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Text Part Number: 78EE117C99-2772723633

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1.2 zlib 1.3.1

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Jean-loup Gailly   Mark Adler
jloup@gzip.org   madler@alumni.caltech.edu
/* zlib.h -- interface of the 'zlib' general purpose compression library
version 1.3.1, January 22nd, 2024

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*/

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1.3 zstd 1.3.1

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

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1.5 openssl 3.0.15

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1.7 skalibs 2.14.4.0-r0

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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: 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
"
```

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```
# 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="
37c8fc73c7aea7b490f7850927e2bb91d12137c9e59e22c084146d515696dbc7973b5de92f4c987ba080dd2502ba8312
7006442c3f019b6447a620c0cae73178  cdefs.h
2f0d5e6e4dc3350285cf17009265dddcbe12431c111868eea39bc8cb038ab7c1f2acacbb21735c4e9d4a1fd106a8fc0f86
11ea33987d4faba37dde5ce6da0750  queue.h
d9ac210d81feb8ad2655bc80fb065d3fe20ae4417b32b4a1711e6738a4870140005c13373b5d1846ef3ce5ae6da45f2da
cef2092881eded0a2e94f6a07752ef3  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>
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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
"
/* $NetBSD: queue.h,v 1.70 2015/11/02 15:21:23 christos Exp $ */

/*
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```
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*
* @(#)queue.h 8.5 (Berkeley) 8/20/94
*/

#ifndef _SYS_QUEUE_H_
#define _SYS_QUEUE_H_

/*
* This file defines five types of data structures: singly-linked lists,
* lists, simple queues, tail queues, and circular queues.
*
* A singly-linked list is headed by a single forward pointer. The
* elements are singly linked for minimum space and
 pointer manipulation
* overhead at the expense of O(n) removal for arbitrary elements. New
* elements can be added to the list after an existing element or at the
* head of the list.  Elements being removed from the head of the list
* should use the explicit macro for this purpose for optimum
* efficiency. A singly-linked list may only be traversed in the forward
* direction.  Singly-linked lists are ideal for applications with large
* datasets and few or no removals or for implementing a LIFO queue.
*
* A list is headed by a single forward pointer (or an array of forward
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* pointers for a hash table header). The elements are doubly linked
* so that an arbitrary element can be removed without a need to
* traverse the list. New elements can be added to the list before
* or after an existing element or at the head of the list. A list
* may only be traversed in the forward direction.
*
* A simple queue is headed by a pair of pointers, one the head of the
* list and the
 other to the tail of the list. The elements are singly
* linked to save space, so elements can only be removed from the
* head of the list. New elements can be added to the list after
* an existing element, at the head of the list, or at the end of the
* list. A simple queue may only be traversed in the forward direction.
*
* A tail queue is headed by a pair of pointers, one to the head of the
* list and the other to the tail of the list. The elements are doubly
* linked so that an arbitrary element can be removed without a need to
* traverse the list. New elements can be added to the list before or
* after an existing element, at the head of the list, or at the end of
* the list. A tail queue may be traversed in either direction.
*
* A circle queue is headed by a pair of pointers, one to the head of the
* list and the other to the tail of the list. The elements are doubly
* linked so that an arbitrary element can be removed without a need to
* traverse the list. New elements
 can be added to the list before or after
* an existing element, at the head of the list, or at the end of the list.
* A circle queue may be traversed in either direction, but has a more
* complex end of list detection.
*
* For details on the use of these macros, see the queue(3) manual page.
*/

/*
* Include the definition of NULL only on NetBSD because sys/null.h
* is not available elsewhere.  This conditional makes the header
* portable and it can simply be dropped verbatim into any system.
* The caveat is that on other systems some other header
* must provide NULL before the macros can be used.
*/
#ifdef __NetBSD__
#include <sys/null.h>
#endif

#if defined(QUEUEDEBUG)
# if defined(_KERNEL)
#  define QUEUEDEBUG_ABORT(...) panic(__VA_ARGS__)
# else
```

```
#  include <err.h>
#  define QUEUEDEBUG_ABORT(...) err(1, __VA_ARGS__)
# endif
#endif

/*
* Singly-linked List definitions.
*/
#define SLIST_HEAD(name, type)      \
struct name {       \
 struct type *slh_first; /* first
 element */   \
}

#define SLIST_HEAD_INITIALIZER(head)     \
 { NULL }

#define SLIST_ENTRY(type)      \
struct {       \
 struct type *sle_next; /* next element */   \
}

/*
* Singly-linked List access methods.
*/
#define SLIST_FIRST(head) ((head)->slh_first)
#define SLIST_END(head)  NULL
#define SLIST_EMPTY(head) ((head)->slh_first == NULL)
#define SLIST_NEXT(elm, field) ((elm)->field.sle_next)

#define SLIST_FOREACH(var, head, field)     \
 for((var) = (head)->slh_first;     \
    (var) != SLIST_END(head);     \
    (var) = (var)->field.sle_next)

#define SLIST_FOREACH_SAFE(var, head, field, tvar)   \
 for ((var) = SLIST_FIRST((head));    \
    (var) != SLIST_END(head) &&     \
    ((tvar) = SLIST_NEXT((var), field), 1);   \
    (var) = (tvar))

/*
* Singly-linked List functions.
*/
#define SLIST_INIT(head) do {      \
 (head)->slh_first = SLIST_END(head);    \
} while (/*CONSTCOND*/0)
```

```
#define SLIST_INSERT_AFTER(slistelm, elm, field) do {   \
 (elm)->field.sle_next = (slistelm)->field.sle_next;  \
 (slistelm)->field.sle_next
 = (elm);    \
} while (/*CONSTCOND*/0)

#define SLIST_INSERT_HEAD(head, elm, field) do {    \
 (elm)->field.sle_next = (head)->slh_first;   \
 (head)->slh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE_AFTER(slistelm, field) do {    \
 (slistelm)->field.sle_next =     \
    SLIST_NEXT(SLIST_NEXT((slistelm), field), field);  \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE_HEAD(head, field) do {     \
 (head)->slh_first = (head)->slh_first->field.sle_next;  \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE(head, elm, type, field) do {   \
 if ((head)->slh_first == (elm)) {    \
  SLIST_REMOVE_HEAD((head), field);   \
 }       \
 else {       \
  struct type *curelm = (head)->slh_first;  \
  while(curelm->field.sle_next != (elm))   \
   curelm = curelm->field.sle_next;  \
  curelm->field.sle_next =    \
      curelm->field.sle_next->field.sle_next;  \
 }       \
} while (/*CONSTCOND*/0)


/*
* List definitions.
 */
#define LIST_HEAD(name, type)      \
struct name {       \
 struct type *lh_first; /* first element */   \
}

#define LIST_HEAD_INITIALIZER(head)     \
 { NULL }

#define LIST_ENTRY(type)      \
struct {       \
 struct type *le_next; /* next element */   \
```

```
 struct type **le_prev; /* address of previous next element */ \
}

/*
* List access methods.
*/
#define LIST_FIRST(head)  ((head)->lh_first)
#define LIST_END(head)   NULL
#define LIST_EMPTY(head)  ((head)->lh_first == LIST_END(head))
#define LIST_NEXT(elm, field)  ((elm)->field.le_next)

#define LIST_FOREACH(var, head, field)     \
 for ((var) = ((head)->lh_first);    \
     (var) != LIST_END(head);     \
     (var) = ((var)->field.le_next))

#define LIST_FOREACH_SAFE(var, head, field, tvar)   \
 for ((var) = LIST_FIRST((head));    \
     (var) != LIST_END(head) &&     \
     ((tvar) = LIST_NEXT((var), field), 1);   \
     (var) = (tvar))

#define LIST_MOVE(head1, head2) do {     \
 LIST_INIT((head2));      \
 if (!LIST_EMPTY((head1)))
 {     \
  (head2)->lh_first = (head1)->lh_first;   \
  LIST_INIT((head1));     \
 }       \
} while (/*CONSTCOND*/0)

/*
* List functions.
*/
#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_LIST_INSERT_HEAD(head, elm, field)   \
 if ((head)->lh_first &&      \
     (head)->lh_first->field.le_prev != &(head)->lh_first) \
  QUEUEDEBUG_ABORT("LIST_INSERT_HEAD %p %s:%d", (head), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_LIST_OP(elm, field)     \
 if ((elm)->field.le_next &&     \
     (elm)->field.le_next->field.le_prev !=   \
     &(elm)->field.le_next)     \
  QUEUEDEBUG_ABORT("LIST_* forw %p %s:%d", (elm),  \
      __FILE__, __LINE__);    \
 if (*(elm)->field.le_prev != (elm))    \
  QUEUEDEBUG_ABORT("LIST_* back %p %s:%d", (elm),  \
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    __FILE__, __LINE__);
#define QUEUEDEBUG_LIST_POSTREMOVE(elm, field)    \
 (elm)->field.le_next = (void *)1L;    \
 (elm)->field.le_prev = (void *)1L;
#else
#define QUEUEDEBUG_LIST_INSERT_HEAD(head, elm, field)
#define QUEUEDEBUG_LIST_OP(elm,
 field)
#define QUEUEDEBUG_LIST_POSTREMOVE(elm, field)
#endif

#define LIST_INIT(head) do {      \
 (head)->lh_first = LIST_END(head);    \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_AFTER(listelm, elm, field) do {   \
 QUEUEDEBUG_LIST_OP((listelm), field)    \
 if (((elm)->field.le_next = (listelm)->field.le_next) !=  \
    LIST_END(head))      \
  (listelm)->field.le_next->field.le_prev =  \
     &(elm)->field.le_next;    \
 (listelm)->field.le_next = (elm);    \
 (elm)->field.le_prev = &(listelm)->field.le_next;  \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_BEFORE(listelm, elm, field) do {   \
 QUEUEDEBUG_LIST_OP((listelm), field)    \
 (elm)->field.le_prev = (listelm)->field.le_prev;  \
 (elm)->field.le_next = (listelm);    \
 *(listelm)->field.le_prev = (elm);    \
 (listelm)->field.le_prev = &(elm)->field.le_next;  \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_HEAD(head, elm, field) do {    \
 QUEUEDEBUG_LIST_INSERT_HEAD((head), (elm), field)  \
 if (((elm)->field.le_next
 = (head)->lh_first) != LIST_END(head))\
  (head)->lh_first->field.le_prev = &(elm)->field.le_next;\
 (head)->lh_first = (elm);     \
 (elm)->field.le_prev = &(head)->lh_first;   \
} while (/*CONSTCOND*/0)

#define LIST_REMOVE(elm, field) do {     \
 QUEUEDEBUG_LIST_OP((elm), field)    \
 if ((elm)->field.le_next != NULL)    \
  (elm)->field.le_next->field.le_prev =    \
     (elm)->field.le_prev;    \
 *(elm)->field.le_prev = (elm)->field.le_next;   \
```

```
 QUEUEDEBUG_LIST_POSTREMOVE((elm), field)   \
} while (/*CONSTCOND*/0)

#define LIST_REPLACE(elm, elm2, field) do {    \
 if (((elm2)->field.le_next = (elm)->field.le_next) != NULL) \
  (elm2)->field.le_next->field.le_prev =   \
      &(elm2)->field.le_next;    \
 (elm2)->field.le_prev = (elm)->field.le_prev;   \
 *(elm2)->field.le_prev = (elm2);    \
 QUEUEDEBUG_LIST_POSTREMOVE((elm), field)   \
} while (/*CONSTCOND*/0)

/*
* Simple queue definitions.
*/
#define SIMPLEQ_HEAD(name, type)     \
struct name {        \
 struct
 type *sqh_first; /* first element */   \
 struct type **sqh_last; /* addr of last next element */  \
}

#define SIMPLEQ_HEAD_INITIALIZER(head)     \
 { NULL, &(head).sqh_first }

#define SIMPLEQ_ENTRY(type)      \
struct {        \
 struct type *sqe_next; /* next element */   \
}

/*
* Simple queue access methods.
*/
#define SIMPLEQ_FIRST(head)  ((head)->sqh_first)
#define SIMPLEQ_END(head)  NULL
#define SIMPLEQ_EMPTY(head)  ((head)->sqh_first == SIMPLEQ_END(head))
#define SIMPLEQ_NEXT(elm, field) ((elm)->field.sqe_next)

#define SIMPLEQ_FOREACH(var, head, field)    \
 for ((var) = ((head)->sqh_first);    \
     (var) != SIMPLEQ_END(head);     \
     (var) = ((var)->field.sqe_next))

#define SIMPLEQ_FOREACH_SAFE(var, head, field, next)   \
 for ((var) = ((head)->sqh_first);    \
     (var) != SIMPLEQ_END(head) &&    \
     ((next = ((var)->field.sqe_next)), 1);   \
     (var) = (next))
```

```
/*
* Simple queue functions.
*/
#define SIMPLEQ_INIT(head) do {      \
 (head)->sqh_first = NULL;     \
 (head)->sqh_last
 = &(head)->sqh_first;    \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_INSERT_HEAD(head, elm, field) do {   \
 if (((elm)->field.sqe_next = (head)->sqh_first) == NULL) \
  (head)->sqh_last = &(elm)->field.sqe_next;  \
 (head)->sqh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_INSERT_TAIL(head, elm, field) do {   \
 (elm)->field.sqe_next = NULL;     \
 *(head)->sqh_last = (elm);     \
 (head)->sqh_last = &(elm)->field.sqe_next;   \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 if (((elm)->field.sqe_next = (listelm)->field.sqe_next) == NULL)\
  (head)->sqh_last = &(elm)->field.sqe_next;  \
 (listelm)->field.sqe_next = (elm);    \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE_HEAD(head, field) do {    \
 if (((head)->sqh_first = (head)->sqh_first->field.sqe_next) == NULL) \
  (head)->sqh_last = &(head)->sqh_first;   \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE_AFTER(head, elm, field) do {   \
 if
 (((elm)->field.sqe_next = (elm)->field.sqe_next->field.sqe_next) \
    == NULL)       \
  (head)->sqh_last = &(elm)->field.sqe_next;  \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE(head, elm, type, field) do {   \
 if ((head)->sqh_first == (elm)) {    \
  SIMPLEQ_REMOVE_HEAD((head), field);   \
 } else {       \
  struct type *curelm = (head)->sqh_first;  \
  while (curelm->field.sqe_next != (elm))   \
   curelm = curelm->field.sqe_next;  \
  if ((curelm->field.sqe_next =    \
```

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   curelm->field.sqe_next->field.sqe_next) == NULL) \
       (head)->sqh_last = &(curelm)->field.sqe_next; \
 }       \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_CONCAT(head1, head2) do {    \
 if (!SIMPLEQ_EMPTY((head2))) {     \
  *(head1)->sqh_last = (head2)->sqh_first;  \
  (head1)->sqh_last = (head2)->sqh_last;  \
  SIMPLEQ_INIT((head2));     \
 }       \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_LAST(head, type, field)     \
 (SIMPLEQ_EMPTY((head)) ?      \
  NULL :       \
        ((struct type
 *)(void *)    \
  ((char *)((head)->sqh_last) - offsetof(struct type, field))))

/*
* Tail queue definitions.
*/
#define _TAILQ_HEAD(name, type, qual)     \
struct name {        \
 qual type *tqh_first;  /* first element */  \
 qual type *qual *tqh_last; /* addr of last next element */ \
}
#define TAILQ_HEAD(name, type) _TAILQ_HEAD(name, struct type,)

#define TAILQ_HEAD_INITIALIZER(head)     \
 { TAILQ_END(head), &(head).tqh_first }

#define _TAILQ_ENTRY(type, qual)     \
struct {        \
 qual type *tqe_next;  /* next element */  \
 qual type *qual *tqe_prev; /* address of previous next element */\
}
#define TAILQ_ENTRY(type) _TAILQ_ENTRY(struct type,)

/*
* Tail queue access methods.
*/
#define TAILQ_FIRST(head)  ((head)->tqh_first)
#define TAILQ_END(head)   (NULL)
#define TAILQ_NEXT(elm, field)  ((elm)->field.tqe_next)
#define TAILQ_LAST(head, headname) \
 (*(((struct headname *)(void *)((head)->tqh_last))->tqh_last))
```

```
#define TAILQ_PREV(elm, headname, field) \
 (*(((struct headname
 *)(void *)((elm)->field.tqe_prev))->tqh_last))
#define TAILQ_EMPTY(head)  (TAILQ_FIRST(head) == TAILQ_END(head))


#define TAILQ_FOREACH(var, head, field)     \
 for ((var) = ((head)->tqh_first);    \
     (var) != TAILQ_END(head);     \
     (var) = ((var)->field.tqe_next))

#define TAILQ_FOREACH_SAFE(var, head, field, next)   \
 for ((var) = ((head)->tqh_first);    \
     (var) != TAILQ_END(head) &&     \
     ((next) = TAILQ_NEXT(var, field), 1); (var) = (next))

#define TAILQ_FOREACH_REVERSE(var, head, headname, field)  \
 for ((var) = TAILQ_LAST((head), headname);   \
     (var) != TAILQ_END(head);     \
     (var) = TAILQ_PREV((var), headname, field))

#define TAILQ_FOREACH_REVERSE_SAFE(var, head, headname, field, prev) \
 for ((var) = TAILQ_LAST((head), headname);   \
     (var) != TAILQ_END(head) &&     \
     ((prev) = TAILQ_PREV((var), headname, field), 1); (var) = (prev))

/*
* Tail queue functions.
*/
#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_TAILQ_INSERT_HEAD(head,
 elm, field)   \
 if ((head)->tqh_first &&     \
     (head)->tqh_first->field.tqe_prev != &(head)->tqh_first) \
  QUEUEDEBUG_ABORT("TAILQ_INSERT_HEAD %p %s:%d", (head), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_INSERT_TAIL(head, elm, field)   \
 if (*(head)->tqh_last != NULL)     \
  QUEUEDEBUG_ABORT("TAILQ_INSERT_TAIL %p %s:%d", (head), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_OP(elm, field)     \
 if ((elm)->field.tqe_next &&     \
     (elm)->field.tqe_next->field.tqe_prev !=   \
     &(elm)->field.tqe_next)     \
  QUEUEDEBUG_ABORT("TAILQ_* forw %p %s:%d", (elm), \
      __FILE__, __LINE__);    \
 if (*(elm)->field.tqe_prev != (elm))    \
  QUEUEDEBUG_ABORT("TAILQ_* back %p %s:%d", (elm), \
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     __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_PREREMOVE(head, elm, field)   \
 if ((elm)->field.tqe_next == NULL &&    \
     (head)->tqh_last != &(elm)->field.tqe_next)   \
  QUEUEDEBUG_ABORT("TAILQ_PREREMOVE head %p elm %p %s:%d",\
      (head), (elm), __FILE__,
 __LINE__);
#define QUEUEDEBUG_TAILQ_POSTREMOVE(elm, field)    \
 (elm)->field.tqe_next = (void *)1L;    \
 (elm)->field.tqe_prev = (void *)1L;
#else
#define QUEUEDEBUG_TAILQ_INSERT_HEAD(head, elm, field)
#define QUEUEDEBUG_TAILQ_INSERT_TAIL(head, elm, field)
#define QUEUEDEBUG_TAILQ_OP(elm, field)
#define QUEUEDEBUG_TAILQ_PREREMOVE(head, elm, field)
#define QUEUEDEBUG_TAILQ_POSTREMOVE(elm, field)
#endif

#define TAILQ_INIT(head) do {      \
 (head)->tqh_first = TAILQ_END(head);    \
 (head)->tqh_last = &(head)->tqh_first;    \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_HEAD(head, elm, field) do {   \
 QUEUEDEBUG_TAILQ_INSERT_HEAD((head), (elm), field)  \
 if (((elm)->field.tqe_next = (head)->tqh_first) != TAILQ_END(head))\
  (head)->tqh_first->field.tqe_prev =   \
     &(elm)->field.tqe_next;    \
 else       \
  (head)->tqh_last = &(elm)->field.tqe_next;  \
 (head)->tqh_first = (elm);     \
 (elm)->field.tqe_prev = &(head)->tqh_first;   \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_TAIL(head,
 elm, field) do {   \
 QUEUEDEBUG_TAILQ_INSERT_TAIL((head), (elm), field)  \
 (elm)->field.tqe_next = TAILQ_END(head);   \
 (elm)->field.tqe_prev = (head)->tqh_last;   \
 *(head)->tqh_last = (elm);     \
 (head)->tqh_last = &(elm)->field.tqe_next;   \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 QUEUEDEBUG_TAILQ_OP((listelm), field)    \
 if (((elm)->field.tqe_next = (listelm)->field.tqe_next) !=  \
     TAILQ_END(head))      \
  (elm)->field.tqe_next->field.tqe_prev =   \
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    &(elm)->field.tqe_next;    \
 else       \
  (head)->tqh_last = &(elm)->field.tqe_next;  \
 (listelm)->field.tqe_next = (elm);    \
 (elm)->field.tqe_prev = &(listelm)->field.tqe_next;  \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_BEFORE(listelm, elm, field) do {   \
 QUEUEDEBUG_TAILQ_OP((listelm), field)    \
 (elm)->field.tqe_prev = (listelm)->field.tqe_prev;  \
 (elm)->field.tqe_next = (listelm);    \
 *(listelm)->field.tqe_prev = (elm);    \
 (listelm)->field.tqe_prev
 = &(elm)->field.tqe_next;  \
} while (/*CONSTCOND*/0)

#define TAILQ_REMOVE(head, elm, field) do {    \
 QUEUEDEBUG_TAILQ_PREREMOVE((head), (elm), field)  \
 QUEUEDEBUG_TAILQ_OP((elm), field)    \
 if (((elm)->field.tqe_next) != TAILQ_END(head))   \
  (elm)->field.tqe_next->field.tqe_prev =   \
     (elm)->field.tqe_prev;    \
 else       \
  (head)->tqh_last = (elm)->field.tqe_prev;  \
 *(elm)->field.tqe_prev = (elm)->field.tqe_next;   \
 QUEUEDEBUG_TAILQ_POSTREMOVE((elm), field);   \
} while (/*CONSTCOND*/0)

#define TAILQ_REPLACE(head, elm, elm2, field) do {   \
      if (((elm2)->field.tqe_next = (elm)->field.tqe_next) !=  \
    TAILQ_END(head))        \
            (elm2)->field.tqe_next->field.tqe_prev =  \
               &(elm2)->field.tqe_next;    \
      else       \
            (head)->tqh_last = &(elm2)->field.tqe_next;  \
      (elm2)->field.tqe_prev = (elm)->field.tqe_prev;   \
      *(elm2)->field.tqe_prev = (elm2);    \
 QUEUEDEBUG_TAILQ_POSTREMOVE((elm),
 field);   \
} while (/*CONSTCOND*/0)

#define TAILQ_CONCAT(head1, head2, field) do {    \
 if (!TAILQ_EMPTY(head2)) {     \
  *(head1)->tqh_last = (head2)->tqh_first;  \
  (head2)->tqh_first->field.tqe_prev = (head1)->tqh_last; \
  (head1)->tqh_last = (head2)->tqh_last;   \
  TAILQ_INIT((head2));     \
 }       \
```

```
} while (/*CONSTCOND*/0)

/*
* Singly-linked Tail queue declarations.
*/
#define STAILQ_HEAD(name, type)      \
struct name {        \
 struct type *stqh_first; /* first element */  \
 struct type **stqh_last; /* addr of last next element */ \
}

#define STAILQ_HEAD_INITIALIZER(head)     \
 { NULL, &(head).stqh_first }

#define STAILQ_ENTRY(type)      \
struct {        \
 struct type *stqe_next; /* next element */   \
}

/*
* Singly-linked Tail queue access methods.
*/
#define STAILQ_FIRST(head) ((head)->stqh_first)
#define STAILQ_END(head) NULL
#define STAILQ_NEXT(elm, field) ((elm)->field.stqe_next)
#define STAILQ_EMPTY(head) (STAILQ_FIRST(head)
 == STAILQ_END(head))

/*
* Singly-linked Tail queue functions.
*/
#define STAILQ_INIT(head) do {      \
 (head)->stqh_first = NULL;     \
 (head)->stqh_last = &(head)->stqh_first;    \
} while (/*CONSTCOND*/0)

#define STAILQ_INSERT_HEAD(head, elm, field) do {    \
 if (((elm)->field.stqe_next = (head)->stqh_first) == NULL) \
  (head)->stqh_last = &(elm)->field.stqe_next;  \
 (head)->stqh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define STAILQ_INSERT_TAIL(head, elm, field) do {    \
 (elm)->field.stqe_next = NULL;     \
 *(head)->stqh_last = (elm);     \
 (head)->stqh_last = &(elm)->field.stqe_next;   \
} while (/*CONSTCOND*/0)
```

```
#define STAILQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 if (((elm)->field.stqe_next = (listelm)->field.stqe_next) == NULL)\
  (head)->stqh_last = &(elm)->field.stqe_next;  \
 (listelm)->field.stqe_next = (elm);    \
} while (/*CONSTCOND*/0)

#define STAILQ_REMOVE_HEAD(head, field) do {    \
 if (((head)->stqh_first = (head)->stqh_first->field.stqe_next)
 == NULL) \
  (head)->stqh_last = &(head)->stqh_first;   \
} while (/*CONSTCOND*/0)

#define STAILQ_REMOVE(head, elm, type, field) do {   \
 if ((head)->stqh_first == (elm)) {    \
  STAILQ_REMOVE_HEAD((head), field);   \
 } else {       \
  struct type *curelm = (head)->stqh_first;  \
  while (curelm->field.stqe_next != (elm))   \
   curelm = curelm->field.stqe_next;  \
  if ((curelm->field.stqe_next =    \
   curelm->field.stqe_next->field.stqe_next) == NULL) \
      (head)->stqh_last = &(curelm)->field.stqe_next; \
 }       \
} while (/*CONSTCOND*/0)

#define STAILQ_FOREACH(var, head, field)    \
 for ((var) = ((head)->stqh_first);    \
  (var);       \
  (var) = ((var)->field.stqe_next))

#define STAILQ_FOREACH_SAFE(var, head, field, tvar)   \
 for ((var) = STAILQ_FIRST((head));    \
    (var) && ((tvar) = STAILQ_NEXT((var), field), 1);  \
    (var) = (tvar))

#define STAILQ_CONCAT(head1, head2) do {    \
 if (!STAILQ_EMPTY((head2))) {     \
  *(head1)->stqh_last
 = (head2)->stqh_first;  \
  (head1)->stqh_last = (head2)->stqh_last;  \
  STAILQ_INIT((head2));     \
 }       \
} while (/*CONSTCOND*/0)

#define STAILQ_LAST(head, type, field)     \
 (STAILQ_EMPTY((head)) ?      \
  NULL :       \
       ((struct type *)(void *)    \
```

```
 ((char *)((head)->stqh_last) - offsetof(struct type, field))))


#ifndef _KERNEL
/*
* Circular queue definitions. Do not use. We still keep the macros
* for compatibility but because of pointer aliasing issues their use
* is discouraged!
*/

/*
* __launder_type():  We use this ugly hack to work around the the compiler
* noticing that two types may not alias each other and elide tests in code.
* We hit this in the CIRCLEQ macros when comparing 'struct name *' and
* 'struct type *' (see CIRCLEQ_HEAD()).  Modern compilers (such as GCC
* 4.8) declare these comparisons as always false, causing the code to
* not run as designed.
*
* This hack is only to be used for comparisons and thus can be fully const.
 * Do not use for assignment.
*
* If we ever choose to change the ABI of the CIRCLEQ macros, we could fix
* this by changing the head/tail sentinal values, but see the note above
* this one.
*/
static __inline const void * __launder_type(const void *);
static __inline const void *
__launder_type(const void *__x)
{
 __asm __volatile("" : "+r" (__x));
 return __x;
}

#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_CIRCLEQ_HEAD(head, field)    \
 if ((head)->cqh_first != CIRCLEQ_ENDC(head) &&   \
    (head)->cqh_first->field.cqe_prev != CIRCLEQ_ENDC(head)) \
  QUEUEDEBUG_ABORT("CIRCLEQ head forw %p %s:%d", (head), \
       __FILE__, __LINE__);    \
 if ((head)->cqh_last != CIRCLEQ_ENDC(head) &&   \
    (head)->cqh_last->field.cqe_next != CIRCLEQ_ENDC(head)) \
  QUEUEDEBUG_ABORT("CIRCLEQ head back %p %s:%d", (head), \
       __FILE__, __LINE__);
#define QUEUEDEBUG_CIRCLEQ_ELM(head, elm, field)   \
 if ((elm)->field.cqe_next == CIRCLEQ_ENDC(head)) {  \
  if ((head)->cqh_last != (elm))    \
   QUEUEDEBUG_ABORT("CIRCLEQ
```

```
 elm last %p %s:%d", \
      (elm), __FILE__, __LINE__);   \
 } else {       \
  if ((elm)->field.cqe_next->field.cqe_prev != (elm)) \
   QUEUEDEBUG_ABORT("CIRCLEQ elm forw %p %s:%d", \
      (elm), __FILE__, __LINE__);   \
 }       \
 if ((elm)->field.cqe_prev == CIRCLEQ_ENDC(head)) {  \
  if ((head)->cqh_first != (elm))    \
   QUEUEDEBUG_ABORT("CIRCLEQ elm first %p %s:%d", \
      (elm), __FILE__, __LINE__);   \
 } else {       \
  if ((elm)->field.cqe_prev->field.cqe_next != (elm)) \
   QUEUEDEBUG_ABORT("CIRCLEQ elm prev %p %s:%d", \
      (elm), __FILE__, __LINE__);   \
 }
#define QUEUEDEBUG_CIRCLEQ_POSTREMOVE(elm, field)   \
 (elm)->field.cqe_next = (void *)1L;    \
 (elm)->field.cqe_prev = (void *)1L;
#else
#define QUEUEDEBUG_CIRCLEQ_HEAD(head, field)
#define QUEUEDEBUG_CIRCLEQ_ELM(head, elm, field)
#define QUEUEDEBUG_CIRCLEQ_POSTREMOVE(elm, field)
#endif

#define CIRCLEQ_HEAD(name, type)     \
struct name {        \
 struct type *cqh_first;  /*
 first element */  \
 struct type *cqh_last;  /* last element */  \
}

#define CIRCLEQ_HEAD_INITIALIZER(head)     \
 { CIRCLEQ_END(&head), CIRCLEQ_END(&head) }

#define CIRCLEQ_ENTRY(type)      \
struct {        \
 struct type *cqe_next;  /* next element */  \
 struct type *cqe_prev;  /* previous element */  \
}

/*
* Circular queue functions.
*/
#define CIRCLEQ_INIT(head) do {      \
 (head)->cqh_first = CIRCLEQ_END(head);    \
 (head)->cqh_last = CIRCLEQ_END(head);    \
} while (/*CONSTCOND*/0)
```

```
#define CIRCLEQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 QUEUEDEBUG_CIRCLEQ_ELM((head), (listelm), field)  \
 (elm)->field.cqe_next = (listelm)->field.cqe_next;  \
 (elm)->field.cqe_prev = (listelm);    \
 if ((listelm)->field.cqe_next == CIRCLEQ_ENDC(head))  \
  (head)->cqh_last = (elm);    \
 else       \
  (listelm)->field.cqe_next->field.cqe_prev = (elm); \
 (listelm)->field.cqe_next = (elm);    \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_BEFORE(head,
 listelm, elm, field) do {  \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 QUEUEDEBUG_CIRCLEQ_ELM((head), (listelm), field)  \
 (elm)->field.cqe_next = (listelm);    \
 (elm)->field.cqe_prev = (listelm)->field.cqe_prev;  \
 if ((listelm)->field.cqe_prev == CIRCLEQ_ENDC(head))  \
  (head)->cqh_first = (elm);    \
 else       \
  (listelm)->field.cqe_prev->field.cqe_next = (elm); \
 (listelm)->field.cqe_prev = (elm);    \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_HEAD(head, elm, field) do {   \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 (elm)->field.cqe_next = (head)->cqh_first;   \
 (elm)->field.cqe_prev = CIRCLEQ_END(head);   \
 if ((head)->cqh_last == CIRCLEQ_ENDC(head))   \
  (head)->cqh_last = (elm);    \
 else       \
  (head)->cqh_first->field.cqe_prev = (elm);  \
 (head)->cqh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_TAIL(head, elm, field) do {   \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 (elm)->field.cqe_next
 = CIRCLEQ_END(head);   \
 (elm)->field.cqe_prev = (head)->cqh_last;   \
 if ((head)->cqh_first == CIRCLEQ_ENDC(head))   \
  (head)->cqh_first = (elm);    \
 else       \
  (head)->cqh_last->field.cqe_next = (elm);  \
 (head)->cqh_last = (elm);     \
} while (/*CONSTCOND*/0)
```

```
#define CIRCLEQ_REMOVE(head, elm, field) do {    \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 QUEUEDEBUG_CIRCLEQ_ELM((head), (elm), field)   \
 if ((elm)->field.cqe_next == CIRCLEQ_ENDC(head))  \
  (head)->cqh_last = (elm)->field.cqe_prev;  \
 else       \
  (elm)->field.cqe_next->field.cqe_prev =   \
     (elm)->field.cqe_prev;    \
 if ((elm)->field.cqe_prev == CIRCLEQ_ENDC(head))  \
  (head)->cqh_first = (elm)->field.cqe_next;  \
 else       \
  (elm)->field.cqe_prev->field.cqe_next =   \
     (elm)->field.cqe_next;    \
 QUEUEDEBUG_CIRCLEQ_POSTREMOVE((elm), field)   \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_FOREACH(var, head, field)    \
 for ((var) = ((head)->cqh_first);    \
  (var) != CIRCLEQ_ENDC(head);    \
  (var)
 = ((var)->field.cqe_next))

#define CIRCLEQ_FOREACH_REVERSE(var, head, field)   \
 for ((var) = ((head)->cqh_last);    \
  (var) != CIRCLEQ_ENDC(head);    \
  (var) = ((var)->field.cqe_prev))

/*
* Circular queue access methods.
*/
#define CIRCLEQ_FIRST(head)  ((head)->cqh_first)
#define CIRCLEQ_LAST(head)  ((head)->cqh_last)
/* For comparisons */
#define CIRCLEQ_ENDC(head)  (__launder_type(head))
/* For assignments */
#define CIRCLEQ_END(head)  ((void *)(head))
#define CIRCLEQ_NEXT(elm, field) ((elm)->field.cqe_next)
#define CIRCLEQ_PREV(elm, field) ((elm)->field.cqe_prev)
#define CIRCLEQ_EMPTY(head)      \
   (CIRCLEQ_FIRST(head) == CIRCLEQ_ENDC(head))

#define CIRCLEQ_LOOP_NEXT(head, elm, field)    \
 (((elm)->field.cqe_next == CIRCLEQ_ENDC(head))   \
     ? ((head)->cqh_first)     \
     : (elm->field.cqe_next))
#define CIRCLEQ_LOOP_PREV(head, elm, field)    \
 (((elm)->field.cqe_prev == CIRCLEQ_ENDC(head))   \
```

```
    ? ((head)->cqh_last)     \
    :
 (elm->field.cqe_prev))
#endif /* !_KERNEL */

#endif /* !_SYS_QUEUE_H_ */
# 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
"
#ifndef _SYS_CDEFS_H_
#define _SYS_CDEFS_H_

#warning usage of non-standard #include <sys/cdefs.h> is deprecated

#undef __P
```

```
#undef __PMT

#define __P(args) args
#define __PMT(args) args

#define __CONCAT(x,y) x ## y
#define __STRING(x) #x

#ifdef  __cplusplus
# define __BEGIN_DECLS extern "C" {
# define __END_DECLS }
#else
# define __BEGIN_DECLS
# define __END_DECLS
#endif

#if defined(__GNUC__) && !defined(__cplusplus)
# define __THROW __attribute__ ((__nothrow__))
# define __NTH(fct) __attribute__ ((__nothrow__)) fct
#else
# define __THROW
# define __NTH(fct)     fct
#endif

#endif /* _SYS_CDEFS_H_ */
# 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
"
/* $NetBSD: tree.h,v 1.20 2013/09/14 13:20:45 joerg Exp $ */
/* $OpenBSD: tree.h,v 1.13 2011/07/09 00:19:45 pirofti Exp $ */
/* Modified by Void Linux. */
/*
* Copyright 2002 Niels Provos <provos@citi.umich.edu>
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*
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* OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED.
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* NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,
* DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
* THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
* (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF
* THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
*/

#ifndef _SYS_TREE_H_
#define _SYS_TREE_H_

#ifdef __GNUC__
#define __GNUC_PREREQ__(x, y)      \
 ((__GNUC__ == (x) && __GNUC_MINOR__ >= (y)) ||   \
  (__GNUC__ > (x)))
#else
#define __GNUC_PREREQ__(x, y) 0
```

```
#endif

#if __GNUC_PREREQ__(2, 7) || defined(__lint__)
#define _sys_tree_h_unused __attribute__((__unused__))
#else
#define _sys_tree_h_unused /* delete */
#endif

/*
* This file defines data structures for different types of trees:
* splay trees and red-black trees.
*
* A splay tree is a self-organizing
 data structure.  Every operation
* on the tree causes a splay to happen.  The splay moves the requested
* node to the root of the tree and partly rebalances it.
*
* This has the benefit that request locality causes faster lookups as
* the requested nodes move to the top of the tree.  On the other hand,
* every lookup causes memory writes.
*
* The Balance Theorem bounds the total access time for m operations
* and n inserts on an initially empty tree as O((m + n)lg n).  The
* amortized cost for a sequence of m accesses to a splay tree is O(lg n);
*
* A red-black tree is a binary search tree with the node color as an
* extra attribute.  It fulfills a set of conditions:
* - every search path from the root to a leaf consists of the
*   same number of black nodes,
* - each red node (except for the root) has a black parent,
* - each leaf node is black.
*
* Every operation on a red-black tree is bounded as O(lg n).
* The maximum height of a red-black tree is 2lg (n+1).
 */

#define SPLAY_HEAD(name, type)      \
struct name {       \
 struct type *sph_root; /* root of the tree */   \
}

#define SPLAY_INITIALIZER(root)      \
 { NULL }

#define SPLAY_INIT(root) do {      \
 (root)->sph_root = NULL;     \
} while (/*CONSTCOND*/ 0)
```

```
#define SPLAY_ENTRY(type)      \
struct {        \
 struct type *spe_left; /* left element */   \
 struct type *spe_right; /* right element */   \
}

#define SPLAY_LEFT(elm, field)  (elm)->field.spe_left
#define SPLAY_RIGHT(elm, field)  (elm)->field.spe_right
#define SPLAY_ROOT(head)  (head)->sph_root
#define SPLAY_EMPTY(head)  (SPLAY_ROOT(head) == NULL)

/* SPLAY_ROTATE_{LEFT,RIGHT} expect that tmp hold SPLAY_{RIGHT,LEFT} */
#define SPLAY_ROTATE_RIGHT(head, tmp, field) do {   \
 SPLAY_LEFT((head)->sph_root, field) = SPLAY_RIGHT(tmp, field); \
 SPLAY_RIGHT(tmp, field) = (head)->sph_root;   \
 (head)->sph_root = tmp;      \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ROTATE_LEFT(head, tmp, field) do {   \
 SPLAY_RIGHT((head)->sph_root,
 field) = SPLAY_LEFT(tmp, field); \
 SPLAY_LEFT(tmp, field) = (head)->sph_root;   \
 (head)->sph_root = tmp;      \
} while (/*CONSTCOND*/ 0)

#define SPLAY_LINKLEFT(head, tmp, field) do {    \
 SPLAY_LEFT(tmp, field) = (head)->sph_root;   \
 tmp = (head)->sph_root;      \
 (head)->sph_root = SPLAY_LEFT((head)->sph_root, field);  \
} while (/*CONSTCOND*/ 0)

#define SPLAY_LINKRIGHT(head, tmp, field) do {    \
 SPLAY_RIGHT(tmp, field) = (head)->sph_root;   \
 tmp = (head)->sph_root;      \
 (head)->sph_root = SPLAY_RIGHT((head)->sph_root, field); \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ASSEMBLE(head, node, left, right, field) do {  \
 SPLAY_RIGHT(left, field) = SPLAY_LEFT((head)->sph_root, field); \
 SPLAY_LEFT(right, field) = SPLAY_RIGHT((head)->sph_root, field);\
 SPLAY_LEFT((head)->sph_root, field) = SPLAY_RIGHT(node, field); \
 SPLAY_RIGHT((head)->sph_root, field) = SPLAY_LEFT(node, field); \
} while (/*CONSTCOND*/ 0)

/* Generates prototypes and inline functions */

#define
```

```
 SPLAY_PROTOTYPE(name, type, field, cmp)    \
void name##_SPLAY(struct name *, struct type *);   \
void name##_SPLAY_MINMAX(struct name *, int);    \
struct type *name##_SPLAY_INSERT(struct name *, struct type *);  \
struct type *name##_SPLAY_REMOVE(struct name *, struct type *);  \
        \
/* Finds the node with the same key as elm */    \
static __inline struct type *      \
name##_SPLAY_FIND(struct name *head, struct type *elm)   \
{        \
 if (SPLAY_EMPTY(head))      \
  return(NULL);      \
 name##_SPLAY(head, elm);     \
 if ((cmp)(elm, (head)->sph_root) == 0)    \
  return (head->sph_root);    \
 return (NULL);       \
}        \
        \
static __inline _sys_tree_h_unused struct type *   \
name##_SPLAY_NEXT(struct name *head, struct type *elm)   \
{        \
 name##_SPLAY(head, elm);     \
 if (SPLAY_RIGHT(elm, field) != NULL) {    \
  elm = SPLAY_RIGHT(elm, field);    \
  while (SPLAY_LEFT(elm, field) != NULL) {  \
   elm = SPLAY_LEFT(elm, field);   \
  }       \
 }
 else       \
  elm = NULL;      \
 return (elm);       \
}        \
        \
static _sys_tree_h_unused __inline struct type *   \
name##_SPLAY_MIN_MAX(struct name *head, int val)   \
{        \
 name##_SPLAY_MINMAX(head, val);     \
       return (SPLAY_ROOT(head));     \
}

/* Main splay operation.
* Moves node close to the key of elm to top
*/
#define SPLAY_GENERATE(name, type, field, cmp)    \
struct type *       \
name##_SPLAY_INSERT(struct name *head, struct type *elm)  \
{        \
   if (SPLAY_EMPTY(head)) {      \
```

```
    SPLAY_LEFT(elm, field) = SPLAY_RIGHT(elm, field) = NULL; \
  } else {       \
    int __comp;      \
    name##_SPLAY(head, elm);    \
    __comp = (cmp)(elm, (head)->sph_root);   \
    if(__comp < 0) {     \
     SPLAY_LEFT(elm, field) = SPLAY_LEFT((head)->sph_root, field);\
     SPLAY_RIGHT(elm, field) = (head)->sph_root;  \
     SPLAY_LEFT((head)->sph_root, field) = NULL;  \
    } else if (__comp > 0) {    \
     SPLAY_RIGHT(elm,
 field) = SPLAY_RIGHT((head)->sph_root, field);\
     SPLAY_LEFT(elm, field) = (head)->sph_root;  \
     SPLAY_RIGHT((head)->sph_root, field) = NULL; \
    } else      \
     return ((head)->sph_root);    \
  }        \
  (head)->sph_root = (elm);     \
  return (NULL);      \
}        \
       \
struct type *       \
name##_SPLAY_REMOVE(struct name *head, struct type *elm)  \
{        \
 struct type *__tmp;     \
 if (SPLAY_EMPTY(head))     \
  return (NULL);     \
 name##_SPLAY(head, elm);    \
 if ((cmp)(elm, (head)->sph_root) == 0) {   \
  if (SPLAY_LEFT((head)->sph_root, field) == NULL) { \
   (head)->sph_root = SPLAY_RIGHT((head)->sph_root, field);\
  } else {     \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   (head)->sph_root = SPLAY_LEFT((head)->sph_root, field);\
   name##_SPLAY(head, elm);   \
   SPLAY_RIGHT((head)->sph_root, field) = __tmp; \
  }      \
  return (elm);     \
 }       \
 return (NULL);      \
}        \
       \
void        \
name##_SPLAY(struct
 name *head, struct type *elm)   \
{        \
 struct type __node, *__left, *__right, *__tmp;   \
 int __comp;      \
```

