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Upstream-Name: liblz4

Upstream-Contact: Yann Collet <Cyan4973@github.com>

Source: <https://github.com/lz4/lz4>

Files: *

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1.8 tre 0.8.0-r2

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1.9 httpsnoop 1.0.4

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src/sha2.c

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man/sha2.3

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src/helper.c

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1.11 zlib 1.3.1

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1.12 google-uuid 1.6.0

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man/bitstring.3bsd

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man/humanize_number.3bsd

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man/fparseln.3bsd
man/tree.3bsd
src/fparseln.c

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man/readpassphrase.3bsd
man/strncpy.3bsd
man/strtonum.3bsd
src/arc4random.c
src/arc4random_linux.h
src/arc4random_uniform.c
src/arc4random_unix.h
src/arc4random_win.h
src/closefrom.c
src/freezero.c
src/getentropy_aix.c
src/getentropy_bsd.c
src/getentropy_hpux.c
src/getentropy_hurd.c
src/getentropy_linux.c
src/getentropy_osx.c
src/getentropy_solaris.c
src/getentropy_win.c
src/readpassphrase.c
src/reallocarray.c
src/recallocarray.c
src/strlcat.c

src/strncpy.c

test/explicit_bzero.c

test/strtonum.c

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1.16 github.com/hashicorp/go-secure-stdlib/strutil 0.1.2

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1.18 sirupsen-logrus 1.9.3

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1.19 go-multierror 1.1.1

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1.24 alpine-keys 2.5-r0

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Maintainer: Natanael Copa <ncopa@alpinelinux.org>

pkgname=alpine-keys

pkgver=2.5

pkgrel=0

pkgdesc="Public keys for Alpine Linux packages"

url="https://alpinelinux.org"

we install arch specific keys to /etc so we cannot do arch=noarch

arch="all"

license="MIT"

replaces="alpine-base"

1.25 go-rootcerts 1.0.2

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1.26 pam 1.6.1-r1

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1.27 zlib 1.3.1-r2

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1.28 bash 5.2.37-r0

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@c ispell-local-pdict: "ispell-dict"
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1.31 skalibs 2.14.3.0-r0

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1.32 utmps 0.1.2.3-r2

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1.33 ncurses 6.5_p20241006-r3

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1.35 iputils 20240905-r0

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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
"
buildddir="$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"
buildid="$srcdir/${_pkgreal}-$pkgver"

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

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

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

sha512sums="
d0032d41c7c0468ed1c6d8f57b885f6cb97a5039d754c8cb60b2067daedaf53bd15fb6561a3d0f828df16dfa5417f663b
8065ba65f4fea16dc9262728b3b6b85

```

```

BSD-Resource-1.2911.tar.gz
"
# Contributor: Fabian Affolter <fabian@affolter-engineering.ch>
# Maintainer: Fabian Affolter <fabian@affolter-engineering.ch>
pkgname=py3-flake8-copyright
_pkgname=flake8-copyright
pkgver=0.2.4
pkgrel=3
pkgdesc="Extension for flake8 which checks for copyrights"
options="!check" # No testsuite
url="https://github.com/savoirfairelinux/flake8-copyright"
arch="noarch"
license="MIT"
depends="py3-flake8 py3-setuptools"
makedepends="py3-gpep517 py3-wheel"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/${_pkgname:0:1}/${_pkgname}/${_pkgname}-${pkgver}.tar.gz"
builddir="$srcdir"/$_pkgname-$pkgver

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

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

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

sha512sums="
a6ab47e1bb715618f075c51f398e18180404871b3b0faf1c2d30701d5203db6bc23771bf22ffb5bafcd8ee856b9b64237
b316bd503ae7dceed6ca284ccd5a74d
flake8-copyright-0.2.4.tar.gz
"
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```

# Contributor: Dhruvin Gandhi <contact@dhruvin>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=py3-license-expression
_pkgname=license_expression
pkgver=30.4.0
pkgrel=0
pkgdesc="Library to parse, compare, simplify and normalize license expressions"
url="https://github.com/nexB/license-expression"
arch="noarch"
license="Apache-2.0"
depends="python3 py3-boolean.py"
makedepends="py3-setuptools py3-setuptools_scm py3-gp517 py3-wheel"
checkdepends="py3-pytest py3-pytest-xdist"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/l/_pkgname/_pkgname-$pkgver.tar.gz"
buildid="$srcdir/_pkgname-$pkgver"

build() {
    gp517 build-wheel \
        --wheel-dir .dist \
        --output-fd 3 3>&1 >&2
}

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

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

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

# Contributor: Maxim Karasev <begs@disroot.org>
# Maintainer: mio <miyopan@e.email>
pkgname=bsd-games
pkgver=3.3
pkgrel=2
pkgdesc="traditional text mode games from BSD"
url="https://bsd-games.sourceforge.io/"
arch="all"
license="BSD-3-Clause"

```

```

install="$pkgname.post-install"
makedepends="ncurses-dev coreutils" # configure causes busybox expr error
subpackages="$pkgname-doc"
source="https://sourceforge.net/projects/bsd-games/files/bsd-games-$pkgver.tar.gz
0001-bsd-games-scores-dir.patch
"
options="!check" # no tests

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

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

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

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

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

```

```

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

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

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

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

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

mini_sendmail - accept email on behalf of real sendmail

```

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1.37 libncursesw 6.5_p20241006-r3

1.37.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
# ncurses 6.5 - patch 20241006 - Thomas E. Dickey
#
# -----
#
# Ncurses 6.5 is at
# https://invisible-island.net/archives/ncurses/
# https://invisible-mirror.net/archives/ncurses/
# https://ftp.gnu.org/gnu/ncurses/
#
# Patches for ncurses 6.5 can be found at
# https://invisible-island.net/archives/ncurses/6.5
# https://invisible-mirror.net/archives/ncurses/6.5
#
# -----
# https://invisible-island.net/archives/ncurses/6.5/ncurses-6.5-20241006.patch.gz
# patch by Thomas E. Dickey <dickey@invisible-island.net>
# created Sun Oct 6 23:44:01 UTC 2024
# -----
# NEWS | 6 +++
# VERSION | 2 -
# c++/cursesf.cc | 6 +--
# c++/cursesf.h
# | 6 +--
# c++/cursesm.cc | 6 +--
# c++/cursesm.h | 6 +--
# c++/cursesp.cc | 6 +--
# c++/cursespad.cc | 6 +--
# c++/cursslk.cc | 12 +++----
# c++/cursslk.h | 6 +--
# dist.mk | 4 +-
# misc/terminfo.src | 23 ++++++++--
# ncurses/base/lib_screen.c | 4 +-
# ncurses/base/new_pair.c | 4 +-

```

```

# ncurses/curses.priv.h      | 4 +-
# ncurses/new_pair.h         | 4 +-
# ncurses/tinfo/trim_sgr0.c  | 7 +++-
# ncurses/tty/lib_twait.c    | 6 +--
# package/debian-mingw/changelog | 4 +-
# package/debian-mingw64/changelog | 4 +-
# package/debian/changelog    | 4 +-
# package/mingw-ncurses.nsi    | 4 +-
# package/mingw-ncurses.spec   | 2 -
# package/ncurses.spec        | 2 -
# package/ncursetest.spec      |
2 -
# test/blue.c                 | 10 +++--
# test/bs.c                    | 8 +++-
# test/cardfile.c              | 12 +++----
# test/chgat.c                 | 6 +--
# test/clip_printw.c           | 8 +++-
# test/color_name.h            | 6 +--
# test/demo_defkey.c           | 4 +-
# test/demo_forms.c            | 22 ++++++-----
# test/demo_menus.c            | 32 ++++++++-----
# test/demo_new_pair.c         | 4 +-
# test/demo_panels.c           | 16 +++++--
# test/demo_termcap.c          | 18 +++++--
# test/demo_terminfo.c         | 18 +++++--
# test/dots.c                  | 6 +--
# test/dots_mvcur.c            | 6 +--
# test/dots_termcap.c          | 8 +++-
# test/dup_field.c             | 14 +++++--
# test/filter.c                | 6 +--
# test/form_driver_w.c         | 6 +--
# test/gdc.c                   | 10 +++--
# test/inch_wide.c             | 6 +--
# test/inchs.c                 | 6 +--
# test/ins_wide.c              | 6 +--
# test/insdelln.c              | 8 +++-
# test/inserts.c               | 6 +--
# test/knight.c                | 7 +++-
# test/list_keys.c             | 8 +++-
# test/move_field.c            | 18 +++++--
# test/movewindow.c           | 16 +++++--
# test/ncurses.c               | 61 ++++++-----
# test/padview.c               | 12 +++--
# test/parse_rgb.h             | 6 +--
# test/picsmap.c               | 14 +++++--
# test/popup_msg.c             | 8 +++-
# test/popup_msg.h             | 6 +--