```
\
 SPLAY_LEFT(&__node, field) = SPLAY_RIGHT(&__node, field) = NULL;\
 __left = __right = &__node;     \
\
 while ((__comp = (cmp)(elm, (head)->sph_root)) != 0) {  \
  if (__comp < 0) {     \
   __tmp = SPLAY_LEFT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if ((cmp)(elm, __tmp) < 0){   \
    SPLAY_ROTATE_RIGHT(head, __tmp, field); \
    if (SPLAY_LEFT((head)->sph_root, field) == NULL)\
     break;    \
   }      \
   SPLAY_LINKLEFT(head, __right, field);  \
  } else if (__comp > 0) {    \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if ((cmp)(elm, __tmp) > 0){   \
    SPLAY_ROTATE_LEFT(head, __tmp, field); \
    if (SPLAY_RIGHT((head)->sph_root, field) == NULL)\
     break;    \
   }      \
   SPLAY_LINKRIGHT(head, __left, field);  \
  }       \
 }       \
 SPLAY_ASSEMBLE(head,
 &__node, __left, __right, field);  \
}        \
        \
/* Splay with either the minimum or the maximum element   \
* Used to find minimum or maximum element in tree.   \
*/        \
void name##_SPLAY_MINMAX(struct name *head, int __comp) \
{        \
 struct type __node, *__left, *__right, *__tmp;   \
\
 SPLAY_LEFT(&__node, field) = SPLAY_RIGHT(&__node, field) = NULL;\
 __left = __right = &__node;     \
\
 while (1) {       \
  if (__comp < 0) {     \
   __tmp = SPLAY_LEFT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if (__comp < 0){    \
    SPLAY_ROTATE_RIGHT(head, __tmp, field); \
```

```
    if (SPLAY_LEFT((head)->sph_root, field) == NULL)\
      break;    \
    }      \
    SPLAY_LINKLEFT(head, __right, field);  \
   } else if (__comp > 0) {    \
    __tmp = SPLAY_RIGHT((head)->sph_root, field); \
    if (__tmp == NULL)    \
     break;     \
    if (__comp > 0) {    \
     SPLAY_ROTATE_LEFT(head, __tmp, field); \
     if (SPLAY_RIGHT((head)->sph_root,
  field) == NULL)\
      break;    \
    }      \
    SPLAY_LINKRIGHT(head, __left, field);  \
   }       \
  }       \
  SPLAY_ASSEMBLE(head, &__node, __left, __right, field);  \
 }

 #define SPLAY_NEGINF -1
 #define SPLAY_INF 1

 #define SPLAY_INSERT(name, x, y) name##_SPLAY_INSERT(x, y)
 #define SPLAY_REMOVE(name, x, y) name##_SPLAY_REMOVE(x, y)
 #define SPLAY_FIND(name, x, y)  name##_SPLAY_FIND(x, y)
 #define SPLAY_NEXT(name, x, y)  name##_SPLAY_NEXT(x, y)
 #define SPLAY_MIN(name, x)  (SPLAY_EMPTY(x) ? NULL \
     : name##_SPLAY_MIN_MAX(x, SPLAY_NEGINF))
 #define SPLAY_MAX(name, x)  (SPLAY_EMPTY(x) ? NULL \
     : name##_SPLAY_MIN_MAX(x, SPLAY_INF))

 #define SPLAY_FOREACH(x, name, head)     \
  for ((x) = SPLAY_MIN(name, head);    \
       (x) != NULL;      \
       (x) = SPLAY_NEXT(name, head, x))

 /* Macros that define a red-black tree */
 #define RB_HEAD(name, type)      \
 struct name {        \
  struct type *rbh_root; /* root of the tree */   \
 }

 #define RB_INITIALIZER(root)      \
  {
  NULL }

 #define RB_INIT(root) do {      \
```

```
 (root)->rbh_root = NULL;     \
} while (/*CONSTCOND*/ 0)

#define RB_BLACK 0
#define RB_RED  1
#define RB_ENTRY(type)       \
struct {        \
 struct type *rbe_left;  /* left element */  \
 struct type *rbe_right;  /* right element */  \
 struct type *rbe_parent; /* parent element */  \
 int rbe_color;   /* node color */  \
}

#define RB_LEFT(elm, field)  (elm)->field.rbe_left
#define RB_RIGHT(elm, field)  (elm)->field.rbe_right
#define RB_PARENT(elm, field)  (elm)->field.rbe_parent
#define RB_COLOR(elm, field)  (elm)->field.rbe_color
#define RB_ROOT(head)   (head)->rbh_root
#define RB_EMPTY(head)   (RB_ROOT(head) == NULL)

#define RB_SET(elm, parent, field) do {     \
 RB_PARENT(elm, field) = parent;     \
 RB_LEFT(elm, field) = RB_RIGHT(elm, field) = NULL;  \
 RB_COLOR(elm, field) = RB_RED;     \
} while (/*CONSTCOND*/ 0)

#define RB_SET_BLACKRED(black, red, field) do {    \
 RB_COLOR(black, field) = RB_BLACK;    \
 RB_COLOR(red, field)
 = RB_RED;     \
} while (/*CONSTCOND*/ 0)

#ifndef RB_AUGMENT
#define RB_AUGMENT(x) do {} while (/*CONSTCOND*/ 0)
#endif

#define RB_ROTATE_LEFT(head, elm, tmp, field) do {   \
 (tmp) = RB_RIGHT(elm, field);     \
 if ((RB_RIGHT(elm, field) = RB_LEFT(tmp, field)) != NULL) { \
  RB_PARENT(RB_LEFT(tmp, field), field) = (elm);  \
 }       \
 RB_AUGMENT(elm);      \
 if ((RB_PARENT(tmp, field) = RB_PARENT(elm, field)) != NULL) { \
  if ((elm) == RB_LEFT(RB_PARENT(elm, field), field)) \
   RB_LEFT(RB_PARENT(elm, field), field) = (tmp); \
  else       \
   RB_RIGHT(RB_PARENT(elm, field), field) = (tmp); \
 } else       \
```

```
 (head)->rbh_root = (tmp);    \
 RB_LEFT(tmp, field) = (elm);     \
 RB_PARENT(elm, field) = (tmp);     \
 RB_AUGMENT(tmp);      \
 if ((RB_PARENT(tmp, field)))     \
  RB_AUGMENT(RB_PARENT(tmp, field));   \
} while (/*CONSTCOND*/ 0)

#define RB_ROTATE_RIGHT(head, elm, tmp, field) do {   \
 (tmp) = RB_LEFT(elm, field);     \
 if ((RB_LEFT(elm, field) = RB_RIGHT(tmp, field))
 != NULL) { \
  RB_PARENT(RB_RIGHT(tmp, field), field) = (elm);  \
 }       \
 RB_AUGMENT(elm);      \
 if ((RB_PARENT(tmp, field) = RB_PARENT(elm, field)) != NULL) { \
  if ((elm) == RB_LEFT(RB_PARENT(elm, field), field)) \
   RB_LEFT(RB_PARENT(elm, field), field) = (tmp); \
  else       \
   RB_RIGHT(RB_PARENT(elm, field), field) = (tmp); \
 } else       \
  (head)->rbh_root = (tmp);    \
 RB_RIGHT(tmp, field) = (elm);     \
 RB_PARENT(elm, field) = (tmp);     \
 RB_AUGMENT(tmp);      \
 if ((RB_PARENT(tmp, field)))     \
  RB_AUGMENT(RB_PARENT(tmp, field));   \
} while (/*CONSTCOND*/ 0)

/* Generates prototypes and inline functions */
#define RB_PROTOTYPE(name, type, field, cmp)    \
 RB_PROTOTYPE_INTERNAL(name, type, field, cmp,)
#define RB_PROTOTYPE_STATIC(name, type, field, cmp)   \
 RB_PROTOTYPE_INTERNAL(name, type, field, cmp, _sys_tree_h_unused static)
#define RB_PROTOTYPE_INTERNAL(name, type, field, cmp, attr)  \
attr void name##_RB_INSERT_COLOR(struct name *, struct
 type *);  \
attr void name##_RB_REMOVE_COLOR(struct name *, struct type *, struct type *);\
attr struct type *name##_RB_REMOVE(struct name *, struct type *); \
attr struct type *name##_RB_INSERT(struct name *, struct type *); \
attr struct type *name##_RB_FIND(struct name *, struct type *);  \
attr struct type *name##_RB_NFIND(struct name *, struct type *); \
attr struct type *name##_RB_NEXT(struct type *);   \
attr struct type *name##_RB_PREV(struct type *);   \
attr struct type *name##_RB_MINMAX(struct name *, int);   \
        \

/* Main rb operation.
```

```
* Moves node close to the key of elm to top
*/
#define RB_GENERATE(name, type, field, cmp)    \
 RB_GENERATE_INTERNAL(name, type, field, cmp,)
#define RB_GENERATE_STATIC(name, type, field, cmp)   \
 RB_GENERATE_INTERNAL(name, type, field, cmp, _sys_tree_h_unused static)
#define RB_GENERATE_INTERNAL(name, type, field, cmp, attr)  \
attr void       \
name##_RB_INSERT_COLOR(struct name *head, struct type *elm)  \
{       \
 struct type
 *parent, *gparent, *tmp;    \
 while ((parent = RB_PARENT(elm, field)) != NULL &&  \
     RB_COLOR(parent, field) == RB_RED) {   \
  gparent = RB_PARENT(parent, field);   \
  if (parent == RB_LEFT(gparent, field)) {  \
   tmp = RB_RIGHT(gparent, field);   \
   if (tmp && RB_COLOR(tmp, field) == RB_RED) { \
    RB_COLOR(tmp, field) = RB_BLACK; \
    RB_SET_BLACKRED(parent, gparent, field);\
    elm = gparent;    \
    continue;    \
   }      \
   if (RB_RIGHT(parent, field) == elm) {  \
    RB_ROTATE_LEFT(head, parent, tmp, field);\
    tmp = parent;    \
    parent = elm;    \
    elm = tmp;    \
   }      \
   RB_SET_BLACKRED(parent, gparent, field); \
   RB_ROTATE_RIGHT(head, gparent, tmp, field); \
  } else {      \
   tmp = RB_LEFT(gparent, field);   \
   if (tmp && RB_COLOR(tmp, field) == RB_RED) { \
    RB_COLOR(tmp, field) = RB_BLACK; \
    RB_SET_BLACKRED(parent, gparent, field);\
    elm = gparent;    \
    continue;    \
   }      \
   if (RB_LEFT(parent, field) == elm)
  {  \
    RB_ROTATE_RIGHT(head, parent, tmp, field);\
    tmp = parent;    \
    parent = elm;    \
    elm = tmp;    \
   }      \
   RB_SET_BLACKRED(parent, gparent, field); \
   RB_ROTATE_LEFT(head, gparent, tmp, field); \
```

```
 }      \
 }      \
 RB_COLOR(head->rbh_root, field) = RB_BLACK;   \
}       \
       \
attr void       \
name##_RB_REMOVE_COLOR(struct name *head, struct type *parent, struct type *elm) \
{       \
 struct type *tmp;     \
 while ((elm == NULL || RB_COLOR(elm, field) == RB_BLACK) && \
     elm != RB_ROOT(head)) {     \
  if (RB_LEFT(parent, field) == elm) {   \
   tmp = RB_RIGHT(parent, field);   \
   if (RB_COLOR(tmp, field) == RB_RED) {  \
    RB_SET_BLACKRED(tmp, parent, field); \
    RB_ROTATE_LEFT(head, parent, tmp, field);\
    tmp = RB_RIGHT(parent, field);  \
   }     \
   if ((RB_LEFT(tmp, field) == NULL ||  \
       RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) &&\
       (RB_RIGHT(tmp, field) == NULL ||  \
       RB_COLOR(RB_RIGHT(tmp,
 field), field) == RB_BLACK)) {\
    RB_COLOR(tmp, field) = RB_RED;  \
    elm = parent;    \
    parent = RB_PARENT(elm, field);  \
   } else {     \
    if (RB_RIGHT(tmp, field) == NULL || \
        RB_COLOR(RB_RIGHT(tmp, field), field) == RB_BLACK) {\
     struct type *oleft;  \
     if ((oleft = RB_LEFT(tmp, field)) \
         != NULL)   \
      RB_COLOR(oleft, field) = RB_BLACK;\
     RB_COLOR(tmp, field) = RB_RED; \
     RB_ROTATE_RIGHT(head, tmp, oleft, field);\
     tmp = RB_RIGHT(parent, field); \
    }     \
    RB_COLOR(tmp, field) = RB_COLOR(parent, field);\
    RB_COLOR(parent, field) = RB_BLACK; \
    if (RB_RIGHT(tmp, field))  \
     RB_COLOR(RB_RIGHT(tmp, field), field) = RB_BLACK;\
    RB_ROTATE_LEFT(head, parent, tmp, field);\
    elm = RB_ROOT(head);   \
    break;     \
   }      \
  } else {      \
   tmp = RB_LEFT(parent, field);   \
   if (RB_COLOR(tmp, field) == RB_RED) {  \
```

```
    RB_SET_BLACKRED(tmp, parent, field); \
    RB_ROTATE_RIGHT(head, parent, tmp, field);\
    tmp
 = RB_LEFT(parent, field);  \
   }      \
   if ((RB_LEFT(tmp, field) == NULL ||  \
       RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) &&\
       (RB_RIGHT(tmp, field) == NULL ||  \
       RB_COLOR(RB_RIGHT(tmp, field), field) == RB_BLACK)) {\
    RB_COLOR(tmp, field) = RB_RED;  \
    elm = parent;    \
    parent = RB_PARENT(elm, field);  \
   } else {     \
    if (RB_LEFT(tmp, field) == NULL || \
        RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) {\
     struct type *oright;  \
     if ((oright = RB_RIGHT(tmp, field)) \
         != NULL)   \
      RB_COLOR(oright, field) = RB_BLACK;\
     RB_COLOR(tmp, field) = RB_RED; \
     RB_ROTATE_LEFT(head, tmp, oright, field);\
     tmp = RB_LEFT(parent, field); \
    }     \
    RB_COLOR(tmp, field) = RB_COLOR(parent, field);\
    RB_COLOR(parent, field) = RB_BLACK; \
    if (RB_LEFT(tmp, field))  \
     RB_COLOR(RB_LEFT(tmp, field), field) = RB_BLACK;\
    RB_ROTATE_RIGHT(head, parent, tmp, field);\
    elm = RB_ROOT(head);   \
    break;     \
   }      \
  }       \
 }       \
 if
 (elm)       \
  RB_COLOR(elm, field) = RB_BLACK;   \
}        \
        \
attr struct type *       \
name##_RB_REMOVE(struct name *head, struct type *elm)   \
{        \
 struct type *child, *parent, *old = elm;   \
 int color;       \
 if (RB_LEFT(elm, field) == NULL)    \
  child = RB_RIGHT(elm, field);    \
 else if (RB_RIGHT(elm, field) == NULL)    \
  child = RB_LEFT(elm, field);    \
 else {        \
```

```
 struct type *left;     \
 elm = RB_RIGHT(elm, field);    \
 while ((left = RB_LEFT(elm, field)) != NULL)  \
  elm = left;     \
 child = RB_RIGHT(elm, field);    \
 parent = RB_PARENT(elm, field);    \
 color = RB_COLOR(elm, field);    \
 if (child)      \
  RB_PARENT(child, field) = parent;  \
 if (parent) {      \
  if (RB_LEFT(parent, field) == elm)  \
   RB_LEFT(parent, field) = child;  \
  else      \
   RB_RIGHT(parent, field) = child; \
  RB_AUGMENT(parent);    \
 } else       \
  RB_ROOT(head)
= child;    \
 if (RB_PARENT(elm, field) == old)   \
  parent = elm;     \
 (elm)->field = (old)->field;    \
 if (RB_PARENT(old, field)) {    \
  if (RB_LEFT(RB_PARENT(old, field), field) == old)\
   RB_LEFT(RB_PARENT(old, field), field) = elm;\
  else      \
   RB_RIGHT(RB_PARENT(old, field), field) = elm;\
  RB_AUGMENT(RB_PARENT(old, field));  \
 } else       \
  RB_ROOT(head) = elm;    \
 RB_PARENT(RB_LEFT(old, field), field) = elm;  \
 if (RB_RIGHT(old, field))    \
  RB_PARENT(RB_RIGHT(old, field), field) = elm; \
 if (parent) {      \
  left = parent;     \
  do {      \
   RB_AUGMENT(left);   \
  } while ((left = RB_PARENT(left, field)) != NULL); \
 }       \
 goto color;      \
}        \
parent = RB_PARENT(elm, field);     \
color = RB_COLOR(elm, field);     \
if (child)       \
 RB_PARENT(child, field) = parent;   \
if (parent) {       \
 if (RB_LEFT(parent, field) == elm)   \
  RB_LEFT(parent, field) = child;   \
 else       \
```

```
   RB_RIGHT(parent,
 field) = child;  \
  RB_AUGMENT(parent);     \
 } else       \
  RB_ROOT(head) = child;     \
color:        \
 if (color == RB_BLACK)      \
  name##_RB_REMOVE_COLOR(head, parent, child);  \
 return (old);       \
}        \
        \
/* Inserts a node into the RB tree */     \
attr struct type *       \
name##_RB_INSERT(struct name *head, struct type *elm)   \
{        \
 struct type *tmp;      \
 struct type *parent = NULL;     \
 int comp = 0;       \
 tmp = RB_ROOT(head);      \
 while (tmp) {       \
  parent = tmp;      \
  comp = (cmp)(elm, parent);    \
  if (comp < 0)      \
   tmp = RB_LEFT(tmp, field);   \
  else if (comp > 0)     \
   tmp = RB_RIGHT(tmp, field);   \
  else       \
   return (tmp);     \
 }       \
 RB_SET(elm, parent, field);     \
 if (parent != NULL) {      \
  if (comp < 0)      \
   RB_LEFT(parent, field) = elm;   \
  else       \
   RB_RIGHT(parent, field) = elm;   \
  RB_AUGMENT(parent);     \
 } else       \
  RB_ROOT(head) = elm;     \
 name##_RB_INSERT_COLOR(head,
 elm);    \
 return (NULL);       \
}        \
        \
/* Finds the node with the same key as elm */    \
attr struct type *       \
name##_RB_FIND(struct name *head, struct type *elm)   \
{        \
 struct type *tmp = RB_ROOT(head);    \
```

```
 int comp;       \
 while (tmp) {       \
  comp = cmp(elm, tmp);     \
  if (comp < 0)      \
   tmp = RB_LEFT(tmp, field);   \
  else if (comp > 0)     \
   tmp = RB_RIGHT(tmp, field);   \
  else       \
   return (tmp);     \
 }        \
 return (NULL);       \
}         \
        \
/* Finds the first node greater than or equal to the search key */ \
attr struct type *       \
name##_RB_NFIND(struct name *head, struct type *elm)   \
{         \
 struct type *tmp = RB_ROOT(head);    \
 struct type *res = NULL;     \
 int comp;       \
 while (tmp) {       \
  comp = cmp(elm, tmp);     \
  if (comp < 0) {      \
   res = tmp;     \
   tmp = RB_LEFT(tmp, field);   \
  }       \
  else if (comp > 0)     \
   tmp =
 RB_RIGHT(tmp, field);   \
  else       \
   return (tmp);     \
 }        \
 return (res);       \
}         \
        \
/* ARGSUSED */       \
attr struct type *       \
name##_RB_NEXT(struct type *elm)     \
{         \
 if (RB_RIGHT(elm, field)) {     \
  elm = RB_RIGHT(elm, field);    \
  while (RB_LEFT(elm, field))    \
   elm = RB_LEFT(elm, field);   \
 } else {       \
  if (RB_PARENT(elm, field) &&    \
      (elm == RB_LEFT(RB_PARENT(elm, field), field))) \
   elm = RB_PARENT(elm, field);   \
  else {       \
```

```
   while (RB_PARENT(elm, field) &&   \
       (elm == RB_RIGHT(RB_PARENT(elm, field), field)))\
     elm = RB_PARENT(elm, field);  \
    elm = RB_PARENT(elm, field);   \
   }       \
  }       \
  return (elm);       \
 }        \
         \
/* ARGSUSED */       \
attr struct type *       \
name##_RB_PREV(struct type *elm)     \
{        \
 if (RB_LEFT(elm, field)) {     \
  elm = RB_LEFT(elm, field);    \
  while (RB_RIGHT(elm, field))    \
   elm = RB_RIGHT(elm, field);   \
 }
 else {       \
  if (RB_PARENT(elm, field) &&    \
      (elm == RB_RIGHT(RB_PARENT(elm, field), field))) \
   elm = RB_PARENT(elm, field);   \
  else {       \
   while (RB_PARENT(elm, field) &&   \
       (elm == RB_LEFT(RB_PARENT(elm, field), field)))\
     elm = RB_PARENT(elm, field);  \
    elm = RB_PARENT(elm, field);   \
   }       \
  }       \
  return (elm);       \
 }        \
         \
attr struct type *       \
name##_RB_MINMAX(struct name *head, int val)    \
{        \
 struct type *tmp = RB_ROOT(head);    \
 struct type *parent = NULL;     \
 while (tmp) {       \
  parent = tmp;      \
  if (val < 0)      \
   tmp = RB_LEFT(tmp, field);   \
  else       \
   tmp = RB_RIGHT(tmp, field);   \
 }       \
 return (parent);      \
}

#define RB_NEGINF -1
```

```
#define RB_INF 1

#define RB_INSERT(name, x, y) name##_RB_INSERT(x, y)
#define RB_REMOVE(name, x, y) name##_RB_REMOVE(x, y)
#define RB_FIND(name, x, y) name##_RB_FIND(x, y)
#define RB_NFIND(name, x, y) name##_RB_NFIND(x,
 y)
#define RB_NEXT(name, x, y) name##_RB_NEXT(y)
#define RB_PREV(name, x, y) name##_RB_PREV(y)
#define RB_MIN(name, x)  name##_RB_MINMAX(x, RB_NEGINF)
#define RB_MAX(name, x)  name##_RB_MINMAX(x, RB_INF)

#define RB_FOREACH(x, name, head)     \
 for ((x) = RB_MIN(name, head);     \
      (x) != NULL;      \
      (x) = name##_RB_NEXT(x))

#define RB_FOREACH_FROM(x, name, y)     \
 for ((x) = (y);       \
     ((x) != NULL) && ((y) = name##_RB_NEXT(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_SAFE(x, name, head, y)    \
 for ((x) = RB_MIN(name, head);     \
     ((x) != NULL) && ((y) = name##_RB_NEXT(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_REVERSE(x, name, head)    \
 for ((x) = RB_MAX(name, head);     \
      (x) != NULL;      \
      (x) = name##_RB_PREV(x))

#define RB_FOREACH_REVERSE_FROM(x, name, y)    \
 for ((x) = (y);       \
     ((x) != NULL) && ((y) = name##_RB_PREV(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_REVERSE_SAFE(x, name,
 head, y)   \
 for ((x) = RB_MAX(name, head);     \
     ((x) != NULL) && ((y) = name##_RB_PREV(x), (x) != NULL); \
      (x) = (y))

#endif /* _SYS_TREE_H_ */
pkgname=linux-headers
pkgver=6.14.2 # Follow the latest Linux stable
_kernver=${pkgver%.*}
pkgrel=0
```

pkgdesc="Linux system headers"
url="https://kernel.org/"
arch="all" # Headers are architecture specific
license="GPL-2.0-only"
makedepends="perl"
options="!check !dbg !strip !tracedeps !archcheck"
source="https://kernel.org/pub/linux/kernel/v6.x/linux-$_kernver.tar.xz
 revert-broken-uapi.patch
 0003-remove-inclusion-of-sysinfo.h-in-kernel.h.patch

1.8 goautoneg 0.0.0-20191010083416-a7dc8b61c822

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1.9 libmd 1.1.0-r0

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1.13 github.com/confluentinc/confluent-kafka-go/v2 2.12.0

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

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1.16 alpine-base 3.22.2-r0

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1.17 alpine-keys 2.5-r0

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1.18 logrus 1.9.3

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1.19 protobuf 1.36.10

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1.20 utmps 0.1.3.1-r0

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# 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: 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
"
```

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 WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE
SOFTWARE.
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="
37c8fc73c7aea7b490f7850927e2bb91d12137c9e59e22c084146d515696dbc7973b5de92f4c987ba080dd2502ba8312
7006442c3f019b6447a620c0cae73178  cdefs.h
2f0d5e6e4dc3350285cf17009265dddcbe12431c111868eea39bc8cb038ab7c1f2acacbb21735c4e9d4a1fd106a8fc0f86
11ea33987d4faba37dde5ce6da0750  queue.h
d9ac210d81feb8ad2655bc80fb065d3fe20ae4417b32b4a1711e6738a4870140005c13373b5d1846ef3ce5ae6da45f2da
cef2092881eded0a2e94f6a07752ef3  tree.h
```

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The Kohonen neural network code for color optimization was written by Anthony Dekker.

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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
"
/* $NetBSD: queue.h,v 1.70 2015/11/02 15:21:23 christos Exp $ */

/*
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*
* @(#)queue.h 8.5 (Berkeley) 8/20/94
*/

#ifndef _SYS_QUEUE_H_
#define _SYS_QUEUE_H_

/*
* This file defines five types of data structures: singly-linked lists,
* lists, simple queues, tail queues, and circular queues.
*
* A singly-linked list is headed by a single forward pointer. The
* elements are singly linked for minimum space and
 pointer manipulation
* overhead at the expense of O(n) removal for arbitrary elements. New
* elements can be added to the list after an existing element or at the
* head of the list.  Elements being removed from the head of the list
* should use the explicit macro for this purpose for optimum
* efficiency. A singly-linked list may only be traversed in the forward
* direction.  Singly-linked lists are ideal for applications with large
* datasets and few or no removals or for implementing a LIFO queue.
*
* A list is headed by a single forward pointer (or an array of forward
* pointers for a hash table header). The elements are doubly linked
* so that an arbitrary element can be removed without a need to
* traverse the list. New elements can be added to the list before
* or after an existing element or at the head of the list. A list
* may only be traversed in the forward direction.
*
* A simple queue is headed by a pair of pointers, one the head of the
* list and the
 other to the tail of the list. The elements are singly
* linked to save space, so elements can only be removed from the
* head of the list. New elements can be added to the list after
* an existing element, at the head of the list, or at the end of the
* list. A simple queue may only be traversed in the forward direction.
*
* A tail queue is headed by a pair of pointers, one to the head of the
* list and the other to the tail of the list. The elements are doubly
* linked so that an arbitrary element can be removed without a need to
* traverse the list. New elements can be added to the list before or
* after an existing element, at the head of the list, or at the end of
* the list. A tail queue may be traversed in either direction.
*
* A circle queue is headed by a pair of pointers, one to the head of the
```

```
* list and the other to the tail of the list. The elements are doubly
* linked so that an arbitrary element can be removed without a need to
* traverse the list. New elements
 can be added to the list before or after
* an existing element, at the head of the list, or at the end of the list.
* A circle queue may be traversed in either direction, but has a more
* complex end of list detection.
*
* For details on the use of these macros, see the queue(3) manual page.
*/

/*
* Include the definition of NULL only on NetBSD because sys/null.h
* is not available elsewhere.  This conditional makes the header
* portable and it can simply be dropped verbatim into any system.
* The caveat is that on other systems some other header
* must provide NULL before the macros can be used.
*/
#ifdef __NetBSD__
#include <sys/null.h>
#endif

#if defined(QUEUEDEBUG)
# if defined(_KERNEL)
#  define QUEUEDEBUG_ABORT(...) panic(__VA_ARGS__)
# else
#  include <err.h>
#  define QUEUEDEBUG_ABORT(...) err(1, __VA_ARGS__)
# endif
#endif

/*
* Singly-linked List definitions.
*/
#define SLIST_HEAD(name, type)      \
struct name {       \
 struct type *slh_first; /* first
 element */   \
}

#define SLIST_HEAD_INITIALIZER(head)    \
 { NULL }

#define SLIST_ENTRY(type)      \
struct {        \
 struct type *sle_next; /* next element */   \
}
```

```
/*
* Singly-linked List access methods.
*/
#define SLIST_FIRST(head) ((head)->slh_first)
#define SLIST_END(head)  NULL
#define SLIST_EMPTY(head) ((head)->slh_first == NULL)
#define SLIST_NEXT(elm, field) ((elm)->field.sle_next)

#define SLIST_FOREACH(var, head, field)     \
 for((var) = (head)->slh_first;     \
    (var) != SLIST_END(head);     \
    (var) = (var)->field.sle_next)

#define SLIST_FOREACH_SAFE(var, head, field, tvar)   \
 for ((var) = SLIST_FIRST((head));    \
    (var) != SLIST_END(head) &&     \
    ((tvar) = SLIST_NEXT((var), field), 1);   \
    (var) = (tvar))

/*
* Singly-linked List functions.
*/
#define SLIST_INIT(head) do {      \
 (head)->slh_first = SLIST_END(head);    \
} while (/*CONSTCOND*/0)

#define SLIST_INSERT_AFTER(slistelm, elm, field) do {   \
 (elm)->field.sle_next = (slistelm)->field.sle_next;  \
 (slistelm)->field.sle_next
 = (elm);    \
} while (/*CONSTCOND*/0)

#define SLIST_INSERT_HEAD(head, elm, field) do {   \
 (elm)->field.sle_next = (head)->slh_first;   \
 (head)->slh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE_AFTER(slistelm, field) do {   \
 (slistelm)->field.sle_next =     \
    SLIST_NEXT(SLIST_NEXT((slistelm), field), field);  \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE_HEAD(head, field) do {    \
 (head)->slh_first = (head)->slh_first->field.sle_next;  \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE(head, elm, type, field) do {   \
 if ((head)->slh_first == (elm)) {    \
```

```
 SLIST_REMOVE_HEAD((head), field);   \
 }       \
 else {       \
  struct type *curelm = (head)->slh_first;  \
  while(curelm->field.sle_next != (elm))   \
   curelm = curelm->field.sle_next;  \
  curelm->field.sle_next =    \
      curelm->field.sle_next->field.sle_next;  \
 }       \
} while (/*CONSTCOND*/0)


/*
* List definitions.
 */
#define LIST_HEAD(name, type)      \
struct name {       \
 struct type *lh_first; /* first element */   \
}

#define LIST_HEAD_INITIALIZER(head)     \
 { NULL }

#define LIST_ENTRY(type)      \
struct {       \
 struct type *le_next; /* next element */   \
 struct type **le_prev; /* address of previous next element */ \
}

/*
* List access methods.
*/
#define LIST_FIRST(head)  ((head)->lh_first)
#define LIST_END(head)   NULL
#define LIST_EMPTY(head)  ((head)->lh_first == LIST_END(head))
#define LIST_NEXT(elm, field)  ((elm)->field.le_next)

#define LIST_FOREACH(var, head, field)     \
 for ((var) = ((head)->lh_first);    \
     (var) != LIST_END(head);     \
     (var) = ((var)->field.le_next))

#define LIST_FOREACH_SAFE(var, head, field, tvar)   \
 for ((var) = LIST_FIRST((head));    \
     (var) != LIST_END(head) &&     \
     ((tvar) = LIST_NEXT((var), field), 1);   \
     (var) = (tvar))
```

```
#define LIST_MOVE(head1, head2) do {     \
 LIST_INIT((head2));      \
 if (!LIST_EMPTY((head1)))
 {     \
  (head2)->lh_first = (head1)->lh_first;   \
  LIST_INIT((head1));     \
 }       \
} while (/*CONSTCOND*/0)

/*
* List functions.
*/
#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_LIST_INSERT_HEAD(head, elm, field)   \
 if ((head)->lh_first &&      \
    (head)->lh_first->field.le_prev != &(head)->lh_first) \
  QUEUEDEBUG_ABORT("LIST_INSERT_HEAD %p %s:%d", (head), \
     __FILE__, __LINE__);
#define QUEUEDEBUG_LIST_OP(elm, field)     \
 if ((elm)->field.le_next &&     \
    (elm)->field.le_next->field.le_prev !=   \
    &(elm)->field.le_next)     \
  QUEUEDEBUG_ABORT("LIST_* forw %p %s:%d", (elm),  \
     __FILE__, __LINE__);    \
 if (*(elm)->field.le_prev != (elm))    \
  QUEUEDEBUG_ABORT("LIST_* back %p %s:%d", (elm),  \
     __FILE__, __LINE__);
#define QUEUEDEBUG_LIST_POSTREMOVE(elm, field)    \
 (elm)->field.le_next = (void *)1L;    \
 (elm)->field.le_prev = (void *)1L;
#else
#define QUEUEDEBUG_LIST_INSERT_HEAD(head, elm, field)
#define QUEUEDEBUG_LIST_OP(elm,
 field)
#define QUEUEDEBUG_LIST_POSTREMOVE(elm, field)
#endif

#define LIST_INIT(head) do {      \
 (head)->lh_first = LIST_END(head);    \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_AFTER(listelm, elm, field) do {   \
 QUEUEDEBUG_LIST_OP((listelm), field)    \
 if (((elm)->field.le_next = (listelm)->field.le_next) !=  \
    LIST_END(head))      \
  (listelm)->field.le_next->field.le_prev =  \
     &(elm)->field.le_next;    \
 (listelm)->field.le_next = (elm);    \
```

```
 (elm)->field.le_prev = &(listelm)->field.le_next;  \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_BEFORE(listelm, elm, field) do {   \
 QUEUEDEBUG_LIST_OP((listelm), field)    \
 (elm)->field.le_prev = (listelm)->field.le_prev;  \
 (elm)->field.le_next = (listelm);    \
 *(listelm)->field.le_prev = (elm);    \
 (listelm)->field.le_prev = &(elm)->field.le_next;  \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_HEAD(head, elm, field) do {    \
 QUEUEDEBUG_LIST_INSERT_HEAD((head), (elm), field)  \
 if (((elm)->field.le_next
 = (head)->lh_first) != LIST_END(head))\
  (head)->lh_first->field.le_prev = &(elm)->field.le_next;\
 (head)->lh_first = (elm);     \
 (elm)->field.le_prev = &(head)->lh_first;   \
} while (/*CONSTCOND*/0)

#define LIST_REMOVE(elm, field) do {     \
 QUEUEDEBUG_LIST_OP((elm), field)    \
 if ((elm)->field.le_next != NULL)    \
  (elm)->field.le_next->field.le_prev =    \
      (elm)->field.le_prev;    \
 *(elm)->field.le_prev = (elm)->field.le_next;   \
 QUEUEDEBUG_LIST_POSTREMOVE((elm), field)   \
} while (/*CONSTCOND*/0)

#define LIST_REPLACE(elm, elm2, field) do {    \
 if (((elm2)->field.le_next = (elm)->field.le_next) != NULL) \
  (elm2)->field.le_next->field.le_prev =   \
      &(elm2)->field.le_next;    \
 (elm2)->field.le_prev = (elm)->field.le_prev;   \
 *(elm2)->field.le_prev = (elm2);    \
 QUEUEDEBUG_LIST_POSTREMOVE((elm), field)   \
} while (/*CONSTCOND*/0)

/*
* Simple queue definitions.
*/
#define SIMPLEQ_HEAD(name, type)     \
struct name {        \
 struct
 type *sqh_first; /* first element */   \
 struct type **sqh_last; /* addr of last next element */  \
}
```

```
#define SIMPLEQ_HEAD_INITIALIZER(head)    \
 { NULL, &(head).sqh_first }

#define SIMPLEQ_ENTRY(type)     \
struct {        \
 struct type *sqe_next; /* next element */   \
}

/*
* Simple queue access methods.
*/
#define SIMPLEQ_FIRST(head)  ((head)->sqh_first)
#define SIMPLEQ_END(head)  NULL
#define SIMPLEQ_EMPTY(head)  ((head)->sqh_first == SIMPLEQ_END(head))
#define SIMPLEQ_NEXT(elm, field) ((elm)->field.sqe_next)

#define SIMPLEQ_FOREACH(var, head, field)    \
 for ((var) = ((head)->sqh_first);    \
     (var) != SIMPLEQ_END(head);     \
     (var) = ((var)->field.sqe_next))

#define SIMPLEQ_FOREACH_SAFE(var, head, field, next)   \
 for ((var) = ((head)->sqh_first);    \
     (var) != SIMPLEQ_END(head) &&    \
     ((next = ((var)->field.sqe_next)), 1);   \
     (var) = (next))

/*
* Simple queue functions.
*/
#define SIMPLEQ_INIT(head) do {      \
 (head)->sqh_first = NULL;     \
 (head)->sqh_last
 = &(head)->sqh_first;    \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_INSERT_HEAD(head, elm, field) do {   \
 if (((elm)->field.sqe_next = (head)->sqh_first) == NULL) \
  (head)->sqh_last = &(elm)->field.sqe_next;  \
 (head)->sqh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_INSERT_TAIL(head, elm, field) do {   \
 (elm)->field.sqe_next = NULL;     \
 *(head)->sqh_last = (elm);     \
 (head)->sqh_last = &(elm)->field.sqe_next;   \
} while (/*CONSTCOND*/0)
```

```
#define SIMPLEQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 if (((elm)->field.sqe_next = (listelm)->field.sqe_next) == NULL)\
  (head)->sqh_last = &(elm)->field.sqe_next;  \
 (listelm)->field.sqe_next = (elm);    \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE_HEAD(head, field) do {    \
 if (((head)->sqh_first = (head)->sqh_first->field.sqe_next) == NULL) \
  (head)->sqh_last = &(head)->sqh_first;   \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE_AFTER(head, elm, field) do {   \
 if
 (((elm)->field.sqe_next = (elm)->field.sqe_next->field.sqe_next) \
    == NULL)       \
  (head)->sqh_last = &(elm)->field.sqe_next;  \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE(head, elm, type, field) do {   \
 if ((head)->sqh_first == (elm)) {    \
  SIMPLEQ_REMOVE_HEAD((head), field);   \
 } else {       \
  struct type *curelm = (head)->sqh_first;  \
  while (curelm->field.sqe_next != (elm))   \
   curelm = curelm->field.sqe_next;  \
  if ((curelm->field.sqe_next =    \
   curelm->field.sqe_next->field.sqe_next) == NULL) \
      (head)->sqh_last = &(curelm)->field.sqe_next; \
 }       \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_CONCAT(head1, head2) do {    \
 if (!SIMPLEQ_EMPTY((head2))) {     \
  *(head1)->sqh_last = (head2)->sqh_first;  \
  (head1)->sqh_last = (head2)->sqh_last;  \
  SIMPLEQ_INIT((head2));     \
 }       \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_LAST(head, type, field)     \
 (SIMPLEQ_EMPTY((head)) ?      \
  NULL :       \
        ((struct type
 *)(void *)    \
  ((char *)((head)->sqh_last) - offsetof(struct type, field))))

/*
* Tail queue definitions.
```

```
*/
#define _TAILQ_HEAD(name, type, qual)     \
struct name {        \
 qual type *tqh_first;  /* first element */  \
 qual type *qual *tqh_last; /* addr of last next element */ \
}
#define TAILQ_HEAD(name, type) _TAILQ_HEAD(name, struct type,)

#define TAILQ_HEAD_INITIALIZER(head)     \
 { TAILQ_END(head), &(head).tqh_first }

#define _TAILQ_ENTRY(type, qual)     \
struct {        \
 qual type *tqe_next;  /* next element */  \
 qual type *qual *tqe_prev; /* address of previous next element */\
}
#define TAILQ_ENTRY(type) _TAILQ_ENTRY(struct type,)

/*
* Tail queue access methods.
*/
#define TAILQ_FIRST(head)  ((head)->tqh_first)
#define TAILQ_END(head)   (NULL)
#define TAILQ_NEXT(elm, field)  ((elm)->field.tqe_next)
#define TAILQ_LAST(head, headname) \
 (*(((struct headname *)(void *)((head)->tqh_last))->tqh_last))
#define TAILQ_PREV(elm, headname, field) \
 (*(((struct headname
 *)(void *)((elm)->field.tqe_prev))->tqh_last))
#define TAILQ_EMPTY(head)  (TAILQ_FIRST(head) == TAILQ_END(head))


#define TAILQ_FOREACH(var, head, field)     \
 for ((var) = ((head)->tqh_first);    \
    (var) != TAILQ_END(head);     \
    (var) = ((var)->field.tqe_next))

#define TAILQ_FOREACH_SAFE(var, head, field, next)   \
 for ((var) = ((head)->tqh_first);    \
    (var) != TAILQ_END(head) &&     \
    ((next) = TAILQ_NEXT(var, field), 1); (var) = (next))

#define TAILQ_FOREACH_REVERSE(var, head, headname, field)  \
 for ((var) = TAILQ_LAST((head), headname);   \
    (var) != TAILQ_END(head);     \
    (var) = TAILQ_PREV((var), headname, field))

#define TAILQ_FOREACH_REVERSE_SAFE(var, head, headname, field, prev) \
```

```
 for ((var) = TAILQ_LAST((head), headname);   \
    (var) != TAILQ_END(head) &&     \
    ((prev) = TAILQ_PREV((var), headname, field), 1); (var) = (prev))

/*
* Tail queue functions.
*/
#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_TAILQ_INSERT_HEAD(head,
 elm, field)   \
 if ((head)->tqh_first &&     \
    (head)->tqh_first->field.tqe_prev != &(head)->tqh_first) \
  QUEUEDEBUG_ABORT("TAILQ_INSERT_HEAD %p %s:%d", (head), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_INSERT_TAIL(head, elm, field)   \
 if (*(head)->tqh_last != NULL)     \
  QUEUEDEBUG_ABORT("TAILQ_INSERT_TAIL %p %s:%d", (head), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_OP(elm, field)     \
 if ((elm)->field.tqe_next &&     \
    (elm)->field.tqe_next->field.tqe_prev !=   \
    &(elm)->field.tqe_next)     \
  QUEUEDEBUG_ABORT("TAILQ_* forw %p %s:%d", (elm), \
      __FILE__, __LINE__);    \
 if (*(elm)->field.tqe_prev != (elm))    \
  QUEUEDEBUG_ABORT("TAILQ_* back %p %s:%d", (elm), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_PREREMOVE(head, elm, field)   \
 if ((elm)->field.tqe_next == NULL &&    \
    (head)->tqh_last != &(elm)->field.tqe_next)   \
  QUEUEDEBUG_ABORT("TAILQ_PREREMOVE head %p elm %p %s:%d",\
      (head), (elm), __FILE__,
 __LINE__);
#define QUEUEDEBUG_TAILQ_POSTREMOVE(elm, field)    \
 (elm)->field.tqe_next = (void *)1L;    \
 (elm)->field.tqe_prev = (void *)1L;
#else
#define QUEUEDEBUG_TAILQ_INSERT_HEAD(head, elm, field)
#define QUEUEDEBUG_TAILQ_INSERT_TAIL(head, elm, field)
#define QUEUEDEBUG_TAILQ_OP(elm, field)
#define QUEUEDEBUG_TAILQ_PREREMOVE(head, elm, field)
#define QUEUEDEBUG_TAILQ_POSTREMOVE(elm, field)
#endif

#define TAILQ_INIT(head) do {      \
 (head)->tqh_first = TAILQ_END(head);    \
 (head)->tqh_last = &(head)->tqh_first;    \
} while (/*CONSTCOND*/0)
```

```
#define TAILQ_INSERT_HEAD(head, elm, field) do {	\
 QUEUEDEBUG_TAILQ_INSERT_HEAD((head), (elm), field)	\
 if (((elm)->field.tqe_next = (head)->tqh_first) != TAILQ_END(head))\
  (head)->tqh_first->field.tqe_prev =	\
      &(elm)->field.tqe_next;	\
 else		\
  (head)->tqh_last = &(elm)->field.tqe_next;	\
 (head)->tqh_first = (elm);	\
 (elm)->field.tqe_prev = &(head)->tqh_first;	\
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_TAIL(head,
 elm, field) do {	\
 QUEUEDEBUG_TAILQ_INSERT_TAIL((head), (elm), field)	\
 (elm)->field.tqe_next = TAILQ_END(head);	\
 (elm)->field.tqe_prev = (head)->tqh_last;	\
 *(head)->tqh_last = (elm);	\
 (head)->tqh_last = &(elm)->field.tqe_next;	\
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_AFTER(head, listelm, elm, field) do {	\
 QUEUEDEBUG_TAILQ_OP((listelm), field)	\
 if (((elm)->field.tqe_next = (listelm)->field.tqe_next) !=	\
     TAILQ_END(head))	\
  (elm)->field.tqe_next->field.tqe_prev =	\
      &(elm)->field.tqe_next;	\
 else		\
  (head)->tqh_last = &(elm)->field.tqe_next;	\
 (listelm)->field.tqe_next = (elm);	\
 (elm)->field.tqe_prev = &(listelm)->field.tqe_next;	\
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_BEFORE(listelm, elm, field) do {	\
 QUEUEDEBUG_TAILQ_OP((listelm), field)	\
 (elm)->field.tqe_prev = (listelm)->field.tqe_prev;	\
 (elm)->field.tqe_next = (listelm);	\
 *(listelm)->field.tqe_prev = (elm);	\
 (listelm)->field.tqe_prev
 = &(elm)->field.tqe_next;	\
} while (/*CONSTCOND*/0)

#define TAILQ_REMOVE(head, elm, field) do {	\
 QUEUEDEBUG_TAILQ_PREREMOVE((head), (elm), field)	\
 QUEUEDEBUG_TAILQ_OP((elm), field)	\
 if (((elm)->field.tqe_next) != TAILQ_END(head))	\
  (elm)->field.tqe_next->field.tqe_prev =	\
      (elm)->field.tqe_prev;	\
```

```
 else       \
  (head)->tqh_last = (elm)->field.tqe_prev;  \
 *(elm)->field.tqe_prev = (elm)->field.tqe_next;   \
 QUEUEDEBUG_TAILQ_POSTREMOVE((elm), field);   \
} while (/*CONSTCOND*/0)

#define TAILQ_REPLACE(head, elm, elm2, field) do {   \
      if (((elm2)->field.tqe_next = (elm)->field.tqe_next) !=  \
    TAILQ_END(head))        \
            (elm2)->field.tqe_next->field.tqe_prev =  \
               &(elm2)->field.tqe_next;    \
      else       \
            (head)->tqh_last = &(elm2)->field.tqe_next;  \
      (elm2)->field.tqe_prev = (elm)->field.tqe_prev;   \
      *(elm2)->field.tqe_prev = (elm2);    \
 QUEUEDEBUG_TAILQ_POSTREMOVE((elm),
 field);   \
} while (/*CONSTCOND*/0)

#define TAILQ_CONCAT(head1, head2, field) do {    \
 if (!TAILQ_EMPTY(head2)) {     \
  *(head1)->tqh_last = (head2)->tqh_first;  \
  (head2)->tqh_first->field.tqe_prev = (head1)->tqh_last; \
  (head1)->tqh_last = (head2)->tqh_last;   \
  TAILQ_INIT((head2));     \
 }       \
} while (/*CONSTCOND*/0)

/*
* Singly-linked Tail queue declarations.
*/
#define STAILQ_HEAD(name, type)      \
struct name {       \
 struct type *stqh_first; /* first element */  \
 struct type **stqh_last; /* addr of last next element */ \
}

#define STAILQ_HEAD_INITIALIZER(head)     \
 { NULL, &(head).stqh_first }

#define STAILQ_ENTRY(type)      \
struct {       \
 struct type *stqe_next; /* next element */   \
}

/*
* Singly-linked Tail queue access methods.
*/
```

```
#define STAILQ_FIRST(head) ((head)->stqh_first)
#define STAILQ_END(head) NULL
#define STAILQ_NEXT(elm, field) ((elm)->field.stqe_next)
#define STAILQ_EMPTY(head) (STAILQ_FIRST(head)
 == STAILQ_END(head))

/*
* Singly-linked Tail queue functions.
*/
#define STAILQ_INIT(head) do {      \
 (head)->stqh_first = NULL;     \
 (head)->stqh_last = &(head)->stqh_first;    \
} while (/*CONSTCOND*/0)

#define STAILQ_INSERT_HEAD(head, elm, field) do {   \
 if (((elm)->field.stqe_next = (head)->stqh_first) == NULL) \
  (head)->stqh_last = &(elm)->field.stqe_next;  \
 (head)->stqh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define STAILQ_INSERT_TAIL(head, elm, field) do {   \
 (elm)->field.stqe_next = NULL;     \
 *(head)->stqh_last = (elm);     \
 (head)->stqh_last = &(elm)->field.stqe_next;   \
} while (/*CONSTCOND*/0)

#define STAILQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 if (((elm)->field.stqe_next = (listelm)->field.stqe_next) == NULL)\
  (head)->stqh_last = &(elm)->field.stqe_next;  \
 (listelm)->field.stqe_next = (elm);    \
} while (/*CONSTCOND*/0)

#define STAILQ_REMOVE_HEAD(head, field) do {    \
 if (((head)->stqh_first = (head)->stqh_first->field.stqe_next)
 == NULL) \
  (head)->stqh_last = &(head)->stqh_first;   \
} while (/*CONSTCOND*/0)

#define STAILQ_REMOVE(head, elm, type, field) do {   \
 if ((head)->stqh_first == (elm)) {    \
  STAILQ_REMOVE_HEAD((head), field);   \
 } else {       \
  struct type *curelm = (head)->stqh_first;  \
  while (curelm->field.stqe_next != (elm))   \
   curelm = curelm->field.stqe_next;  \
  if ((curelm->field.stqe_next =    \
   curelm->field.stqe_next->field.stqe_next) == NULL) \
      (head)->stqh_last = &(curelm)->field.stqe_next; \
```

```
 }       \
} while (/*CONSTCOND*/0)

#define STAILQ_FOREACH(var, head, field)    \
 for ((var) = ((head)->stqh_first);    \
  (var);       \
  (var) = ((var)->field.stqe_next))

#define STAILQ_FOREACH_SAFE(var, head, field, tvar)   \
 for ((var) = STAILQ_FIRST((head));    \
     (var) && ((tvar) = STAILQ_NEXT((var), field), 1);  \
     (var) = (tvar))

#define STAILQ_CONCAT(head1, head2) do {    \
 if (!STAILQ_EMPTY((head2))) {     \
  *(head1)->stqh_last
 = (head2)->stqh_first;  \
  (head1)->stqh_last = (head2)->stqh_last;  \
  STAILQ_INIT((head2));     \
 }       \
} while (/*CONSTCOND*/0)

#define STAILQ_LAST(head, type, field)     \
 (STAILQ_EMPTY((head)) ?      \
  NULL :       \
        ((struct type *)(void *)    \
  ((char *)((head)->stqh_last) - offsetof(struct type, field))))


#ifndef _KERNEL
/*
* Circular queue definitions. Do not use. We still keep the macros
* for compatibility but because of pointer aliasing issues their use
* is discouraged!
*/

/*
* __launder_type():  We use this ugly hack to work around the the compiler
* noticing that two types may not alias each other and elide tests in code.
* We hit this in the CIRCLEQ macros when comparing 'struct name *' and
* 'struct type *' (see CIRCLEQ_HEAD()).  Modern compilers (such as GCC
* 4.8) declare these comparisons as always false, causing the code to
* not run as designed.
*
* This hack is only to be used for comparisons and thus can be fully const.
 * Do not use for assignment.
*
* If we ever choose to change the ABI of the CIRCLEQ macros, we could fix
```

```
* this by changing the head/tail sentinal values, but see the note above
* this one.
*/
static __inline const void * __launder_type(const void *);
static __inline const void *
__launder_type(const void *__x)
{
 __asm __volatile("" : "+r" (__x));
 return __x;
}

#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_CIRCLEQ_HEAD(head, field)    \
 if ((head)->cqh_first != CIRCLEQ_ENDC(head) &&   \
    (head)->cqh_first->field.cqe_prev != CIRCLEQ_ENDC(head)) \
  QUEUEDEBUG_ABORT("CIRCLEQ head forw %p %s:%d", (head), \
       __FILE__, __LINE__);    \
 if ((head)->cqh_last != CIRCLEQ_ENDC(head) &&   \
    (head)->cqh_last->field.cqe_next != CIRCLEQ_ENDC(head)) \
  QUEUEDEBUG_ABORT("CIRCLEQ head back %p %s:%d", (head), \
       __FILE__, __LINE__);
#define QUEUEDEBUG_CIRCLEQ_ELM(head, elm, field)   \
 if ((elm)->field.cqe_next == CIRCLEQ_ENDC(head)) {  \
  if ((head)->cqh_last != (elm))    \
   QUEUEDEBUG_ABORT("CIRCLEQ
 elm last %p %s:%d", \
      (elm), __FILE__, __LINE__);   \
 } else {      \
  if ((elm)->field.cqe_next->field.cqe_prev != (elm)) \
   QUEUEDEBUG_ABORT("CIRCLEQ elm forw %p %s:%d", \
      (elm), __FILE__, __LINE__);   \
 }       \
 if ((elm)->field.cqe_prev == CIRCLEQ_ENDC(head)) {  \
  if ((head)->cqh_first != (elm))    \
   QUEUEDEBUG_ABORT("CIRCLEQ elm first %p %s:%d", \
      (elm), __FILE__, __LINE__);   \
 } else {      \
  if ((elm)->field.cqe_prev->field.cqe_next != (elm)) \
   QUEUEDEBUG_ABORT("CIRCLEQ elm prev %p %s:%d", \
      (elm), __FILE__, __LINE__);   \
 }
#define QUEUEDEBUG_CIRCLEQ_POSTREMOVE(elm, field)   \
 (elm)->field.cqe_next = (void *)1L;    \
 (elm)->field.cqe_prev = (void *)1L;
#else
#define QUEUEDEBUG_CIRCLEQ_HEAD(head, field)
#define QUEUEDEBUG_CIRCLEQ_ELM(head, elm, field)
#define QUEUEDEBUG_CIRCLEQ_POSTREMOVE(elm, field)
```

```
#endif

#define CIRCLEQ_HEAD(name, type)     \
struct name {        \
 struct type *cqh_first;  /*
 first element */  \
 struct type *cqh_last;  /* last element */  \
}

#define CIRCLEQ_HEAD_INITIALIZER(head)     \
 { CIRCLEQ_END(&head), CIRCLEQ_END(&head) }

#define CIRCLEQ_ENTRY(type)      \
struct {        \
 struct type *cqe_next;  /* next element */  \
 struct type *cqe_prev;  /* previous element */  \
}

/*
* Circular queue functions.
*/
#define CIRCLEQ_INIT(head) do {      \
 (head)->cqh_first = CIRCLEQ_END(head);    \
 (head)->cqh_last = CIRCLEQ_END(head);    \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 QUEUEDEBUG_CIRCLEQ_ELM((head), (listelm), field)  \
 (elm)->field.cqe_next = (listelm)->field.cqe_next;  \
 (elm)->field.cqe_prev = (listelm);    \
 if ((listelm)->field.cqe_next == CIRCLEQ_ENDC(head))  \
  (head)->cqh_last = (elm);    \
 else        \
  (listelm)->field.cqe_next->field.cqe_prev = (elm); \
 (listelm)->field.cqe_next = (elm);    \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_BEFORE(head,
 listelm, elm, field) do {  \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 QUEUEDEBUG_CIRCLEQ_ELM((head), (listelm), field)  \
 (elm)->field.cqe_next = (listelm);    \
 (elm)->field.cqe_prev = (listelm)->field.cqe_prev;  \
 if ((listelm)->field.cqe_prev == CIRCLEQ_ENDC(head))  \
  (head)->cqh_first = (elm);    \
 else        \
  (listelm)->field.cqe_prev->field.cqe_next = (elm); \
```

```
 (listelm)->field.cqe_prev = (elm);    \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_HEAD(head, elm, field) do {    \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 (elm)->field.cqe_next = (head)->cqh_first;    \
 (elm)->field.cqe_prev = CIRCLEQ_END(head);    \
 if ((head)->cqh_last == CIRCLEQ_ENDC(head))    \
  (head)->cqh_last = (elm);    \
 else        \
  (head)->cqh_first->field.cqe_prev = (elm);  \
 (head)->cqh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_TAIL(head, elm, field) do {    \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 (elm)->field.cqe_next
 = CIRCLEQ_END(head);    \
 (elm)->field.cqe_prev = (head)->cqh_last;    \
 if ((head)->cqh_first == CIRCLEQ_ENDC(head))    \
  (head)->cqh_first = (elm);    \
 else        \
  (head)->cqh_last->field.cqe_next = (elm);  \
 (head)->cqh_last = (elm);     \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_REMOVE(head, elm, field) do {    \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 QUEUEDEBUG_CIRCLEQ_ELM((head), (elm), field)   \
 if ((elm)->field.cqe_next == CIRCLEQ_ENDC(head))  \
  (head)->cqh_last = (elm)->field.cqe_prev;  \
 else        \
  (elm)->field.cqe_next->field.cqe_prev =   \
      (elm)->field.cqe_prev;    \
 if ((elm)->field.cqe_prev == CIRCLEQ_ENDC(head))  \
  (head)->cqh_first = (elm)->field.cqe_next;  \
 else        \
  (elm)->field.cqe_prev->field.cqe_next =   \
      (elm)->field.cqe_next;    \
 QUEUEDEBUG_CIRCLEQ_POSTREMOVE((elm), field)   \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_FOREACH(var, head, field)    \
 for ((var) = ((head)->cqh_first);    \
  (var) != CIRCLEQ_ENDC(head);    \
  (var)
 = ((var)->field.cqe_next))
```

```
#define CIRCLEQ_FOREACH_REVERSE(var, head, field)   \
 for ((var) = ((head)->cqh_last);    \
  (var) != CIRCLEQ_ENDC(head);    \
  (var) = ((var)->field.cqe_prev))

/*
* Circular queue access methods.
*/
#define CIRCLEQ_FIRST(head)  ((head)->cqh_first)
#define CIRCLEQ_LAST(head)  ((head)->cqh_last)
/* For comparisons */
#define CIRCLEQ_ENDC(head)  (__launder_type(head))
/* For assignments */
#define CIRCLEQ_END(head)  ((void *)(head))
#define CIRCLEQ_NEXT(elm, field) ((elm)->field.cqe_next)
#define CIRCLEQ_PREV(elm, field) ((elm)->field.cqe_prev)
#define CIRCLEQ_EMPTY(head)      \
   (CIRCLEQ_FIRST(head) == CIRCLEQ_ENDC(head))

#define CIRCLEQ_LOOP_NEXT(head, elm, field)    \
 (((elm)->field.cqe_next == CIRCLEQ_ENDC(head))   \
     ? ((head)->cqh_first)     \
     : (elm->field.cqe_next))
#define CIRCLEQ_LOOP_PREV(head, elm, field)    \
 (((elm)->field.cqe_prev == CIRCLEQ_ENDC(head))   \
     ? ((head)->cqh_last)     \
     :
 (elm->field.cqe_prev))
#endif /* !_KERNEL */

#endif /* !_SYS_QUEUE_H_ */
# 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
"
#ifndef _SYS_CDEFS_H_
#define _SYS_CDEFS_H_

#warning usage of non-standard #include <sys/cdefs.h> is deprecated

#undef __P
#undef __PMT

#define __P(args) args
#define __PMT(args) args

#define __CONCAT(x,y) x ## y
#define __STRING(x) #x

#ifdef  __cplusplus
# define __BEGIN_DECLS extern "C" {
# define __END_DECLS }
#else
# define __BEGIN_DECLS
# define __END_DECLS
#endif

#if defined(__GNUC__) && !defined(__cplusplus)
# define __THROW __attribute__ ((__nothrow__))
# define __NTH(fct) __attribute__ ((__nothrow__)) fct
#else
# define __THROW
# define __NTH(fct)     fct
#endif
```

```
#endif /* _SYS_CDEFS_H_ */
# 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
"
/* $NetBSD: tree.h,v 1.20 2013/09/14 13:20:45 joerg Exp $ */
/* $OpenBSD: tree.h,v 1.13 2011/07/09 00:19:45 pirofti Exp $ */
/* Modified by Void Linux. */
/*
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```