```

```

# test/railroad.c      |  6 +--
# test/rain.c          | 20 ++++++-----
# test/redraw.c        |  6 +--
# test/savescreen.c    | 14 +++++----
# test/tclock.c        |  4 +-
# test/test.priv.h
    | 10 +++---
# test/test_add_wchstr.c |  6 +--
# test/test_addchstr.c  |  6 +--
# test/test_addstr.c    |  6 +--
# test/test_addwstr.c   |  6 +--
# test/test_endwin.c    |  6 +--
# test/test_get_wstr.c  |  8 ++--
# test/test_getstr.c    |  8 ++--
# test/test_instr.c     |  8 ++--
# test/test_inwstr.c    |  8 ++--
# test/test_mouse.c     |  4 +-
# test/test_opaque.c    |  8 ++--
# test/test_sgr.c       | 26 ++++++-----
# test/test_tparm.c     | 12 +++----
# test/test_vidputs.c   |  6 +--
# test/testcurs.c       |  8 ++--
# test/testscanw.c      |  6 +--
# test/view.c          | 21 ++++++-----
# 83 files changed, 392 insertions(+), 369 deletions(-)
# -----
Index: NEWS
Prereq:
1.4185
--- ncurses-6.5-20240928+/NEWS 2024-09-28 20:27:44.000000000 +0000
+++ ncurses-6.5-20241006/NEWS 2024-10-06 08:53:45.000000000 +0000
@@ -26,7 +26,7 @@
-- sale, use or other dealings in this Software without prior written    --
-- authorization.                                                         --
-----
--- $Id: NEWS,v 1.4185 2024/09/28 20:27:44 tom Exp $
+-- $Id: NEWS,v 1.4188 2024/10/06 08:53:45 tom Exp $
-----

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

+20241006
+ + fixes for compiler warnings/cppcheck.
+ + use xterm+alt+title in wezterm -TD
+

```


20240928

+ improve error-message from infocmp when a terminal entry cannot be opened (patch by Branden Robinson).

Index:

VERSION

--- ncurses-6.5-20240928+/VERSION 2024-09-28 09:53:21.000000000 +0000

+++ ncurses-6.5-20241006/VERSION 2024-10-06 08:53:45.000000000 +0000

@@ -1 +1 @@

-5:0:10 6.5 20240928

+5:0:10 6.5 20241006

Index: c++/cursesf.cc

Prereq: 1.26

--- ncurses-6.5-20240928+/c++/cursesf.cc 2021-04-17 18:11:08.000000000 +0000

+++ ncurses-6.5-20241006/c++/cursesf.cc 2024-10-05 22:47:12.000000000 +0000

@@ -1,6 +1,6 @@

// * this is for making emacs happy: -*-Mode: C++;-*-

/*****

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* *

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@@ -36,7 +36,7 @@

#include "cursesf.h"

#include "cursesapp.h"

-MODULE_ID("\$Id: cursesf.cc,v 1.26 2021/04/17 18:11:08 tom Exp \$")

+MODULE_ID("\$Id: cursesf.cc,v 1.27 2024/10/05 22:47:12 tom Exp \$")

NCursesFormField::~NCursesFormField () THROWS(NCursesException)

{

@@ -76,7 +76,7 @@

void NCursesForm::setDefaultAttributes()

{

- NCursesApplication* S = NCursesApplication::getApplication();