```
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* INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT
* NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,
* DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
* THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
* (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF
* THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
*/

#ifndef _SYS_TREE_H_
#define _SYS_TREE_H_

#ifdef __GNUC__
#define __GNUC_PREREQ__(x, y)      \
 ((__GNUC__ == (x) && __GNUC_MINOR__ >= (y)) ||   \
  (__GNUC__ > (x)))
#else
#define __GNUC_PREREQ__(x, y) 0
#endif

#if __GNUC_PREREQ__(2, 7) || defined(__lint__)
#define _sys_tree_h_unused __attribute__((__unused__))
#else
#define _sys_tree_h_unused /* delete */
#endif

/*
* This file defines data structures for different types of trees:
* splay trees and red-black trees.
*
* A splay tree is a self-organizing
 data structure.  Every operation
* on the tree causes a splay to happen.  The splay moves the requested
* node to the root of the tree and partly rebalances it.
*
* This has the benefit that request locality causes faster lookups as
* the requested nodes move to the top of the tree.  On the other hand,
* every lookup causes memory writes.
*
* The Balance Theorem bounds the total access time for m operations
* and n inserts on an initially empty tree as O((m + n)lg n).  The
```

```
* amortized cost for a sequence of m accesses to a splay tree is O(lg n);
*
* A red-black tree is a binary search tree with the node color as an
* extra attribute.  It fulfills a set of conditions:
* - every search path from the root to a leaf consists of the
*   same number of black nodes,
* - each red node (except for the root) has a black parent,
* - each leaf node is black.
*
* Every operation on a red-black tree is bounded as O(lg n).
* The maximum height of a red-black tree is 2lg (n+1).
 */

#define SPLAY_HEAD(name, type)      \
struct name {       \
 struct type *sph_root; /* root of the tree */   \
}

#define SPLAY_INITIALIZER(root)     \
 { NULL }

#define SPLAY_INIT(root) do {      \
 (root)->sph_root = NULL;     \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ENTRY(type)      \
struct {       \
 struct type *spe_left; /* left element */   \
 struct type *spe_right; /* right element */   \
}

#define SPLAY_LEFT(elm, field)  (elm)->field.spe_left
#define SPLAY_RIGHT(elm, field)  (elm)->field.spe_right
#define SPLAY_ROOT(head)  (head)->sph_root
#define SPLAY_EMPTY(head)  (SPLAY_ROOT(head) == NULL)

/* SPLAY_ROTATE_{LEFT,RIGHT} expect that tmp hold SPLAY_{RIGHT,LEFT} */
#define SPLAY_ROTATE_RIGHT(head, tmp, field) do {   \
 SPLAY_LEFT((head)->sph_root, field) = SPLAY_RIGHT(tmp, field); \
 SPLAY_RIGHT(tmp, field) = (head)->sph_root;   \
 (head)->sph_root = tmp;      \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ROTATE_LEFT(head, tmp, field) do {   \
 SPLAY_RIGHT((head)->sph_root,
 field) = SPLAY_LEFT(tmp, field); \
 SPLAY_LEFT(tmp, field) = (head)->sph_root;   \
 (head)->sph_root = tmp;      \
```

```
} while (/*CONSTCOND*/ 0)

#define SPLAY_LINKLEFT(head, tmp, field) do {    \
 SPLAY_LEFT(tmp, field) = (head)->sph_root;   \
 tmp = (head)->sph_root;      \
 (head)->sph_root = SPLAY_LEFT((head)->sph_root, field);  \
} while (/*CONSTCOND*/ 0)

#define SPLAY_LINKRIGHT(head, tmp, field) do {    \
 SPLAY_RIGHT(tmp, field) = (head)->sph_root;   \
 tmp = (head)->sph_root;      \
 (head)->sph_root = SPLAY_RIGHT((head)->sph_root, field); \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ASSEMBLE(head, node, left, right, field) do {  \
 SPLAY_RIGHT(left, field) = SPLAY_LEFT((head)->sph_root, field); \
 SPLAY_LEFT(right, field) = SPLAY_RIGHT((head)->sph_root, field);\
 SPLAY_LEFT((head)->sph_root, field) = SPLAY_RIGHT(node, field); \
 SPLAY_RIGHT((head)->sph_root, field) = SPLAY_LEFT(node, field); \
} while (/*CONSTCOND*/ 0)

/* Generates prototypes and inline functions */

#define
 SPLAY_PROTOTYPE(name, type, field, cmp)    \
void name##_SPLAY(struct name *, struct type *);   \
void name##_SPLAY_MINMAX(struct name *, int);    \
struct type *name##_SPLAY_INSERT(struct name *, struct type *);  \
struct type *name##_SPLAY_REMOVE(struct name *, struct type *);  \
        \
/* Finds the node with the same key as elm */    \
static __inline struct type *      \
name##_SPLAY_FIND(struct name *head, struct type *elm)   \
{        \
 if (SPLAY_EMPTY(head))      \
  return(NULL);      \
 name##_SPLAY(head, elm);     \
 if ((cmp)(elm, (head)->sph_root) == 0)    \
  return (head->sph_root);    \
 return (NULL);       \
}        \
        \
static __inline _sys_tree_h_unused struct type *   \
name##_SPLAY_NEXT(struct name *head, struct type *elm)   \
{        \
 name##_SPLAY(head, elm);     \
 if (SPLAY_RIGHT(elm, field) != NULL) {    \
  elm = SPLAY_RIGHT(elm, field);    \
```

```
  while (SPLAY_LEFT(elm, field) != NULL) {  \
   elm = SPLAY_LEFT(elm, field);   \
  }       \
 }
 else       \
  elm = NULL;      \
 return (elm);       \
}        \
        \
static _sys_tree_h_unused __inline struct type *   \
name##_SPLAY_MIN_MAX(struct name *head, int val)   \
{        \
 name##_SPLAY_MINMAX(head, val);     \
       return (SPLAY_ROOT(head));     \
}

/* Main splay operation.
* Moves node close to the key of elm to top
*/
#define SPLAY_GENERATE(name, type, field, cmp)    \
struct type *       \
name##_SPLAY_INSERT(struct name *head, struct type *elm)  \
{        \
   if (SPLAY_EMPTY(head)) {      \
     SPLAY_LEFT(elm, field) = SPLAY_RIGHT(elm, field) = NULL; \
   } else {       \
     int __comp;       \
     name##_SPLAY(head, elm);     \
     __comp = (cmp)(elm, (head)->sph_root);   \
     if(__comp < 0) {      \
      SPLAY_LEFT(elm, field) = SPLAY_LEFT((head)->sph_root, field);\
      SPLAY_RIGHT(elm, field) = (head)->sph_root;  \
      SPLAY_LEFT((head)->sph_root, field) = NULL;  \
     } else if (__comp > 0) {     \
      SPLAY_RIGHT(elm,
 field) = SPLAY_RIGHT((head)->sph_root, field);\
      SPLAY_LEFT(elm, field) = (head)->sph_root;  \
      SPLAY_RIGHT((head)->sph_root, field) = NULL; \
     } else       \
      return ((head)->sph_root);    \
   }        \
   (head)->sph_root = (elm);      \
   return (NULL);       \
}        \
        \
struct type *       \
name##_SPLAY_REMOVE(struct name *head, struct type *elm)  \
{        \
```

```
 struct type *__tmp;      \
 if (SPLAY_EMPTY(head))      \
  return (NULL);      \
 name##_SPLAY(head, elm);     \
 if ((cmp)(elm, (head)->sph_root) == 0) {   \
  if (SPLAY_LEFT((head)->sph_root, field) == NULL) { \
   (head)->sph_root = SPLAY_RIGHT((head)->sph_root, field);\
  } else {      \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   (head)->sph_root = SPLAY_LEFT((head)->sph_root, field);\
   name##_SPLAY(head, elm);   \
   SPLAY_RIGHT((head)->sph_root, field) = __tmp; \
  }       \
  return (elm);      \
 }        \
 return (NULL);       \
}         \
         \
void         \
name##_SPLAY(struct
 name *head, struct type *elm)   \
{         \
 struct type __node, *__left, *__right, *__tmp;   \
 int __comp;       \
\
 SPLAY_LEFT(&__node, field) = SPLAY_RIGHT(&__node, field) = NULL;\
 __left = __right = &__node;     \
\
 while ((__comp = (cmp)(elm, (head)->sph_root)) != 0) {  \
  if (__comp < 0) {     \
   __tmp = SPLAY_LEFT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if ((cmp)(elm, __tmp) < 0){   \
    SPLAY_ROTATE_RIGHT(head, __tmp, field); \
    if (SPLAY_LEFT((head)->sph_root, field) == NULL)\
     break;    \
   }      \
   SPLAY_LINKLEFT(head, __right, field);  \
  } else if (__comp > 0) {    \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if ((cmp)(elm, __tmp) > 0){   \
    SPLAY_ROTATE_LEFT(head, __tmp, field); \
    if (SPLAY_RIGHT((head)->sph_root, field) == NULL)\
     break;    \
   }      \
```

```
  SPLAY_LINKRIGHT(head, __left, field);  \
 }       \
 }       \
 SPLAY_ASSEMBLE(head,
 &__node, __left, __right, field);  \
}        \
        \
/* Splay with either the minimum or the maximum element   \
* Used to find minimum or maximum element in tree.   \
*/        \
void name##_SPLAY_MINMAX(struct name *head, int __comp) \
{        \
 struct type __node, *__left, *__right, *__tmp;   \
\
 SPLAY_LEFT(&__node, field) = SPLAY_RIGHT(&__node, field) = NULL;\
 __left = __right = &__node;     \
\
 while (1) {       \
  if (__comp < 0) {     \
   __tmp = SPLAY_LEFT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if (__comp < 0){    \
    SPLAY_ROTATE_RIGHT(head, __tmp, field); \
    if (SPLAY_LEFT((head)->sph_root, field) == NULL)\
     break;    \
   }      \
   SPLAY_LINKLEFT(head, __right, field);  \
  } else if (__comp > 0) {    \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if (__comp > 0) {    \
    SPLAY_ROTATE_LEFT(head, __tmp, field); \
    if (SPLAY_RIGHT((head)->sph_root,
 field) == NULL)\
     break;    \
   }      \
   SPLAY_LINKRIGHT(head, __left, field);  \
  }       \
 }       \
 SPLAY_ASSEMBLE(head, &__node, __left, __right, field);  \
}

#define SPLAY_NEGINF -1
#define SPLAY_INF 1

#define SPLAY_INSERT(name, x, y) name##_SPLAY_INSERT(x, y)
```

```
#define SPLAY_REMOVE(name, x, y) name##_SPLAY_REMOVE(x, y)
#define SPLAY_FIND(name, x, y)  name##_SPLAY_FIND(x, y)
#define SPLAY_NEXT(name, x, y)  name##_SPLAY_NEXT(x, y)
#define SPLAY_MIN(name, x)  (SPLAY_EMPTY(x) ? NULL \
    : name##_SPLAY_MIN_MAX(x, SPLAY_NEGINF))
#define SPLAY_MAX(name, x)  (SPLAY_EMPTY(x) ? NULL \
    : name##_SPLAY_MIN_MAX(x, SPLAY_INF))

#define SPLAY_FOREACH(x, name, head)    \
 for ((x) = SPLAY_MIN(name, head);   \
     (x) != NULL;     \
     (x) = SPLAY_NEXT(name, head, x))

/* Macros that define a red-black tree */
#define RB_HEAD(name, type)     \
struct name {       \
 struct type *rbh_root; /* root of the tree */  \
}

#define RB_INITIALIZER(root)     \
 {
 NULL }

#define RB_INIT(root) do {      \
 (root)->rbh_root = NULL;    \
} while (/*CONSTCOND*/ 0)

#define RB_BLACK 0
#define RB_RED  1
#define RB_ENTRY(type)      \
struct {       \
 struct type *rbe_left;  /* left element */  \
 struct type *rbe_right;  /* right element */  \
 struct type *rbe_parent; /* parent element */  \
 int rbe_color;   /* node color */  \
}

#define RB_LEFT(elm, field)  (elm)->field.rbe_left
#define RB_RIGHT(elm, field)  (elm)->field.rbe_right
#define RB_PARENT(elm, field)  (elm)->field.rbe_parent
#define RB_COLOR(elm, field)  (elm)->field.rbe_color
#define RB_ROOT(head)   (head)->rbh_root
#define RB_EMPTY(head)   (RB_ROOT(head) == NULL)

#define RB_SET(elm, parent, field) do {     \
 RB_PARENT(elm, field) = parent;     \
 RB_LEFT(elm, field) = RB_RIGHT(elm, field) = NULL;  \
 RB_COLOR(elm, field) = RB_RED;     \
```

```
} while (/*CONSTCOND*/ 0)

#define RB_SET_BLACKRED(black, red, field) do {    \
 RB_COLOR(black, field) = RB_BLACK;    \
 RB_COLOR(red, field)
 = RB_RED;     \
} while (/*CONSTCOND*/ 0)

#ifndef RB_AUGMENT
#define RB_AUGMENT(x) do {} while (/*CONSTCOND*/ 0)
#endif

#define RB_ROTATE_LEFT(head, elm, tmp, field) do {   \
 (tmp) = RB_RIGHT(elm, field);     \
 if ((RB_RIGHT(elm, field) = RB_LEFT(tmp, field)) != NULL) { \
  RB_PARENT(RB_LEFT(tmp, field), field) = (elm);  \
 }       \
 RB_AUGMENT(elm);      \
 if ((RB_PARENT(tmp, field) = RB_PARENT(elm, field)) != NULL) { \
  if ((elm) == RB_LEFT(RB_PARENT(elm, field), field)) \
   RB_LEFT(RB_PARENT(elm, field), field) = (tmp); \
  else      \
   RB_RIGHT(RB_PARENT(elm, field), field) = (tmp); \
 } else       \
  (head)->rbh_root = (tmp);    \
 RB_LEFT(tmp, field) = (elm);     \
 RB_PARENT(elm, field) = (tmp);     \
 RB_AUGMENT(tmp);      \
 if ((RB_PARENT(tmp, field)))     \
  RB_AUGMENT(RB_PARENT(tmp, field));   \
} while (/*CONSTCOND*/ 0)

#define RB_ROTATE_RIGHT(head, elm, tmp, field) do {   \
 (tmp) = RB_LEFT(elm, field);     \
 if ((RB_LEFT(elm, field) = RB_RIGHT(tmp, field))
 != NULL) { \
  RB_PARENT(RB_RIGHT(tmp, field), field) = (elm);  \
 }       \
 RB_AUGMENT(elm);      \
 if ((RB_PARENT(tmp, field) = RB_PARENT(elm, field)) != NULL) { \
  if ((elm) == RB_LEFT(RB_PARENT(elm, field), field)) \
   RB_LEFT(RB_PARENT(elm, field), field) = (tmp); \
  else      \
   RB_RIGHT(RB_PARENT(elm, field), field) = (tmp); \
 } else       \
  (head)->rbh_root = (tmp);    \
 RB_RIGHT(tmp, field) = (elm);     \
 RB_PARENT(elm, field) = (tmp);     \
```

```
 RB_AUGMENT(tmp);      \
 if ((RB_PARENT(tmp, field)))     \
  RB_AUGMENT(RB_PARENT(tmp, field));   \
} while (/*CONSTCOND*/ 0)

/* Generates prototypes and inline functions */
#define RB_PROTOTYPE(name, type, field, cmp)    \
 RB_PROTOTYPE_INTERNAL(name, type, field, cmp,)
#define RB_PROTOTYPE_STATIC(name, type, field, cmp)   \
 RB_PROTOTYPE_INTERNAL(name, type, field, cmp, _sys_tree_h_unused static)
#define RB_PROTOTYPE_INTERNAL(name, type, field, cmp, attr)  \
attr void name##_RB_INSERT_COLOR(struct name *, struct
 type *);  \
attr void name##_RB_REMOVE_COLOR(struct name *, struct type *, struct type *);\
attr struct type *name##_RB_REMOVE(struct name *, struct type *); \
attr struct type *name##_RB_INSERT(struct name *, struct type *); \
attr struct type *name##_RB_FIND(struct name *, struct type *);  \
attr struct type *name##_RB_NFIND(struct name *, struct type *); \
attr struct type *name##_RB_NEXT(struct type *);   \
attr struct type *name##_RB_PREV(struct type *);   \
attr struct type *name##_RB_MINMAX(struct name *, int);   \
        \

/* Main rb operation.
* Moves node close to the key of elm to top
*/
#define RB_GENERATE(name, type, field, cmp)    \
 RB_GENERATE_INTERNAL(name, type, field, cmp,)
#define RB_GENERATE_STATIC(name, type, field, cmp)   \
 RB_GENERATE_INTERNAL(name, type, field, cmp, _sys_tree_h_unused static)
#define RB_GENERATE_INTERNAL(name, type, field, cmp, attr)  \
attr void        \
name##_RB_INSERT_COLOR(struct name *head, struct type *elm)  \
{        \
 struct type
 *parent, *gparent, *tmp;    \
 while ((parent = RB_PARENT(elm, field)) != NULL &&  \
     RB_COLOR(parent, field) == RB_RED) {   \
  gparent = RB_PARENT(parent, field);   \
  if (parent == RB_LEFT(gparent, field)) {  \
   tmp = RB_RIGHT(gparent, field);   \
   if (tmp && RB_COLOR(tmp, field) == RB_RED) { \
    RB_COLOR(tmp, field) = RB_BLACK; \
    RB_SET_BLACKRED(parent, gparent, field);\
    elm = gparent;    \
    continue;    \
   }      \
   if (RB_RIGHT(parent, field) == elm) {  \
```

```
   RB_ROTATE_LEFT(head, parent, tmp, field);\
   tmp = parent;    \
   parent = elm;    \
   elm = tmp;    \
  }      \
  RB_SET_BLACKRED(parent, gparent, field); \
  RB_ROTATE_RIGHT(head, gparent, tmp, field); \
 } else {      \
  tmp = RB_LEFT(gparent, field);   \
  if (tmp && RB_COLOR(tmp, field) == RB_RED) { \
   RB_COLOR(tmp, field) = RB_BLACK; \
   RB_SET_BLACKRED(parent, gparent, field);\
   elm = gparent;    \
   continue;    \
  }      \
  if (RB_LEFT(parent, field) == elm)
 {  \
   RB_ROTATE_RIGHT(head, parent, tmp, field);\
   tmp = parent;    \
   parent = elm;    \
   elm = tmp;    \
  }      \
  RB_SET_BLACKRED(parent, gparent, field); \
  RB_ROTATE_LEFT(head, gparent, tmp, field); \
 }       \
 }       \
 RB_COLOR(head->rbh_root, field) = RB_BLACK;   \
}        \
        \
attr void        \
name##_RB_REMOVE_COLOR(struct name *head, struct type *parent, struct type *elm) \
{        \
 struct type *tmp;      \
 while ((elm == NULL || RB_COLOR(elm, field) == RB_BLACK) && \
     elm != RB_ROOT(head)) {     \
  if (RB_LEFT(parent, field) == elm) {   \
   tmp = RB_RIGHT(parent, field);   \
   if (RB_COLOR(tmp, field) == RB_RED) {  \
    RB_SET_BLACKRED(tmp, parent, field); \
    RB_ROTATE_LEFT(head, parent, tmp, field);\
    tmp = RB_RIGHT(parent, field);  \
   }      \
   if ((RB_LEFT(tmp, field) == NULL ||  \
       RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) &&\
       (RB_RIGHT(tmp, field) == NULL ||  \
       RB_COLOR(RB_RIGHT(tmp,
 field), field) == RB_BLACK)) {\
    RB_COLOR(tmp, field) = RB_RED;  \
```

```
 elm = parent;    \
 parent = RB_PARENT(elm, field);  \
 } else {     \
 if (RB_RIGHT(tmp, field) == NULL || \
     RB_COLOR(RB_RIGHT(tmp, field), field) == RB_BLACK) {\
  struct type *oleft;  \
  if ((oleft = RB_LEFT(tmp, field)) \
      != NULL)   \
   RB_COLOR(oleft, field) = RB_BLACK;\
  RB_COLOR(tmp, field) = RB_RED; \
  RB_ROTATE_RIGHT(head, tmp, oleft, field);\
  tmp = RB_RIGHT(parent, field); \
  }     \
 RB_COLOR(tmp, field) = RB_COLOR(parent, field);\
 RB_COLOR(parent, field) = RB_BLACK; \
 if (RB_RIGHT(tmp, field))  \
  RB_COLOR(RB_RIGHT(tmp, field), field) = RB_BLACK;\
 RB_ROTATE_LEFT(head, parent, tmp, field);\
 elm = RB_ROOT(head);   \
 break;     \
 }      \
} else {      \
 tmp = RB_LEFT(parent, field);   \
 if (RB_COLOR(tmp, field) == RB_RED) {  \
  RB_SET_BLACKRED(tmp, parent, field); \
  RB_ROTATE_RIGHT(head, parent, tmp, field);\
  tmp
= RB_LEFT(parent, field);  \
 }      \
 if ((RB_LEFT(tmp, field) == NULL ||  \
     RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) &&\
     (RB_RIGHT(tmp, field) == NULL ||  \
     RB_COLOR(RB_RIGHT(tmp, field), field) == RB_BLACK)) {\
 RB_COLOR(tmp, field) = RB_RED;  \
 elm = parent;    \
 parent = RB_PARENT(elm, field);  \
 } else {     \
 if (RB_LEFT(tmp, field) == NULL || \
     RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) {\
  struct type *oright;  \
  if ((oright = RB_RIGHT(tmp, field)) \
      != NULL)   \
   RB_COLOR(oright, field) = RB_BLACK;\
  RB_COLOR(tmp, field) = RB_RED; \
  RB_ROTATE_LEFT(head, tmp, oright, field);\
  tmp = RB_LEFT(parent, field); \
  }     \
 RB_COLOR(tmp, field) = RB_COLOR(parent, field);\
```

```
    RB_COLOR(parent, field) = RB_BLACK; \
    if (RB_LEFT(tmp, field))  \
     RB_COLOR(RB_LEFT(tmp, field), field) = RB_BLACK;\
    RB_ROTATE_RIGHT(head, parent, tmp, field);\
    elm = RB_ROOT(head);   \
    break;     \
   }      \
  }       \
 }       \
 if
 (elm)      \
  RB_COLOR(elm, field) = RB_BLACK;   \
}        \
        \
attr struct type *       \
name##_RB_REMOVE(struct name *head, struct type *elm)   \
{        \
 struct type *child, *parent, *old = elm;   \
 int color;       \
 if (RB_LEFT(elm, field) == NULL)    \
  child = RB_RIGHT(elm, field);    \
 else if (RB_RIGHT(elm, field) == NULL)    \
  child = RB_LEFT(elm, field);    \
 else {        \
  struct type *left;     \
  elm = RB_RIGHT(elm, field);    \
  while ((left = RB_LEFT(elm, field)) != NULL)  \
   elm = left;     \
  child = RB_RIGHT(elm, field);    \
  parent = RB_PARENT(elm, field);    \
  color = RB_COLOR(elm, field);    \
  if (child)      \
   RB_PARENT(child, field) = parent;  \
  if (parent) {      \
   if (RB_LEFT(parent, field) == elm)  \
    RB_LEFT(parent, field) = child;  \
   else      \
    RB_RIGHT(parent, field) = child; \
   RB_AUGMENT(parent);    \
  } else       \
   RB_ROOT(head)
 = child;    \
  if (RB_PARENT(elm, field) == old)   \
   parent = elm;     \
  (elm)->field = (old)->field;    \
  if (RB_PARENT(old, field)) {    \
   if (RB_LEFT(RB_PARENT(old, field), field) == old)\
    RB_LEFT(RB_PARENT(old, field), field) = elm;\
```

```
  else      \
   RB_RIGHT(RB_PARENT(old, field), field) = elm;\
  RB_AUGMENT(RB_PARENT(old, field));  \
 } else       \
  RB_ROOT(head) = elm;    \
 RB_PARENT(RB_LEFT(old, field), field) = elm;  \
 if (RB_RIGHT(old, field))    \
  RB_PARENT(RB_RIGHT(old, field), field) = elm; \
 if (parent) {      \
  left = parent;     \
  do {      \
   RB_AUGMENT(left);   \
  } while ((left = RB_PARENT(left, field)) != NULL); \
 }       \
 goto color;      \
}        \
parent = RB_PARENT(elm, field);     \
color = RB_COLOR(elm, field);     \
if (child)       \
 RB_PARENT(child, field) = parent;   \
if (parent) {       \
 if (RB_LEFT(parent, field) == elm)   \
  RB_LEFT(parent, field) = child;   \
 else       \
  RB_RIGHT(parent,
field) = child;  \
 RB_AUGMENT(parent);     \
} else        \
 RB_ROOT(head) = child;     \
color:         \
if (color == RB_BLACK)      \
 name##_RB_REMOVE_COLOR(head, parent, child);  \
return (old);       \
}        \
       \
/* Inserts a node into the RB tree */     \
attr struct type *       \
name##_RB_INSERT(struct name *head, struct type *elm)   \
{        \
 struct type *tmp;      \
 struct type *parent = NULL;     \
 int comp = 0;       \
 tmp = RB_ROOT(head);      \
 while (tmp) {       \
  parent = tmp;      \
  comp = (cmp)(elm, parent);    \
  if (comp < 0)      \
   tmp = RB_LEFT(tmp, field);   \
```

```
 else if (comp > 0)     \
  tmp = RB_RIGHT(tmp, field);   \
 else       \
  return (tmp);     \
}       \
RB_SET(elm, parent, field);     \
if (parent != NULL) {      \
 if (comp < 0)      \
  RB_LEFT(parent, field) = elm;   \
 else       \
  RB_RIGHT(parent, field) = elm;   \
 RB_AUGMENT(parent);     \
} else       \
 RB_ROOT(head) = elm;     \
name##_RB_INSERT_COLOR(head,
elm);    \
return (NULL);       \
}       \
       \
/* Finds the node with the same key as elm */    \
attr struct type *       \
name##_RB_FIND(struct name *head, struct type *elm)   \
{       \
 struct type *tmp = RB_ROOT(head);    \
 int comp;       \
 while (tmp) {       \
  comp = cmp(elm, tmp);     \
  if (comp < 0)      \
   tmp = RB_LEFT(tmp, field);   \
  else if (comp > 0)     \
   tmp = RB_RIGHT(tmp, field);   \
  else       \
   return (tmp);     \
 }       \
 return (NULL);       \
}       \
       \
/* Finds the first node greater than or equal to the search key */ \
attr struct type *       \
name##_RB_NFIND(struct name *head, struct type *elm)   \
{       \
 struct type *tmp = RB_ROOT(head);    \
 struct type *res = NULL;     \
 int comp;       \
 while (tmp) {       \
  comp = cmp(elm, tmp);     \
  if (comp < 0) {      \
   res = tmp;     \
```

```
  tmp = RB_LEFT(tmp, field);   \
 }       \
 else if (comp > 0)     \
  tmp =
RB_RIGHT(tmp, field);   \
 else       \
  return (tmp);     \
 }       \
 return (res);       \
}        \
        \
/* ARGSUSED */       \
attr struct type *       \
name##_RB_NEXT(struct type *elm)     \
{        \
 if (RB_RIGHT(elm, field)) {     \
  elm = RB_RIGHT(elm, field);    \
  while (RB_LEFT(elm, field))    \
   elm = RB_LEFT(elm, field);   \
 } else {       \
  if (RB_PARENT(elm, field) &&    \
      (elm == RB_LEFT(RB_PARENT(elm, field), field))) \
   elm = RB_PARENT(elm, field);   \
  else {       \
   while (RB_PARENT(elm, field) &&   \
       (elm == RB_RIGHT(RB_PARENT(elm, field), field)))\
    elm = RB_PARENT(elm, field);  \
   elm = RB_PARENT(elm, field);   \
  }       \
 }       \
 return (elm);       \
}        \
        \
/* ARGSUSED */       \
attr struct type *       \
name##_RB_PREV(struct type *elm)     \
{        \
 if (RB_LEFT(elm, field)) {     \
  elm = RB_LEFT(elm, field);    \
  while (RB_RIGHT(elm, field))    \
   elm = RB_RIGHT(elm, field);   \
 }
 else {       \
  if (RB_PARENT(elm, field) &&    \
      (elm == RB_RIGHT(RB_PARENT(elm, field), field))) \
   elm = RB_PARENT(elm, field);   \
  else {       \
   while (RB_PARENT(elm, field) &&   \
```

```
      (elm == RB_LEFT(RB_PARENT(elm, field), field)))\
    elm = RB_PARENT(elm, field);  \
   elm = RB_PARENT(elm, field);   \
  }       \
 }       \
 return (elm);       \
}        \
        \
attr struct type *       \
name##_RB_MINMAX(struct name *head, int val)    \
{        \
 struct type *tmp = RB_ROOT(head);    \
 struct type *parent = NULL;     \
 while (tmp) {       \
  parent = tmp;      \
  if (val < 0)      \
   tmp = RB_LEFT(tmp, field);   \
  else       \
   tmp = RB_RIGHT(tmp, field);   \
 }       \
 return (parent);      \
}

#define RB_NEGINF -1
#define RB_INF 1

#define RB_INSERT(name, x, y) name##_RB_INSERT(x, y)
#define RB_REMOVE(name, x, y) name##_RB_REMOVE(x, y)
#define RB_FIND(name, x, y) name##_RB_FIND(x, y)
#define RB_NFIND(name, x, y) name##_RB_NFIND(x,
 y)
#define RB_NEXT(name, x, y) name##_RB_NEXT(y)
#define RB_PREV(name, x, y) name##_RB_PREV(y)
#define RB_MIN(name, x)  name##_RB_MINMAX(x, RB_NEGINF)
#define RB_MAX(name, x)  name##_RB_MINMAX(x, RB_INF)