+ const NCursesApplication* S = NCursesApplication::getApplication();

int n = count();

if (n > 0) {

Index: c++/cursesf.h

Prereq: 1.39

--- ncurses-6.5-20240928+/c++/cursesf.h 2022-08-20 20:52:15.000000000 +0000

+++ ncurses-6.5-20241006/c++/cursesf.h 2024-10-05 22:47:12.000000000 +0000

@@ -1,7 +1,7 @@

// * This makes emacs happy -*-Mode: C++;-*-

// vile:cppmode

/*****

```

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Foundation, Inc. *
*
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@@ -33,7 +33,7 @@
* Author: Juergen Pfeifer, 1997 *
*****/

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

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

inline void *get_user() {
- UserHook* uptr = reinterpret_cast<UserHook*> (::form_userptr (form));
+ const UserHook* uptr = reinterpret_cast<UserHook*> (::form_userptr (form));
assert (uptr != 0 && uptr->m_back==this && uptr->m_owner==form);
return uptr->m_user;
}
Index: c++/cursesm.cc
Prereq: 1.27
--- ncurses-6.5-20240928+/c++/cursesm.cc 2021-04-17 18:11:08.000000000 +0000
+++ ncurses-6.5-20241006/c++/cursesm.cc 2024-10-05
22:47:12.000000000 +0000
@@@ -1,6 +1,6 @@@
// * this is for making emacs happy: -*-Mode: C++;-*-
/*****
- * Copyright 2019-2020,2021 Thomas E. Dickey *
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*
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@@@ -36,7 +36,7 @@@
#include "cursesm.h"
#include "cursesapp.h"

-MODULE_ID("$Id: cursesm.cc,v 1.27 2021/04/17 18:11:08 tom Exp $")
+MODULE_ID("$Id: cursesm.cc,v 1.28 2024/10/05 22:47:12 tom Exp $")

NCursesMenuItem::~NCursesMenuItem() THROWS(NCursesException)
{
@@@ -168,7 +168,7 @@@
void

```

```

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

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

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

inline void *get_user() {
- UserHook* uptr = STATIC_CAST(UserHook*)(::menu_userptr (menu));
+ const UserHook* uptr = STATIC_CAST(UserHook*)(::menu_userptr (menu));
  assert (uptr != 0 && uptr->m_back==this && uptr->m_owner==menu);
  return uptr->m_user;
}
Index: c++/curses.h
Prereq: 1.27
--- ncurses-6.5-20240928+/c++/curses.h 2020-02-02 23:34:34.000000000 +0000
+++ ncurses-6.5-20241006/c++/curses.h 2024-10-05 22:47:12.000000000 +0000
@@ -1,6 +1,6 @@
// * this is for making emacs happy: -*-Mode: C++;-*-
/*****
- * Copyright 2019,2020 Thomas E. Dickey                *
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```

```

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*
*
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@@ -35,7 +35,7 @@
#include "internal.h"
#include "curses.h"

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

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

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

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

#include <curses.h>

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

NCursesPad::NCursesPad(int nlines, int ncols)
    : NCursesWindow(),
@@ -221,7 +221,7 @@
void NCursesFramedPad::OnOperation(int pad_req)
{
    (void) pad_req;

```

```

- NCursesWindow* W = Win();
+ const NCursesWindow* W = Win();
  NCursesWindow* W2 = getWindow();

  if ((static_cast<NCursesWindow*>(0) != W) && (static_cast<NCursesWindow*>(0) != W2)) {
Index: c++/cursslk.cc
Prereq:
  1.22
--- ncurses-6.5-20240928/c++/cursslk.cc 2024-06-15 21:07:30.000000000 +0000
+++ ncurses-6.5-20241006/c++/cursslk.cc 2024-10-05 19:36:22.000000000 +0000
@@ -35,10 +35,10 @@
#include "internal.h"
#include "cursesapp.h"

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

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

void Soft_Label_Key_Set::activate_label(int i, bool bf) {
  if (!b_attrInit) {
-   NCursesApplication* A = NCursesApplication::getApplication();
+   const NCursesApplication* A = NCursesApplication::getApplication();
    if (A) attrset(A->labels());
    b_attrInit = TRUE;
  }
- Soft_Label_Key& K = (*this)[i];
+ const Soft_Label_Key& K = (*this)[i];
  if (ERR==::slk_set(K.num,bf?K.label:"",K.format))
    Error("slk_set");
  noutrefresh();
@@ -124,12 +124,12 @@

void Soft_Label_Key_Set::activate_labels(bool bf)
{
  if (!b_attrInit) {
-   NCursesApplication* A = NCursesApplication::getApplication();
+   const NCursesApplication* A = NCursesApplication::getApplication();
    if (A) attrset(A->labels());
    b_attrInit = TRUE;
  }
  for(int i=1; i <= num_labels; i++) {
-   Soft_Label_Key& K = (*this)[i];

```