#define RB_FOREACH(x, name, head)     \
 for ((x) = RB_MIN(name, head);     \
      (x) != NULL;      \
      (x) = name##_RB_NEXT(x))

#define RB_FOREACH_FROM(x, name, y)     \
 for ((x) = (y);       \
     ((x) != NULL) && ((y) = name##_RB_NEXT(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_SAFE(x, name, head, y)    \
 for ((x) = RB_MIN(name, head);     \
```

```
    ((x) != NULL) && ((y) = name##_RB_NEXT(x), (x) != NULL); \
     (x) = (y))

#define RB_FOREACH_REVERSE(x, name, head)    \
 for ((x) = RB_MAX(name, head);     \
      (x) != NULL;      \
      (x) = name##_RB_PREV(x))

#define RB_FOREACH_REVERSE_FROM(x, name, y)    \
 for ((x) = (y);       \
    ((x) != NULL) && ((y) = name##_RB_PREV(x), (x) != NULL); \
     (x) = (y))

#define RB_FOREACH_REVERSE_SAFE(x, name,
 head, y)   \
 for ((x) = RB_MAX(name, head);     \
    ((x) != NULL) && ((y) = name##_RB_PREV(x), (x) != NULL); \
     (x) = (y))

#endif /* _SYS_TREE_H_ */
pkgname=linux-headers
pkgver=6.14.2 # Follow the latest Linux stable
_kernver=${pkgver%.*}
pkgrel=0
pkgdesc="Linux system headers"
url="https://kernel.org/"
arch="all" # Headers are architecture specific
license="GPL-2.0-only"
makedepends="perl"
options="!check !dbg !strip !tracedeps !archcheck"
source="https://kernel.org/pub/linux/kernel/v6.x/linux-$_kernver.tar.xz
 revert-broken-uapi.patch
 0003-remove-inclusion-of-sysinfo.h-in-kernel.h.patch
```

1.21 ca-certificates 20250911-r0

1.21.1 Available under license :

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/opt/cola/permits/2660733757_1759915527.765318/0/ca-certificates-20250911-r0-tar-gz/usr/share/ca-certificates/mozilla/HARICA_TLS_RSA_Root_CA_2021.crt-----BEGIN CERTIFICATE-----
/opt/cola/permits/2660733757_1759915527.765318/0/ca-certificates-20250911-r0-tar-gz/usr/share/ca-certificates/mozilla/QuoVadis_Root_CA_2.crt-----BEGIN CERTIFICATE-----
/opt/cola/permits/2660733757_1759915527.765318/0/ca-certificates-20250911-r0-tar-gz/usr/share/ca-certificates/mozilla/TWCA_Global_Root_CA.crt-----BEGIN CERTIFICATE-----
/opt/cola/permits/2660733757_1759915527.765318/0/ca-certificates-20250911-r0-tar-gz/usr/share/ca-certificates/mozilla/TrustAsia_TLS_RSA_Root_CA.crt-----BEGIN CERTIFICATE-----

Found in path(s):
*
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-----BEGIN CERTIFICATE-----
MIIFWjCCA0KgAwIBAgISEdK7udcjGJ5AXwqdLdDfJWfRMA0GCSqGSIb3DQEBDAUA
MEYxCzAJBgNVBAYTAkJFMRkwFwYDVQQKExBHbG9iYWxTaWduIG52LXNhMRwwGgYD
VQQDExNHbG9iYWxTaWduIFJvb3QgUjQ2MB4XDTE5MDMyMDAwMDAwMFoXDTQ2MDMy
MDAwMDAwMFowRjELMAkGA1UEBhMCQkUxGTAXBgNVBAoTEEdsb2JhbFNpZ24gbnYt
c2ExHDAaBgNVBAMTE0dsb2JhbFNpZ24gUm9vdCBSNDYwggIiMA0GCSqGSIb3DQEB
AQUAA4ICDwAwggIKAoICAQCsrHQy6LNl5brtQyYdpokNRbopiLKkHWPd08EsCVeJ
OaFV6Wc0dwxu5FUdUiXSE2te4R2pt32JMl8Nnp8semNgQB+msLZ4j5lUlghYruQG
vGIFAha/r6gjA7aUD7xubMLL1aa7DOn2wQL7Id5m3RerdELv8HQvJfTqa1VbkNud
316HCkD7rRlr+/fKYIje2sGP1q7Vf9Q8g+7XFkyDRTNrJ9CG0Bwta/OrffGFqfUo
0q3v84RLHIf8E6M6cqJaESvWJ3En7YEtbWaBkoe0G1h6zD8K+kZPTXhc+CtI4wSE
y132tGqzZfxCnlEmIyDLPRT5ge1lFgBPGmSXZgjPjHvjK8Cd+RTyG/FWaha/LIWF
zXg4mutCagI0GIMXTpRW+LaCtfOW3T3zvn8gdz57GSNrLNRyc0NXfeD412lPFzYE
+cCQYDdF3uYM2HSNrpyibXRdQr4G9dlkbgIQrImwTDsHTUB+JMWKmIJ5jqSngiCN
I/onccnfxkF0oE32kRbcRoxfKWMxWXEM2G/CtjJ9++ZdU6Z+Ffy7dXxd7Pj2Fxzs
x2sZy/N78CsHpdlseVR2bJ0cpm4O6XkMqCNqo98bMDGfsVR7/mrLZqrcZdCinkqa
ByFrgY/bxFn63iLABJzjqls2k+g9vXqhnQt2sQvHnf3PmKgGwvgqo6GDoLclcqUC
4wIDAQABo0IwQDAOBgNVHQ8BAf8EBAMCAYYwDwYDVR0TAQH/BAUwAwEB/zAdBgNV
HQ4EFgQUA1yrc4GHqMywptWU4jaWSf8FmSwwDQYJKoZIhvcNAQEMBQADggIBAHx4
7PYCLLtbfpIrXTncvtgdokIzTfnvpCo7RGkerNlFo048p9gkUbJUHJNOxO97k4Vg
JuoJSOD1u8fpaNK7ajFxzHmuEajwmf3lH7wvqMxX63bEIaZHU1VNaL8FpO7XJqti
2kM3S+LGteWygxk6x9PbTZ4IevPuzz5i+6zoYMzRx6Fcg0XERczzF2sUyQQCPtIk
pnnpHs6i58FZFZ8d4kuaPp92CC1r2LpXFNqD6v6MVenQTqnMdzGxRBF6XLE+0xRF
FRhiJBPSy03OXIPBNvIQtQ6IbbjhVp+J3pZmOUdkLG5NrmJ7v2B0GbhWrJKsFjLt
rWhV/pi60zTe9Mlhww6G9kuEYO4Ne7UyWHmRVSyBQ7N0H3qqJZ4d16GLuc1CLgSk
ZoNNiTW2bKg2SnkheCLQQrzRQDGQob4Ez8pn7fXwgNNgyYMqIgXQBztSvwyeqiv5
u+YfjyW6hY0XHgL+XVAEV8/+LbzvXMAaq7afJMbfc2hIkCwU9D9SGuTSyxTDYWnP
4vkYxboznxSjBF25cfe1lNj2M8FawTSLfJvdkzrnE6JwYZ+vj+vYxXX4M2bUdGc6
N3ec592kD3ZDZopD8p/7DEJ4Y9HiD2971KE9dJeFt0g5QdYg/NA6s/rob8SKunE3
vouXsXgxT7PntgMTzlSdriVZzH81Xwj3QEUxeCp6
-----END
CERTIFICATE-----

Found in path(s):
*
/ca-certificates-20250911-r0-tar-gz/usr/share/ca-certificates/mozilla/GlobalSign_Root_R46.crt

1.22 libssl3 3.5.4-r0

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<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice

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1.23 musl 1.2.5-r10

1.23.1 Available under license :

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

Found in path(s):
* /aports-master-main-musl-zip/aports-master-main-musl/main/musl/iconv.c
No license file was found, but licenses were detected in source scan.

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*
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*
* Mostly rewritten to be used in Alpine Linux (with musl c-library)
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* /aports-master-main-musl-zip/aports-master-main-musl/main/musl/getconf.c
No license file was found, but licenses were detected in source scan.

/*-
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*
* This code is derived from software contributed to The NetBSD Foundation
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*/

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

1.24 aws-sdk-go-v2-internal-ini 1.8.4

1.24.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper

```
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(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",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
```

ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer

InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart

setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(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
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
```

```
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// 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 = addInterceptBeforeRetryLoop(stack,
options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterDeserialization(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
  InterceptExecution
  RegisterServiceMetadata
```

legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
{
  "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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
          }
        },
        "IsSharedActiveDirectory": {
          "target": "smithy.api#Boolean",
          "traits": {

          "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
                    }
                }
            },
            "DomainIpv6List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
            }
        },
        "OwnerAccountId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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#IpV6": {
         "type": "string",
         "traits": {
```

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            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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": {
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            "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 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 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 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 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 license
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 license
server.</p>"
            }
        },
        "Ipv6Address": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
                }
```

```
        },
        "LicenseServers": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the license 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) license 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 server.</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> <ul> <li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                 }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
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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>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
from a previously truncated response.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
```

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            "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p> <ul> <li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul> <li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
```

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            "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",
```

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            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
```

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            "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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
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            "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 the 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>"
        }
      },
```

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    "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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                "smithy.api#required": {}
              }

          },
            "Settings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
              "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration settings 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
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            },
            "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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC
endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours
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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li>
<p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to
remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC
endpoints.</p> </li> </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 require 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 your 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 the 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack,
options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(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",
 }
}
name: License Scan

on: [pull_request]


permissions:
 contents: read

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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(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",
 }
}
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(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",
 }
}
```

```
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(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",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
```

legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(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",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
```

InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

```
{
  "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 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 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 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 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"
        }
    }
  }
}
```


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spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step

ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization

OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.25 protobuf-go 1.36.10

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1.29 kelseyhightower-envconfig 1.4.0

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1.30 go.yaml.in/yaml/v2 2.4.3

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1.31 openssl 3.5.4-r0

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1.32 bash 5.2.37-r0

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1.33 go.yaml.in-yaml 2.4.3

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1.34 pam 1.7.0-r4

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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
"
# 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
"
```

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```
# 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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SUCH DAMAGE.
# 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
"
# 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
"
```

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The Kohonen neural network code for color optimization was written by Anthony Dekker.

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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
"
/* $NetBSD: queue.h,v 1.70 2015/11/02 15:21:23 christos Exp $ */

/*
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*
* @(#)queue.h 8.5 (Berkeley) 8/20/94
*/

#ifndef _SYS_QUEUE_H_
#define _SYS_QUEUE_H_

/*
* This file defines five types of data structures: singly-linked lists,
* lists, simple queues, tail queues, and circular queues.
*
* A singly-linked list is headed by a single forward pointer. The

```
* elements are singly linked for minimum space and
 pointer manipulation
* overhead at the expense of O(n) removal for arbitrary elements. New
* elements can be added to the list after an existing element or at the
* head of the list.  Elements being removed from the head of the list
* should use the explicit macro for this purpose for optimum
* efficiency. A singly-linked list may only be traversed in the forward
* direction.  Singly-linked lists are ideal for applications with large
* datasets and few or no removals or for implementing a LIFO queue.
*
* A list is headed by a single forward pointer (or an array of forward
* pointers for a hash table header). The elements are doubly linked
* so that an arbitrary element can be removed without a need to
* traverse the list. New elements can be added to the list before
* or after an existing element or at the head of the list. A list
* may only be traversed in the forward direction.
*
* A simple queue is headed by a pair of pointers, one the head of the
* list and the
 other to the tail of the list. The elements are singly
* linked to save space, so elements can only be removed from the
* head of the list. New elements can be added to the list after
* an existing element, at the head of the list, or at the end of the
* list. A simple queue may only be traversed in the forward direction.
*
* A tail queue is headed by a pair of pointers, one to the head of the
* list and the other to the tail of the list. The elements are doubly
* linked so that an arbitrary element can be removed without a need to
* traverse the list. New elements can be added to the list before or
* after an existing element, at the head of the list, or at the end of
* the list. A tail queue may be traversed in either direction.
*
* A circle queue is headed by a pair of pointers, one to the head of the
* list and the other to the tail of the list. The elements are doubly
* linked so that an arbitrary element can be removed without a need to
* traverse the list. New elements
 can be added to the list before or after
* an existing element, at the head of the list, or at the end of the list.
* A circle queue may be traversed in either direction, but has a more
* complex end of list detection.
*
* For details on the use of these macros, see the queue(3) manual page.
*/

/*
* Include the definition of NULL only on NetBSD because sys/null.h
* is not available elsewhere.  This conditional makes the header
* portable and it can simply be dropped verbatim into any system.
```

```
* The caveat is that on other systems some other header
* must provide NULL before the macros can be used.
*/
#ifdef __NetBSD__
#include <sys/null.h>
#endif

#if defined(QUEUEDEBUG)
# if defined(_KERNEL)
#  define QUEUEDEBUG_ABORT(...) panic(__VA_ARGS__)
# else
#  include <err.h>
#  define QUEUEDEBUG_ABORT(...) err(1, __VA_ARGS__)
# endif
#endif

/*
* Singly-linked List definitions.
*/
#define SLIST_HEAD(name, type)      \
struct name {       \
 struct type *slh_first; /* first
 element */   \
}

#define SLIST_HEAD_INITIALIZER(head)     \
 { NULL }

#define SLIST_ENTRY(type)      \
struct {       \
 struct type *sle_next; /* next element */   \
}

/*
* Singly-linked List access methods.
*/
#define SLIST_FIRST(head) ((head)->slh_first)
#define SLIST_END(head)  NULL
#define SLIST_EMPTY(head) ((head)->slh_first == NULL)
#define SLIST_NEXT(elm, field) ((elm)->field.sle_next)

#define SLIST_FOREACH(var, head, field)     \
 for((var) = (head)->slh_first;     \
     (var) != SLIST_END(head);     \
     (var) = (var)->field.sle_next)

#define SLIST_FOREACH_SAFE(var, head, field, tvar)   \
 for ((var) = SLIST_FIRST((head));    \
```

```
    (var) != SLIST_END(head) &&     \
    ((tvar) = SLIST_NEXT((var), field), 1);   \
    (var) = (tvar))

/*
* Singly-linked List functions.
*/
#define SLIST_INIT(head) do {      \
 (head)->slh_first = SLIST_END(head);    \
} while (/*CONSTCOND*/0)

#define SLIST_INSERT_AFTER(slistelm, elm, field) do {   \
 (elm)->field.sle_next = (slistelm)->field.sle_next;  \
 (slistelm)->field.sle_next
 = (elm);    \
} while (/*CONSTCOND*/0)

#define SLIST_INSERT_HEAD(head, elm, field) do {   \
 (elm)->field.sle_next = (head)->slh_first;   \
 (head)->slh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE_AFTER(slistelm, field) do {   \
 (slistelm)->field.sle_next =     \
    SLIST_NEXT(SLIST_NEXT((slistelm), field), field);  \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE_HEAD(head, field) do {    \
 (head)->slh_first = (head)->slh_first->field.sle_next;  \
} while (/*CONSTCOND*/0)

#define SLIST_REMOVE(head, elm, type, field) do {   \
 if ((head)->slh_first == (elm)) {    \
  SLIST_REMOVE_HEAD((head), field);   \
 }       \
 else {       \
  struct type *curelm = (head)->slh_first;  \
  while(curelm->field.sle_next != (elm))   \
   curelm = curelm->field.sle_next;  \
  curelm->field.sle_next =    \
     curelm->field.sle_next->field.sle_next;  \
 }       \
} while (/*CONSTCOND*/0)


/*
* List definitions.
```

```
 */
#define LIST_HEAD(name, type)      \
struct name {        \
 struct type *lh_first; /* first element */   \
}

#define LIST_HEAD_INITIALIZER(head)     \
 { NULL }

#define LIST_ENTRY(type)      \
struct {        \
 struct type *le_next; /* next element */   \
 struct type **le_prev; /* address of previous next element */ \
}

/*
* List access methods.
*/
#define LIST_FIRST(head)  ((head)->lh_first)
#define LIST_END(head)   NULL
#define LIST_EMPTY(head)  ((head)->lh_first == LIST_END(head))
#define LIST_NEXT(elm, field)  ((elm)->field.le_next)

#define LIST_FOREACH(var, head, field)     \
 for ((var) = ((head)->lh_first);    \
     (var) != LIST_END(head);     \
     (var) = ((var)->field.le_next))

#define LIST_FOREACH_SAFE(var, head, field, tvar)   \
 for ((var) = LIST_FIRST((head));    \
     (var) != LIST_END(head) &&     \
     ((tvar) = LIST_NEXT((var), field), 1);   \
     (var) = (tvar))

#define LIST_MOVE(head1, head2) do {     \
 LIST_INIT((head2));      \
 if (!LIST_EMPTY((head1)))
 {     \
  (head2)->lh_first = (head1)->lh_first;   \
  LIST_INIT((head1));     \
 }        \
} while (/*CONSTCOND*/0)

/*
* List functions.
*/
#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_LIST_INSERT_HEAD(head, elm, field)   \
```

```
 if ((head)->lh_first &&      \
    (head)->lh_first->field.le_prev != &(head)->lh_first) \
  QUEUEDEBUG_ABORT("LIST_INSERT_HEAD %p %s:%d", (head), \
      __FILE__, __LINE__);
#define QUEUEDEBUG_LIST_OP(elm, field)     \
 if ((elm)->field.le_next &&     \
    (elm)->field.le_next->field.le_prev !=   \
    &(elm)->field.le_next)     \
  QUEUEDEBUG_ABORT("LIST_* forw %p %s:%d", (elm),  \
      __FILE__, __LINE__);    \
 if (*(elm)->field.le_prev != (elm))    \
  QUEUEDEBUG_ABORT("LIST_* back %p %s:%d", (elm),  \
      __FILE__, __LINE__);
#define QUEUEDEBUG_LIST_POSTREMOVE(elm, field)    \
 (elm)->field.le_next = (void *)1L;    \
 (elm)->field.le_prev = (void *)1L;
#else
#define QUEUEDEBUG_LIST_INSERT_HEAD(head, elm, field)
#define QUEUEDEBUG_LIST_OP(elm,
 field)
#define QUEUEDEBUG_LIST_POSTREMOVE(elm, field)
#endif

#define LIST_INIT(head) do {      \
 (head)->lh_first = LIST_END(head);    \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_AFTER(listelm, elm, field) do {   \
 QUEUEDEBUG_LIST_OP((listelm), field)    \
 if (((elm)->field.le_next = (listelm)->field.le_next) !=  \
    LIST_END(head))      \
  (listelm)->field.le_next->field.le_prev =  \
     &(elm)->field.le_next;    \
 (listelm)->field.le_next = (elm);    \
 (elm)->field.le_prev = &(listelm)->field.le_next;  \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_BEFORE(listelm, elm, field) do {   \
 QUEUEDEBUG_LIST_OP((listelm), field)    \
 (elm)->field.le_prev = (listelm)->field.le_prev;  \
 (elm)->field.le_next = (listelm);    \
 *(listelm)->field.le_prev = (elm);    \
 (listelm)->field.le_prev = &(elm)->field.le_next;  \
} while (/*CONSTCOND*/0)

#define LIST_INSERT_HEAD(head, elm, field) do {    \
 QUEUEDEBUG_LIST_INSERT_HEAD((head), (elm), field)  \
 if (((elm)->field.le_next
```

```
 = (head)->lh_first) != LIST_END(head))\
  (head)->lh_first->field.le_prev = &(elm)->field.le_next;\
 (head)->lh_first = (elm);     \
 (elm)->field.le_prev = &(head)->lh_first;   \
} while (/*CONSTCOND*/0)

#define LIST_REMOVE(elm, field) do {     \
 QUEUEDEBUG_LIST_OP((elm), field)    \
 if ((elm)->field.le_next != NULL)    \
  (elm)->field.le_next->field.le_prev =    \
      (elm)->field.le_prev;    \
 *(elm)->field.le_prev = (elm)->field.le_next;   \
 QUEUEDEBUG_LIST_POSTREMOVE((elm), field)   \
} while (/*CONSTCOND*/0)

#define LIST_REPLACE(elm, elm2, field) do {    \
 if (((elm2)->field.le_next = (elm)->field.le_next) != NULL) \
  (elm2)->field.le_next->field.le_prev =   \
      &(elm2)->field.le_next;    \
 (elm2)->field.le_prev = (elm)->field.le_prev;   \
 *(elm2)->field.le_prev = (elm2);    \
 QUEUEDEBUG_LIST_POSTREMOVE((elm), field)   \
} while (/*CONSTCOND*/0)

/*
* Simple queue definitions.
*/
#define SIMPLEQ_HEAD(name, type)     \
struct name {        \
 struct
 type *sqh_first; /* first element */   \
 struct type **sqh_last; /* addr of last next element */  \
}

#define SIMPLEQ_HEAD_INITIALIZER(head)     \
 { NULL, &(head).sqh_first }

#define SIMPLEQ_ENTRY(type)      \
struct {        \
 struct type *sqe_next; /* next element */   \
}

/*
* Simple queue access methods.
*/
#define SIMPLEQ_FIRST(head)  ((head)->sqh_first)
#define SIMPLEQ_END(head)  NULL
#define SIMPLEQ_EMPTY(head)  ((head)->sqh_first == SIMPLEQ_END(head))
```

```
#define SIMPLEQ_NEXT(elm, field) ((elm)->field.sqe_next)

#define SIMPLEQ_FOREACH(var, head, field)    \
 for ((var) = ((head)->sqh_first);    \
     (var) != SIMPLEQ_END(head);     \
     (var) = ((var)->field.sqe_next))

#define SIMPLEQ_FOREACH_SAFE(var, head, field, next)   \
 for ((var) = ((head)->sqh_first);    \
     (var) != SIMPLEQ_END(head) &&    \
     ((next = ((var)->field.sqe_next)), 1);   \
     (var) = (next))

/*
* Simple queue functions.
*/
#define SIMPLEQ_INIT(head) do {      \
 (head)->sqh_first = NULL;     \
 (head)->sqh_last
 = &(head)->sqh_first;    \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_INSERT_HEAD(head, elm, field) do {   \
 if (((elm)->field.sqe_next = (head)->sqh_first) == NULL) \
  (head)->sqh_last = &(elm)->field.sqe_next;  \
 (head)->sqh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_INSERT_TAIL(head, elm, field) do {   \
 (elm)->field.sqe_next = NULL;     \
 *(head)->sqh_last = (elm);     \
 (head)->sqh_last = &(elm)->field.sqe_next;   \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 if (((elm)->field.sqe_next = (listelm)->field.sqe_next) == NULL)\
  (head)->sqh_last = &(elm)->field.sqe_next;  \
 (listelm)->field.sqe_next = (elm);    \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE_HEAD(head, field) do {    \
 if (((head)->sqh_first = (head)->sqh_first->field.sqe_next) == NULL) \
  (head)->sqh_last = &(head)->sqh_first;   \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE_AFTER(head, elm, field) do {   \
 if
```

```
 (((elm)->field.sqe_next = (elm)->field.sqe_next->field.sqe_next) \
    == NULL)      \
  (head)->sqh_last = &(elm)->field.sqe_next;  \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_REMOVE(head, elm, type, field) do {   \
 if ((head)->sqh_first == (elm)) {    \
  SIMPLEQ_REMOVE_HEAD((head), field);   \
 } else {      \
  struct type *curelm = (head)->sqh_first;  \
  while (curelm->field.sqe_next != (elm))   \
   curelm = curelm->field.sqe_next;  \
  if ((curelm->field.sqe_next =    \
   curelm->field.sqe_next->field.sqe_next) == NULL) \
      (head)->sqh_last = &(curelm)->field.sqe_next; \
 }       \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_CONCAT(head1, head2) do {    \
 if (!SIMPLEQ_EMPTY((head2))) {     \
  *(head1)->sqh_last = (head2)->sqh_first;  \
  (head1)->sqh_last = (head2)->sqh_last;  \
  SIMPLEQ_INIT((head2));     \
 }       \
} while (/*CONSTCOND*/0)

#define SIMPLEQ_LAST(head, type, field)     \
 (SIMPLEQ_EMPTY((head)) ?      \
  NULL :       \
        ((struct type
 *)(void *)    \
  ((char *)((head)->sqh_last) - offsetof(struct type, field))))

/*
* Tail queue definitions.
*/
#define _TAILQ_HEAD(name, type, qual)     \
struct name {        \
 qual type *tqh_first;  /* first element */  \
 qual type *qual *tqh_last; /* addr of last next element */ \
}
#define TAILQ_HEAD(name, type) _TAILQ_HEAD(name, struct type,)

#define TAILQ_HEAD_INITIALIZER(head)     \
 { TAILQ_END(head), &(head).tqh_first }

#define _TAILQ_ENTRY(type, qual)     \
struct {        \
```

```
 qual type *tqe_next;  /* next element */  \
 qual type *qual *tqe_prev; /* address of previous next element */\
}
#define TAILQ_ENTRY(type) _TAILQ_ENTRY(struct type,)

/*
* Tail queue access methods.
*/
#define TAILQ_FIRST(head)  ((head)->tqh_first)
#define TAILQ_END(head)   (NULL)
#define TAILQ_NEXT(elm, field)  ((elm)->field.tqe_next)
#define TAILQ_LAST(head, headname) \
 (*(((struct headname *)(void *)((head)->tqh_last))->tqh_last))
#define TAILQ_PREV(elm, headname, field) \
 (*(((struct headname
 *)(void *)((elm)->field.tqe_prev))->tqh_last))
#define TAILQ_EMPTY(head)  (TAILQ_FIRST(head) == TAILQ_END(head))


#define TAILQ_FOREACH(var, head, field)     \
 for ((var) = ((head)->tqh_first);    \
     (var) != TAILQ_END(head);     \
     (var) = ((var)->field.tqe_next))

#define TAILQ_FOREACH_SAFE(var, head, field, next)   \
 for ((var) = ((head)->tqh_first);    \
     (var) != TAILQ_END(head) &&     \
     ((next) = TAILQ_NEXT(var, field), 1); (var) = (next))

#define TAILQ_FOREACH_REVERSE(var, head, headname, field)  \
 for ((var) = TAILQ_LAST((head), headname);   \
     (var) != TAILQ_END(head);     \
     (var) = TAILQ_PREV((var), headname, field))

#define TAILQ_FOREACH_REVERSE_SAFE(var, head, headname, field, prev) \
 for ((var) = TAILQ_LAST((head), headname);   \
     (var) != TAILQ_END(head) &&     \
     ((prev) = TAILQ_PREV((var), headname, field), 1); (var) = (prev))

/*
* Tail queue functions.
*/
#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_TAILQ_INSERT_HEAD(head,
 elm, field)   \
 if ((head)->tqh_first &&     \
     (head)->tqh_first->field.tqe_prev != &(head)->tqh_first) \
  QUEUEDEBUG_ABORT("TAILQ_INSERT_HEAD %p %s:%d", (head), \
```

```
    __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_INSERT_TAIL(head, elm, field)  \
 if (*(head)->tqh_last != NULL)    \
  QUEUEDEBUG_ABORT("TAILQ_INSERT_TAIL %p %s:%d", (head), \
    __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_OP(elm, field)    \
 if ((elm)->field.tqe_next &&    \
    (elm)->field.tqe_next->field.tqe_prev !=  \
    &(elm)->field.tqe_next)    \
  QUEUEDEBUG_ABORT("TAILQ_* forw %p %s:%d", (elm), \
    __FILE__, __LINE__);   \
 if (*(elm)->field.tqe_prev != (elm))   \
  QUEUEDEBUG_ABORT("TAILQ_* back %p %s:%d", (elm), \
    __FILE__, __LINE__);
#define QUEUEDEBUG_TAILQ_PREREMOVE(head, elm, field)  \
 if ((elm)->field.tqe_next == NULL &&   \
    (head)->tqh_last != &(elm)->field.tqe_next)  \
  QUEUEDEBUG_ABORT("TAILQ_PREREMOVE head %p elm %p %s:%d",\
     (head), (elm), __FILE__,
 __LINE__);
#define QUEUEDEBUG_TAILQ_POSTREMOVE(elm, field)   \
 (elm)->field.tqe_next = (void *)1L;   \
 (elm)->field.tqe_prev = (void *)1L;
#else
#define QUEUEDEBUG_TAILQ_INSERT_HEAD(head, elm, field)
#define QUEUEDEBUG_TAILQ_INSERT_TAIL(head, elm, field)
#define QUEUEDEBUG_TAILQ_OP(elm, field)
#define QUEUEDEBUG_TAILQ_PREREMOVE(head, elm, field)
#define QUEUEDEBUG_TAILQ_POSTREMOVE(elm, field)
#endif

#define TAILQ_INIT(head) do {     \
 (head)->tqh_first = TAILQ_END(head);   \
 (head)->tqh_last = &(head)->tqh_first;   \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_HEAD(head, elm, field) do {  \
 QUEUEDEBUG_TAILQ_INSERT_HEAD((head), (elm), field)  \
 if (((elm)->field.tqe_next = (head)->tqh_first) != TAILQ_END(head))\
  (head)->tqh_first->field.tqe_prev =  \
     &(elm)->field.tqe_next;   \
 else       \
  (head)->tqh_last = &(elm)->field.tqe_next;  \
 (head)->tqh_first = (elm);    \
 (elm)->field.tqe_prev = &(head)->tqh_first;  \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_TAIL(head,
```

```
 elm, field) do {   \
 QUEUEDEBUG_TAILQ_INSERT_TAIL((head), (elm), field)  \
 (elm)->field.tqe_next = TAILQ_END(head);   \
 (elm)->field.tqe_prev = (head)->tqh_last;   \
 *(head)->tqh_last = (elm);     \
 (head)->tqh_last = &(elm)->field.tqe_next;   \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 QUEUEDEBUG_TAILQ_OP((listelm), field)    \
 if (((elm)->field.tqe_next = (listelm)->field.tqe_next) !=  \
     TAILQ_END(head))      \
  (elm)->field.tqe_next->field.tqe_prev =   \
      &(elm)->field.tqe_next;    \
 else       \
  (head)->tqh_last = &(elm)->field.tqe_next;  \
 (listelm)->field.tqe_next = (elm);    \
 (elm)->field.tqe_prev = &(listelm)->field.tqe_next;  \
} while (/*CONSTCOND*/0)

#define TAILQ_INSERT_BEFORE(listelm, elm, field) do {   \
 QUEUEDEBUG_TAILQ_OP((listelm), field)    \
 (elm)->field.tqe_prev = (listelm)->field.tqe_prev;  \
 (elm)->field.tqe_next = (listelm);    \
 *(listelm)->field.tqe_prev = (elm);    \
 (listelm)->field.tqe_prev
 = &(elm)->field.tqe_next;  \
} while (/*CONSTCOND*/0)

#define TAILQ_REMOVE(head, elm, field) do {    \
 QUEUEDEBUG_TAILQ_PREREMOVE((head), (elm), field)  \
 QUEUEDEBUG_TAILQ_OP((elm), field)    \
 if (((elm)->field.tqe_next) != TAILQ_END(head))   \
  (elm)->field.tqe_next->field.tqe_prev =   \
      (elm)->field.tqe_prev;    \
 else       \
  (head)->tqh_last = (elm)->field.tqe_prev;  \
 *(elm)->field.tqe_prev = (elm)->field.tqe_next;   \
 QUEUEDEBUG_TAILQ_POSTREMOVE((elm), field);   \
} while (/*CONSTCOND*/0)

#define TAILQ_REPLACE(head, elm, elm2, field) do {   \
       if (((elm2)->field.tqe_next = (elm)->field.tqe_next) !=  \
     TAILQ_END(head))        \
             (elm2)->field.tqe_next->field.tqe_prev =  \
                 &(elm2)->field.tqe_next;    \
       else       \
             (head)->tqh_last = &(elm2)->field.tqe_next;  \
```

```
        (elm2)->field.tqe_prev = (elm)->field.tqe_prev;   \
        *(elm2)->field.tqe_prev = (elm2);    \
 QUEUEDEBUG_TAILQ_POSTREMOVE((elm),
 field);   \
} while (/*CONSTCOND*/0)

#define TAILQ_CONCAT(head1, head2, field) do {    \
 if (!TAILQ_EMPTY(head2)) {     \
  *(head1)->tqh_last = (head2)->tqh_first;  \
  (head2)->tqh_first->field.tqe_prev = (head1)->tqh_last; \
  (head1)->tqh_last = (head2)->tqh_last;   \
  TAILQ_INIT((head2));     \
 }       \
} while (/*CONSTCOND*/0)

/*
* Singly-linked Tail queue declarations.
*/
#define STAILQ_HEAD(name, type)      \
struct name {        \
 struct type *stqh_first; /* first element */  \
 struct type **stqh_last; /* addr of last next element */ \
}

#define STAILQ_HEAD_INITIALIZER(head)     \
 { NULL, &(head).stqh_first }

#define STAILQ_ENTRY(type)      \
struct {        \
 struct type *stqe_next; /* next element */   \
}

/*
* Singly-linked Tail queue access methods.
*/
#define STAILQ_FIRST(head) ((head)->stqh_first)
#define STAILQ_END(head) NULL
#define STAILQ_NEXT(elm, field) ((elm)->field.stqe_next)
#define STAILQ_EMPTY(head) (STAILQ_FIRST(head)
 == STAILQ_END(head))

/*
* Singly-linked Tail queue functions.
*/
#define STAILQ_INIT(head) do {      \
 (head)->stqh_first = NULL;     \
 (head)->stqh_last = &(head)->stqh_first;    \
} while (/*CONSTCOND*/0)
```

```
#define STAILQ_INSERT_HEAD(head, elm, field) do {   \
 if (((elm)->field.stqe_next = (head)->stqh_first) == NULL) \
  (head)->stqh_last = &(elm)->field.stqe_next;  \
 (head)->stqh_first = (elm);     \
} while (/*CONSTCOND*/0)

#define STAILQ_INSERT_TAIL(head, elm, field) do {   \
 (elm)->field.stqe_next = NULL;     \
 *(head)->stqh_last = (elm);     \
 (head)->stqh_last = &(elm)->field.stqe_next;   \
} while (/*CONSTCOND*/0)

#define STAILQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 if (((elm)->field.stqe_next = (listelm)->field.stqe_next) == NULL)\
  (head)->stqh_last = &(elm)->field.stqe_next;  \
 (listelm)->field.stqe_next = (elm);    \
} while (/*CONSTCOND*/0)

#define STAILQ_REMOVE_HEAD(head, field) do {    \
 if (((head)->stqh_first = (head)->stqh_first->field.stqe_next)
 == NULL) \
  (head)->stqh_last = &(head)->stqh_first;   \
} while (/*CONSTCOND*/0)

#define STAILQ_REMOVE(head, elm, type, field) do {   \
 if ((head)->stqh_first == (elm)) {    \
  STAILQ_REMOVE_HEAD((head), field);   \
 } else {       \
  struct type *curelm = (head)->stqh_first;  \
  while (curelm->field.stqe_next != (elm))   \
   curelm = curelm->field.stqe_next;  \
  if ((curelm->field.stqe_next =    \
   curelm->field.stqe_next->field.stqe_next) == NULL) \
      (head)->stqh_last = &(curelm)->field.stqe_next; \
 }       \
} while (/*CONSTCOND*/0)

#define STAILQ_FOREACH(var, head, field)    \
 for ((var) = ((head)->stqh_first);    \
  (var);       \
  (var) = ((var)->field.stqe_next))

#define STAILQ_FOREACH_SAFE(var, head, field, tvar)   \
 for ((var) = STAILQ_FIRST((head));    \
    (var) && ((tvar) = STAILQ_NEXT((var), field), 1);  \
    (var) = (tvar))
```

```
#define STAILQ_CONCAT(head1, head2) do {    \
 if (!STAILQ_EMPTY((head2))) {     \
  *(head1)->stqh_last
 = (head2)->stqh_first;  \
  (head1)->stqh_last = (head2)->stqh_last;  \
  STAILQ_INIT((head2));     \
 }       \
} while (/*CONSTCOND*/0)

#define STAILQ_LAST(head, type, field)     \
 (STAILQ_EMPTY((head)) ?      \
  NULL :       \
       ((struct type *)(void *)    \
  ((char *)((head)->stqh_last) - offsetof(struct type, field))))


#ifndef _KERNEL
/*
* Circular queue definitions. Do not use. We still keep the macros
* for compatibility but because of pointer aliasing issues their use
* is discouraged!
*/

/*
* __launder_type():  We use this ugly hack to work around the the compiler
* noticing that two types may not alias each other and elide tests in code.
* We hit this in the CIRCLEQ macros when comparing 'struct name *' and
* 'struct type *' (see CIRCLEQ_HEAD()).  Modern compilers (such as GCC
* 4.8) declare these comparisons as always false, causing the code to
* not run as designed.
*
* This hack is only to be used for comparisons and thus can be fully const.
 * Do not use for assignment.
*
* If we ever choose to change the ABI of the CIRCLEQ macros, we could fix
* this by changing the head/tail sentinal values, but see the note above
* this one.
*/
static __inline const void * __launder_type(const void *);
static __inline const void *
__launder_type(const void *__x)
{
 __asm __volatile("" : "+r" (__x));
 return __x;
}

#if defined(QUEUEDEBUG)
#define QUEUEDEBUG_CIRCLEQ_HEAD(head, field)    \
```

```
 if ((head)->cqh_first != CIRCLEQ_ENDC(head) &&   \
    (head)->cqh_first->field.cqe_prev != CIRCLEQ_ENDC(head)) \
  QUEUEDEBUG_ABORT("CIRCLEQ head forw %p %s:%d", (head), \
       __FILE__, __LINE__);    \
 if ((head)->cqh_last != CIRCLEQ_ENDC(head) &&   \
    (head)->cqh_last->field.cqe_next != CIRCLEQ_ENDC(head)) \
  QUEUEDEBUG_ABORT("CIRCLEQ head back %p %s:%d", (head), \
       __FILE__, __LINE__);
#define QUEUEDEBUG_CIRCLEQ_ELM(head, elm, field)   \
 if ((elm)->field.cqe_next == CIRCLEQ_ENDC(head)) {  \
  if ((head)->cqh_last != (elm))    \
   QUEUEDEBUG_ABORT("CIRCLEQ
 elm last %p %s:%d", \
       (elm), __FILE__, __LINE__);   \
 } else {       \
  if ((elm)->field.cqe_next->field.cqe_prev != (elm)) \
   QUEUEDEBUG_ABORT("CIRCLEQ elm forw %p %s:%d", \
       (elm), __FILE__, __LINE__);   \
 }        \
 if ((elm)->field.cqe_prev == CIRCLEQ_ENDC(head)) {  \
  if ((head)->cqh_first != (elm))    \
   QUEUEDEBUG_ABORT("CIRCLEQ elm first %p %s:%d", \
       (elm), __FILE__, __LINE__);   \
 } else {       \
  if ((elm)->field.cqe_prev->field.cqe_next != (elm)) \
   QUEUEDEBUG_ABORT("CIRCLEQ elm prev %p %s:%d", \
       (elm), __FILE__, __LINE__);   \
 }
#define QUEUEDEBUG_CIRCLEQ_POSTREMOVE(elm, field)   \
 (elm)->field.cqe_next = (void *)1L;    \
 (elm)->field.cqe_prev = (void *)1L;
#else
#define QUEUEDEBUG_CIRCLEQ_HEAD(head, field)
#define QUEUEDEBUG_CIRCLEQ_ELM(head, elm, field)
#define QUEUEDEBUG_CIRCLEQ_POSTREMOVE(elm, field)
#endif

#define CIRCLEQ_HEAD(name, type)     \
struct name {        \
 struct type *cqh_first;  /*
 first element */  \
 struct type *cqh_last;  /* last element */  \
}

#define CIRCLEQ_HEAD_INITIALIZER(head)     \
 { CIRCLEQ_END(&head), CIRCLEQ_END(&head) }

#define CIRCLEQ_ENTRY(type)      \
```

```
struct {        \
 struct type *cqe_next;  /* next element */  \
 struct type *cqe_prev;  /* previous element */  \
}

/*
* Circular queue functions.
*/
#define CIRCLEQ_INIT(head) do {      \
 (head)->cqh_first = CIRCLEQ_END(head);    \
 (head)->cqh_last = CIRCLEQ_END(head);    \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_AFTER(head, listelm, elm, field) do {  \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 QUEUEDEBUG_CIRCLEQ_ELM((head), (listelm), field)  \
 (elm)->field.cqe_next = (listelm)->field.cqe_next;  \
 (elm)->field.cqe_prev = (listelm);    \
 if ((listelm)->field.cqe_next == CIRCLEQ_ENDC(head))  \
  (head)->cqh_last = (elm);    \
 else       \
  (listelm)->field.cqe_next->field.cqe_prev = (elm); \
 (listelm)->field.cqe_next = (elm);    \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_BEFORE(head,
 listelm, elm, field) do {  \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 QUEUEDEBUG_CIRCLEQ_ELM((head), (listelm), field)  \
 (elm)->field.cqe_next = (listelm);    \
 (elm)->field.cqe_prev = (listelm)->field.cqe_prev;  \
 if ((listelm)->field.cqe_prev == CIRCLEQ_ENDC(head))  \
  (head)->cqh_first = (elm);    \
 else       \
  (listelm)->field.cqe_prev->field.cqe_next = (elm); \
 (listelm)->field.cqe_prev = (elm);    \
} while (/*CONSTCOND*/0)

#define CIRCLEQ_INSERT_HEAD(head, elm, field) do {   \
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)    \
 (elm)->field.cqe_next = (head)->cqh_first;   \
 (elm)->field.cqe_prev = CIRCLEQ_END(head);   \
 if ((head)->cqh_last == CIRCLEQ_ENDC(head))   \
  (head)->cqh_last = (elm);    \
 else       \
  (head)->cqh_first->field.cqe_prev = (elm);  \
 (head)->cqh_first = (elm);     \
} while (/*CONSTCOND*/0)
```

```
#define CIRCLEQ_INSERT_TAIL(head, elm, field) do {	\
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)		\
 (elm)->field.cqe_next
 = CIRCLEQ_END(head);	\
 (elm)->field.cqe_prev = (head)->cqh_last;	\
 if ((head)->cqh_first == CIRCLEQ_ENDC(head))	\
  (head)->cqh_first = (elm);		\
 else		\
  (head)->cqh_last->field.cqe_next = (elm);	\
 (head)->cqh_last = (elm);		\
} while (/*CONSTCOND*/0)

#define CIRCLEQ_REMOVE(head, elm, field) do {		\
 QUEUEDEBUG_CIRCLEQ_HEAD((head), field)		\
 QUEUEDEBUG_CIRCLEQ_ELM((head), (elm), field)	\
 if ((elm)->field.cqe_next == CIRCLEQ_ENDC(head))	\
  (head)->cqh_last = (elm)->field.cqe_prev;	\
 else		\
  (elm)->field.cqe_next->field.cqe_prev =	\
      (elm)->field.cqe_prev;		\
 if ((elm)->field.cqe_prev == CIRCLEQ_ENDC(head))	\
  (head)->cqh_first = (elm)->field.cqe_next;	\
 else		\
  (elm)->field.cqe_prev->field.cqe_next =	\
      (elm)->field.cqe_next;		\
 QUEUEDEBUG_CIRCLEQ_POSTREMOVE((elm), field)	\
} while (/*CONSTCOND*/0)

#define CIRCLEQ_FOREACH(var, head, field)		\
 for ((var) = ((head)->cqh_first);		\
  (var) != CIRCLEQ_ENDC(head);		\
  (var)
 = ((var)->field.cqe_next))

#define CIRCLEQ_FOREACH_REVERSE(var, head, field)	\
 for ((var) = ((head)->cqh_last);		\
  (var) != CIRCLEQ_ENDC(head);		\
  (var) = ((var)->field.cqe_prev))

/*
* Circular queue access methods.
*/
#define CIRCLEQ_FIRST(head)  ((head)->cqh_first)
#define CIRCLEQ_LAST(head)  ((head)->cqh_last)
/* For comparisons */
#define CIRCLEQ_ENDC(head)  (__launder_type(head))
/* For assignments */
```

```
#define CIRCLEQ_END(head)  ((void *)(head))
#define CIRCLEQ_NEXT(elm, field) ((elm)->field.cqe_next)
#define CIRCLEQ_PREV(elm, field) ((elm)->field.cqe_prev)
#define CIRCLEQ_EMPTY(head)      \
   (CIRCLEQ_FIRST(head) == CIRCLEQ_ENDC(head))

#define CIRCLEQ_LOOP_NEXT(head, elm, field)    \
 (((elm)->field.cqe_next == CIRCLEQ_ENDC(head))   \
     ? ((head)->cqh_first)     \
     : (elm->field.cqe_next))
#define CIRCLEQ_LOOP_PREV(head, elm, field)    \
 (((elm)->field.cqe_prev == CIRCLEQ_ENDC(head))   \
     ? ((head)->cqh_last)     \
     :
 (elm->field.cqe_prev))
#endif /* !_KERNEL */

#endif /* !_SYS_QUEUE_H_ */
#ifndef _SYS_CDEFS_H_
#define _SYS_CDEFS_H_

#warning usage of non-standard #include <sys/cdefs.h> is deprecated

#undef __P
#undef __PMT

#define __P(args) args
#define __PMT(args) args

#define __CONCAT(x,y) x ## y
#define __STRING(x) #x

#ifdef  __cplusplus
# define __BEGIN_DECLS extern "C" {
# define __END_DECLS }
#else
# define __BEGIN_DECLS
# define __END_DECLS
#endif

#if defined(__GNUC__) && !defined(__cplusplus)
# define __THROW __attribute__ ((__nothrow__))
# define __NTH(fct) __attribute__ ((__nothrow__)) fct
#else
# define __THROW
# define __NTH(fct)     fct
#endif
```

```
#endif /* _SYS_CDEFS_H_ */
# 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
"
/* $NetBSD: tree.h,v 1.20 2013/09/14 13:20:45 joerg Exp $ */
/* $OpenBSD: tree.h,v 1.13 2011/07/09 00:19:45 pirofti Exp $ */
/* Modified by Void Linux. */
/*
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```

```
* THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
*/

#ifndef _SYS_TREE_H_
#define _SYS_TREE_H_

#ifdef __GNUC__
#define __GNUC_PREREQ__(x, y)      \
 ((__GNUC__ == (x) && __GNUC_MINOR__ >= (y)) ||   \
  (__GNUC__ > (x)))
#else
#define __GNUC_PREREQ__(x, y) 0
#endif

#if __GNUC_PREREQ__(2, 7) || defined(__lint__)
#define _sys_tree_h_unused __attribute__((__unused__))
#else
#define _sys_tree_h_unused /* delete */
#endif

/*
* This file defines data structures for different types of trees:
* splay trees and red-black trees.
*
* A splay tree is a self-organizing
 data structure.  Every operation
* on the tree causes a splay to happen.  The splay moves the requested
* node to the root of the tree and partly rebalances it.
*
* This has the benefit that request locality causes faster lookups as
* the requested nodes move to the top of the tree.  On the other hand,
* every lookup causes memory writes.
*
* The Balance Theorem bounds the total access time for m operations
* and n inserts on an initially empty tree as O((m + n)lg n).  The
* amortized cost for a sequence of m accesses to a splay tree is O(lg n);
*
* A red-black tree is a binary search tree with the node color as an
* extra attribute.  It fulfills a set of conditions:
* - every search path from the root to a leaf consists of the
*   same number of black nodes,
* - each red node (except for the root) has a black parent,
* - each leaf node is black.
*
* Every operation on a red-black tree is bounded as O(lg n).
* The maximum height of a red-black tree is 2lg (n+1).
 */
```

```
#define SPLAY_HEAD(name, type)      \
struct name {       \
 struct type *sph_root; /* root of the tree */   \
}

#define SPLAY_INITIALIZER(root)     \
 { NULL }

#define SPLAY_INIT(root) do {      \
 (root)->sph_root = NULL;     \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ENTRY(type)      \
struct {       \
 struct type *spe_left; /* left element */   \
 struct type *spe_right; /* right element */   \
}

#define SPLAY_LEFT(elm, field)  (elm)->field.spe_left
#define SPLAY_RIGHT(elm, field)  (elm)->field.spe_right
#define SPLAY_ROOT(head)  (head)->sph_root
#define SPLAY_EMPTY(head)  (SPLAY_ROOT(head) == NULL)

/* SPLAY_ROTATE_{LEFT,RIGHT} expect that tmp hold SPLAY_{RIGHT,LEFT} */
#define SPLAY_ROTATE_RIGHT(head, tmp, field) do {   \
 SPLAY_LEFT((head)->sph_root, field) = SPLAY_RIGHT(tmp, field); \
 SPLAY_RIGHT(tmp, field) = (head)->sph_root;   \
 (head)->sph_root = tmp;      \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ROTATE_LEFT(head, tmp, field) do {   \
 SPLAY_RIGHT((head)->sph_root,
 field) = SPLAY_LEFT(tmp, field); \
 SPLAY_LEFT(tmp, field) = (head)->sph_root;   \
 (head)->sph_root = tmp;      \
} while (/*CONSTCOND*/ 0)

#define SPLAY_LINKLEFT(head, tmp, field) do {    \
 SPLAY_LEFT(tmp, field) = (head)->sph_root;   \
 tmp = (head)->sph_root;      \
 (head)->sph_root = SPLAY_LEFT((head)->sph_root, field);  \
} while (/*CONSTCOND*/ 0)

#define SPLAY_LINKRIGHT(head, tmp, field) do {    \
 SPLAY_RIGHT(tmp, field) = (head)->sph_root;   \
 tmp = (head)->sph_root;      \
 (head)->sph_root = SPLAY_RIGHT((head)->sph_root, field); \
} while (/*CONSTCOND*/ 0)
```

```
#define SPLAY_ASSEMBLE(head, node, left, right, field) do {  \
 SPLAY_RIGHT(left, field) = SPLAY_LEFT((head)->sph_root, field); \
 SPLAY_LEFT(right, field) = SPLAY_RIGHT((head)->sph_root, field);\
 SPLAY_LEFT((head)->sph_root, field) = SPLAY_RIGHT(node, field); \
 SPLAY_RIGHT((head)->sph_root, field) = SPLAY_LEFT(node, field); \
} while (/*CONSTCOND*/ 0)

/* Generates prototypes and inline functions */

#define
 SPLAY_PROTOTYPE(name, type, field, cmp)    \
void name##_SPLAY(struct name *, struct type *);   \
void name##_SPLAY_MINMAX(struct name *, int);    \
struct type *name##_SPLAY_INSERT(struct name *, struct type *);  \
struct type *name##_SPLAY_REMOVE(struct name *, struct type *);  \
        \
/* Finds the node with the same key as elm */    \
static __inline struct type *      \
name##_SPLAY_FIND(struct name *head, struct type *elm)   \
{         \
 if (SPLAY_EMPTY(head))      \
  return(NULL);      \
 name##_SPLAY(head, elm);     \
 if ((cmp)(elm, (head)->sph_root) == 0)    \
  return (head->sph_root);    \
 return (NULL);       \
}         \
        \
static __inline _sys_tree_h_unused struct type *   \
name##_SPLAY_NEXT(struct name *head, struct type *elm)   \
{         \
 name##_SPLAY(head, elm);     \
 if (SPLAY_RIGHT(elm, field) != NULL) {    \
  elm = SPLAY_RIGHT(elm, field);    \
  while (SPLAY_LEFT(elm, field) != NULL) {  \
   elm = SPLAY_LEFT(elm, field);   \
  }       \
 }
 else        \
  elm = NULL;      \
 return (elm);       \
}         \
        \
static _sys_tree_h_unused __inline struct type *   \
name##_SPLAY_MIN_MAX(struct name *head, int val)   \
{         \
 name##_SPLAY_MINMAX(head, val);     \
```

```
	return (SPLAY_ROOT(head));	\
}

/* Main splay operation.
* Moves node close to the key of elm to top
*/
#define SPLAY_GENERATE(name, type, field, cmp)	\
struct type *		\
name##_SPLAY_INSERT(struct name *head, struct type *elm)	\
{		\
  if (SPLAY_EMPTY(head)) {	\
    SPLAY_LEFT(elm, field) = SPLAY_RIGHT(elm, field) = NULL; \
  } else {		\
    int __comp;		\
    name##_SPLAY(head, elm);	\
    __comp = (cmp)(elm, (head)->sph_root);	\
    if(__comp < 0) {	\
     SPLAY_LEFT(elm, field) = SPLAY_LEFT((head)->sph_root, field);\
     SPLAY_RIGHT(elm, field) = (head)->sph_root;	\
     SPLAY_LEFT((head)->sph_root, field) = NULL;	\
    } else if (__comp > 0) {	\
     SPLAY_RIGHT(elm,
 field) = SPLAY_RIGHT((head)->sph_root, field);\
     SPLAY_LEFT(elm, field) = (head)->sph_root;	\
     SPLAY_RIGHT((head)->sph_root, field) = NULL; \
    } else	\
     return ((head)->sph_root);	\
  }		\
  (head)->sph_root = (elm);	\
  return (NULL);		\
}		\
		\
struct type *		\
name##_SPLAY_REMOVE(struct name *head, struct type *elm)	\
{		\
 struct type *__tmp;	\
 if (SPLAY_EMPTY(head))	\
  return (NULL);	\
 name##_SPLAY(head, elm);	\
 if ((cmp)(elm, (head)->sph_root) == 0) {	\
  if (SPLAY_LEFT((head)->sph_root, field) == NULL) { \
   (head)->sph_root = SPLAY_RIGHT((head)->sph_root, field);\
  } else {	\
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   (head)->sph_root = SPLAY_LEFT((head)->sph_root, field);\
   name##_SPLAY(head, elm);	\
   SPLAY_RIGHT((head)->sph_root, field) = __tmp; \
  }	\
```

```
 return (elm);      \
 }       \
 return (NULL);       \
}        \
        \
void        \
name##_SPLAY(struct
 name *head, struct type *elm)   \
{        \
 struct type __node, *__left, *__right, *__tmp;   \
 int __comp;       \
\
 SPLAY_LEFT(&__node, field) = SPLAY_RIGHT(&__node, field) = NULL;\
 __left = __right = &__node;     \
\
 while ((__comp = (cmp)(elm, (head)->sph_root)) != 0) {  \
  if (__comp < 0) {     \
   __tmp = SPLAY_LEFT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if ((cmp)(elm, __tmp) < 0){   \
    SPLAY_ROTATE_RIGHT(head, __tmp, field); \
    if (SPLAY_LEFT((head)->sph_root, field) == NULL)\
     break;    \
   }      \
   SPLAY_LINKLEFT(head, __right, field);  \
  } else if (__comp > 0) {    \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if ((cmp)(elm, __tmp) > 0){   \
    SPLAY_ROTATE_LEFT(head, __tmp, field); \
    if (SPLAY_RIGHT((head)->sph_root, field) == NULL)\
     break;    \
   }      \
   SPLAY_LINKRIGHT(head, __left, field);  \
  }       \
 }       \
 SPLAY_ASSEMBLE(head,
 &__node, __left, __right, field);  \
}        \
        \
/* Splay with either the minimum or the maximum element   \
* Used to find minimum or maximum element in tree.   \
*/        \
void name##_SPLAY_MINMAX(struct name *head, int __comp) \
{        \
 struct type __node, *__left, *__right, *__tmp;   \
```

```
\
 SPLAY_LEFT(&__node, field) = SPLAY_RIGHT(&__node, field) = NULL;\
 __left = __right = &__node;     \
\
 while (1) {       \
  if (__comp < 0) {     \
   __tmp = SPLAY_LEFT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if (__comp < 0){    \
    SPLAY_ROTATE_RIGHT(head, __tmp, field); \
    if (SPLAY_LEFT((head)->sph_root, field) == NULL)\
     break;    \
   }      \
   SPLAY_LINKLEFT(head, __right, field);  \
  } else if (__comp > 0) {    \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if (__comp > 0) {    \
    SPLAY_ROTATE_LEFT(head, __tmp, field); \
    if (SPLAY_RIGHT((head)->sph_root,
 field) == NULL)\
     break;    \
   }      \
   SPLAY_LINKRIGHT(head, __left, field);  \
  }       \
 }       \
 SPLAY_ASSEMBLE(head, &__node, __left, __right, field);  \
}

#define SPLAY_NEGINF -1
#define SPLAY_INF 1

#define SPLAY_INSERT(name, x, y) name##_SPLAY_INSERT(x, y)
#define SPLAY_REMOVE(name, x, y) name##_SPLAY_REMOVE(x, y)
#define SPLAY_FIND(name, x, y)  name##_SPLAY_FIND(x, y)
#define SPLAY_NEXT(name, x, y)  name##_SPLAY_NEXT(x, y)
#define SPLAY_MIN(name, x)  (SPLAY_EMPTY(x) ? NULL \
    : name##_SPLAY_MIN_MAX(x, SPLAY_NEGINF))
#define SPLAY_MAX(name, x)  (SPLAY_EMPTY(x) ? NULL \
    : name##_SPLAY_MIN_MAX(x, SPLAY_INF))

#define SPLAY_FOREACH(x, name, head)     \
 for ((x) = SPLAY_MIN(name, head);    \
     (x) != NULL;      \
     (x) = SPLAY_NEXT(name, head, x))
```

```
/* Macros that define a red-black tree */
#define RB_HEAD(name, type)      \
struct name {        \
 struct type *rbh_root; /* root of the tree */   \
}

#define RB_INITIALIZER(root)      \
 {
 NULL }

#define RB_INIT(root) do {      \
 (root)->rbh_root = NULL;     \
} while (/*CONSTCOND*/ 0)

#define RB_BLACK 0
#define RB_RED  1
#define RB_ENTRY(type)       \
struct {        \
 struct type *rbe_left;  /* left element */  \
 struct type *rbe_right;  /* right element */  \
 struct type *rbe_parent; /* parent element */  \
 int rbe_color;   /* node color */  \
}

#define RB_LEFT(elm, field)  (elm)->field.rbe_left
#define RB_RIGHT(elm, field)  (elm)->field.rbe_right
#define RB_PARENT(elm, field)  (elm)->field.rbe_parent
#define RB_COLOR(elm, field)  (elm)->field.rbe_color
#define RB_ROOT(head)   (head)->rbh_root
#define RB_EMPTY(head)   (RB_ROOT(head) == NULL)

#define RB_SET(elm, parent, field) do {     \
 RB_PARENT(elm, field) = parent;     \
 RB_LEFT(elm, field) = RB_RIGHT(elm, field) = NULL;  \
 RB_COLOR(elm, field) = RB_RED;     \
} while (/*CONSTCOND*/ 0)

#define RB_SET_BLACKRED(black, red, field) do {    \
 RB_COLOR(black, field) = RB_BLACK;    \
 RB_COLOR(red, field)
 = RB_RED;     \
} while (/*CONSTCOND*/ 0)

#ifndef RB_AUGMENT
#define RB_AUGMENT(x) do {} while (/*CONSTCOND*/ 0)
#endif

#define RB_ROTATE_LEFT(head, elm, tmp, field) do {   \
```

```
 (tmp) = RB_RIGHT(elm, field);     \
 if ((RB_RIGHT(elm, field) = RB_LEFT(tmp, field)) != NULL) { \
  RB_PARENT(RB_LEFT(tmp, field), field) = (elm);  \
 }       \
 RB_AUGMENT(elm);      \
 if ((RB_PARENT(tmp, field) = RB_PARENT(elm, field)) != NULL) { \
  if ((elm) == RB_LEFT(RB_PARENT(elm, field), field)) \
   RB_LEFT(RB_PARENT(elm, field), field) = (tmp); \
  else       \
   RB_RIGHT(RB_PARENT(elm, field), field) = (tmp); \
 } else       \
  (head)->rbh_root = (tmp);    \
 RB_LEFT(tmp, field) = (elm);     \
 RB_PARENT(elm, field) = (tmp);     \
 RB_AUGMENT(tmp);      \
 if ((RB_PARENT(tmp, field)))     \
  RB_AUGMENT(RB_PARENT(tmp, field));   \
} while (/*CONSTCOND*/ 0)

#define RB_ROTATE_RIGHT(head, elm, tmp, field) do {   \
 (tmp) = RB_LEFT(elm, field);     \
 if ((RB_LEFT(elm, field) = RB_RIGHT(tmp, field))
 != NULL) { \
  RB_PARENT(RB_RIGHT(tmp, field), field) = (elm);  \
 }       \
 RB_AUGMENT(elm);      \
 if ((RB_PARENT(tmp, field) = RB_PARENT(elm, field)) != NULL) { \
  if ((elm) == RB_LEFT(RB_PARENT(elm, field), field)) \
   RB_LEFT(RB_PARENT(elm, field), field) = (tmp); \
  else       \
   RB_RIGHT(RB_PARENT(elm, field), field) = (tmp); \
 } else       \
  (head)->rbh_root = (tmp);    \
 RB_RIGHT(tmp, field) = (elm);     \
 RB_PARENT(elm, field) = (tmp);     \
 RB_AUGMENT(tmp);      \
 if ((RB_PARENT(tmp, field)))     \
  RB_AUGMENT(RB_PARENT(tmp, field));   \
} while (/*CONSTCOND*/ 0)

/* Generates prototypes and inline functions */
#define RB_PROTOTYPE(name, type, field, cmp)    \
 RB_PROTOTYPE_INTERNAL(name, type, field, cmp,)
#define RB_PROTOTYPE_STATIC(name, type, field, cmp)   \
 RB_PROTOTYPE_INTERNAL(name, type, field, cmp, _sys_tree_h_unused static)
#define RB_PROTOTYPE_INTERNAL(name, type, field, cmp, attr)  \
attr void name##_RB_INSERT_COLOR(struct name *, struct
```

```
 type *);  \
attr void name##_RB_REMOVE_COLOR(struct name *, struct type *, struct type *);\
attr struct type *name##_RB_REMOVE(struct name *, struct type *); \
attr struct type *name##_RB_INSERT(struct name *, struct type *); \
attr struct type *name##_RB_FIND(struct name *, struct type *);  \
attr struct type *name##_RB_NFIND(struct name *, struct type *); \
attr struct type *name##_RB_NEXT(struct type *);   \
attr struct type *name##_RB_PREV(struct type *);   \
attr struct type *name##_RB_MINMAX(struct name *, int);   \
        \

/* Main rb operation.
* Moves node close to the key of elm to top
*/
#define RB_GENERATE(name, type, field, cmp)    \
 RB_GENERATE_INTERNAL(name, type, field, cmp,)
#define RB_GENERATE_STATIC(name, type, field, cmp)   \
 RB_GENERATE_INTERNAL(name, type, field, cmp, _sys_tree_h_unused static)
#define RB_GENERATE_INTERNAL(name, type, field, cmp, attr)  \
attr void       \
name##_RB_INSERT_COLOR(struct name *head, struct type *elm)  \
{       \
 struct type
 *parent, *gparent, *tmp;    \
 while ((parent = RB_PARENT(elm, field)) != NULL &&  \
     RB_COLOR(parent, field) == RB_RED) {   \
  gparent = RB_PARENT(parent, field);   \
  if (parent == RB_LEFT(gparent, field)) {  \
   tmp = RB_RIGHT(gparent, field);   \
   if (tmp && RB_COLOR(tmp, field) == RB_RED) { \
    RB_COLOR(tmp, field) = RB_BLACK; \
    RB_SET_BLACKRED(parent, gparent, field);\
    elm = gparent;    \
    continue;    \
   }      \
   if (RB_RIGHT(parent, field) == elm) {  \
    RB_ROTATE_LEFT(head, parent, tmp, field);\
    tmp = parent;    \
    parent = elm;    \
    elm = tmp;    \
   }      \
   RB_SET_BLACKRED(parent, gparent, field); \
   RB_ROTATE_RIGHT(head, gparent, tmp, field); \
  } else {      \
   tmp = RB_LEFT(gparent, field);   \
   if (tmp && RB_COLOR(tmp, field) == RB_RED) { \
    RB_COLOR(tmp, field) = RB_BLACK; \
    RB_SET_BLACKRED(parent, gparent, field);\
```

```
    elm = gparent;    \
    continue;    \
   }      \
   if (RB_LEFT(parent, field) == elm)
  {  \
    RB_ROTATE_RIGHT(head, parent, tmp, field);\
    tmp = parent;    \
    parent = elm;    \
    elm = tmp;    \
   }      \
   RB_SET_BLACKRED(parent, gparent, field); \
   RB_ROTATE_LEFT(head, gparent, tmp, field); \
  }       \
 }        \
 RB_COLOR(head->rbh_root, field) = RB_BLACK;   \
}         \
         \
attr void        \
name##_RB_REMOVE_COLOR(struct name *head, struct type *parent, struct type *elm) \
{         \
 struct type *tmp;      \
 while ((elm == NULL || RB_COLOR(elm, field) == RB_BLACK) && \
     elm != RB_ROOT(head)) {     \
  if (RB_LEFT(parent, field) == elm) {   \
   tmp = RB_RIGHT(parent, field);   \
   if (RB_COLOR(tmp, field) == RB_RED) {  \
    RB_SET_BLACKRED(tmp, parent, field); \
    RB_ROTATE_LEFT(head, parent, tmp, field);\
    tmp = RB_RIGHT(parent, field);  \
   }      \
   if ((RB_LEFT(tmp, field) == NULL ||  \
       RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) &&\
       (RB_RIGHT(tmp, field) == NULL ||  \
       RB_COLOR(RB_RIGHT(tmp,
 field), field) == RB_BLACK)) {\
    RB_COLOR(tmp, field) = RB_RED;  \
    elm = parent;    \
    parent = RB_PARENT(elm, field);  \
   } else {     \
    if (RB_RIGHT(tmp, field) == NULL || \
        RB_COLOR(RB_RIGHT(tmp, field), field) == RB_BLACK) {\
     struct type *oleft;  \
     if ((oleft = RB_LEFT(tmp, field)) \
         != NULL)   \
      RB_COLOR(oleft, field) = RB_BLACK;\
     RB_COLOR(tmp, field) = RB_RED; \
     RB_ROTATE_RIGHT(head, tmp, oleft, field);\
     tmp = RB_RIGHT(parent, field); \
```

```
  }     \
  RB_COLOR(tmp, field) = RB_COLOR(parent, field);\
  RB_COLOR(parent, field) = RB_BLACK; \
  if (RB_RIGHT(tmp, field))  \
   RB_COLOR(RB_RIGHT(tmp, field), field) = RB_BLACK;\
  RB_ROTATE_LEFT(head, parent, tmp, field);\
  elm = RB_ROOT(head);   \
  break;     \
  }      \
 } else {      \
  tmp = RB_LEFT(parent, field);   \
  if (RB_COLOR(tmp, field) == RB_RED) {  \
  RB_SET_BLACKRED(tmp, parent, field); \
  RB_ROTATE_RIGHT(head, parent, tmp, field);\
  tmp
= RB_LEFT(parent, field);  \
  }      \
  if ((RB_LEFT(tmp, field) == NULL ||  \
      RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) &&\
      (RB_RIGHT(tmp, field) == NULL ||  \
      RB_COLOR(RB_RIGHT(tmp, field), field) == RB_BLACK)) {\
  RB_COLOR(tmp, field) = RB_RED;  \
  elm = parent;    \
  parent = RB_PARENT(elm, field);  \
  } else {     \
  if (RB_LEFT(tmp, field) == NULL || \
      RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) {\
   struct type *oright;  \
   if ((oright = RB_RIGHT(tmp, field)) \
       != NULL)   \
    RB_COLOR(oright, field) = RB_BLACK;\
   RB_COLOR(tmp, field) = RB_RED; \
   RB_ROTATE_LEFT(head, tmp, oright, field);\
   tmp = RB_LEFT(parent, field); \
  }     \
  RB_COLOR(tmp, field) = RB_COLOR(parent, field);\
  RB_COLOR(parent, field) = RB_BLACK; \
  if (RB_LEFT(tmp, field))  \
   RB_COLOR(RB_LEFT(tmp, field), field) = RB_BLACK;\
  RB_ROTATE_RIGHT(head, parent, tmp, field);\
  elm = RB_ROOT(head);   \
  break;     \
  }      \
 }       \
}       \
if
(elm)      \
 RB_COLOR(elm, field) = RB_BLACK;   \
```

```
}       \
       \
attr struct type *      \
name##_RB_REMOVE(struct name *head, struct type *elm)   \
{       \
 struct type *child, *parent, *old = elm;   \
 int color;      \
 if (RB_LEFT(elm, field) == NULL)    \
  child = RB_RIGHT(elm, field);    \
 else if (RB_RIGHT(elm, field) == NULL)    \
  child = RB_LEFT(elm, field);    \
 else {       \
  struct type *left;     \
  elm = RB_RIGHT(elm, field);    \
  while ((left = RB_LEFT(elm, field)) != NULL)  \
   elm = left;     \
  child = RB_RIGHT(elm, field);    \
  parent = RB_PARENT(elm, field);    \
  color = RB_COLOR(elm, field);    \
  if (child)      \
   RB_PARENT(child, field) = parent;  \
  if (parent) {      \
   if (RB_LEFT(parent, field) == elm)  \
    RB_LEFT(parent, field) = child;  \
   else      \
    RB_RIGHT(parent, field) = child; \
   RB_AUGMENT(parent);    \
  } else       \
   RB_ROOT(head)
 = child;    \
  if (RB_PARENT(elm, field) == old)   \
   parent = elm;     \
  (elm)->field = (old)->field;    \
  if (RB_PARENT(old, field)) {    \
   if (RB_LEFT(RB_PARENT(old, field), field) == old)\
    RB_LEFT(RB_PARENT(old, field), field) = elm;\
   else      \
    RB_RIGHT(RB_PARENT(old, field), field) = elm;\
   RB_AUGMENT(RB_PARENT(old, field));  \
  } else       \
   RB_ROOT(head) = elm;    \
  RB_PARENT(RB_LEFT(old, field), field) = elm;  \
  if (RB_RIGHT(old, field))    \
   RB_PARENT(RB_RIGHT(old, field), field) = elm; \
  if (parent) {      \
   left = parent;     \
   do {      \
    RB_AUGMENT(left);   \
```

```
  } while ((left = RB_PARENT(left, field)) != NULL); \
 }      \
 goto color;     \
}       \
parent = RB_PARENT(elm, field);    \
color = RB_COLOR(elm, field);    \
if (child)      \
 RB_PARENT(child, field) = parent;  \
if (parent) {      \
 if (RB_LEFT(parent, field) == elm)  \
  RB_LEFT(parent, field) = child;  \
 else      \
  RB_RIGHT(parent,
field) = child;  \
 RB_AUGMENT(parent);    \
} else       \
 RB_ROOT(head) = child;    \
color:       \
if (color == RB_BLACK)     \
 name##_RB_REMOVE_COLOR(head, parent, child);  \
return (old);      \
}       \
       \
/* Inserts a node into the RB tree */    \
attr struct type *      \
name##_RB_INSERT(struct name *head, struct type *elm)  \
{       \
 struct type *tmp;     \
 struct type *parent = NULL;    \
 int comp = 0;      \
 tmp = RB_ROOT(head);     \
 while (tmp) {      \
  parent = tmp;     \
  comp = (cmp)(elm, parent);   \
  if (comp < 0)     \
   tmp = RB_LEFT(tmp, field);  \
  else if (comp > 0)    \
   tmp = RB_RIGHT(tmp, field);  \
  else      \
   return (tmp);    \
 }       \
 RB_SET(elm, parent, field);    \
 if (parent != NULL) {     \
  if (comp < 0)     \
   RB_LEFT(parent, field) = elm;  \
  else      \
   RB_RIGHT(parent, field) = elm;  \
  RB_AUGMENT(parent);    \
```

```
 } else       \
  RB_ROOT(head) = elm;    \
 name##_RB_INSERT_COLOR(head,
 elm);   \
 return (NULL);      \
}       \
       \
/* Finds the node with the same key as elm */   \
attr struct type *      \
name##_RB_FIND(struct name *head, struct type *elm)   \
{       \
 struct type *tmp = RB_ROOT(head);   \
 int comp;      \
 while (tmp) {      \
  comp = cmp(elm, tmp);    \
  if (comp < 0)     \
   tmp = RB_LEFT(tmp, field);   \
  else if (comp > 0)    \
   tmp = RB_RIGHT(tmp, field);   \
  else      \
   return (tmp);    \
 }       \
 return (NULL);      \
}       \
       \
/* Finds the first node greater than or equal to the search key */ \
attr struct type *      \
name##_RB_NFIND(struct name *head, struct type *elm)   \
{       \
 struct type *tmp = RB_ROOT(head);   \
 struct type *res = NULL;    \
 int comp;      \
 while (tmp) {      \
  comp = cmp(elm, tmp);    \
  if (comp < 0) {     \
   res = tmp;    \
   tmp = RB_LEFT(tmp, field);   \
  }      \
  else if (comp > 0)    \
   tmp =
 RB_RIGHT(tmp, field);   \
  else      \
   return (tmp);    \
 }       \
 return (res);      \
}       \
       \
/* ARGSUSED */       \
```

```
attr struct type *	\
name##_RB_NEXT(struct type *elm)	\
{	\
 if (RB_RIGHT(elm, field)) {	\
  elm = RB_RIGHT(elm, field);	\
  while (RB_LEFT(elm, field))	\
   elm = RB_LEFT(elm, field);	\
 } else {	\
  if (RB_PARENT(elm, field) &&	\
      (elm == RB_LEFT(RB_PARENT(elm, field), field))) \
   elm = RB_PARENT(elm, field);	\
  else {	\
   while (RB_PARENT(elm, field) &&	\
       (elm == RB_RIGHT(RB_PARENT(elm, field), field)))\
    elm = RB_PARENT(elm, field);	\
   elm = RB_PARENT(elm, field);	\
  }	\
 }	\
 return (elm);	\
}	\
	\
/* ARGSUSED */	\
attr struct type *	\
name##_RB_PREV(struct type *elm)	\
{	\
 if (RB_LEFT(elm, field)) {	\
  elm = RB_LEFT(elm, field);	\
  while (RB_RIGHT(elm, field))	\
   elm = RB_RIGHT(elm, field);	\
 }	\
 else {	\
  if (RB_PARENT(elm, field) &&	\
      (elm == RB_RIGHT(RB_PARENT(elm, field), field))) \
   elm = RB_PARENT(elm, field);	\
  else {	\
   while (RB_PARENT(elm, field) &&	\
       (elm == RB_LEFT(RB_PARENT(elm, field), field)))\
    elm = RB_PARENT(elm, field);	\
   elm = RB_PARENT(elm, field);	\
  }	\
 }	\
 return (elm);	\
}	\
	\
attr struct type *	\
name##_RB_MINMAX(struct name *head, int val)	\
{	\
 struct type *tmp = RB_ROOT(head);	\
```

```
 struct type *parent = NULL;     \
 while (tmp) {       \
  parent = tmp;      \
  if (val < 0)      \
   tmp = RB_LEFT(tmp, field);   \
  else       \
   tmp = RB_RIGHT(tmp, field);   \
 }       \
 return (parent);      \
}

#define RB_NEGINF -1
#define RB_INF 1

#define RB_INSERT(name, x, y) name##_RB_INSERT(x, y)
#define RB_REMOVE(name, x, y) name##_RB_REMOVE(x, y)
#define RB_FIND(name, x, y) name##_RB_FIND(x, y)
#define RB_NFIND(name, x, y) name##_RB_NFIND(x,
 y)
#define RB_NEXT(name, x, y) name##_RB_NEXT(y)
#define RB_PREV(name, x, y) name##_RB_PREV(y)
#define RB_MIN(name, x)  name##_RB_MINMAX(x, RB_NEGINF)
#define RB_MAX(name, x)  name##_RB_MINMAX(x, RB_INF)

#define RB_FOREACH(x, name, head)     \
 for ((x) = RB_MIN(name, head);     \
      (x) != NULL;      \
      (x) = name##_RB_NEXT(x))

#define RB_FOREACH_FROM(x, name, y)     \
 for ((x) = (y);       \
     ((x) != NULL) && ((y) = name##_RB_NEXT(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_SAFE(x, name, head, y)    \
 for ((x) = RB_MIN(name, head);     \
     ((x) != NULL) && ((y) = name##_RB_NEXT(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_REVERSE(x, name, head)    \
 for ((x) = RB_MAX(name, head);     \
      (x) != NULL;      \
      (x) = name##_RB_PREV(x))

#define RB_FOREACH_REVERSE_FROM(x, name, y)    \
 for ((x) = (y);       \
     ((x) != NULL) && ((y) = name##_RB_PREV(x), (x) != NULL); \
      (x) = (y))
```

```
#define RB_FOREACH_REVERSE_SAFE(x, name,
 head, y)   \
 for ((x) = RB_MAX(name, head);     \
     ((x) != NULL) && ((y) = name##_RB_PREV(x), (x) != NULL); \
      (x) = (y))

#endif /* _SYS_TREE_H_ */
pkgname=linux-headers
pkgver=6.14.2 # Follow the latest Linux stable
_kernver=${pkgver%.*}
pkgrel=0
pkgdesc="Linux system headers"
url="https://kernel.org/"
arch="all" # Headers are architecture specific
license="GPL-2.0-only"
makedepends="perl"
options="!check !dbg !strip !tracedeps !archcheck"
source="https://kernel.org/pub/linux/kernel/v6.x/linux-$_kernver.tar.xz
 revert-broken-uapi.patch
 0003-remove-inclusion-of-sysinfo.h-in-kernel.h.patch
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1.36 go-retryablehttp 0.7.8

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Found in path(s):
* /ca-certificates-bundle-20250911-r0-tar-gz/etc/ssl/certs/ca-certificates.crt

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Julian Seward, Cambridge, UK.
jseward@bzip.org
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1.39 shadow 4.17.3-r0

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1.40 libncursesw 6.5_p20250503-r0

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-- vile:txtmode fc=72
-- $Id: COPYING,v 1.13 2024/01/05 21:13:17 tom Exp $

1.41 ncurses 6.5_p20250503-r0

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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
"
#ifndef _SYS_CDEFS_H_
#define _SYS_CDEFS_H_

#warning usage of non-standard #include <sys/cdefs.h> is deprecated

#undef __P
#undef __PMT

#define __P(args) args
#define __PMT(args) args

#define __CONCAT(x,y) x ## y
#define __STRING(x) #x

#ifdef  __cplusplus
# define __BEGIN_DECLS extern "C" {
# define __END_DECLS }
```

```
#else
# define __BEGIN_DECLS
# define __END_DECLS
#endif

#if defined(__GNUC__) && !defined(__cplusplus)
# define __THROW __attribute__ ((__nothrow__))
# define __NTH(fct) __attribute__ ((__nothrow__)) fct
#else
# define __THROW
# define __NTH(fct)     fct
#endif

#endif /* _SYS_CDEFS_H_ */
# 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
"
```

```
/* $NetBSD: tree.h,v 1.20 2013/09/14 13:20:45 joerg Exp $ */
/* $OpenBSD: tree.h,v 1.13 2011/07/09 00:19:45 pirofti Exp $ */
/* Modified by Void Linux. */
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*/

#ifndef _SYS_TREE_H_
#define _SYS_TREE_H_

#ifdef __GNUC__
#define __GNUC_PREREQ__(x, y)      \
 ((__GNUC__ == (x) && __GNUC_MINOR__ >= (y)) ||   \
  (__GNUC__ > (x)))
#else
#define __GNUC_PREREQ__(x, y) 0
#endif

#if __GNUC_PREREQ__(2, 7) || defined(__lint__)
#define _sys_tree_h_unused __attribute__((__unused__))
#else
#define _sys_tree_h_unused /* delete */
#endif

/*
* This file defines data structures for different types of trees:
```

```
* splay trees and red-black trees.
*
* A splay tree is a self-organizing
 data structure.  Every operation
* on the tree causes a splay to happen.  The splay moves the requested
* node to the root of the tree and partly rebalances it.
*
* This has the benefit that request locality causes faster lookups as
* the requested nodes move to the top of the tree.  On the other hand,
* every lookup causes memory writes.
*
* The Balance Theorem bounds the total access time for m operations
* and n inserts on an initially empty tree as O((m + n)lg n).  The
* amortized cost for a sequence of m accesses to a splay tree is O(lg n);
*
* A red-black tree is a binary search tree with the node color as an
* extra attribute.  It fulfills a set of conditions:
* - every search path from the root to a leaf consists of the
*   same number of black nodes,
* - each red node (except for the root) has a black parent,
* - each leaf node is black.
*
* Every operation on a red-black tree is bounded as O(lg n).
* The maximum height of a red-black tree is 2lg (n+1).
 */

#define SPLAY_HEAD(name, type)      \
struct name {       \
 struct type *sph_root; /* root of the tree */   \
}

#define SPLAY_INITIALIZER(root)     \
 { NULL }

#define SPLAY_INIT(root) do {      \
 (root)->sph_root = NULL;     \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ENTRY(type)      \
struct {       \
 struct type *spe_left; /* left element */   \
 struct type *spe_right; /* right element */   \
}

#define SPLAY_LEFT(elm, field)  (elm)->field.spe_left
#define SPLAY_RIGHT(elm, field)  (elm)->field.spe_right
#define SPLAY_ROOT(head)  (head)->sph_root
#define SPLAY_EMPTY(head)  (SPLAY_ROOT(head) == NULL)
```

```
/* SPLAY_ROTATE_{LEFT,RIGHT} expect that tmp hold SPLAY_{RIGHT,LEFT} */
#define SPLAY_ROTATE_RIGHT(head, tmp, field) do {   \
 SPLAY_LEFT((head)->sph_root, field) = SPLAY_RIGHT(tmp, field); \
 SPLAY_RIGHT(tmp, field) = (head)->sph_root;   \
 (head)->sph_root = tmp;      \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ROTATE_LEFT(head, tmp, field) do {   \
 SPLAY_RIGHT((head)->sph_root,
 field) = SPLAY_LEFT(tmp, field); \
 SPLAY_LEFT(tmp, field) = (head)->sph_root;   \
 (head)->sph_root = tmp;      \
} while (/*CONSTCOND*/ 0)

#define SPLAY_LINKLEFT(head, tmp, field) do {    \
 SPLAY_LEFT(tmp, field) = (head)->sph_root;   \
 tmp = (head)->sph_root;      \
 (head)->sph_root = SPLAY_LEFT((head)->sph_root, field);  \
} while (/*CONSTCOND*/ 0)

#define SPLAY_LINKRIGHT(head, tmp, field) do {    \
 SPLAY_RIGHT(tmp, field) = (head)->sph_root;   \
 tmp = (head)->sph_root;      \
 (head)->sph_root = SPLAY_RIGHT((head)->sph_root, field); \
} while (/*CONSTCOND*/ 0)

#define SPLAY_ASSEMBLE(head, node, left, right, field) do {  \
 SPLAY_RIGHT(left, field) = SPLAY_LEFT((head)->sph_root, field); \
 SPLAY_LEFT(right, field) = SPLAY_RIGHT((head)->sph_root, field);\
 SPLAY_LEFT((head)->sph_root, field) = SPLAY_RIGHT(node, field); \
 SPLAY_RIGHT((head)->sph_root, field) = SPLAY_LEFT(node, field); \
} while (/*CONSTCOND*/ 0)

/* Generates prototypes and inline functions */

#define
 SPLAY_PROTOTYPE(name, type, field, cmp)    \
void name##_SPLAY(struct name *, struct type *);   \
void name##_SPLAY_MINMAX(struct name *, int);    \
struct type *name##_SPLAY_INSERT(struct name *, struct type *);  \
struct type *name##_SPLAY_REMOVE(struct name *, struct type *);  \
        \
/* Finds the node with the same key as elm */    \
static __inline struct type *      \
name##_SPLAY_FIND(struct name *head, struct type *elm)   \
{        \
 if (SPLAY_EMPTY(head))      \
```

```
 return(NULL);      \
 name##_SPLAY(head, elm);     \
 if ((cmp)(elm, (head)->sph_root) == 0)    \
  return (head->sph_root);    \
 return (NULL);       \
}         \
         \
static __inline _sys_tree_h_unused struct type *   \
name##_SPLAY_NEXT(struct name *head, struct type *elm)   \
{         \
 name##_SPLAY(head, elm);     \
 if (SPLAY_RIGHT(elm, field) != NULL) {    \
  elm = SPLAY_RIGHT(elm, field);    \
  while (SPLAY_LEFT(elm, field) != NULL) {  \
   elm = SPLAY_LEFT(elm, field);   \
  }       \
 }
 else        \
  elm = NULL;      \
 return (elm);       \
}         \
         \
static _sys_tree_h_unused __inline struct type *   \
name##_SPLAY_MIN_MAX(struct name *head, int val)   \
{         \
 name##_SPLAY_MINMAX(head, val);     \
       return (SPLAY_ROOT(head));     \
}

/* Main splay operation.
* Moves node close to the key of elm to top
*/
#define SPLAY_GENERATE(name, type, field, cmp)    \
struct type *        \
name##_SPLAY_INSERT(struct name *head, struct type *elm)  \
{         \
   if (SPLAY_EMPTY(head)) {      \
     SPLAY_LEFT(elm, field) = SPLAY_RIGHT(elm, field) = NULL; \
   } else {        \
     int __comp;       \
     name##_SPLAY(head, elm);     \
     __comp = (cmp)(elm, (head)->sph_root);   \
     if(__comp < 0) {      \
      SPLAY_LEFT(elm, field) = SPLAY_LEFT((head)->sph_root, field);\
      SPLAY_RIGHT(elm, field) = (head)->sph_root;  \
      SPLAY_LEFT((head)->sph_root, field) = NULL;  \
     } else if (__comp > 0) {     \
      SPLAY_RIGHT(elm,
```

```
 field) = SPLAY_RIGHT((head)->sph_root, field);\
      SPLAY_LEFT(elm, field) = (head)->sph_root;  \
      SPLAY_RIGHT((head)->sph_root, field) = NULL; \
     } else       \
      return ((head)->sph_root);    \
   }         \
   (head)->sph_root = (elm);      \
   return (NULL);       \
}         \
        \
struct type *        \
name##_SPLAY_REMOVE(struct name *head, struct type *elm)  \
{         \
 struct type *__tmp;      \
 if (SPLAY_EMPTY(head))      \
  return (NULL);      \
 name##_SPLAY(head, elm);     \
 if ((cmp)(elm, (head)->sph_root) == 0) {   \
  if (SPLAY_LEFT((head)->sph_root, field) == NULL) { \
   (head)->sph_root = SPLAY_RIGHT((head)->sph_root, field);\
  } else {      \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   (head)->sph_root = SPLAY_LEFT((head)->sph_root, field);\
   name##_SPLAY(head, elm);   \
   SPLAY_RIGHT((head)->sph_root, field) = __tmp; \
  }       \
  return (elm);      \
 }        \
 return (NULL);       \
}         \
        \
void         \
name##_SPLAY(struct
 name *head, struct type *elm)   \
{         \
 struct type __node, *__left, *__right, *__tmp;   \
 int __comp;       \
\
 SPLAY_LEFT(&__node, field) = SPLAY_RIGHT(&__node, field) = NULL;\
 __left = __right = &__node;     \
\
 while ((__comp = (cmp)(elm, (head)->sph_root)) != 0) {  \
  if (__comp < 0) {     \
   __tmp = SPLAY_LEFT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if ((cmp)(elm, __tmp) < 0){   \
    SPLAY_ROTATE_RIGHT(head, __tmp, field); \
```

```
   if (SPLAY_LEFT((head)->sph_root, field) == NULL)\
    break;    \
   }      \
   SPLAY_LINKLEFT(head, __right, field);  \
  } else if (__comp > 0) {    \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if ((cmp)(elm, __tmp) > 0){    \
    SPLAY_ROTATE_LEFT(head, __tmp, field); \
    if (SPLAY_RIGHT((head)->sph_root, field) == NULL)\
     break;    \
   }      \
   SPLAY_LINKRIGHT(head, __left, field);  \
  }       \
 }       \
 SPLAY_ASSEMBLE(head,
 &__node, __left, __right, field);  \
}        \
        \
/* Splay with either the minimum or the maximum element   \
* Used to find minimum or maximum element in tree.   \
*/        \
void name##_SPLAY_MINMAX(struct name *head, int __comp) \
{        \
 struct type __node, *__left, *__right, *__tmp;   \
\
 SPLAY_LEFT(&__node, field) = SPLAY_RIGHT(&__node, field) = NULL;\
 __left = __right = &__node;     \
\
 while (1) {       \
  if (__comp < 0) {     \
   __tmp = SPLAY_LEFT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if (__comp < 0){    \
    SPLAY_ROTATE_RIGHT(head, __tmp, field); \
    if (SPLAY_LEFT((head)->sph_root, field) == NULL)\
     break;    \
   }      \
   SPLAY_LINKLEFT(head, __right, field);  \
  } else if (__comp > 0) {    \
   __tmp = SPLAY_RIGHT((head)->sph_root, field); \
   if (__tmp == NULL)    \
    break;     \
   if (__comp > 0) {    \
    SPLAY_ROTATE_LEFT(head, __tmp, field); \
    if (SPLAY_RIGHT((head)->sph_root,
```