```

+   const Soft_Label_Key& K = (*this)[i];
    if (ERR==:slk_set(K.num,bf?K.label:"",K.format))
        Error("slk_set");
    }
Index: c++/cursslk.h
Prereq: 1.19
--- ncurses-6.5-20240928+/c++/cursslk.h 2021-04-17 18:11:08.000000000 +0000
+++ ncurses-6.5-20241006/c++/cursslk.h 2024-10-05 22:47:12.000000000 +0000
@@ -1,7 +1,7 @@
// * this is for making emacs happy: -*-Mode: C++;-*-
// vile:cppmode
/*****
- * Copyright 2019-2020,2021 Thomas E. Dickey
    *
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+ *
+ * Permission is hereby granted, free of charge, to any person obtaining a *
@@ -33,7 +33,7 @@
+ * Author: Juergen Pfeifer, 1997          *
+ *****/

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

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

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

    // Set the Justification of the Label
    Soft_Label_Key& operator=(Justification just) {
Index: dist.mk
Prereq: 1.1634
--- ncurses-6.5-20240928+/dist.mk 2024-09-28
09:53:21.000000000 +0000
+++ ncurses-6.5-20241006/dist.mk 2024-10-06 08:53:45.000000000 +0000
@@ -26,7 +26,7 @@
# use or other dealings in this Software without prior written      #
# authorization.                                                    #
#####
-# $Id: dist.mk,v 1.1634 2024/09/28 09:53:21 tom Exp $
+# $Id: dist.mk,v 1.1636 2024/10/06 08:53:45 tom Exp $
# Makefile for creating ncurses distributions.

```

```

#
# This only needs to be used directly as a makefile by developers, but
@@ -38,7 +38,7 @@
# These define the major/minor/patch versions of ncurses.
NCURSES_MAJOR = 6
NCURSES_MINOR = 5
-NCURSES_PATCH = 20240928
+NCURSES_PATCH = 20241006

# We don't append the patch to the version, since this only applies to releases
VERSION = $(NCURSES_MAJOR).$(NCURSES_MINOR)
Index: misc/terminfo.src
--- ncurses-6.5-20240928+/misc/terminfo.src 2024-09-07 16:23:31.000000000
+0000
+++ ncurses-6.5-20241006/misc/terminfo.src 2024-10-05 16:04:17.000000000 +0000
@@ -6,8 +6,8 @@
# Report bugs and new terminal descriptions to
# bug-ncurses@gnu.org
#
-# $Revision: 1.1150 $
-# $Date: 2024/09/07 16:23:31 $
+# $Revision: 1.1153 $
+# $Date: 2024/10/05 16:04:17 $
#
# The original header is preserved below for reference. It is noted that there
# is a "newer" version which differs in some cosmetic details (but actually
@@ -8060,6 +8060,17 @@
# "wezterm is a terminal emulator with support for modern features
# such as fonts with ligatures, hyperlinks, tabs and multiple windows."
#
+# The documentation bears mention. It refers to the "ANSI" standard and
+# https://wez.furlong.org/wezterm/what-is-a-terminal.html#ansi-and-ecma-48
+# X3.64 (withdrawn long ago). A related website
+# https://github.com/wez/ecma48
+# states that ECMA-48 was issued in 1979 and not revised since. Actually that
+# was the second revision; the fifth revision in 1991 is current. The source
+#
# code refers to the second revision in a half-dozen places. Further, there
+# are three times as many references to Wikipedia as to xterm's documentation.
+# The git commit comments in several instances hint at an incomplete reading
+# of the relevant standards.
+#
# wezterm-20240203-110809-5046fc22 tested with MacOS
# General:
# + initial screensize is now 80x24
@@ -8094,7 +8105,7 @@
# + poor (doesn't copy anyone, most of the results are wrong)
# vttest:

```