```
 field) == NULL)\
    break;    \
  }      \
  SPLAY_LINKRIGHT(head, __left, field);  \
 }       \
}       \
 SPLAY_ASSEMBLE(head, &__node, __left, __right, field);  \
}

#define SPLAY_NEGINF -1
#define SPLAY_INF 1

#define SPLAY_INSERT(name, x, y) name##_SPLAY_INSERT(x, y)
#define SPLAY_REMOVE(name, x, y) name##_SPLAY_REMOVE(x, y)
#define SPLAY_FIND(name, x, y)  name##_SPLAY_FIND(x, y)
#define SPLAY_NEXT(name, x, y)  name##_SPLAY_NEXT(x, y)
#define SPLAY_MIN(name, x)  (SPLAY_EMPTY(x) ? NULL \
    : name##_SPLAY_MIN_MAX(x, SPLAY_NEGINF))
#define SPLAY_MAX(name, x)  (SPLAY_EMPTY(x) ? NULL \
    : name##_SPLAY_MIN_MAX(x, SPLAY_INF))

#define SPLAY_FOREACH(x, name, head)     \
 for ((x) = SPLAY_MIN(name, head);    \
      (x) != NULL;      \
      (x) = SPLAY_NEXT(name, head, x))

/* Macros that define a red-black tree */
#define RB_HEAD(name, type)      \
struct name {        \
 struct type *rbh_root; /* root of the tree */   \
}

#define RB_INITIALIZER(root)      \
 {
 NULL }

#define RB_INIT(root) do {      \
 (root)->rbh_root = NULL;     \
} while (/*CONSTCOND*/ 0)

#define RB_BLACK 0
#define RB_RED  1
#define RB_ENTRY(type)       \
struct {        \
 struct type *rbe_left;  /* left element */  \
 struct type *rbe_right;  /* right element */  \
 struct type *rbe_parent; /* parent element */  \
 int rbe_color;   /* node color */  \
```

```
}

#define RB_LEFT(elm, field)  (elm)->field.rbe_left
#define RB_RIGHT(elm, field)  (elm)->field.rbe_right
#define RB_PARENT(elm, field)  (elm)->field.rbe_parent
#define RB_COLOR(elm, field)  (elm)->field.rbe_color
#define RB_ROOT(head)   (head)->rbh_root
#define RB_EMPTY(head)   (RB_ROOT(head) == NULL)

#define RB_SET(elm, parent, field) do {     \
 RB_PARENT(elm, field) = parent;     \
 RB_LEFT(elm, field) = RB_RIGHT(elm, field) = NULL;  \
 RB_COLOR(elm, field) = RB_RED;     \
} while (/*CONSTCOND*/ 0)

#define RB_SET_BLACKRED(black, red, field) do {    \
 RB_COLOR(black, field) = RB_BLACK;    \
 RB_COLOR(red, field)
 = RB_RED;     \
} while (/*CONSTCOND*/ 0)

#ifndef RB_AUGMENT
#define RB_AUGMENT(x) do {} while (/*CONSTCOND*/ 0)
#endif

#define RB_ROTATE_LEFT(head, elm, tmp, field) do {   \
 (tmp) = RB_RIGHT(elm, field);     \
 if ((RB_RIGHT(elm, field) = RB_LEFT(tmp, field)) != NULL) { \
  RB_PARENT(RB_LEFT(tmp, field), field) = (elm);  \
 }       \
 RB_AUGMENT(elm);      \
 if ((RB_PARENT(tmp, field) = RB_PARENT(elm, field)) != NULL) { \
  if ((elm) == RB_LEFT(RB_PARENT(elm, field), field)) \
   RB_LEFT(RB_PARENT(elm, field), field) = (tmp); \
  else      \
   RB_RIGHT(RB_PARENT(elm, field), field) = (tmp); \
 } else       \
  (head)->rbh_root = (tmp);    \
 RB_LEFT(tmp, field) = (elm);     \
 RB_PARENT(elm, field) = (tmp);     \
 RB_AUGMENT(tmp);      \
 if ((RB_PARENT(tmp, field)))     \
  RB_AUGMENT(RB_PARENT(tmp, field));   \
} while (/*CONSTCOND*/ 0)

#define RB_ROTATE_RIGHT(head, elm, tmp, field) do {   \
 (tmp) = RB_LEFT(elm, field);     \
 if ((RB_LEFT(elm, field) = RB_RIGHT(tmp, field))
```

```
 != NULL) { \
  RB_PARENT(RB_RIGHT(tmp, field), field) = (elm);  \
 }       \
 RB_AUGMENT(elm);      \
 if ((RB_PARENT(tmp, field) = RB_PARENT(elm, field)) != NULL) { \
  if ((elm) == RB_LEFT(RB_PARENT(elm, field), field)) \
   RB_LEFT(RB_PARENT(elm, field), field) = (tmp); \
  else       \
   RB_RIGHT(RB_PARENT(elm, field), field) = (tmp); \
 } else       \
  (head)->rbh_root = (tmp);    \
 RB_RIGHT(tmp, field) = (elm);     \
 RB_PARENT(elm, field) = (tmp);     \
 RB_AUGMENT(tmp);      \
 if ((RB_PARENT(tmp, field)))     \
  RB_AUGMENT(RB_PARENT(tmp, field));   \
} while (/*CONSTCOND*/ 0)

/* Generates prototypes and inline functions */
#define RB_PROTOTYPE(name, type, field, cmp)    \
 RB_PROTOTYPE_INTERNAL(name, type, field, cmp,)
#define RB_PROTOTYPE_STATIC(name, type, field, cmp)   \
 RB_PROTOTYPE_INTERNAL(name, type, field, cmp, _sys_tree_h_unused static)
#define RB_PROTOTYPE_INTERNAL(name, type, field, cmp, attr)  \
attr void name##_RB_INSERT_COLOR(struct name *, struct
 type *);  \
attr void name##_RB_REMOVE_COLOR(struct name *, struct type *, struct type *);\
attr struct type *name##_RB_REMOVE(struct name *, struct type *); \
attr struct type *name##_RB_INSERT(struct name *, struct type *); \
attr struct type *name##_RB_FIND(struct name *, struct type *);  \
attr struct type *name##_RB_NFIND(struct name *, struct type *); \
attr struct type *name##_RB_NEXT(struct type *);   \
attr struct type *name##_RB_PREV(struct type *);   \
attr struct type *name##_RB_MINMAX(struct name *, int);   \
        \

/* Main rb operation.
* Moves node close to the key of elm to top
*/
#define RB_GENERATE(name, type, field, cmp)    \
 RB_GENERATE_INTERNAL(name, type, field, cmp,)
#define RB_GENERATE_STATIC(name, type, field, cmp)   \
 RB_GENERATE_INTERNAL(name, type, field, cmp, _sys_tree_h_unused static)
#define RB_GENERATE_INTERNAL(name, type, field, cmp, attr)  \
attr void       \
name##_RB_INSERT_COLOR(struct name *head, struct type *elm)  \
{       \
 struct type
```

```
 *parent, *gparent, *tmp;    \
 while ((parent = RB_PARENT(elm, field)) != NULL &&  \
     RB_COLOR(parent, field) == RB_RED) {    \
  gparent = RB_PARENT(parent, field);    \
  if (parent == RB_LEFT(gparent, field)) {  \
   tmp = RB_RIGHT(gparent, field);    \
   if (tmp && RB_COLOR(tmp, field) == RB_RED) { \
    RB_COLOR(tmp, field) = RB_BLACK; \
    RB_SET_BLACKRED(parent, gparent, field);\
    elm = gparent;    \
    continue;    \
   }      \
   if (RB_RIGHT(parent, field) == elm) {  \
    RB_ROTATE_LEFT(head, parent, tmp, field);\
    tmp = parent;    \
    parent = elm;    \
    elm = tmp;    \
   }      \
   RB_SET_BLACKRED(parent, gparent, field); \
   RB_ROTATE_RIGHT(head, gparent, tmp, field); \
  } else {      \
   tmp = RB_LEFT(gparent, field);    \
   if (tmp && RB_COLOR(tmp, field) == RB_RED) { \
    RB_COLOR(tmp, field) = RB_BLACK; \
    RB_SET_BLACKRED(parent, gparent, field);\
    elm = gparent;    \
    continue;    \
   }      \
   if (RB_LEFT(parent, field) == elm)
  {  \
    RB_ROTATE_RIGHT(head, parent, tmp, field);\
    tmp = parent;    \
    parent = elm;    \
    elm = tmp;    \
   }      \
   RB_SET_BLACKRED(parent, gparent, field); \
   RB_ROTATE_LEFT(head, gparent, tmp, field); \
  }       \
 }        \
 RB_COLOR(head->rbh_root, field) = RB_BLACK;    \
}         \
         \
attr void        \
name##_RB_REMOVE_COLOR(struct name *head, struct type *parent, struct type *elm) \
{         \
 struct type *tmp;      \
 while ((elm == NULL || RB_COLOR(elm, field) == RB_BLACK) && \
     elm != RB_ROOT(head)) {     \
```

```
 if (RB_LEFT(parent, field) == elm) {   \
  tmp = RB_RIGHT(parent, field);   \
  if (RB_COLOR(tmp, field) == RB_RED) {  \
   RB_SET_BLACKRED(tmp, parent, field); \
   RB_ROTATE_LEFT(head, parent, tmp, field);\
   tmp = RB_RIGHT(parent, field);  \
  }      \
  if ((RB_LEFT(tmp, field) == NULL ||  \
      RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) &&\
      (RB_RIGHT(tmp, field) == NULL ||  \
      RB_COLOR(RB_RIGHT(tmp,
field), field) == RB_BLACK)) {\
   RB_COLOR(tmp, field) = RB_RED;  \
   elm = parent;    \
   parent = RB_PARENT(elm, field);  \
  } else {     \
   if (RB_RIGHT(tmp, field) == NULL || \
       RB_COLOR(RB_RIGHT(tmp, field), field) == RB_BLACK) {\
    struct type *oleft;  \
    if ((oleft = RB_LEFT(tmp, field)) \
        != NULL)   \
     RB_COLOR(oleft, field) = RB_BLACK;\
    RB_COLOR(tmp, field) = RB_RED; \
    RB_ROTATE_RIGHT(head, tmp, oleft, field);\
    tmp = RB_RIGHT(parent, field); \
   }     \
   RB_COLOR(tmp, field) = RB_COLOR(parent, field);\
   RB_COLOR(parent, field) = RB_BLACK; \
   if (RB_RIGHT(tmp, field))  \
    RB_COLOR(RB_RIGHT(tmp, field), field) = RB_BLACK;\
   RB_ROTATE_LEFT(head, parent, tmp, field);\
   elm = RB_ROOT(head);   \
   break;     \
  }      \
 } else {      \
  tmp = RB_LEFT(parent, field);   \
  if (RB_COLOR(tmp, field) == RB_RED) {  \
   RB_SET_BLACKRED(tmp, parent, field); \
   RB_ROTATE_RIGHT(head, parent, tmp, field);\
   tmp
= RB_LEFT(parent, field);  \
  }      \
  if ((RB_LEFT(tmp, field) == NULL ||  \
      RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) &&\
      (RB_RIGHT(tmp, field) == NULL ||  \
      RB_COLOR(RB_RIGHT(tmp, field), field) == RB_BLACK)) {\
   RB_COLOR(tmp, field) = RB_RED;  \
   elm = parent;    \
```

```
    parent = RB_PARENT(elm, field);  \
   } else {     \
    if (RB_LEFT(tmp, field) == NULL || \
        RB_COLOR(RB_LEFT(tmp, field), field) == RB_BLACK) {\
     struct type *oright;  \
     if ((oright = RB_RIGHT(tmp, field)) \
         != NULL)   \
      RB_COLOR(oright, field) = RB_BLACK;\
     RB_COLOR(tmp, field) = RB_RED; \
     RB_ROTATE_LEFT(head, tmp, oright, field);\
     tmp = RB_LEFT(parent, field); \
    }     \
    RB_COLOR(tmp, field) = RB_COLOR(parent, field);\
    RB_COLOR(parent, field) = RB_BLACK; \
    if (RB_LEFT(tmp, field))  \
     RB_COLOR(RB_LEFT(tmp, field), field) = RB_BLACK;\
    RB_ROTATE_RIGHT(head, parent, tmp, field);\
    elm = RB_ROOT(head);   \
    break;     \
   }      \
  }       \
 }        \
 if
 (elm)       \
  RB_COLOR(elm, field) = RB_BLACK;   \
}         \
         \
attr struct type *       \
name##_RB_REMOVE(struct name *head, struct type *elm)   \
{         \
 struct type *child, *parent, *old = elm;   \
 int color;       \
 if (RB_LEFT(elm, field) == NULL)    \
  child = RB_RIGHT(elm, field);    \
 else if (RB_RIGHT(elm, field) == NULL)    \
  child = RB_LEFT(elm, field);    \
 else {        \
  struct type *left;     \
  elm = RB_RIGHT(elm, field);    \
  while ((left = RB_LEFT(elm, field)) != NULL)  \
   elm = left;     \
  child = RB_RIGHT(elm, field);    \
  parent = RB_PARENT(elm, field);    \
  color = RB_COLOR(elm, field);    \
  if (child)      \
   RB_PARENT(child, field) = parent;  \
  if (parent) {      \
   if (RB_LEFT(parent, field) == elm)  \
```

```
    RB_LEFT(parent, field) = child;  \
   else      \
    RB_RIGHT(parent, field) = child; \
   RB_AUGMENT(parent);    \
  } else       \
   RB_ROOT(head)
 = child;    \
  if (RB_PARENT(elm, field) == old)   \
   parent = elm;     \
  (elm)->field = (old)->field;    \
  if (RB_PARENT(old, field)) {    \
   if (RB_LEFT(RB_PARENT(old, field), field) == old)\
    RB_LEFT(RB_PARENT(old, field), field) = elm;\
   else      \
    RB_RIGHT(RB_PARENT(old, field), field) = elm;\
   RB_AUGMENT(RB_PARENT(old, field));  \
  } else       \
   RB_ROOT(head) = elm;    \
  RB_PARENT(RB_LEFT(old, field), field) = elm;  \
  if (RB_RIGHT(old, field))    \
   RB_PARENT(RB_RIGHT(old, field), field) = elm; \
  if (parent) {      \
   left = parent;     \
   do {      \
    RB_AUGMENT(left);   \
   } while ((left = RB_PARENT(left, field)) != NULL); \
  }       \
  goto color;      \
 }       \
 parent = RB_PARENT(elm, field);     \
 color = RB_COLOR(elm, field);     \
 if (child)       \
  RB_PARENT(child, field) = parent;   \
 if (parent) {       \
  if (RB_LEFT(parent, field) == elm)   \
   RB_LEFT(parent, field) = child;   \
  else       \
   RB_RIGHT(parent,
 field) = child;  \
  RB_AUGMENT(parent);     \
 } else       \
  RB_ROOT(head) = child;     \
color:        \
 if (color == RB_BLACK)      \
  name##_RB_REMOVE_COLOR(head, parent, child);  \
 return (old);       \
}        \
       \
```

```
/* Inserts a node into the RB tree */     \
attr struct type *       \
name##_RB_INSERT(struct name *head, struct type *elm)   \
{        \
 struct type *tmp;      \
 struct type *parent = NULL;     \
 int comp = 0;       \
 tmp = RB_ROOT(head);      \
 while (tmp) {       \
  parent = tmp;      \
  comp = (cmp)(elm, parent);    \
  if (comp < 0)      \
   tmp = RB_LEFT(tmp, field);   \
  else if (comp > 0)     \
   tmp = RB_RIGHT(tmp, field);   \
  else       \
   return (tmp);     \
 }        \
 RB_SET(elm, parent, field);     \
 if (parent != NULL) {      \
  if (comp < 0)      \
   RB_LEFT(parent, field) = elm;   \
  else       \
   RB_RIGHT(parent, field) = elm;   \
  RB_AUGMENT(parent);     \
 } else       \
  RB_ROOT(head) = elm;     \
 name##_RB_INSERT_COLOR(head,
 elm);    \
 return (NULL);       \
}        \
        \
/* Finds the node with the same key as elm */    \
attr struct type *       \
name##_RB_FIND(struct name *head, struct type *elm)   \
{        \
 struct type *tmp = RB_ROOT(head);    \
 int comp;       \
 while (tmp) {       \
  comp = cmp(elm, tmp);     \
  if (comp < 0)      \
   tmp = RB_LEFT(tmp, field);   \
  else if (comp > 0)     \
   tmp = RB_RIGHT(tmp, field);   \
  else       \
   return (tmp);     \
 }        \
 return (NULL);       \
```

```
}       \
        \
/* Finds the first node greater than or equal to the search key */ \
attr struct type *      \
name##_RB_NFIND(struct name *head, struct type *elm)   \
{       \
 struct type *tmp = RB_ROOT(head);    \
 struct type *res = NULL;     \
 int comp;      \
 while (tmp) {      \
  comp = cmp(elm, tmp);     \
  if (comp < 0) {      \
   res = tmp;     \
   tmp = RB_LEFT(tmp, field);   \
  }       \
  else if (comp > 0)     \
   tmp =
 RB_RIGHT(tmp, field);   \
  else      \
   return (tmp);     \
 }       \
 return (res);      \
}       \
        \
/* ARGSUSED */       \
attr struct type *      \
name##_RB_NEXT(struct type *elm)     \
{       \
 if (RB_RIGHT(elm, field)) {     \
  elm = RB_RIGHT(elm, field);    \
  while (RB_LEFT(elm, field))    \
   elm = RB_LEFT(elm, field);   \
 } else {       \
  if (RB_PARENT(elm, field) &&    \
      (elm == RB_LEFT(RB_PARENT(elm, field), field))) \
   elm = RB_PARENT(elm, field);   \
  else {       \
   while (RB_PARENT(elm, field) &&   \
       (elm == RB_RIGHT(RB_PARENT(elm, field), field)))\
    elm = RB_PARENT(elm, field);  \
   elm = RB_PARENT(elm, field);   \
  }       \
 }       \
 return (elm);      \
}       \
        \
/* ARGSUSED */       \
attr struct type *      \
```

```
name##_RB_PREV(struct type *elm)     \
{        \
 if (RB_LEFT(elm, field)) {     \
  elm = RB_LEFT(elm, field);    \
  while (RB_RIGHT(elm, field))    \
   elm = RB_RIGHT(elm, field);   \
 }
 else {       \
  if (RB_PARENT(elm, field) &&    \
      (elm == RB_RIGHT(RB_PARENT(elm, field), field))) \
   elm = RB_PARENT(elm, field);   \
  else {       \
   while (RB_PARENT(elm, field) &&   \
       (elm == RB_LEFT(RB_PARENT(elm, field), field)))\
    elm = RB_PARENT(elm, field);  \
   elm = RB_PARENT(elm, field);   \
  }       \
 }       \
 return (elm);       \
}        \
        \
attr struct type *       \
name##_RB_MINMAX(struct name *head, int val)    \
{        \
 struct type *tmp = RB_ROOT(head);    \
 struct type *parent = NULL;     \
 while (tmp) {       \
  parent = tmp;      \
  if (val < 0)      \
   tmp = RB_LEFT(tmp, field);   \
  else       \
   tmp = RB_RIGHT(tmp, field);   \
 }       \
 return (parent);      \
}

#define RB_NEGINF -1
#define RB_INF 1

#define RB_INSERT(name, x, y) name##_RB_INSERT(x, y)
#define RB_REMOVE(name, x, y) name##_RB_REMOVE(x, y)
#define RB_FIND(name, x, y) name##_RB_FIND(x, y)
#define RB_NFIND(name, x, y) name##_RB_NFIND(x,
 y)
#define RB_NEXT(name, x, y) name##_RB_NEXT(y)
#define RB_PREV(name, x, y) name##_RB_PREV(y)
#define RB_MIN(name, x)  name##_RB_MINMAX(x, RB_NEGINF)
#define RB_MAX(name, x)  name##_RB_MINMAX(x, RB_INF)
```

```
#define RB_FOREACH(x, name, head)     \
 for ((x) = RB_MIN(name, head);     \
      (x) != NULL;      \
      (x) = name##_RB_NEXT(x))

#define RB_FOREACH_FROM(x, name, y)     \
 for ((x) = (y);       \
     ((x) != NULL) && ((y) = name##_RB_NEXT(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_SAFE(x, name, head, y)    \
 for ((x) = RB_MIN(name, head);     \
     ((x) != NULL) && ((y) = name##_RB_NEXT(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_REVERSE(x, name, head)    \
 for ((x) = RB_MAX(name, head);     \
      (x) != NULL;      \
      (x) = name##_RB_PREV(x))

#define RB_FOREACH_REVERSE_FROM(x, name, y)    \
 for ((x) = (y);       \
     ((x) != NULL) && ((y) = name##_RB_PREV(x), (x) != NULL); \
      (x) = (y))

#define RB_FOREACH_REVERSE_SAFE(x, name,
 head, y)   \
 for ((x) = RB_MAX(name, head);     \
     ((x) != NULL) && ((y) = name##_RB_PREV(x), (x) != NULL); \
      (x) = (y))

#endif /* _SYS_TREE_H_ */
```

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```
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```

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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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1.42 utmps-libs 0.1.3.1-r0

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1.43 iputils-ping 20240905-r0

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1.44 libcrypto3 3.5.4-r0

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1.45 alpine-baselayout-data 3.7.0-r0

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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"
# 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="$pkgname-dev"
source="https://download.gnome.org/sources/libart_lgpl/2.3/libart_lgpl-$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
}

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

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Automatically generated by apkbuild-cpan, template 1
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pkgname=perl-bsd-resource
_pkgreal=BSD-Resource
pkgver=1.2909
pkgrel=2
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
}

md5sums="3c6dd2fa953088aa87e263f40818d012  BSD-Resource-1.2909.tar.gz"
sha256sums="c47d460e2bd00d8d049f6ff4a0f1f61957e289e8de45af5fc79e851e2e855e06  BSD-Resource-
1.2909.tar.gz"
sha512sums="5f489eaac5089e82081b7cf51d62638750e443751b49415407354da96b17771819b5e6e85529faa41ddd
85743363750157943c7f7700276cce2bd40a429fa430  BSD-Resource-1.2909.tar.gz"
```

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_pkgname=flake8-copyright
pkgver=0.2.0
pkgrel=1
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
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```

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1.47 iputils 20240905-r0

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1.48 alpine-baselayout 3.7.0-r0

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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"
# 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="$pkgname-dev"
source="https://download.gnome.org/sources/libart_lgpl/2.3/libart_lgpl-$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
}

sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e7
6654309e001aee9bace727b5b4c8589405256a3c020  libart_lgpl-2.3.21.tar.bz2"
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pkgname=perl-bsd-resource
_pkgreal=BSD-Resource
pkgver=1.2909
pkgrel=2
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
}

md5sums="3c6dd2fa953088aa87e263f40818d012  BSD-Resource-1.2909.tar.gz"
sha256sums="c47d460e2bd00d8d049f6ff4a0f1f61957e289e8de45af5fc79e851e2e855e06  BSD-Resource-
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sha512sums="5f489eaac5089e82081b7cf51d62638750e443751b49415407354da96b17771819b5e6e85529faa41ddd
85743363750157943c7f7700276cce2bd40a429fa430  BSD-Resource-1.2909.tar.gz"
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pkgver=0.2.0
pkgrel=1
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
}

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sha256sums="aeef26eb4d5223c9cd5b101e68175fcef6d2b353bf36da688fdde62fccfe2b73 flake8-copyright-0.2.0.tar.gz"
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parts of src/rdmurmur2.c: git@github.com:abrandoned/murmur2.git

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1.52 ssl-client 1.37.0-r19

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* /aports-3-22-stable-main-busybox-zip/aports-3.22-stable-main-busybox/main/busybox/0024-umount-Implement-O-option-to-unmount-by-mount-option.patch
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* depmod - generate modules.dep
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@@ -25,6 +25,24 @@
#include "modutils.h"
#include <sys/utsname.h> /* uname() */

+#define INDEX_MINCHAR 32
+#define INDEX_MAXCHAR 128
+
+typedef struct index_node {
+ char *prefix;
+ llist_t *values;
+ struct index_node *children[INDEX_MAXCHAR-INDEX_MINCHAR];
+} index_node;
+
+struct globals {
+ module_db db;
+ index_node *root_node;
+} FIX_ALIASING;

```
+#define G (*ptr_to_globals)
+#define INIT_G() do { \
+ SET_PTR_TO_GLOBALS(xzalloc(sizeof(G))); \
+} while (0)
+
/*
* Theory of operation:
* - iterate over all modules and record their full path
@@ -53,18 +71,12 @@ static int FAST_FUNC parse_module(struct recursive_state
 *state,

for (ptr = image; ptr < image + len - 10; ptr++) {
if (is_prefixed_with(ptr, "depends=")) {
-   char *u;
-
ptr += 8;
-   for (u = ptr; *u; u++)
-    if (*u == '-')
-     *u = '_';
-   ptr += string_to_llist(ptr, &e->deps, ",");
+   string_to_llist(replace_underscores(ptr), &e->deps, ",");
} else if (ENABLE_FEATURE_MODUTILS_ALIAS
&& is_prefixed_with(ptr, "alias=")
) {
-   llist_add_to(&e->aliases, xstrdup(ptr + 6));
-   ptr += strlen(ptr);
+   llist_add_to(&e->aliases, replace_underscores(xstrdup(ptr + 6)));
} else if (ENABLE_FEATURE_MODUTILS_SYMBOLS
&& is_prefixed_with(ptr, "__ksymtab_")
) {
@@ -74,9 +86,10 @@ static int FAST_FUNC parse_module(struct recursive_state *state,
) {
continue;
}
-   llist_add_to(&e->symbols, xstrdup(ptr));
-   ptr += strlen(ptr);
-  }
+   llist_add_to(&e->symbols, xasprintf("symbol:%s", ptr));
+  } else
+   continue;
+  ptr += strlen(ptr);
}
free(image);

@@ -108,12 +121,6 @@ static void order_dep_list(module_db *modules, module_entry *start, llist_t
 *add
}
}
```

-static void xfreopen_write(const char *file, FILE *f)
-{
- if (freopen(file, "w", f) == NULL)
- bb_perror_msg_and_die("can't open '%s'", file);
-}
-
//usage:#if !ENABLE_MODPROBE_SMALL
//usage:#define depmod_trivial_usage "[-n] [-b BASE] [VERSION] [MODFILES]..."
//usage:#define depmod_full_usage "\n\n"
@@ -167,6 +174,169 @@ enum {
OPT_C = (1 << 9), /* -C,--config etc_modules_conf: ignored */

Found in path(s):
* /aports-3-22-stable-main-busybox-zip/aports-3.22-stable-main-busybox/main/busybox/0018-depmod-support-generating-kmod-binary-index-files.patch
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Found in path(s):
* /aports-3-22-stable-main-busybox-zip/aports-3.22-stable-main-busybox/main/busybox/bbsuid.c

1.53 libapk2 2.14.9-r3

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1.54 clientmodel 0.6.2

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1.55 skalibs-libs 2.14.4.0-r0

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1.56 musl-utils 1.2.5-r10

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1.57 github.com/aws/aws-sdk-go-v2/internal/ini 1.8.4

1.57.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody

```
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(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",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
```

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

InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd

Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 InterceptBeforeSerialization
 OperationSerializer
 InterceptAfterSerialization
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
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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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(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
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
```

```
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
// 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
```

```
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(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
```

InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

InterceptTransmit


```
{
  "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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
          }
        },
        "IsSharedActiveDirectory": {
          "target": "smithy.api#Boolean",
          "traits": {

      "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
                    }
                }
            },
            "DomainIpv6List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
            }
        },
        "OwnerAccountId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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#IpV6": {
         "type": "string",
         "traits": {
```

```
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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"
            }
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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": [],
                    "endpoint": {

        "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ],
            "type": "tree"
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        {
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            "type": "error"

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

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

```
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]

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

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

                "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    }
],
```

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                "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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                  }
                },
                "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": {
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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-user-subscriptions.us-east-1.amazonaws.com"
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            },
            "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",
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"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": {
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            "Region": "us-gov-east-1",
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            "UseDualStack": false
          }
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          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
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          "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 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 disabled",
```

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            "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 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 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"
              }
            },
            {
              "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 license
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 license
server.</p>"
            }
        },
        "Ipv6Address": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
                }
```

```
            },
            "LicenseServers": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the license 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) license 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 server.</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> <ul> <li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                 }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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
from 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> <ul> <li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul> <li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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 the 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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                "smithy.api#required": {}
              }

          },
            "Settings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
              "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC
endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours
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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li>
<p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to
remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC
endpoints.</p> </li> </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 require 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 your 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 the 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack,
options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(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",
 }
}
name: License Scan

on: [pull_request]


permissions:
 contents: read

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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(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",
 }
}
AWS SDK for Go
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Copyright 2014-2015 Stripe, Inc.
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(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",
 }
}
```

```
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
 }
 if err = addInterceptAfterDeserialization(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",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
```

legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(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",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
```

```
 InterceptAfterSerialization
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 InterceptBeforeSigning
 Signing
 InterceptAfterSigning
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 InterceptAfterDeserialization
 OperationDeserializer
 InterceptBeforeDeserialization
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
 InterceptTransmit
{
  "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",
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```
                "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",
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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 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 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 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 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"
        }
    }
  }
}
```


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Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step

ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization

OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.58 sirupsen-logrus 1.9.3

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1.59 cjson 1.7.19-r0

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procfs provides functions to retrieve system, kernel and process
metrics from the pseudo-filesystem proc.

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```
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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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1.66 golang 1.25.4

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```
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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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The views and conclusions contained in the software and documentation are those of the
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or implied, of Andrea Leofreddi.

1.67 github.com/aws/aws-sdk-go-v2/aws/protocol/eventstream 1.7.3

1.67.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
DisassociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
```

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

```
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
                }
            },
            "IsSharedActiveDirectory": {
                "target": "smithy.api#Boolean",
                "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
                }
              }
            },
            "DomainIpv6List": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user
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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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
```

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state of the resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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>
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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 user administration in
 the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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"
            },
            {
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                "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> resource 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": {
```

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            "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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": {
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            "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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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
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about an identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered identity providers product related configuration settings, such as the subnets to provision VPC endpoints. ",

"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}

},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
},
"OwnerAccountId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AWS Account ID of the owner of this resource. "
}
}
},

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        "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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            },
            "OwnerAccountId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
```

```
about 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}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
```

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"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 a per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
```

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    "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"
                }
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              "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": [
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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"
              },
              {
                "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 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 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 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 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 license
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 license
server.</p>"
                }
            },
            "Ipv6Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the license servers that are accessed through this endpoint.</p>"
            }
        },
        "CreationTime": {
            "target": "smithy.api#Timestamp",
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    "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) license 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",
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                "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": {}
              }
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            },
            "ServerSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your server.</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
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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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
               }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
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            "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain details 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
          },
          {
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                "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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
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      "type": "structure",

    "members": {
        "InstanceSummaries": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
        },
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            {
                "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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {

            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
a previously truncated response.</p>"
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            }
          }
        },
        "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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
          },
          {
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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 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
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                "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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with the next request to retrieve additional objects.</p>"
            }
        }
    },
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        "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": {
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            "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"
            }
```

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        ],
        "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> <ul>
<li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </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
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {}
               }
            },
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        "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 the 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                    "smithy.api#required": {}
```

```
            }

        },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC
endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
         }
      }
   }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
```

```
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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

 // 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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

AWS SDK for Go

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AssociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
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InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
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ComputePayloadHash
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GetLicense
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legacyEndpointContextSetter
SetLogger
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Serialize stack step
setOperationInput
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Build stack step
ClientRequestID

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

```
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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. "
            }
          },
          "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. "
        }
      },
      "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":
 " An exception occurred with the service. ",
          "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"

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    },
    {
      "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
                      ]
```

```
                },
                {
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                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }

    ],
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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"
                                                }
                                            ],

                                "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"
                }
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              "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"
                    }
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                "type": "tree"
            }
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        "type": "tree"
    },
    {
        "conditions": [],
        "error": "Invalid Configuration: Missing Region",
        "type": "error"
    }
],
"type": "tree"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
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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
      }
    },
    {
      "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
      }
    },
    {

"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 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 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 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 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. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The valid Operators for this filter are: \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#ListLinuxSubscriptionsResponse": {
    "type": "structure",
    "members": {
      "Subscriptions": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
        "traits": {
          "smithy.api#documentation": " An array that contains subscription objects. "
        }
      },
      "NextToken": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": " 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. "

```
            }
          }
        }
      },
      "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",
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            "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"
        }
    }
  }
}
```


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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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.68 aws-sdk-go-v2-service-internal-accept-encoding 1.13.3

1.68.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
 return err
 }
 return nil
}

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

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

```
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
          }
        },
        "IsSharedActiveDirectory": {
          "target": "smithy.api#Boolean",
          "traits": {

       "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
                    }
                }
            },
            "DomainIpv6List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
            }
        },
        "OwnerAccountId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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#IpV6": {
         "type": "string",
         "traits": {
```

```
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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"
    }
],
```

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                "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",
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            "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",
```

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                "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": {
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            "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 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 disabled",
```

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                "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 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 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"
              }
            },
            {
              "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 license
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 license
server.</p>"
            }
        },
        "Ipv6Address": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license server endpoint</p>"
                }
```

```
        },
        "LicenseServers": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the license 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) license 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 server.</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> <ul> <li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                 }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
```

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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>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
from 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> <ul> <li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul> <li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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 the 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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                "smithy.api#required": {}
              }

          },
            "Settings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
              "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC
endpoints. The security group should permit inbound TCP port 1688 communication from resources in the
VPC.</p>"
        }
     },
     "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input":
{
           "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
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```
        "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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li>
<p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to
remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC
endpoints.</p> </li> </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 require 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 your 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 the 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"
        }
    }
  }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
```

```
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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
```

AWS SDK for Go

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```
AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
```

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

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

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

```
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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": [],
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                                          "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 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 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 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 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"
          }
      }
  }
```

```
}
```
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```
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
```

```
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.69 github.com/aws/smithy-go 1.23.2

1.69.1 Available under license :

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1.70 aws-sdk-go-v2-aws-protocol-eventstream 1.7.3

1.70.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutLicense",
 }
}
DisassociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
```

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

```
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

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

CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
                }
            },
            "IsSharedActiveDirectory": {
                "target": "smithy.api#Boolean",
                "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
                }
              }
            },
            "DomainIpv6List": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user
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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered identity providers product related configuration settings, such as the subnets to provision VPC endpoints. ",

"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}

},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
},
"OwnerAccountId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AWS Account ID of the owner of this resource. "
}
}
},

```
        "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>"
                }
```

```
            },
            "OwnerAccountId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
```

about the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "

```
        }
      },
      "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}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
      },
      "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 a per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
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    "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
      }
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        },
        {
          "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"
            }
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      },
      "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 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 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
      }
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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 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": {
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                    "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": {
```

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            "ProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
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 license
server.</p>"
                }
            },
            "Ipv6Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
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                "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 address 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 license server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the license servers that are accessed through this endpoint.</p>"
            }
        },
        "CreationTime": {
            "target": "smithy.api#Timestamp",
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    "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) license 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",
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                "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": {}
              }
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            },
            "ServerSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your server.</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
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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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
         "type": "structure",
         "members": {
            "IdentityProviderSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
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            "traits": {
                "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain details 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
          },
          {
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                "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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
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      "type": "structure",

    "members": {
        "InstanceSummaries": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
        },
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            {
                "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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {

            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
a previously truncated response.</p>"
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            }
          }
        },
        "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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
          },
          {
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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 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
```

```
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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 the 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                    "smithy.api#required": {}
```

```
            }

        },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC
endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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"
```

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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>Starts a product subscription for a user with the specified identity provider.</p> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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"
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```
        },
        "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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
         }
      }
   }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
```

```
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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

 // 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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

AWS SDK for Go

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

```
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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. "
            }
          },
          "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. "
        }
      },
      "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":
 " An exception occurred with the service. ",
          "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"

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    },
    {
      "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",
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            "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 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 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 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 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. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The valid Operators for this filter are: \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#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " 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. "

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


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// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

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

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Version 2.0, January 2004

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.71 smithy-go 1.23.2

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1.72 github.com/aws/aws-sdk-go-v2/service/internal/accept-encoding 1.13.3

1.72.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
DisassociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
```

ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
```

UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
            }
          },
          "IsSharedActiveDirectory": {
            "target": "smithy.api#Boolean",
            "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed
Active Directory. The default value is false.</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
```

```
                }
            }
        },
        "DomainIpv6List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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
```

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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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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": {
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                "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": {}
              }
            }
          },
```

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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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
          }
        },
        "OwnerAccountId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
            }
        },
        "OwnerAccountId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
             "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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 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 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 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 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 license
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 license
server.</p>"
                }
            },
            "Ipv6Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license server endpoint</p>"
                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the license 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) license 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 server.</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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
```

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            "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 the 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"
```

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            },
            {
                "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                    "smithy.api#required": {}
                }

        },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings such as the subnets to provision VPC endpoints.</p>"
```

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            }
          },
          "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",
```

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            "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": {
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        "type": "union",

      "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure a 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": {
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                    "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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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"
        },
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        {
            "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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
              "smithy.api#required": {}
            }
          },
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            "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 subscription.</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"
            },
            {
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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>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> <p>Valid
```

values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> "
                }
            },
            "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 subscription. "
                }
            }
        },
        "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": {

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            "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}"
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            },
            "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
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            },
            "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": {
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```
            "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 provider.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
        }
      }
    }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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

 // 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

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

```
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read
```

```
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
AWS SDK for Go
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AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
CheckoutLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter

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

SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
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disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
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AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry

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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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 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 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 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 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"
            },
            {
```

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            "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"
          }
        }
      }
}
```


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```
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// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptors(stack, options); err != nil {
 return err
}
return nil
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}
```

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

1.73 mime-type 1.4.11

1.73.1 Available under license :

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1.74 x-sys 0.38.0

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1.75 common 0.67.3

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1.76 prometheus-common 0.67.3

1.76.1 Available under license :

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1.77 github.com/gabriel-vasile/mimetype 1.4.11

1.77.1 Available under license :

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1.78 aws-sdk-go-v2-service-s3 1.91.1

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```
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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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutLicense",
 }
}
DisassociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
```

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

```
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

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

CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
                }
            },
            "IsSharedActiveDirectory": {
                "target": "smithy.api#Boolean",
                "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
                }
              }
            },
            "DomainIpv6List": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user
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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered identity providers product related configuration settings, such as the subnets to provision VPC endpoints. ",

"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}

},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
},
"OwnerAccountId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AWS Account ID of the owner of this resource. "
}
}
},

```
        "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>"
                }
```

```
            },
            "OwnerAccountId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details about the identity provider.</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
```

about the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "

```
        }
      },
      "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}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
      },
      "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 a per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
```

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    "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"
                    }
```

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

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            "ProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
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 license
server.</p>"
                }
            },
            "Ipv6Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
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                "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 address 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 license server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the license servers that are accessed through this endpoint.</p>"
            }
        },
        "CreationTime": {
            "target": "smithy.api#Timestamp",
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    "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) license 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",
```

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                "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": {}
              }
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            },
            "ServerSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your server.</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
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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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
         "type": "structure",
         "members": {
            "IdentityProviderSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
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            "traits": {
                "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain details 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
          },
          {
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                "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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
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      "type": "structure",

    "members": {
        "InstanceSummaries": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
        },
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            {
                "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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {

            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
a previously truncated response.</p>"
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            }
          }
        },
        "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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
          },
          {
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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 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
```

```
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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 the 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                    "smithy.api#required": {}
```

```
            }

        },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC
endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
         }
      }
   }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
```

```
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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

 // 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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

AWS SDK for Go

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AssociateLicense
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Finalize stack step
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InterceptBeforeRetryLoop
Retry
InterceptAttempt
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AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
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OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
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Serialize stack step
setOperationInput
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OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop

```
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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. "
            }
          },
          "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. "
        }
      },
      "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":
 " An exception occurred with the service. ",
          "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 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 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 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 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"
        }
      }
    }
}
```


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// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

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

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Version 2.0, January 2004

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.79 github.com/aws/aws-sdk-go-v2/service/internal/checksum 1.9.5

1.79.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
 return err
 }
 return nil
}

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

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

```
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
          }
        },
        "IsSharedActiveDirectory": {
          "target": "smithy.api#Boolean",
          "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
                    }
                }
            },
            "DomainIpv6List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
            }
        },
        "OwnerAccountId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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}$"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
          }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
         "type": "string",
         "traits": {
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            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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",
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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 a 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": {}
                    },
```

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

          {
                        "ref": "PartitionResult"
                      },
                      "supportsFIPS"
                    ]
                  },
                  true
                ]
```

```
                }
            ],
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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"
        },
        {
            "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": [],
                "endpoint": {
                    "url": "https://license-manager-user-
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": {
                  "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",
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            "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",
```

```
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"endpoint": {
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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": {
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            "UseDualStack": false
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            }
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            "UseFIPS":
false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
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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 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 disabled",
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                "expect": {
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                  }
                },
                "params": {
                  "Region": "us-iso-east-1",
                  "UseFIPS":
false,
                  "UseDualStack": false
                }
              },
              {
                "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 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"
                  }
                },
                {
                  "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 license
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 license
server.</p>"
            }
        },
        "Ipv6Address": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license server endpoint</p>"
                }
```

```
            },
            "LicenseServers": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the license 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) license 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"
```

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        }
      },
      "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 server.</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> <ul> <li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                 }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from a previously truncated response.</p>"
                }
```

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            }
        },
        "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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
```

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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>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
from 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> <ul> <li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul> <li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
```

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            "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",
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            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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
```

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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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
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            "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"
            },
```

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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>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",
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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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with the next request to retrieve additional objects.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#output":
 {}
      }
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    },
    "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": {
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            "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 the 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>"
        }
      },
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    "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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                "smithy.api#required": {}
              }

          },
            "Settings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
              "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC
endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li>
<p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to
remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC
endpoints.</p> </li> </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 require 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 your 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 the 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"
        }
    }
  }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
```

```
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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
```

AWS SDK for Go

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```
AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
```

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

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

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

```
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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"
              }
```

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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": [],
              "endpoint": {
                "url": {
                  "ref": "Endpoint"
                },
                "properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }
          ],
          "type": "tree"

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

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

    "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }
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                  "type": "tree"
                }
              ],
              "type": "tree"
```

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

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                "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",
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            "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"
            }
          ],
```

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        "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": {
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            "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>",
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            "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"
          },
          {
```

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                "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"
          }
      }
  }
```

}
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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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
```

```
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.80 github.com/aws/aws-sdk-go-v2/credentials 1.19.0

1.80.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
```

```
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
```

```
 return nil
}

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

AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
            }
          },
          "IsSharedActiveDirectory": {
            "target": "smithy.api#Boolean",
            "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
              }
            }
          },
          "DomainIpv6List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user
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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
 about the identity provider.</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
about 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}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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",
```

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      "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": {

"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 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 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 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 disabled",
              "expect": {

      "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                }
              },
              "params": {
                "Region": "us-isob-east-1",
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                "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 license
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 license
server.</p>"
                }
              },
              "Ipv6Address": {
                "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license 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 the 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 address 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 license server.</p>"
            }
          },
          "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
            }
          },
          "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the license 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) license 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 server.</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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
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
contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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",

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            "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from a previously truncated response.</p>"
```

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            }
          }
        },
        "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, there are additional elements that the service hasn't included in this request. Use this token with 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"
```

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            }
        ],
        "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": {
```

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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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {}
               }
            },
```

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            "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 the 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
              "smithy.api#required": {}
            }

         },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</p>"
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"

               }
            }
```

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        },
        "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
          }
        }
      }
    }
  }
  CreateLicense
   Initialize stack step
    RegisterServiceMetadata
    legacyEndpointContextSetter
    SetLogger
    OperationInputValidation
   Serialize stack step
    setOperationInput
    ResolveEndpoint
    OperationSerializer
   Build stack step
    ClientRequestID
    ComputeContentLength
    SetCredentialSourceMiddleware
    UserAgent
    AddTimeOffsetMiddleware
    RecursionDetection
   Finalize stack step
    spanRetryLoop
    InterceptBeforeRetryLoop
    Retry
    InterceptAttempt
    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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
```

```
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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
```

AWS SDK for Go

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AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer

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

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

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

RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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 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 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 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 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"
        }
    }
  }
}
```

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// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.81 github.com/aws/aws-sdk-go-v2/feature/dynamodb/attributevalue 1.20.25

1.81.1 Available under license :

```
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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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
DisassociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
```

ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
```

UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
            }
          },
          "IsSharedActiveDirectory": {
            "target": "smithy.api#Boolean",
            "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed
Active Directory. The default value is false.</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
```

```
                }
            }
        },
        "DomainIpv6List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user 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"
            }
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            ]
        }
    },
    "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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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
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href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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>"
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            }
          }
        },
        "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 resource.</p>",
          "smithy.api#error": "server"
        }

 },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "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>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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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": {
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                "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for user administration in
 the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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",
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                "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> resource 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
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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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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": {
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                "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": {}
              }
            }
          },
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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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets to provision VPC endpoints.</p>",

                 "smithy.api#required": {}
              }
            },
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        "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>"
          }
        },
        "OwnerAccountId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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": {
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        "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>"
          }
        },
        "OwnerAccountId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
          }
        },
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
           "traits": {
            "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
         }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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 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 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 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 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 license
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 license
server.</p>"
                }
            },
            "Ipv6Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
               }
            },
            "LicenseServerEndpointProvisioningStatus": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
               "traits": {
                  "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license server endpoint</p>"
               }
            },
            "LicenseServers": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the license 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) license 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 server.</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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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 details about the Active Directory identity providers that meet the request
 criteria.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
```

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            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, there are additional elements that the service hasn't included in this request. Use this token with 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",
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            "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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
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            "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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
```

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            "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 the 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"
```

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            },
            {
               "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                  "smithy.api#required": {}
               }

          },
            "Settings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
               "traits": {
                  "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings such as the subnets to provision VPC endpoints.</p>"
```

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

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        "type": "union",

      "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure a 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": {
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                    "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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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"
        },
```

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        {
            "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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
              "smithy.api#required": {}
            }
          },
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            "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 subscription.</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"
            },
            {
```

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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>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> <p>Valid
```

values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> "
                }
            },
            "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 subscription. "
                }
            }
        },
        "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": {

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            "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
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            },
            "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": {
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            "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"
            },
            {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity provider.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </ul>",
              "smithy.api#required": {}
            }
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        }
      },
      "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 require 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 your 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 the 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"
        }
      }
    }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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

 // 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

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

```
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read
```

```
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
AWS SDK for Go
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AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
CheckoutLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter

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

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

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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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 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 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 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 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",
```

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                "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"
            },
            {
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            "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",
```

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            "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"
```

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        },
        "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>"
            }
          },
```

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            "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"
```

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        },
        "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>",
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                "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": {
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```
            "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>"
```

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            }
        }
    },
    "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>"
            }
          }
        },
```

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      "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",
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                "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"
          }
        }
      }
}
```


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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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptors(stack, options); err != nil {
 return err
}
return nil
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}
```

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

1.82 github.com/aws/aws-sdk-go-v2/internal/configsources 1.4.14

1.82.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
DisassociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
```

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

```
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
                }
            },
            "IsSharedActiveDirectory": {
                "target": "smithy.api#Boolean",
                "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
                }
              }
            },
            "DomainIpv6List": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user
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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered identity providers product related configuration settings, such as the subnets to provision VPC endpoints. ",

"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}

},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
},
"OwnerAccountId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AWS Account ID of the owner of this resource. "
}
}
},

```
        "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>"
                }
```

```
            },
            "OwnerAccountId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
```

```
about 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}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
      },
      "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 a 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"
        }
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```
      },
      "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 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 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 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 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 license
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 license
server.</p>"
                }
            },
            "Ipv6Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
          }
        },
        "LicenseServerEndpointProvisioningStatus": {
          "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
          "traits": {
            "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
          }
        },
        "LicenseServers": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the license 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) license 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": {}
          }
```

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            },
            "ServerSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your server.</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
```

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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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
               }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
          },
          {
```

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                "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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {

            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
```

```
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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 the 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                    "smithy.api#required": {}
```

```
            }

        },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration settings 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": {
```

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            "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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC
endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
         }
      }
   }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
```

```
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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

 // 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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

AWS SDK for Go

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AssociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper

RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
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Serialize stack step
setOperationInput
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OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
RegisterServiceMetadata

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

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

```
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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. "
            }
          },
          "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. "
        }
      },
      "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":
 " An exception occurred with the service. ",
          "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 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 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 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 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"
        }
    }
  }
}
```


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// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.83 github.com/aws/aws-sdk-go-v2/internal/endpoints/v2 2.7.14

1.83.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
 return err
 }
 return nil
}

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

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

```
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
          }
        },
        "IsSharedActiveDirectory": {
          "target": "smithy.api#Boolean",
          "traits": {

       "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
                    }
                }
            },
            "DomainIpv6List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
            }
        },
        "OwnerAccountId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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}$"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
          }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
         "type": "string",
         "traits": {
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```
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
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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 a 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": {}
                    },
```

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                "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",
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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-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",
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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": {
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            "UseDualStack": false
          }
        },
        {
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          "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 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 disabled",
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      "expect": {
        "endpoint": {
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        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS":
false,
        "UseDualStack": false
      }
    },
    {
      "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 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 license
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 license
server.</p>"
            }
        },
        "Ipv6Address": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
server.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
     }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
    "type": "structure",
```

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        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with the 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 address 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 license server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
                }
```

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            },
            "LicenseServers": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the license 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) license 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",
```

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                "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"
```

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        }
      },
      "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 server.</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> <ul> <li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                 }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from a previously truncated response.</p>"
                }
```

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            }
        },
        "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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
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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>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
from a previously truncated response.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
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            "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p> <ul> <li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul> <li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
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            "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",
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            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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
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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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
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            "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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
 {}
        }
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    },
    "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 the 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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                "smithy.api#required": {}
              }

          },
            "Settings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
              "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC
endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours
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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li>
<p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to
remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC
endpoints.</p> </li> </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 require 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 your 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 the 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"
        }
    }
  }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
```

```
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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
```

AWS SDK for Go

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```
AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
```

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

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

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

```
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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": {
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```
            "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": [],
              "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": [
```

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

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

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

}
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// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

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

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limitations under the 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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
```

```
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.84 aws-sdk-go-v2-service-internal-checksum 1.9.5

1.84.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
```

```
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
```

```
 return nil
}

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

AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
            }
          },
          "IsSharedActiveDirectory": {
            "target": "smithy.api#Boolean",
            "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
              }
            }
          },
          "DomainIpv6List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user
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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
 about the identity provider.</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
about 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}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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": [
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                    "conditions": [
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                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },
                              "supportsFIPS"
                            ]
                          }
                        ]
                      },

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

```
                                    }

                                ]
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                                ],
                                "rules": [
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }

            ],
                                "type": "tree"
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                                "conditions": [],
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both",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [

        {
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                                    },
                                    true
                                ]
                            }
                        ],
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                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
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                                {
                                  "fn": "getAttr",
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                            {
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                                    },
                                    "supportsFIPS"
                                  ]
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                            }
                          ],
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                              "conditions": [],
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                                "headers": {}
                              },
                              "type": "endpoint"
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                          ],
                          "type": "tree"
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                          "type": "error"

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

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

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                                    }
                                ],
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                                        "conditions": [],
                                        "endpoint": {
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
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                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }

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                                "type": "error"
                            }
                        ],
                        "type": "tree"
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                        "conditions": [],
                        "endpoint": {
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

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                            },
                            "type": "endpoint"
                        }
                    ],
                    "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": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-east-1",
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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-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"
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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-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",
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          "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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            "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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          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS":
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            "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
          }
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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 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 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 disabled",
              "expect": {

      "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                }
              },
              "params": {
                "Region": "us-isob-east-1",
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            "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",
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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.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 license
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 license
server.</p>"
                }
              },
              "Ipv6Address": {
                "target": "smithy.api#String",
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```
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license 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 the 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 address 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 license server.</p>"
            }
          },
          "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
            }
          },
          "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the license 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) license 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 server.</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>"
              }
            },
```

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            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
```

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                "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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
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
contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
          },
          "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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 the 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
              "smithy.api#required": {}
            }

          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
          }
        }
      }
    }
  }
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
```

```
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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
```

AWS SDK for Go

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AssociateLicense

Initialize stack step

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

Serialize stack step

setOperationInput

ResolveEndpoint

OperationSerializer

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

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

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

RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptors(stack, options); 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",
  "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",
```

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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 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 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 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 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"
```

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            },
            {
                "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": {
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```
            "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"
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```
        },
        "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
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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"
        }
    }
  }
}
```
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```
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.85 aws-sdk-go-v2-service-dynamodb 1.53.1

1.85.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
DisassociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
```

ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
```

UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
            }
          },
          "IsSharedActiveDirectory": {
            "target": "smithy.api#Boolean",
            "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed
Active Directory. The default value is false.</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
```

```
                }
            }
        },
        "DomainIpv6List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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
```

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href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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": {
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                "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for user administration in
 the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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
```

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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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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": {
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                "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": {}
              }
            }
          },
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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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets to provision VPC endpoints.</p>",

                 "smithy.api#required": {}
              }
            },
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        "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>"
          }
        },
        "OwnerAccountId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
            }
        },
        "OwnerAccountId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
             "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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 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 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 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 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 license
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 license
server.</p>"
                }
            },
            "Ipv6Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license server endpoint</p>"
                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the license 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) license 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 server.</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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
```

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            "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 the 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"
```

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            },
            {
               "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                  "smithy.api#required": {}
               }

          },
            "Settings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
               "traits": {
                  "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings such as the subnets to provision VPC endpoints.</p>"
```

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            }
          },
          "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",
```

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            "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": {
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        "type": "union",

      "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure a 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": {
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                    "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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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"
        },
```

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        {
            "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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
              "smithy.api#required": {}
            }
          },
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            "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 subscription.</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"
            },
            {
```

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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>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> <p>Valid
```

values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> "
                }
            },
            "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 subscription. "
                }
            }
        },
        "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": {

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            "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}"
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            },
            "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
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            },
            "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": {
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```
            "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 provider.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
        }
      }
    }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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

 // 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

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

```
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read
```

```
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
AWS SDK for Go
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AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
CheckoutLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter

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

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

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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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 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 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 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 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"
            },
            {
```

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            "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",
```

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            "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>",
```

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                "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": {
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```
            "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"
        }
      }
    }
}
```


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```
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// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

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END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}
```

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

1.86 github.com/aws/aws-sdk-go-v2/service/internal/s3shared 1.19.14

1.86.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
DisassociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
```

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

```
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
                }
            },
            "IsSharedActiveDirectory": {
                "target": "smithy.api#Boolean",
                "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
            }
          }
        },
        "DomainIpv6List": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
          "traits": {
            "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user
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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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>
```

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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 user administration in
 the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered identity providers product related configuration settings, such as the subnets to provision VPC endpoints. ",

"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}

},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
},
"OwnerAccountId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AWS Account ID of the owner of this resource. "
}
}
},

```
        "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>"
                }
```

```
            },
            "OwnerAccountId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
```

about the identity provider. ",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {

              "smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
                "smithy.api#required": {}
            }
        },
        "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance
user. "
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": " The status message for users of an EC2 instance. "
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": " The domain name of the Active Directory that
 contains the user information for the product subscription. "
            }
        },
        "AssociationDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": " The date a user was associated with an EC2 instance. "
            }
        },
        "DisassociationDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
            }
        }
    },
    "traits": {
        "smithy.api#documentation": " Describes users of an EC2 instance providing user-based
subscriptions. "

```
        }
      },
      "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}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
      },
      "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 a 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
                            ]
                        }
                    ],
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                        {
                            "conditions": [
                                {

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

```
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
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                              "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": [],
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```

```
both",
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                            "type": "tree"
                        },
                        {
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                                    "fn": "booleanEquals",
                                    "argv": [

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

                                {
                                                        "ref": "PartitionResult"
                                                    },
                                                    "supportsFIPS"
                                                ]
                                            },
                                            true
                                        ]
                                    }
                                ],
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                                        "conditions": [],
                                        "endpoint": {

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                                            "properties": {},
                                            "headers": {}
                                        },
```

```
                        "type": "endpoint"
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                    "type": "tree"
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                  {
                    "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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                    "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": [],
                        "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": [
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```
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                  "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
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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
      }
    },
    {
      "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
      }
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```
    },
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      "expect": {
        "endpoint": {
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        }
      },
      "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"
        }
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        "Region": "us-gov-east-1",
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        "UseDualStack": true
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        }
      },
      "params": {
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        "UseFIPS": true,
        "UseDualStack": false
      }
    },
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      "expect": {
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        }
```

```
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false,
        "UseDualStack": true
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    {
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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 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 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 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 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": {
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```
            "ProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
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 license
server.</p>"
                }
            },
            "Ipv6Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the license 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) license 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 server.</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
```

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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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
               }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {

            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
          },
          {
```

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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 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
```

```
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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 the 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                    "smithy.api#required": {}
```

```
            }

        },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC
endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
         }
      }
   }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
```

```
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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

 // 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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

AWS SDK for Go

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AssociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
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RequestIDRetriever
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Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
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InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
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ResponseErrorWrapper
RequestIDRetriever
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AddTimeOffsetMiddleware
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RequestResponseLogger
ListReceivedLicenses
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RegisterServiceMetadata

legacyEndpointContextSetter
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setOperationInput
ResolveEndpoint
OperationSerializer
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ClientRequestID
ComputeContentLength
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UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
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RequestResponseLogger
GetLicense
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legacyEndpointContextSetter
SetLogger
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setOperationInput
ResolveEndpoint
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Build stack step
ClientRequestID

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

```
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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. "
            }
          },
          "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. "
        }
      },
      "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":
 " An exception occurred with the service. ",
          "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": [
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                "conditions": [
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                        "fn": "booleanEquals",
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                            {
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                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true
                                    ]

}
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                            "type": "error"
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                        {
                            "conditions": [],
                            "endpoint": {
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                                    "ref": "Endpoint"
                                },
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
```

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            }
          ],
          "type": "tree"

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

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

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

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

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

                               {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                              ]
                            }
                          ]
                        }
                      ],
```

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

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

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

    "properties": {},
                        "headers": {}
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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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          "type": "tree"
        },
        {
```

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                        "argv": [
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                                "ref": "UseDualStack"
                            },
                            true

                ]
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                "rules": [
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                            {
                                "fn": "booleanEquals",
                                "argv": [
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                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {

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

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

```
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                            }
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                                "type": "tree"
                            },
                            {
                                "conditions": [],
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                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
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                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "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": [
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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
      }
    },
    {
      "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": {
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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": {
          "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": {
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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
        }
      },
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                  "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
                  "expect": {
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                      "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"
                    }
                  },
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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-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"
                    }
                  },
```

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        "UseFIPS": false,
        "UseDualStack": true
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    },
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
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        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
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      "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 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 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 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"
        },
```

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        "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",
```

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    "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": {
```

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            "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"
      },
```

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        "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": {}
```

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            }
          },
          "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>",
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            "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",
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```
                "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"
        }
    }
  }
}
```


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// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.87 github.com/aws/aws-sdk-go-v2/feature/s3/manager 1.20.9

1.87.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
 return err
 }
 return nil
}

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

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

```
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
          }
        },
        "IsSharedActiveDirectory": {
          "target": "smithy.api#Boolean",
          "traits": {

       "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
                    }
                }
            },
            "DomainIpv6List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
            }
        },
        "OwnerAccountId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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#IpV6": {
         "type": "string",
         "traits": {
```

```
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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",
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```
                "expect": {

"endpoint": {
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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": {
```

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            "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 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 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 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 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": {
```

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                        "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 license
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 license
server.</p>"
            }
        },
        "Ipv6Address": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
server.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
     }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
    "type": "structure",
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        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with the 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 address 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 license server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
                }
```

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        },
        "LicenseServers": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the license 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) license 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",
```

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                "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"
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        }
      },
      "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 server.</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> <ul> <li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                 }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from a previously truncated response.</p>"
                }
```

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            }
        },
        "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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
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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>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
from a previously truncated response.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
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            "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p> <ul> <li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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",
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```
            "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
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
contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
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            "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",
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            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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
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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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
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            "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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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 the 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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                "smithy.api#required": {}
              }

          },
            "Settings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
              "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC
endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours
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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li>
<p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to
remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC
endpoints.</p> </li> </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 require 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 your 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 the 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"
        }
    }
  }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
```

```
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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
```

AWS SDK for Go

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```
AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
```

GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
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RecordResponseTiming
RequestResponseLogger
CheckoutLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
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OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
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Build stack step
ClientRequestID
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Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata

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

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

```
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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 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 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 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 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"
          }
      }
  }
```

}
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// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

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

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boilerplate notice, with the fields enclosed by brackets "[]"
replaced with your own identifying information. (Don't include
the brackets!) The text should be enclosed in the appropriate
comment syntax for the file format. We also recommend that a
file or class name and description of purpose be included on the
same "printed page" as the copyright notice for easier
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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
```

```
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.88 aws-sdk-go-v2-feature-s3-manager 1.20.9

1.88.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
```

```
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
```

```
 return nil
}

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

```
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
 ListLicenses
  Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
  Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
            }
          },
          "IsSharedActiveDirectory": {
            "target": "smithy.api#Boolean",
            "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
              }
            }
          },
          "DomainIpv6List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user
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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
 about the identity provider.</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
about 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}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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",
```

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            "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": [
                                {
```

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                    "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"
                        ]
```

```
                                    }

                                ]
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                                ],
                                "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": [
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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"
                    },
                    {
                      "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",
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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-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 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 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 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 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 license
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 license
server.</p>"
                }
              },
              "Ipv6Address": {
                "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license 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 the 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 address 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 license server.</p>"
            }
          },
          "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
            }
          },
          "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the license 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) license 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 server.</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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
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
contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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",

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            "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from a previously truncated response.</p>"
```

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            }
          }
        },
        "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, there are additional elements that the service hasn't included in this request. Use this token with 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"
```

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            }
        ],
        "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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {}
               }
            },
```

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            "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": {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a reference to the 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": {
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            "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
              "smithy.api#required": {}
            }

          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
          }
        }
      }
    }
  }
  CreateLicense
   Initialize stack step
    RegisterServiceMetadata
    legacyEndpointContextSetter
    SetLogger
    OperationInputValidation
   Serialize stack step
    setOperationInput
    ResolveEndpoint
    OperationSerializer
   Build stack step
    ClientRequestID
    ComputeContentLength
    SetCredentialSourceMiddleware
    UserAgent
    AddTimeOffsetMiddleware
    RecursionDetection
   Finalize stack step
    spanRetryLoop
    InterceptBeforeRetryLoop
    Retry
    InterceptAttempt
    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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
```

```
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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
```

AWS SDK for Go

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AssociateLicense

Initialize stack step

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

Serialize stack step

setOperationInput

ResolveEndpoint

OperationSerializer

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

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

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

RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptors(stack, options); 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",
  "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": {}
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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
          }
        },
        {

      "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",
```

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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 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 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 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 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"
        }
    }
  }
}
```

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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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
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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 = 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.89 aws-sdk-go-v2-internal-configsources 1.4.14

1.89.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
DisassociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
```

ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
```

UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
            }
          },
          "IsSharedActiveDirectory": {
            "target": "smithy.api#Boolean",
            "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed
Active Directory. The default value is false.</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
```

```
                }
            }
        },
        "DomainIpv6List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user administration.</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> resource 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
```

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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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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": {
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```
                "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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
          }
        },
        "OwnerAccountId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
            }
        },
        "OwnerAccountId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
             "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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": {
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            "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 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 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 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,
```

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                "UseDualStack": false
              }
            },
            {
              "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 license
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 license
server.</p>"
                }
            },
            "Ipv6Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license server endpoint</p>"
                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the license 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) license 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 server.</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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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",
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            "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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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 the 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"
```

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            },
            {
               "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                  "smithy.api#required": {}
               }

          },
            "Settings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
               "traits": {
                  "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings such as the subnets to provision VPC endpoints.</p>"
```

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            }
          },
          "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",
```

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            "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": {
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        "type": "union",

      "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure a 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": {
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                    "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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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"
        },
```

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        {
            "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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
              "smithy.api#required": {}
            }
          },
```

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            "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 subscription.</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> <p>Valid
```

values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> "
                }
            },
            "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 subscription. "
                }
            }
        },
        "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": {

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            "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 provider.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
        }
      }
    }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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

 // 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

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

```
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read
```

```
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
AWS SDK for Go
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AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
CheckoutLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter

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

SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
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Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry

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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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": {
```

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            "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",
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            "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 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 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 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 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": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client"
}
}
}
}
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```
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// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptors(stack, options); err != nil {
 return err
}
return nil
}

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

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"control" means (i) the power, direct or indirect, to cause the
direction or management of such entity, whether by contract or
otherwise, or (ii) ownership of fifty percent (50%) or more of the
outstanding shares, or (iii) beneficial ownership
of such entity.

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}
```

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

1.90 github.com/aws/aws-sdk-go-v2/config 1.32.0

1.90.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
DisassociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
```

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

```
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
                }
            },
            "IsSharedActiveDirectory": {
                "target": "smithy.api#Boolean",
                "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
                }
              }
            },
            "DomainIpv6List": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user
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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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
```

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state of the resource.</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": {}
        }
    },
```

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    "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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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>
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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 user administration in
 the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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"
            },
            {
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                "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> resource 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": {
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            "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": {
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            "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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": {}
            }
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            }
        },
        "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>",
```

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            "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": {
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            "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>"
                }
            },
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            "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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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
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about an identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered identity providers product related configuration settings, such as the subnets to provision VPC endpoints. ",

"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}

},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
},
"OwnerAccountId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AWS Account ID of the owner of this resource. "
}
}
},

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        "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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            },
            "OwnerAccountId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
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about 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>"
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        }
      },
      "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}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
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"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 a per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
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    "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"
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        "rules": [
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                "conditions": [
                    {
                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Endpoint"
                            }
                        ]

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                ],
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                    "argv": [
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                "type": "error"
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                "conditions": [

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                    "argv": [
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                      },
                      true
                    ]
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                "type": "error"
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                    "ref": "Endpoint"
                  },

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                    "headers": {}
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                  "type": "endpoint"
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              "type": "tree"
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            {
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                  "fn": "isSet",
                  "argv": [
                    {
```

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

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

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

                {
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                  "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",
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                            ],
                            "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": [

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                                                            "ref": "PartitionResult"
                                                        },
                                                        "supportsFIPS"
                                                    ]
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                                                true
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                                        }
                                    ],
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                                            "conditions": [],
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                        "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                                "properties": {},
                                                "headers": {}
                                            },
```

```
                        "type": "endpoint"
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                    "type": "error"

}
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                "type": "tree"
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                "conditions": [
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                    "argv": [
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                      },
                      true
                    ]
                  }
                ],
                "rules": [
                  {

    "conditions": [
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                        "argv": [
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                          {
                            "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"
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                                "type": "error"
                            }
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                        "type": "tree"
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                    {
                        "conditions": [],
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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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            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
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"smithy.rules#endpointTests": {
    "testCases": [
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                  "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"
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```

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

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    },
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      "expect": {
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        }
      },
      "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"
        }
      },
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        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
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    },
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        "UseDualStack": false
      }
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        }
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false,
        "UseDualStack": true
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        }
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        "UseFIPS": false,
        "UseDualStack": false
      }
    },
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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 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 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 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": {
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            "ProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
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 license
server.</p>"
                }
            },
            "Ipv6Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the license servers that are accessed through this endpoint.</p>"
            }
        },
        "CreationTime": {
            "target": "smithy.api#Timestamp",
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```
    "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) license 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",
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```
            "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 server.</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
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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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
               }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
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            "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain details 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
          },
          {
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                "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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
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```
      "type": "structure",

    "members": {
        "InstanceSummaries": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
        },
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            {
                "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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {

            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
a previously truncated response.</p>"
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            }
          }
        },
        "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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
          },
          {
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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 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
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                "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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with the next request to retrieve additional objects.</p>"
              }
            }
          },
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        "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": {
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            "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"
            }
```

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        ],
        "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> <ul>
<li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </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
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {}
               }
            },
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        "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>"
          }
        },
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            "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 the 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"
            },
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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>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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                    "smithy.api#required": {}
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            }

        },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC
endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
         }
      }
   }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
```

```
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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

 // 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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

AWS SDK for Go

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AssociateLicense

Initialize stack step

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

Serialize stack step

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

SetCredentialSourceMiddleware

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

Finalize stack step

spanRetryLoop

InterceptBeforeRetryLoop

Retry

InterceptAttempt

RetryMetricsHeader

ResolveAuthScheme

GetIdentity

ResolveEndpointV2

disableHTTPS

ComputePayloadHash

setLegacyContextSigningOptions

Signing

Deserialize stack step

AddRawResponseToMetadata

ErrorCloseResponseBody

CloseResponseBody

ResponseErrorWrapper

RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
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ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
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RegisterServiceMetadata

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

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

```
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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. "
            }
          },
          "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. "
        }
      },
      "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":
 " An exception occurred with the service. ",
          "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
              ]
            }

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

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

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

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

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

    "properties": {},
                        "headers": {}
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                      "type": "endpoint"
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              "type": "tree"
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            {
              "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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                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true

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

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

        {
                                        "conditions": [],
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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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```

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                            }
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                                "type": "tree"
                            },
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                                "type": "error"
                            }
                        ],
                        "type": "tree"
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                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
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                "type": "tree"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "error": "Invalid Configuration: Missing Region",
        "type": "error"
    }
],
"type": "tree"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
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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
      }
    },
    {
      "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
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    },
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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",
        "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"
                    }
                  },
```

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      "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 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 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 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 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. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The valid Operators for this filter are: \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#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " 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. "

```
            }
          }
        }
      },
      "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"
      },
```

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        "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"
        }
    }
  }
}
```


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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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.91 aws-sdk-go-v2-feature-dynamodb-attributevalue 1.20.25

1.91.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
 return err
 }
 return nil
}

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

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

```
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
          }
        },
        "IsSharedActiveDirectory": {
          "target": "smithy.api#Boolean",
          "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
                    }
                }
            },
            "DomainIpv6List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
            }
        },
        "OwnerAccountId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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#IpV6": {
         "type": "string",
         "traits": {
```

```
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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": {
```

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            "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 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 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 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 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"
              }
            },
            {
              "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 license
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 license
server.</p>"
            }
        },
        "Ipv6Address": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
                }
```

```
        },
        "LicenseServers": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the license 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) license 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 server.</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> <ul> <li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                 }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
```

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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>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
from 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> <ul> <li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul> <li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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
```

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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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
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            "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"
            },
```

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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>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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
 {}
        }
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    },
    "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": {
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            "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 the 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": {
```

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                "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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                "smithy.api#required": {}
              }

          },
            "Settings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
              "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration settings 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
```

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            },
            "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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC
endpoints. The security group should permit inbound TCP port 1688 communication from resources in the
VPC.</p>"
        }
     },
     "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input":
{
           "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
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        "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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours
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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",

 "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
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                "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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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": {}
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            }
          }
        },
        "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li>
<p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to
remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC
endpoints.</p> </li> </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 require 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 your 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 the 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"
        }
    }
  }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
```

```
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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
```

AWS SDK for Go

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```
AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
```

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

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

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

```
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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 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 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 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 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"
          }
      }
  }
```

}
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OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
```

```
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.92 github.com/aws/aws-sdk-go-v2/internal/v4a 1.4.14

1.92.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
```

```
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
```

```
 return nil
}

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

AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
            }
          },
          "IsSharedActiveDirectory": {
            "target": "smithy.api#Boolean",
            "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
              }
            }
          },
          "DomainIpv6List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user
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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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",
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            "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",
```

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            "type": "error"
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        {
            "conditions": [],
            "endpoint": {
                "url": {
                    "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": [
                                {
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                "ref": "UseFIPS"
              },

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

```
                    ],
                    "rules": [
                        {

                "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
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                                        {
                                            "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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                                "type": "tree"
                            },
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                                "conditions": [],
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                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
```

```
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                            "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "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": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-east-1",
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            "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",
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        },
        {
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          "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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          "expect": {
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              "url": "https://license-manager-user-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-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 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 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 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 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 license
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 license
server.</p>"
                }
              },
              "Ipv6Address": {
                "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license 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 the 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 address 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 license server.</p>"
            }
          },
          "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
            }
          },
          "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the license 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) license 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 server.</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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
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
contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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",

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            "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from a previously truncated response.</p>"
```

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            }
          }
        },
        "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, there are additional elements that the service hasn't included in this request. Use this token with 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"
```

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            }
          ],
          "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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {}
               }
            },
```

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            "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": {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a reference to the 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": {
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            "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
              "smithy.api#required": {}
            }

         },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
          }
        }
      }
    }
  }
  CreateLicense
   Initialize stack step
    RegisterServiceMetadata
    legacyEndpointContextSetter
    SetLogger
    OperationInputValidation
   Serialize stack step
    setOperationInput
    ResolveEndpoint
    OperationSerializer
   Build stack step
    ClientRequestID
    ComputeContentLength
    SetCredentialSourceMiddleware
    UserAgent
    AddTimeOffsetMiddleware
    RecursionDetection
   Finalize stack step
    spanRetryLoop
    InterceptBeforeRetryLoop
    Retry
    InterceptAttempt
    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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
```

```
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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
```

AWS SDK for Go

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AssociateLicense

Initialize stack step

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

Serialize stack step

setOperationInput

ResolveEndpoint

OperationSerializer

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

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

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

RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptors(stack, options); 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",
  "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"
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                    {
                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"

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

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

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

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

             "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"
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          {

      "conditions": [
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              "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": {}
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                                                "type": "endpoint"
                                            }
                                        ],
                                        "type": "tree"
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                                "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": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            true,
                                            {
                                                "fn": "getAttr",
                                                "argv": [
                                                    {
```

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

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

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                        ],
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                    },
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                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
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                "conditions": [],
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
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```

```
                                },
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                        "type": "tree"
                    }
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            }
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    {
        "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",
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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-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,
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                    }
                  },
                  {
                    "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
                    }
                  },
                  {

 "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
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        },
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          "expect": {
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            }

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

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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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.93 aws-sdk-go-v2-service-ssooidc 1.35.8

1.93.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
DisassociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
```

ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
```

UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
            }
          },
          "IsSharedActiveDirectory": {
            "target": "smithy.api#Boolean",
            "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed
Active Directory. The default value is false.</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
```

```
                }
            }
        },
        "DomainIpv6List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
            }
        },
        "OwnerAccountId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
             "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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":
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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": {
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            "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 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 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 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,
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```
                "UseDualStack": false
            }
        },
        {
            "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 license
server.</p>"
                }
              },
              "HealthStatus": {
                "target":
```

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 "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 license
server.</p>"
                }
            },
            "Ipv6Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license server endpoint</p>"
                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the license 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) license 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 server.</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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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",
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```
            "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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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 the 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                  "smithy.api#required": {}
               }

          },
            "Settings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
               "traits": {
                  "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings 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": {
```

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        "type": "union",

      "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid
```

values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> "
                }
            },
            "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 subscription. "
                }
            }
        },
        "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 provider.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
        }
      }
    }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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

 // 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

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

```
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read
```

```
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
AWS SDK for Go
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AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
CheckoutLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter

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

SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
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Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry

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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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",
```

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                                    "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",
```

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            "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 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 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 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 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"
            }
        },
```

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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": {

      "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"
          }
        }
      }
}
```


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```
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// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptors(stack, options); err != nil {
 return err
}
return nil
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}
```

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

1.94 aws-sdk-go-v2-credentials 1.19.0

1.94.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutLicense",
 }
}
DisassociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
```

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

```
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

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

CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
                }
            },
            "IsSharedActiveDirectory": {
                "target": "smithy.api#Boolean",
                "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
                }
              }
            },
            "DomainIpv6List": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user
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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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>
```

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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 user administration in
 the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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"
            },
            {
```

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                "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> resource 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": {
```

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            "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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": {
```

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            "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>"
                }
            },
```

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            "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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered identity providers product related configuration settings, such as the subnets to provision VPC endpoints. ",

"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}

},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
},
"OwnerAccountId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AWS Account ID of the owner of this resource. "
}
}
},

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        "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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            },
            "OwnerAccountId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details about the identity provider.</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
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about the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "

```
        }
      },
      "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}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
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"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 a per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
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    "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": [
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                        "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"
                }
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              "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": [
```

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                        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"
                                                    ]
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                                                true
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                                        }
                                    ],
                                    "rules": [
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                                            "conditions": [],
                                            "endpoint": {

                                "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                                "properties": {},
                                                "headers": {}
                                            },
```

```
                        "type": "endpoint"
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                    "type": "tree"
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                  {
                    "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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                    "fn": "booleanEquals",
                    "argv": [
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                        "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"
                                    }

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                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
            }
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        "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 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 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 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 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 license
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 license
server.</p>"
                }
            },
            "Ipv6Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the license 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) license 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",
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            "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": {}
          }
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            },
            "ServerSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your server.</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
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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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
               }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
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            "traits": {
                "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain details 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
          },
          {
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                "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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
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      "type": "structure",

    "members": {
        "InstanceSummaries": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
        },
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            {
                "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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {

            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
a previously truncated response.</p>"
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            }
          }
        },
        "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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
          },
          {
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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 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
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                "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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with the next request to retrieve additional objects.</p>"
              }
            }
          },
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        "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": {
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            "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"
            }
```

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        ],
        "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> <ul>
<li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </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 from 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {}
               }
            },
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        "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>"
          }
        },
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            "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 the 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                    "smithy.api#required": {}
```

```
            }

        },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC
endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
         }
      }
   }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
```

```
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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

 // 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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

AWS SDK for Go

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AssociateLicense

Initialize stack step

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

Serialize stack step

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

SetCredentialSourceMiddleware

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

Finalize stack step

spanRetryLoop

InterceptBeforeRetryLoop

Retry

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disableHTTPS

ComputePayloadHash

setLegacyContextSigningOptions

Signing

Deserialize stack step

AddRawResponseToMetadata

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CloseResponseBody

ResponseErrorWrapper

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ClientRequestID

ComputeContentLength
SetCredentialSourceMiddleware
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AddTimeOffsetMiddleware
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Finalize stack step
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InterceptBeforeRetryLoop
Retry
InterceptAttempt
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ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop

```
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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. "
            }
          },
          "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. "
        }
      },
      "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":
 " An exception occurred with the service. ",
          "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"

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

                    "ref": "UseFIPS"
                        },
                        true
                      ]
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                },
                {
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                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
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                  ]
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                    "conditions": [
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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"
                              ]
                            }
                          ]
                        }
                      ],
```

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

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

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

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                            },
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                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
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                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
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                "type": "tree"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "error": "Invalid Configuration: Missing Region",
        "type": "error"
    }
],
"type": "tree"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
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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
      }
    },
    {
      "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
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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
        }
      },
```

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

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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": {
        "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 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 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 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 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"
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              "params": {
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                "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",
```

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            "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",
```

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    "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"
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        },
        "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"
        }
    }
  }
}
```


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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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.95 aws-sdk-go-v2-feature-ec2-imds 1.18.14

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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
 return nil
}

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

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

```
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
          }
        },
        "IsSharedActiveDirectory": {
          "target": "smithy.api#Boolean",
          "traits": {

       "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
                    }
                }
            },
            "DomainIpv6List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
            }
        },
        "OwnerAccountId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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#IpV6": {
         "type": "string",
         "traits": {
```

```
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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"
    }
],
```

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                "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",
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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-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",
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"endpoint": {
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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": {
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            "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 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 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 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 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"
              }
            },
            {
              "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 license
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 license
server.</p>"
            }
        },
        "Ipv6Address": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
                }
```

```
        },
        "LicenseServers": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the license 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) license 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 server.</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> <ul> <li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                 }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
```

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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>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
from 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> <ul> <li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul> <li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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
```

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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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
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            "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"
            },
```

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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>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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
```

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            "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 the 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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                "smithy.api#required": {}
              }

          },
            "Settings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
              "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration settings 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
```

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            },
            "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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC
endpoints. The security group should permit inbound TCP port 1688 communication from resources in the
VPC.</p>"
        }
     },
     "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input":
{
           "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
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        "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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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": {}
```

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            }
          }
        },
        "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li>
<p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to
remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC
endpoints.</p> </li> </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 require 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 your 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 the 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"
        }
    }
  }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
```

```
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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
```

AWS SDK for Go

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```
AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
```

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

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

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

```
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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": {
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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",
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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 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 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 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 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"
          }
      }
  }
```

}
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// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
```

```
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.96 aws-sdk-go-v2 1.40.0

1.96.1 Available under license :

```
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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"
)
```

```
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
 return nil
}
```

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

```
  RequestResponseLogger
ListLicenses
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
          }
        },
        "IsSharedActiveDirectory": {
          "target": "smithy.api#Boolean",
          "traits": {

       "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
            }
          }
        },
        "DomainIpv6List": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
          "traits": {
            "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user
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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource to delete. ",
                    "smithy.api#required": {}
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": " The type of License Server that the delete request refers to. ",
                    "smithy.api#required": {}

    }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
                    "smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted. "
                }
            }
        },
        "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"
            },

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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>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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>"
              }
            },
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
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            "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"
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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>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>",
```

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                "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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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",
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        "members": {
            "ActiveDirectoryIdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
               }
            },
            "OwnerAccountId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
            }
          },
          "OwnerAccountId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
             "traits": {
              "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
 about the identity provider.</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
about 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"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
      }
    },
    "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 a 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
                            ]
                        }
                    ],
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                        {
                            "conditions": [
                                {

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

            ],
                "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": [
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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"
        },
        {
            "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"
                    }

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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"
            },
            {
              "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
          }
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    },
    {
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      "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 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 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 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 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
          }
```

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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"
      }
    },
    {
      "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 license
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 license
server.</p>"
            }
          },
          "Ipv6Address": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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>
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 resource for the RDS license server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the license 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) license 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 server.</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",
```

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            "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p> <ul> <li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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
```

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 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 from 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> <ul> <li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
     "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
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```
        "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> <ul> <li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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",
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            "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, there are additional elements that the service hasn't included in this request. Use this token with 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": {
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```
                "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 the credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"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": " Registers an identity provider for user-based subscriptions. ",
"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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                    "smithy.api#required": {}
                }

            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings 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 a 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",
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      "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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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. <note> Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges in the Amazon Web Services Billing User Guide. </note>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",

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 "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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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"
          }
```

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        ],
        "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</p>"
                }
            }
```

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        },
        "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": {
```

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      "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": {
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            "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": {}
          }
        }
```

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        },
        "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 provider.</p>",
          "smithy.api#http": {

    "code": 200,
            "method": "POST",
            "uri": "/identity-provider/UpdateIdentityProviderSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
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        "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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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": {
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            "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 require 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 your 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 the 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"
        }
    }
```

```
   }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

```
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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]


permissions:
 contents: read

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
```

AWS SDK for Go

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```
AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
```

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

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

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

```
  RequestResponseLogger
DeleteLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptors(stack, options); 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",
  "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": [
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                "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": {
```

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

```
                                "ref": "UseDualStack"
                            },
                            true
                        ]

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

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

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

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

                },
                                          "supportsFIPS"
```

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

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

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

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

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


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

                                                "ref": "PartitionResult"
                                                },
                                                "supportsDualStack"
```

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

```
                        ],
                        "type": "tree"
                      }
                    ],
                    "type": "tree"
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                ],
                "type": "tree"
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              {
                "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": {
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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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                {
                  "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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                  "expect": {
                    "endpoint": {
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                    }
                  },
                  "params": {
                    "Region": "us-gov-east-1",
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                    "UseDualStack": true
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
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                    }
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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 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 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 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 disabled",
      "expect": {
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}
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
```

```
                {
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                  "expect": {
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                    }
                  },
                  "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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                  "expect": {
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                  },
                  "params": {

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                    "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": {
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                    "Region": "us-east-1",
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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",
          "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,
```

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            "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",
```

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            "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",
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                "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": [
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            {
                "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. "
}
},
"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. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException":

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{
        "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",
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      "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": {
```

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                    "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"
        }
    }
  }
}
```

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```
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
```

```
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

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

1.97 aws-aws-sdk-go-v2-service-signin 1.0.1

1.97.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutLicense",
 }
}
DisassociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
```

AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
```

Retry
InterceptAttempt
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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
              }
            },
            "IsSharedActiveDirectory": {
              "target": "smithy.api#Boolean",
              "traits": {

          "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
                }
              }
            },
            "DomainIpv6List": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
              "traits": {
```

```
            "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
```

```
secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
            }
          },
          "OwnerAccountId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
            }
        },
        "OwnerAccountId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
             "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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 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 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 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 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 license
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 license server.</p>"
                }
            },
            "Ipv6Address": {
                "target": "smithy.api#String",
                "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license 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 the 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 address 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 license server.</p>"
            }
          },
          "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
            }
          },
          "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the license 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) license 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 server.</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> <ul> <li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
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
contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
              }
            },
            "NextToken": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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 the 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                    "smithy.api#required": {}
                }

         },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings 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": {
```

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            "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
```

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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 a 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 your VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the subnets to provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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. <note> Your estimated bill for charges on the number of users and related costs will take 48 hours

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 monthly charges in the Amazon Web Services Billing User Guide. </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. Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> ",
                "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 subscription. "
              }
            },
            "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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
          }
        }
      }
    }
```


```
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

```
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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
```

AWS SDK for Go

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AssociateLicense

Initialize stack step

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

Serialize stack step

setOperationInput
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setOperationInput
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SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata

ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); 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",
  "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": {
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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"
                    }
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                "type": "tree"
            },
            {
                "conditions": [],
                "rules": [
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                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-linux-
```

```
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
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                                }
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                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                }
            ],
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        },
        {
            "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"
}
},
```

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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",
        "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"
                      }
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                    "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"
                      }
                    },
```

```
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        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
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      "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 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 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 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 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"
        }
      }
    }
}
```

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```
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.98 aws-sdk-go-v2-config 1.32.0

1.98.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
DisassociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
```

ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
```

UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
            }
          },
          "IsSharedActiveDirectory": {
            "target": "smithy.api#Boolean",
            "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed
Active Directory. The default value is false.</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
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                }
            }
        },
        "DomainIpv6List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user 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"
            }
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            ]
        }
    },
    "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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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
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href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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>"
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            }
          }
        },
        "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 resource.</p>",
          "smithy.api#error": "server"
        }

 },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "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>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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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": {
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                "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials needed for user administration in
 the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user administration.</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",
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                "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> resource 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
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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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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": {
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                "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": {}
              }
            }
          },
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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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets to provision VPC endpoints.</p>",

                 "smithy.api#required": {}
              }
            },
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        "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>"
          }
        },
        "OwnerAccountId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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": {
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        "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>"
          }
        },
        "OwnerAccountId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
          }
        },
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
           "traits": {
            "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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": {
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            "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 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 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 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 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 license
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 license
server.</p>"
                }
            },
            "Ipv6Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license server endpoint</p>"
                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the license 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) license 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 server.</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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
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            "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 the 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"
```

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            },
            {
               "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                  "smithy.api#required": {}
               }

          },
            "Settings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
               "traits": {
                  "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings such as the subnets to provision VPC endpoints.</p>"
```

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            }
          },
          "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",
```

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            "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": {
```

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        "type": "union",

      "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure a 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": {
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                    "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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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"
        },
```

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        {
            "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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
              "smithy.api#required": {}
            }
          },
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            "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 subscription.</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"
            },
            {
```

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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>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> <p>Valid
```

values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> "
                }
            },
            "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 subscription. "
                }
            }
        },
        "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": {

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            "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}"
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            },
            "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
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            },
            "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": {
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            "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"
            },
            {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity provider.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </ul>",
              "smithy.api#required": {}
            }
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        }
      },
      "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 require 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 your 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 the 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"
        }
      }
    }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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

 // 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

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

```
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read
```

```
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
AWS SDK for Go
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AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
CheckoutLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter

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

SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
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Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry

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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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 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 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 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 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"
            }
        },
```

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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": {

      "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",
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                "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"
            },
            {
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            "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",
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            "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"
```

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        },
        "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"
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        },
        "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>",
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                "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": {
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```
            "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>"
```

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            }
        }
    },
    "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>"
            }
          }
        },
```

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      "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",
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            "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"
          }
        }
      }
}
```


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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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptors(stack, options); err != nil {
 return err
}
return nil
}

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

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 "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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}
```

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

1.99 github.com/aws/aws-sdk-go-v2/service/signin 1.0.1

1.99.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
DisassociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
```