```

# + DA is VT5xx with sixel, selective erase, user windows, color
-# + DA2 is VT220 version 277
+# + DA2 is VT220 version 277, perhaps a reference to xterm #277
# + only the VT100 character set works, contrary to DA/DA2.
# + no NRCS, either
# + double-sized character work, with some debris
@@ -8136,7 +8147,7 @@
    use=ansi+rep, use=ansi+sgrdim, use=bracketed+paste,
    use=ecma+index, use=ecma+italics, use=ecma+strikeout,
    use=report+version, use=vt220+cvis,
- use=xterm+256color2, use=xterm+alt1049,
+ use=xterm+256color2,
    use=xterm+alt+title,
    use=xterm+focus, use=xterm+pcc2, use=xterm+pce2,
    use=xterm+pcf2, use=xterm+sl-alt, use=xterm+sm+1006,
    use=xterm+tmux,
@@ -27644,4 +27655,8 @@
# 2024-09-07
# + update comments -TD
#
+# 2024-10-05
+# + use xterm+alt+title in wezterm -TD
+# + update comments -TD
+#
##### SHANTIH! SHANTIH! SHANTIH!
Index: ncurses/base/lib_screen.c
Prereq: 1.108
--- ncurses-6.5-20240928+/ncurses/base/lib_screen.c 2024-09-22 20:20:36.000000000 +0000
+++ ncurses-6.5-20241006/ncurses/base/lib_screen.c 2024-10-05 20:47:44.000000000 +0000
@@ -42,7 +42,7 @@
#define CUR SP_TERMTYPE
#endif

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

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

@@ -943,7 +943,7 @@
* Replace a window covering the whole screen, i.e., newscr or curscr.
*/
static WINDOW *
replace_window(WINDOW *target, FILE *source)
+replace_window(const
WINDOW *target, FILE *source)
{
    WINDOW *result = getwin(source);
#if NCURSES_EXT_FUNCS

```


Index: ncurses/base/new_pair.c

Prereq: 1.24

```
--- ncurses-6.5-20240928+/ncurses/base/new_pair.c 2024-07-27 19:22:23.000000000 +0000
+++ ncurses-6.5-20241006/ncurses/base/new_pair.c 2024-10-05 20:51:29.000000000 +0000
@@ -61,7 +61,7 @@
```

#endif

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

#if NCURSES_EXT_COLORS

```
@@ -193,7 +193,7 @@
```

* pair table.

*/

NCURSES_EXPORT(void)

_nc_reset_color_pair(SCREEN *sp, int pair, colorpair_t * next)

+_nc_reset_color_pair(SCREEN *sp, int pair, const colorpair_t * next)

{

 colorpair_t *last;

Index: ncurses/curses.priv.h

Prereq: 1.691

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

*****/

/*

- * \$Id: curses.priv.h,v 1.691 2024/09/28 15:35:01 tom Exp \$

+ * \$Id: curses.priv.h,v 1.692 2024/10/05 21:01:50 tom Exp \$

*

* curses.priv.h

*

```
@@ -2170,7 +2170,7 @@
```

extern NCURSES_EXPORT(int) _nc_read_termcap_entry (const char *const, TERMTYPE2 *const);

extern NCURSES_EXPORT(int) _nc_setup_tinfo(const char *, TERMTYPE2 *);

extern NCURSES_EXPORT(int) _nc_setupscreen (int, int, FILE *, int, int);

-extern NCURSES_EXPORT(int) _nc_timed_wait (SCREEN *, int, int, int * EVENTLIST_2nd(_nc_eventlist *));

+extern NCURSES_EXPORT(int) _nc_timed_wait (const SCREEN *, int, int, int *

EVENTLIST_2nd(_nc_eventlist *));

extern NCURSES_EXPORT(int) _nc_trans_string (char *, const char *);

extern NCURSES_EXPORT(void) _nc_init_termtype (TERMTYPE2 *const);

extern NCURSES_EXPORT(void) _nc_do_color (int, int, int, NCURSES_OUTC);

Index: ncurses/new_pair.h

Prereq: 1.14

```
--- ncurses-6.5-20240928+/ncurses/new_pair.h 2024-05-25 23:10:33.000000000 +0000
```