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

```
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
                }
            },
            "IsSharedActiveDirectory": {
                "target": "smithy.api#Boolean",
                "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
                }
              }
            },
            "DomainIpv6List": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user
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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered identity providers product related configuration settings, such as the subnets to provision VPC endpoints. ",

"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}

},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
},
"OwnerAccountId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AWS Account ID of the owner of this resource. "
}
}
},

```
        "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>"
                }
```

```
            },
            "OwnerAccountId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
```

```
about 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}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
      },
      "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 a 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
```

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both",
                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [

        {
                                            "ref": "UseFIPS"
                                        },
                                        true
                                    ]
                                }
                            ],
                            "rules": [
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                                    "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": {}
                                        },
```

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                        "type": "endpoint"
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                    "type": "tree"
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                    "conditions": [],
                    "error": "FIPS is enabled but this partition does not support FIPS",
                    "type": "error"

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

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

                            "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
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            "type": "tree"
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ]
},
"smithy.rules#endpointTests": {
    "testCases": [
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                  "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"
                    }
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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-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
      }
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    },
    {
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      "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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      "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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      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
        }
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      "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 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 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 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 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 license
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 license
server.</p>"
                }
            },
            "Ipv6Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the license 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) license 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",
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                "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": {}
              }
```

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            },
            "ServerSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your server.</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
```

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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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
               }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
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            "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain details 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
          },
          {
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                "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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {

            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
```

```
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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 the 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                    "smithy.api#required": {}
```

```
            }

        },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC
endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
         }
      }
   }
}
```


CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop

```
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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

 // 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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

AWS SDK for Go

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AssociateLicense

Initialize stack step

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

Serialize stack step

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

SetCredentialSourceMiddleware

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AddRawResponseToMetadata

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

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SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
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CloseResponseBody
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OperationDeserializer
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RequestResponseLogger
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legacyEndpointContextSetter
SetLogger
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Serialize stack step
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 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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. "
            }
          },
          "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. "
        }
      },
      "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":
 " An exception occurred with the service. ",
          "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 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 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 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 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. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The valid Operators for this filter are: \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#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " 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. "

```
            }
          }
        }
      },
      "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"
        }
    }
  }
}
```


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// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

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

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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/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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.100 aws-sdk-go-v2-service-sso 1.30.4

1.100.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
 return nil
}

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

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

```
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
          }
        },
        "IsSharedActiveDirectory": {
          "target": "smithy.api#Boolean",
          "traits": {

       "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
                    }
                }
            },
            "DomainIpv6List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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"
          },
          {
```

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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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
            }
          },
          "OwnerAccountId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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}$"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
          }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
         "type": "string",
         "traits": {
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            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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": {}
                        },
```

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                "type": "endpoint"
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            ],
            "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
                ]
            }
        ],
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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": [],
                        "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",
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            "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",
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"endpoint": {
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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": {
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            "Region": "us-gov-east-1",
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            "UseDualStack": false
          }
        },
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            "endpoint": {
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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
          }
        },
        {
          "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 disabled",
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            "expect": {
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                "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 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 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"
              }
            },
            {
              "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 license
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 license
server.</p>"
            }
        },
        "Ipv6Address": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
                }
```

```
        },
        "LicenseServers": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the license 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) license 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",
```

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                "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 server.</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> <ul> <li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                 }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from a previously truncated response.</p>"
                }
```

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            }
        },
        "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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
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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>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
from a previously truncated response.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
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            "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p> <ul> <li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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",
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```
            "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p> <ul> <li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
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            "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",
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            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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
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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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
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            "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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
 {}
        }
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    },
    "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 the 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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                "smithy.api#required": {}
              }

          },
            "Settings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
              "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC
endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li>
<p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to
remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC
endpoints.</p> </li> </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 require 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 your 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 the 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"
        }
    }
  }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
```

```
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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

    // 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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
```

AWS SDK for Go

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```
AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
```

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

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

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

```
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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": [],
              "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"
        },
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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
              ]
            }
          ],
          "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"
```

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

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

}
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// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

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

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limitations under the 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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
```

```
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.101 aws-sdk-go-v2-service-dynamodbstreams 1.32.5

1.101.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
```

```
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
```

```
 return nil
}

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

AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
            }
          },
          "IsSharedActiveDirectory": {
            "target": "smithy.api#Boolean",
            "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
              }
            }
          },
          "DomainIpv6List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user
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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
            }
        },
        "OwnerAccountId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
             "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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": [
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                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  },

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

```
                                    }

                                ]
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                                ],
                                "rules": [
                                    {
                                        "conditions": [],
                                        "endpoint": {
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "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": [

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

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

             }
                                    ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "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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                {
                    "conditions": [],
                    "endpoint": {
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                            "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
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            "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",
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            "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-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"
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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-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",
```

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      "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": {

"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 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 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 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 disabled",
              "expect": {

      "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                }
              },
              "params": {
                "Region": "us-isob-east-1",
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            "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 license
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 license
server.</p>"
                }
              },
              "Ipv6Address": {
                "target": "smithy.api#String",
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```
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license 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 the 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 address 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 license server.</p>"
            }
          },
          "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
            }
          },
          "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the license 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) license 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 server.</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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
```

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                "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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
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
contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
          },
          "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from a previously truncated response.</p>"
```

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            }
          }
        },
        "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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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 the 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
              "smithy.api#required": {}
            }

          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
          }
        }
      }
    }
  }
  CreateLicense
   Initialize stack step
    RegisterServiceMetadata
    legacyEndpointContextSetter
    SetLogger
    OperationInputValidation
   Serialize stack step
    setOperationInput
    ResolveEndpoint
    OperationSerializer
   Build stack step
    ClientRequestID
    ComputeContentLength
    SetCredentialSourceMiddleware
    UserAgent
    AddTimeOffsetMiddleware
    RecursionDetection
   Finalize stack step
    spanRetryLoop
    InterceptBeforeRetryLoop
    Retry
    InterceptAttempt
    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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
```

```
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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
```

AWS SDK for Go

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AssociateLicense

Initialize stack step

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

Serialize stack step

setOperationInput

ResolveEndpoint

OperationSerializer

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

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

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

RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
   "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",
```

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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 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 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 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 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>"
                }
            },
```

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        "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"
```

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

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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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.102 aws-sdk-go-v2-service-internal-s3shared 1.19.14

1.102.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
DisassociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
```

ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
```

UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
            }
          },
          "IsSharedActiveDirectory": {
            "target": "smithy.api#Boolean",
            "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed
Active Directory. The default value is false.</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
```

```
                }
            }
        },
        "DomainIpv6List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user 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"
            }
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            ]
        }
    },
    "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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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
```

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href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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>"
```

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            }
          }
        },
        "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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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": {
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                "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials needed for user administration in
 the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user administration.</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> resource 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
```

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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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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": {
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                "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": {}
              }
            }
          },
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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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets to provision VPC endpoints.</p>",

                 "smithy.api#required": {}
              }
            },
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        "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>"
          }
        },
        "OwnerAccountId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
            }
        },
        "OwnerAccountId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
             "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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 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 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 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 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 license
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 license
server.</p>"
                }
            },
            "Ipv6Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license server endpoint</p>"
                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the license 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) license 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 server.</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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
```

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            "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 the 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"
```

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            },
            {
               "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                  "smithy.api#required": {}
               }

          },
            "Settings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
               "traits": {
                  "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings such as the subnets to provision VPC endpoints.</p>"
```

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            }
          },
          "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",
```

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            "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": {
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        "type": "union",

      "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure a 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": {
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                    "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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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"
        },
```

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        {
            "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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
              "smithy.api#required": {}
            }
          },
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            "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 subscription.</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"
            },
            {
```

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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>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> <p>Valid
```

values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> "
                }
            },
            "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 subscription. "
                }
            }
        },
        "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": {

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            "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}"
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            },
            "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
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            },
            "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": {
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```
            "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 provider.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
        }
      }
    }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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

 // 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

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

CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]

permissions:
 contents: read

```
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
AWS SDK for Go
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AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
CheckoutLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter

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

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

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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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 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 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 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 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"
            },
            {
```

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            "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>",
```

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                "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"
          }
        }
      }
}
```


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```
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// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptors(stack, options); err != nil {
 return err
}
return nil
}

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

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END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

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```
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  limitations under the 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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}
```

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

1.103 github.com/aws/aws-sdk-go-v2/service/ssooidc 1.35.8

1.103.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
DisassociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
```

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

```
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
                }
            },
            "IsSharedActiveDirectory": {
                "target": "smithy.api#Boolean",
                "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
                }
              }
            },
            "DomainIpv6List": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user
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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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>
```

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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 user administration in
 the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered identity providers product related configuration settings, such as the subnets to provision VPC endpoints. ",

"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}

},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
},
"OwnerAccountId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AWS Account ID of the owner of this resource. "
}
}
},

```
        "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>"
                }
```

```
            },
            "OwnerAccountId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
```

```
about 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}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
      },
      "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 a 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",
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                    "argv": [
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                        "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": [
                    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": [],
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```

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

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

                                        {
                                                            "ref": "PartitionResult"
                                                        },
                                                        "supportsFIPS"
                                                    ]
                                                },
                                                true
                                            ]
                                        }
                                    ],
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                                        {
                                            "conditions": [],
                                            "endpoint": {

                        "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                                "properties": {},
                                                "headers": {}
                                            },
```

```
                        "type": "endpoint"
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                "type": "tree"
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            {
                "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
                ]
                }
            ],
            "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"
            }
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        "type": "tree"
    },
    {
        "conditions": [],
        "error": "Invalid Configuration: Missing Region",
        "type": "error"
    }
]
},
"smithy.rules#endpointTests": {
    "testCases": [
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                  "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
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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
      }
    },
    {
      "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
      }
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```
    },
    {
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      "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"
        }
      },
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        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
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"endpoint": {
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        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
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      "expect": {
        "endpoint": {
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        }
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      },
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        "Region": "us-gov-east-1",
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false,
        "UseDualStack": true
      }
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    {
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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 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 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 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 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": {
```

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            "ProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
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 license
server.</p>"
                }
            },
            "Ipv6Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the license 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) license 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 server.</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
```

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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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
               }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {

            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
```

```
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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 the 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                    "smithy.api#required": {}
```

```
            }

        },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC
endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
         }
      }
   }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
```

```
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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

 // 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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

AWS SDK for Go

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AssociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper

RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutLicense
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legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
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CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
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RegisterServiceMetadata

legacyEndpointContextSetter
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setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
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ComputeContentLength
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UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
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InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
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Finalize stack step
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InterceptBeforeRetryLoop
Retry
InterceptAttempt
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AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
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legacyEndpointContextSetter
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OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop

```
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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. "
            }
          },
          "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. "
        }
      },
      "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":
 " An exception occurred with the service. ",
          "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": [
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                "conditions": [
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                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
                        ]
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                    "type": "error"
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                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true
                                    ]

}
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                            "type": "error"
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                                    "ref": "Endpoint"
                                },
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
```

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

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

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

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

```
                },
                {
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                  "argv": [
                    {
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                    },
                    true
                  ]
                }

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

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

                               {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                              ]
                            }
                          ]
                        }
                      ],
```

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

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

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

    "properties": {},
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                      },
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                  "type": "tree"
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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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          "type": "tree"
        },
        {
```

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                "conditions": [
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                        "argv": [
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                                "ref": "UseDualStack"
                            },
                            true

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

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

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

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                                "type": "tree"
                            },
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                                "conditions": [],
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                                "type": "error"
                            }
                        ],
                        "type": "tree"
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                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
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                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
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                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
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                "type": "tree"
            }
        ],
        "type": "tree"
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        "conditions": [],
        "error": "Invalid Configuration: Missing Region",
        "type": "error"
    }
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"type": "tree"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
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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
      }
    },
    {
      "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
        }
      },
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          "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"
            }
          },
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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": {
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              "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"
            }
          },
```

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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
      }
    },
    {
      "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 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 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 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. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The valid Operators for this filter are: \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#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " 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. "

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

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    },
    "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>"
          }
```

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            },
            "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",
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            "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",
```

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    "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"
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        },
        "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}$"
        }
```

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    },
    "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"
      },
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        "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": {}
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            }
          },
          "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>",
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            "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",
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                "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",
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        "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"
        }
    }
  }
}
```


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// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.104 aws-sdk-go-v2-internal-endpoints 2.7.14

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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
 return err
 }
 return nil
}

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

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

```
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
          }
        },
        "IsSharedActiveDirectory": {
          "target": "smithy.api#Boolean",
          "traits": {

       "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
                    }
                }
            },
            "DomainIpv6List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
            }
        },
        "OwnerAccountId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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#IpV6": {
         "type": "string",
         "traits": {
```

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            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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": {}
                        },
```

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                "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",
```

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            "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",
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"endpoint": {
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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": {
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            "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 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 disabled",
```

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                "expect": {
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                  }
                },
                "params": {
                  "Region": "us-iso-east-1",
                  "UseFIPS":
false,
                  "UseDualStack": false
                }
              },
              {
                "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 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 license
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 license
server.</p>"
            }
        },
        "Ipv6Address": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license server endpoint</p>"
                }
```

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        },
        "LicenseServers": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the license 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) license 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",
```

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                "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"
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        }
      },
      "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 server.</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> <ul> <li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                 }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from a previously truncated response.</p>"
                }
```

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            }
        },
        "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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
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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>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
from a previously truncated response.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
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            "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p> <ul> <li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul> <li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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",
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            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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
```

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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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
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            "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"
            },
```

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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>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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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 the 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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                "smithy.api#required": {}
              }

          },
            "Settings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
              "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC
endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li>
<p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to
remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC
endpoints.</p> </li> </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 require connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in your VPC and the VPC endpoints for activation servers. "
}
}
},

"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings such as the 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"
}
}
}
}
CreateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput

```
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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
```

AWS SDK for Go

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```
AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
```

GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
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Build stack step
ClientRequestID
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Finalize stack step
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InterceptBeforeRetryLoop
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ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
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Deserialize stack step
AddRawResponseToMetadata

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

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

```
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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 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 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 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 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",
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```
            "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"
            }
          ],
```

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        "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": {
```

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            "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"
          }
      }
  }
```

}
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// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

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

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APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following
boilerplate notice, with the fields enclosed by brackets "[]"
replaced with your own identifying information. (Don't include
the brackets!) The text should be enclosed in the appropriate
comment syntax for the file format. We also recommend that a
file or class name and description of purpose be included on the
same "printed page" as the copyright notice for easier
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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
```

```
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.105 aws-sdk-go-v2-service-internal-endpoint-discovery 1.11.14

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"
```

```
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
```

```
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
```

```
 return nil
}

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

AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
            }
          },
          "IsSharedActiveDirectory": {
            "target": "smithy.api#Boolean",
            "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
              }
            }
          },
          "DomainIpv6List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user
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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
 about the identity provider.</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
about 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}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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",
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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-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 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 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 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 disabled",
              "expect": {

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

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            "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 license
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 license
server.</p>"
                }
              },
              "Ipv6Address": {
                "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license 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 the 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 address 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 license server.</p>"
            }
          },
          "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
            }
          },
          "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the license 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) license 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 server.</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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
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
contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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",

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            "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from a previously truncated response.</p>"
```

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            }
          }
        },
        "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, there are additional elements that the service hasn't included in this request. Use this token with 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"
```

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            }
          ],
          "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": {
```

```
                "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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {}
               }
            },
```

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            "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": {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a reference to the 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": {
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            "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
              "smithy.api#required": {}
            }

          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings 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
              }
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            }
          }
        },
        "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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
          }
        }
      }
    }
  }
  CreateLicense
   Initialize stack step
    RegisterServiceMetadata
    legacyEndpointContextSetter
    SetLogger
    OperationInputValidation
   Serialize stack step
    setOperationInput
    ResolveEndpoint
    OperationSerializer
   Build stack step
    ClientRequestID
    ComputeContentLength
    SetCredentialSourceMiddleware
    UserAgent
    AddTimeOffsetMiddleware
    RecursionDetection
   Finalize stack step
    spanRetryLoop
    InterceptBeforeRetryLoop
    Retry
    InterceptAttempt
    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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
```

```
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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
```

AWS SDK for Go

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AssociateLicense

Initialize stack step

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

Serialize stack step

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
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RecursionDetection
Finalize stack step
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InterceptBeforeRetryLoop
Retry
InterceptAttempt
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InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
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ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
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AddTimeOffsetMiddleware
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RequestResponseLogger
ListReceivedLicenses
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Serialize stack step
setOperationInput
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ClientRequestID
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InterceptAttempt
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ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS

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

RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptors(stack, options); 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",
  "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 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 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 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 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"
        }
    }
  }
}
```

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// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.106 github.com/aws/aws-sdk-go-v2/service/internal/presigned-url 1.13.14

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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
DisassociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
```

ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
```

UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
            }
          },
          "IsSharedActiveDirectory": {
            "target": "smithy.api#Boolean",
            "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed
Active Directory. The default value is false.</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
```

```
                }
            }
        },
        "DomainIpv6List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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
```

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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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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": {
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                "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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
            }
        },
        "OwnerAccountId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
             "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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 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 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 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,
```

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                "UseDualStack": false
              }
            },
            {
              "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 license
server.</p>"
                }
              },
              "HealthStatus": {
                "target":
```

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 "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 license
server.</p>"
                }
            },
            "Ipv6Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address of the RDS license server endpoint.</p>"
                }
            },
```

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            "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 license server.</p>"
              }
            },
            "LicenseServerEndpointProvisioningStatus": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
              "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license server endpoint</p>"
              }
            },
            "LicenseServers": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
              "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the license 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) license 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 server.</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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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 details about the Active Directory identity providers that meet the request
 criteria.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
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            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, there are additional elements that the service hasn't included in this request. Use this token with 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",
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            "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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
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```
            "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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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 the 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"
```

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            },
            {
                "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                    "smithy.api#required": {}
                }

        },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings 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",
```

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            "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": {
```

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        "type": "union",

      "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure a 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": {
```

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                    "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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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"
        },
```

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        {
            "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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid
```

values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> "
                }
            },
            "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 subscription. "
                }
            }
        },
        "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": {

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            "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 provider.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
        }
      }
    }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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

 // 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

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

```
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read
```

```
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
AWS SDK for Go
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AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
CheckoutLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter

SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
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ErrorCloseResponseBody
CloseResponseBody
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RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength

SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
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Deserialize stack step
AddRawResponseToMetadata
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RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry

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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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",
```

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                "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",
```

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

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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": {

        "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"
          }
        }
      }
}
```


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```
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// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}
```

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

1.107 github.com/aws/aws-sdk-go-v2/service/sso 1.30.4

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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
DisassociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
```

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

```
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
                }
            },
            "IsSharedActiveDirectory": {
                "target": "smithy.api#Boolean",
                "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
                }
              }
            },
            "DomainIpv6List": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user
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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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
```

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state of the resource.</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": {}
        }
    },
```

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    "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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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>
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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 user administration in
 the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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"
            },
            {
```

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                "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> resource 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": {
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            "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": {
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            "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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": {
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            "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>"
                }
            },
```

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            "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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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
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about an identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered identity providers product related configuration settings, such as the subnets to provision VPC endpoints. ",

"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}

},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
},
"OwnerAccountId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AWS Account ID of the owner of this resource. "
}
}
},

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        "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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            },
            "OwnerAccountId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
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about 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>"
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        }
      },
      "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}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
      },
      "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"
  },
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```
        {
          "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 a per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
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    "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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                        "fn": "isSet",
                        "argv": [
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                                "ref": "Endpoint"
                            }
                        ]

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                "type": "error"
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                "conditions": [

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                    "argv": [
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                      },
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                    ]
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                "type": "error"
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                    "ref": "Endpoint"
                  },

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

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

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

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

                                {
                                                        "ref": "PartitionResult"
                                                    },
                                                    "supportsFIPS"
                                                ]
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                                            true
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                                ],
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                                            "headers": {}
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```
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                    "type": "tree"
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                    "type": "error"

}
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                    "argv": [
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                      },
                      true
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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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                  "rules": [
```

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

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                                "type": "error"
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                        "type": "tree"
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                        "conditions": [],
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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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        "conditions": [],
        "error": "Invalid Configuration: Missing Region",
        "type": "error"
    }
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"smithy.rules#endpointTests": {
    "testCases": [
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                  "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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                  "documentation": "For region us-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": {

  "endpoint": {
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```

```
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      "params": {
        "Region": "us-east-1",
        "UseFIPS": 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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    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
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"endpoint": {
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        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
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        },
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          "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
          }
        },
        {
          "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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"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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          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
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      },
      "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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        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "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 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 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 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": {
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            "ProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
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 license
server.</p>"
                }
            },
            "Ipv6Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the license 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) license 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",
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```
            "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 server.</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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
               }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
```

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            "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain details 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, there are additional elements that the service hasn't included in this request. Use this token with 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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {

            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
          },
          {
```

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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 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
```

```
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {}
               }
            },
```

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        "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 the 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"
            },
```

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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>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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                    "smithy.api#required": {}
```

```
            }

        },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC
endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
         }
      }
   }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
```

```
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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

 // 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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

AWS SDK for Go

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AssociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper

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

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

```
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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. "
            }
          },
          "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. "
        }
      },
      "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":
 " An exception occurred with the service. ",
          "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"

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    },
    {
      "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",
```

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            "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
                        ]
                    }

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                    "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
                      ]
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                },
                {
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                  "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"
                              ]
                            }
                          ]
                        }
                      ],
```

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

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

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

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

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

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

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

```
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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
      }
    },
    {
      "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"
                    }
                  },
```

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

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    "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"
      },
```

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        "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"
        }
    }
  }
}
```


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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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.108 github.com/aws/aws-sdk-go-v2/service/sts 1.41.1

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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
 return err
 }
 return nil
}

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

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

```
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
          }
        },
        "IsSharedActiveDirectory": {
          "target": "smithy.api#Boolean",
          "traits": {

       "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
                    }
                }
            },
            "DomainIpv6List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
            }
        },
        "OwnerAccountId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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#IpV6": {
         "type": "string",
         "traits": {
```

```
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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": {
```

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            "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 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 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 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 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"
              }
            },
            {
              "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 license
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 license
server.</p>"
            }
        },
        "Ipv6Address": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
                }
```

```
        },
        "LicenseServers": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the license 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) license 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 server.</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> <ul> <li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                 }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
```

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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>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
from a previously truncated response.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
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            "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p> <ul> <li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul> <li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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",
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```
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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
```

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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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
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            "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"
            },
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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>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",
```

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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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with the next request to retrieve additional objects.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#output":
 {}
      }
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    },
    "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": {
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            "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 the 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": {
```

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                "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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                "smithy.api#required": {}
              }

          },
            "Settings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
              "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration settings 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
```

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            },
            "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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC
endpoints. The security group should permit inbound TCP port 1688 communication from resources in the
VPC.</p>"
        }
     },
     "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input":
{
           "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
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        "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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours
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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",

 "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
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                "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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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": {}
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            }
          }
        },
        "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"
          }
        }
      },
```

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    "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li>
<p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to
remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC
endpoints.</p> </li> </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 require 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 your 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 the 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"
        }
    }
  }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
```

```
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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
```

AWS SDK for Go

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```
AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
```

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

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

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

```
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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 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 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 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 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"
      }
    }
  }
```

```
}
```

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```
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

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

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file or class name and description of purpose be included on the
same "printed page" as the copyright notice for easier
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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
```

```
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.109 github.com/aws/aws-sdk-go-v2/service/dynamodb 1.53.1

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"
```

```
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
```

```
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
```

```
 return nil
}

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

```
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
ListLicenses
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
            }
          },
          "IsSharedActiveDirectory": {
            "target": "smithy.api#Boolean",
            "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
              }
            }
          },
          "DomainIpv6List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user
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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
 about the identity provider.</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
about 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}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
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    "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
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            {
                "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"
      },
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        "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": [
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          "content-type",
          "x-amz-content-sha256",
          "x-amz-user-agent",
          "x-amzn-platform-id",
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                "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 a 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",
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            "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": [
                  {
                    "ref": "Endpoint"
                  }
                ]

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

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

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

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

```
                                    }

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

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

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

                            {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                  ]
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                                true
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                            }
                          ],
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                              "conditions": [],
                              "endpoint": {

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                                "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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                          "argv": [
                            {
                              "ref": "UseDualStack"
                            },
                            true
                          ]
                        }
```

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                    ],
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                        {

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

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                                }
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                                {
                                    "conditions": [],
                                    "endpoint": {
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
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                            ],
                            "type": "tree"
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                            "type": "error"
                        }
                    ],
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                {
                    "conditions": [],
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```
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                            "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
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            "type": "tree"
        },
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            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
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"smithy.rules#endpointTests": {
    "testCases": [
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"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",
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            "UseFIPS": 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-user-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": {
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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-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": {
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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": {
          "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
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        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
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    {
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        }
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        "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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        }
      },
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          "expect": {

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            }
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            "UseFIPS": true,
            "UseDualStack": false
          }
        },
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            }
          },
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false,
            "UseDualStack": true
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            }
          },
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            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "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"
                }
              },
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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 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 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 disabled",
              "expect": {

      "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                }
              },
              "params": {
                "Region": "us-isob-east-1",
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                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
            "expect": {
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                    "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",
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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.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 license
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 license
server.</p>"
                }
              },
              "Ipv6Address": {
                "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license 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 the 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 address 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": {
```

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            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code>
 resource for the RDS license server.</p>"
            }
          },
          "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
            }
          },
          "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the license 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) license 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 server.</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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
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
contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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",

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            "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from a previously truncated response.</p>"
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            }
          }
        },
        "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, there are additional elements that the service hasn't included in this request. Use this token with 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"
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            }
          ],
          "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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {}
               }
            },
```

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            "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": {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a reference to the 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": {
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            "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
              "smithy.api#required": {}
            }

         },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
          }
        }
      }
    }
  }
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
```

```
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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
```

AWS SDK for Go

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AssociateLicense

Initialize stack step

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

Serialize stack step

setOperationInput

ResolveEndpoint

OperationSerializer

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

spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
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ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
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SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS

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

RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
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InterceptBeforeRetryLoop
Retry
InterceptAttempt
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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptors(stack, options); 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",
  "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"
                                        }
                                    ]
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                            "rules": [
                                {
```

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

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        "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": {
```

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            "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": {
```

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            "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"
        }
    }
  }
}
```

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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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.110 aws-sdk-go-v2-service-sts 1.41.1

1.110.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
DisassociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
```

ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
```

UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
            }
          },
          "IsSharedActiveDirectory": {
            "target": "smithy.api#Boolean",
            "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed
Active Directory. The default value is false.</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
```

```
                }
            }
        },
        "DomainIpv6List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user administration.</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> resource 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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
            }
        },
        "OwnerAccountId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
             "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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": {
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                "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":
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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": {
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            "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 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 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 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,
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            "UseDualStack": false
          }
        },
        {
          "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 license
server.</p>"
                }
              },
              "HealthStatus": {
                "target":
```

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 "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 license
server.</p>"
                }
            },
            "Ipv6Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address of the RDS license server endpoint.</p>"
                }
            },
```

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            "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 license server.</p>"
               }
            },
            "LicenseServerEndpointProvisioningStatus": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
               "traits": {
                  "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license server endpoint</p>"
               }
            },
            "LicenseServers": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the license 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) license server.</p>"
         }
```

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    },
    "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 server.</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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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 details about the Active Directory identity providers that meet the request
 criteria.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
```

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            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, there are additional elements that the service hasn't included in this request. Use this token with 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",
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            "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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
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```
            "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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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 the 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"
```

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            },
            {
               "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                  "smithy.api#required": {}
               }

          },
            "Settings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
               "traits": {
                  "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings 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": {
```

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        "type": "union",

      "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure a 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": {
```

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                    "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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid
```

values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> "
                }
            },
            "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 subscription. "
                }
            }
        },
        "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 provider.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
        }
      }
    }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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

 // 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

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

```
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read
```

```
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
AWS SDK for Go
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Copyright 2014-2015 Stripe, Inc.
AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
CheckoutLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter

SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
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ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength

SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
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AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry

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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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",
```

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                                    "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
        }
    },
    {
```

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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 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 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 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 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": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client"
}
}
}
}
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// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptors(stack, options); err != nil {
 return err
}
return nil
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}
```

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

1.111 github.com/aws/aws-sdk-go-v2/feature/ec2/imds 1.18.14

1.111.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
DisassociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
```

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

```
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
                }
            },
            "IsSharedActiveDirectory": {
                "target": "smithy.api#Boolean",
                "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
                }
              }
            },
            "DomainIpv6List": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user
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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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>
```

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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 user administration in
 the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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"
            },
            {
```

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                "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> resource 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": {
```

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            "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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": {
```

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            "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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered identity providers product related configuration settings, such as the subnets to provision VPC endpoints. ",

"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}

},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
},
"OwnerAccountId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AWS Account ID of the owner of this resource. "
}
}
},

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        "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>"
                }
```

```
            },
            "OwnerAccountId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
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about the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "

```
        }
      },
      "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}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
```

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"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 a per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
```

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    "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"
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                  {
                    "conditions": [],
                    "error": "FIPS is enabled but this partition does not support FIPS",
                    "type": "error"

}
                ],
                "type": "tree"
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              {
                "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 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 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 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 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 license
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 license
server.</p>"
                }
            },
            "Ipv6Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the license 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) license 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",
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                "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": {}
              }
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            },
            "ServerSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your server.</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
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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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
               }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
```

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            "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain details 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
          },
          {
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                "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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
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```
      "type": "structure",

    "members": {
        "InstanceSummaries": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
        },
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            {
                "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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {

            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
a previously truncated response.</p>"
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            }
          }
        },
        "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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
          },
          {
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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 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
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            "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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with the next request to retrieve additional objects.</p>"
          }
        }
      },
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        "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": {
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            "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"
            }
```

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        ],
        "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> <ul>
<li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </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 from 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {}
               }
            },
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        "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>"
          }
        },
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            "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 the 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"
            },
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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>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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                    "smithy.api#required": {}
```

```
            }

        },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC
endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
         }
      }
   }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
```

```
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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

 // 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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

AWS SDK for Go

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AssociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
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RequestIDRetriever
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InterceptAttempt
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Signing
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AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID

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

```
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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. "
            }
          },
          "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. "
        }
      },
      "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":
 " An exception occurred with the service. ",
          "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"
                            },
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                        ]
                    }

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                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
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                    "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"
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            }
          ],
          "type": "tree"

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

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

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

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

                               {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                              ]
                            }
                          ]
                        }
                      ],
```

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                "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"
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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
                ]
              }
            ],
            "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"
                    }
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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

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

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

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

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        {
          "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 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 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 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 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"
        }
    }
  }
}
```


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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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.112 github.com/aws/aws-sdk-go-v2/service/dynamodbstreams 1.32.5

1.112.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
 return err
 }
 return nil
}

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

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

```
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
          }
        },
        "IsSharedActiveDirectory": {
          "target": "smithy.api#Boolean",
          "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
                    }
                }
            },
            "DomainIpv6List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
            }
        },
        "OwnerAccountId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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#IpV6": {
         "type": "string",
         "traits": {
```

```
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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"
    }
],
```

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                "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",
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                "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": {

    "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",
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"endpoint": {
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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": {
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                    }
                },
                "params": {
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            "Region": "us-gov-east-1",
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            "UseDualStack": false
          }
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          "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 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 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 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 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"
                  }
                },
                {
                  "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": {
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```
                        "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 license
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 license
server.</p>"
            }
        },
        "Ipv6Address": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
                }
```

```
        },
        "LicenseServers": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the license 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) license 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 server.</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> <ul> <li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                 }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
```

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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>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
from 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> <ul> <li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul> <li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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",
```

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            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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
```

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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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
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            "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"
            },
```

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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>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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {
```

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            "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 the 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": {
```

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                "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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                "smithy.api#required": {}
              }

          },
            "Settings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
              "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration settings 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
```

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            },
            "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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC
endpoints. The security group should permit inbound TCP port 1688 communication from resources in the
VPC.</p>"
        }
     },
     "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input":
{
           "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
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        "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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",

 "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
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```
                "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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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": {}
```

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            }
          }
        },
        "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li>
<p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to
remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC
endpoints.</p> </li> </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 require connectivity to activation servers. ",
                "smithy.api#required": {}
              }
            },
            "RemoveSubnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": " The ID of one or more subnets to remove. ",
                "smithy.api#required": {}
              }
            },
            "SecurityGroupId": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
              "traits": {
                "smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in your VPC and the VPC endpoints for activation servers. "
              }
            }
          },

          "traits": {
            "smithy.api#documentation": " Updates the registered identity providers product related configuration settings such as the 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"
          }
        }
      }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput

```
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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
```

AWS SDK for Go

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```
AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
```

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

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

```
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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 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 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 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 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"
      }
    }
  }
```

}
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// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
```

```
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.113 github.com/aws/aws-sdk-go-v2/service/s3 1.91.1

1.113.1 Available under license :

```
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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"
```

```
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
```

```
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
```

```
 return nil
}

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

AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
            }
          },
          "IsSharedActiveDirectory": {
            "target": "smithy.api#Boolean",
            "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
              }
            }
          },
          "DomainIpv6List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user
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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
            }
        },
        "OwnerAccountId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
             "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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": {
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            "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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",
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```
            "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",
```

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            "type": "error"
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        {
            "conditions": [],
            "endpoint": {
                "url": {
                    "ref": "Endpoint"
                },

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

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                    "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": [],
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                                            "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": [

        {
                                        "ref": "UseFIPS"
                                    },
                                    true
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "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"
                    },
                    {
                      "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",
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            "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",
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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": {
              "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 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 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 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 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 license
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 license
server.</p>"
                }
              },
              "Ipv6Address": {
                "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license 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 the 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 address 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 license server.</p>"
            }
          },
          "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
            }
          },
          "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the license 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) license 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 server.</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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with the next
request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
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    },
    "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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with the next
request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
```

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        "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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
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
contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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",

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            "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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from a previously truncated response.</p>"
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            }
          }
        },
        "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, there are additional elements that the service hasn't included in this request. Use this token with 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"
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            }
          ],
          "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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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": {}
               }
            },
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```
            "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 the 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
              "smithy.api#required": {}
            }

          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
          }
        }
      }
    }
  }
  CreateLicense
   Initialize stack step
    RegisterServiceMetadata
    legacyEndpointContextSetter
    SetLogger
    OperationInputValidation
   Serialize stack step
    setOperationInput
    ResolveEndpoint
    OperationSerializer
   Build stack step
    ClientRequestID
    ComputeContentLength
    SetCredentialSourceMiddleware
    UserAgent
    AddTimeOffsetMiddleware
    RecursionDetection
   Finalize stack step
    spanRetryLoop
    InterceptBeforeRetryLoop
    Retry
    InterceptAttempt
    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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
```

```
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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
```

AWS SDK for Go

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AssociateLicense

Initialize stack step

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

Serialize stack step

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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CheckoutLicense
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Serialize stack step
setOperationInput
ResolveEndpoint
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Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
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Finalize stack step

spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
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ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
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AddTimeOffsetMiddleware
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Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS

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

RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptors(stack, options); 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",
  "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 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 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 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 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"
        }
    }
  }
}
```

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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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.114 aws-sdk-go-v2-service-internal-presigned-url 1.13.14

1.114.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
DisassociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
```

ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
```

UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
            }
          },
          "IsSharedActiveDirectory": {
            "target": "smithy.api#Boolean",
            "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed
Active Directory. The default value is false.</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
```

```
                }
            }
        },
        "DomainIpv6List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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
```

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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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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": {
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                "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": {
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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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets to provision VPC endpoints.</p>",

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

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            "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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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": {
```

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        "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>"
          }
        },
        "OwnerAccountId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
          }
        },
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
           "traits": {
            "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-
F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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"
            },
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            "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": [
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```
{
                        "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 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 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 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 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 license
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 license
server.</p>"
                }
            },
            "Ipv6Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license server endpoint</p>"
                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the license 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) license 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 server.</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> <ul>
<li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from
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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul>
<li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with 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 the 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                  "smithy.api#required": {}
               }

          },
            "Settings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
               "traits": {
                  "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid
```

values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> "
                }
            },
            "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 subscription. "
                }
            }
        },
        "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 provider.</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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
        }
      }
    }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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

 // 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

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

```
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read
```

```
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
AWS SDK for Go
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AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
CheckoutLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter

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

SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
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```
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Deserialize stack step
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 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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": [
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                                "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": {
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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
        }
    },
    {
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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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                    "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 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 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 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"
            }
        },
```

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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": {

      "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"
          }
        }
      }
}
```


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// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptors(stack, options); err != nil {
 return err
}
return nil
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}
```

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

1.115 github.com/aws/aws-sdk-go-v2/service/internal/endpoint-discovery 1.11.14

1.115.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
 return err
 }
 return nil
}

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

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

```
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
 }
 return nil
}

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

```
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
                }
            },
            "IsSharedActiveDirectory": {
                "target": "smithy.api#Boolean",
                "traits": {

        "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed
Active Directory. The default value is false.</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
                    }
                }
            },
            "DomainIpv6List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user
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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
            }
        },
        "OwnerAccountId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details about the identity provider.</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 about 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}$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
           }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IpV6": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
          }
```

```
},
"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 a per user subscription fee on Amazon EC2 instances.</p>",
          "smithy.api#title": "AWS License Manager User Subscriptions",
          "smithy.rules#endpointRuleSet": {
            "version": "1.0",
```

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            "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"
        }
    ]
},
```

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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
              }
            },
            {
              "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 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 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 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 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 license
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 license
server.</p>"
          }
        },
        "Ipv6Address": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
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 the 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 address 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 license server.</p>"
          }
        },
        "LicenseServerEndpointProvisioningStatus": {
          "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
          "traits": {
            "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
server endpoint</p>"
          }
        },
        "LicenseServers": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the license 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) license 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": {
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                "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 server.</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> <ul> <li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
             }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
        "type": "structure",
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        "members": {
          "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain details 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, there are additional elements that the service hasn't included in this request. Use this token with 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
from 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> <ul>
<li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
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        }
      },
      "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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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"
          },
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      {
            "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> <ul>
<li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
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            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code>
 </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
from 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, there are additional elements that the service hasn't included in this request. Use this token with the next
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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",
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            "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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",
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            "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 the 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",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                "smithy.api#required": {}
              }

          },
            "Settings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
              "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC
endpoints. The security group should permit inbound TCP port 1688 communication from resources in 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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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": {
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```
        "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"
        },
        {
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                "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": {}
        }
    },
```

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    "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": {
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            "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"
```

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        },
        "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 provider.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </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 require 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 your 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 the 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"
          }
        }
    }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
```

```
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); err != nil {
 return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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
```

AWS SDK for Go

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AssociateLicense

Initialize stack step

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

Serialize stack step

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

SetCredentialSourceMiddleware

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AddTimeOffsetMiddleware

RecursionDetection

Finalize stack step

spanRetryLoop

InterceptBeforeRetryLoop

Retry

InterceptAttempt

RetryMetricsHeader

ResolveAuthScheme

GetIdentity

ResolveEndpointV2

disableHTTPS

ComputePayloadHash

setLegacyContextSigningOptions

Signing

Deserialize stack step

AddRawResponseToMetadata

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RecordResponseTiming
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CheckoutLicense
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ErrorCloseResponseBody
CloseResponseBody
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ListReceivedLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
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setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
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Finalize stack step
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Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
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AddTimeOffsetMiddleware
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RequestResponseLogger
GetLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
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Serialize stack step
setOperationInput
ResolveEndpoint

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

```
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptors(stack, options); 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",
  "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",
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```
            "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-
```

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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"
        },
```

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    {
      "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"
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        ],
        "type": "tree"

    }
    ],
    "type": "tree"
},
{
    "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": [
                        {
                            "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": [
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                            "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": [],
                                "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"
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                },
                {
                  "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": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
                ],
                "type": "tree"
            }
        ],
        "type": "tree"
    },
    {
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        "error": "Invalid Configuration: Missing Region",
        "type": "error"
    }
],
"type": "tree"
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]
},
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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",
        "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 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 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 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 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 \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": " 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. "
}

```
            }
        }
    },
    "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"
         }
      }
   }
}
```


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// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

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 "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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
 return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

1.116 aws-sdk-go-v2-internal-v4a 1.4.14

1.116.1 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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.
//
// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); err != nil {
  return err
 }
 return nil
}

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

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

```
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
}
if err = addInterceptors(stack, options); err != nil {
 return err
}
return nil
```

```
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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.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 the Active Directory, including network access details such as domain name and IP addresses, 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 Amazon Web Services Managed Active Directory.</p>"
          }
        },
        "IsSharedActiveDirectory": {
          "target": "smithy.api#Boolean",
          "traits": {

      "smithy.api#documentation": "<p>Whether this directory is shared from an Amazon Web Services Managed Active Directory. The default value is false.</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
                    }
                }
            },
            "DomainIpv6List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv6 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 information 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 subnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for user 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"
```

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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>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48
hours 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 monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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 resource.</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 about a registered identity provider. In the case of
Active Directory, that can be a 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 settings include the type of license server and the Secrets Manager
 secret that enables administrators to add or remove users associated with the license 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 user administration in
 the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user
administration.</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> resource 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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 or list operation. You can use filters can be used to match a set
 of resources by specific criteria, 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 and 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 an 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 identity providers product related configuration settings, such as the subnets 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>"
            }
        },
        "OwnerAccountId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</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>"
              }
            },
            "OwnerAccountId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AWS Account ID of the owner of this resource.</p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
about the identity provider.</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
about 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#IpV6": {
         "type": "string",
         "traits": {
```

```
            "smithy.api#pattern": "^([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4}|::|::[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV6List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV6"
        }
    },
    "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 a 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": {},
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```
                "headers": {}
              },
              "type": "endpoint"
            }

        ],
            "type": "tree"
          },
          {
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            "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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      {
        "conditions": [
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            "fn": "booleanEquals",
            "argv": [

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

          {
                        "ref": "PartitionResult"
                      },
                      "supportsFIPS"
                    ]
                  },
                  true
                ]
```

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

        "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
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            "type": "tree"
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            "type": "error"

}
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
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                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],
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                        {
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                            "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": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "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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              {
                "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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                    "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",
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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-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",
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"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": {
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            "Region": "us-gov-east-1",
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            "UseDualStack": false
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          "expect": {
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            }
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          "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 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 disabled",
```

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            "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 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 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"
              }
            },
            {
              "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 license
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 license
server.</p>"
            }
        },
        "Ipv6Address": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv6 addresses that are used for the RDS license
server.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
server.</p>"
     }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
    "type": "structure",
```

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        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's associated with the 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 address 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 license server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license server endpoint</p>"
                }
```

```
            },
            "LicenseServers": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the license 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) license 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 server.</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> <ul> <li> <p>Product</p> </li> <li> <p>DirectoryId</p> </li> </ul>"
                 }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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 details 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, there are additional elements that the service hasn't included in this request. Use this token with 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
from 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> <ul> <li> <p>Status</p> </li> <li> <p>InstanceId</p> </li> </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 about the instances that provide user-based subscriptions and also meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul> <li> <p>IdentityProviderArn</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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 contain detailed information about the RDS License Servers that meet the 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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> <ul> <li> <p>Status</p> </li> <li> <p>Username</p> </li> <li> <p>Domain</p> </li> </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken from 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, there are additional elements that the service hasn't included in this request. Use this token with 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 the 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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </p>",
                "smithy.api#required": {}
              }

          },
            "Settings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
              "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration settings 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 a 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 your 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 subnets to provision VPC endpoints, and the security group ID that is associated with the VPC
endpoints. The security group should permit inbound TCP port 1688 communication from resources in the
VPC.</p>"
        }
     },
     "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input":
{
           "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
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```
        "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> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours 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 monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </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> <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 subscription.</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 provider.</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> <p>Valid
values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | <code>REMOTE_DESKTOP_SERVICES</code> </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 update any combination of settings in a single operation such as the:</p> <ul> <li>
<p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to
remove the VPC endpoints from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC
endpoints.</p> </li> </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 require 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 your 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 the 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"
        }
    }
  }
}
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
```

```
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  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]


permissions:
 contents: read

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
```

AWS SDK for Go

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```
AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
```

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

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

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

```
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
Finalize stack step
 spanRetryLoop
 InterceptBeforeRetryLoop
 Retry
 InterceptAttempt
 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"
)

// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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",
  "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": [],
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      {
        "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": [],
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                                    {
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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",
```

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      "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",
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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 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 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 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 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"
          }
      }
  }
```

}
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// 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

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

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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 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 = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
```

```
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); 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 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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack,
 options); 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/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 = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptors(stack, options); err != nil {
  return err
 }
 return nil
}

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

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