```

+++
ncurses-6.5-20241006/ncurses/new_pair.h 2024-10-05 20:57:47.000000000 +0000
@@ -34,7 +34,7 @@
/*
 * Common type definitions and macros for new_pair.c, lib_color.c
 *
- * $Id: new_pair.h,v 1.14 2024/05/25 23:10:33 tom Exp $
+ * $Id: new_pair.h,v 1.15 2024/10/05 20:57:47 tom Exp $
 */

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

#include <tic.h>

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

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

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

    TR(TRACE_DATABASE, ("checking if we can trim sgr0 based on sgr"));
    TR(TRACE_DATABASE, ("sgr0    %s", _nc_visbuf(end)));
@@ -255,6 +253,9 @@

```

```

    FreeIfNeeded(off);
} else if (similar_sgr(off, end)
    && !similar_sgr(off, on)) {
+   bool found = FALSE;
+   size_t i, j, k;
+
    TR(TRACE_DATABASE, ("adjusting sgr(9:off) : %s", _nc_visbuf(off)));
    result = off;
    /*
Index: ncurses/tty/lib_twait.c
Prereq: 1.81
--- ncurses-6.5-20240928+/ncurses/tty/lib_twait.c 2023-09-16
16:30:40.000000000 +0000
+++ ncurses-6.5-20241006/ncurses/tty/lib_twait.c 2024-10-05 22:47:12.000000000 +0000
@@ -1,5 +1,5 @@
/*****
- * Copyright 2018-2020,2023 Thomas E. Dickey                *
+ * Copyright 2018-2023,2024 Thomas E. Dickey                *
* Copyright 1998-2015,2016 Free Software Foundation, Inc.    *
*                                                              *
* Permission is hereby granted, free of charge, to any person obtaining a *
@@ -76,7 +76,7 @@
#endif
#undef CUR

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

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

* latest weekly patch

```

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

ncurses6 (5.9+20131005) unstable; urgency=low

Index: package/debian-mingw64/changelog

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

* latest weekly patch

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

ncurses6 (5.9+20131005) unstable; urgency=low

Index: package/debian/changelog

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

* latest weekly patch

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

ncurses6 (5.9+20120608) unstable; urgency=low

Index: package/mingw-ncurses.nsi

Prereq: 1.669

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

; TODO add examples

; TODO bump ABI to 6

@@ -10,7 +10,7 @@

!define VERSION_MAJOR "6"

```

!define VERSION_MINOR "5"
!define VERSION_YYYY "2024"
-!define VERSION_MMDD "0928"
+!define VERSION_MMDD "1006"
!define VERSION_PATCH ${VERSION_YYYY}${VERSION_MMDD}

!define MY_ABI "5"
Index: package/mingw-ncurses.spec
--- ncurses-6.5-20240928+/package/mingw-ncurses.spec 2024-09-28 09:53:21.000000000 +0000
+++ ncurses-6.5-20241006/package/mingw-ncurses.spec 2024-10-06 08:53:45.000000000 +0000
@@ -3,7 +3,7 @@
Summary: shared libraries for terminal handling
Name: mingw32-ncurses6
Version: 6.5
-Release: 20240928
+Release: 20241006
License: X11
Group: Development/Libraries
URL: https://invisible-island.net/ncurses/
Index: package/ncurses.spec
--- ncurses-6.5-20240928+/package/ncurses.spec 2024-09-28
09:53:21.000000000 +0000
+++ ncurses-6.5-20241006/package/ncurses.spec 2024-10-06 08:53:45.000000000 +0000
@@ -1,7 +1,7 @@
Summary: shared libraries for terminal handling
Name: ncurses6
Version: 6.5
-Release: 20240928
+Release: 20241006
License: X11
Group: Development/Libraries
URL: https://invisible-island.net/ncurses/
Index: package/ncurset.spec
--- ncurses-6.5-20240928+/package/ncurset.spec 2024-09-28 09:53:21.000000000 +0000
+++ ncurses-6.5-20241006/package/ncurset.spec 2024-10-06 08:53:45.000000000 +0000
@@ -1,7 +1,7 @@
Summary: Curses library with POSIX thread support.
Name: ncurset6
Version: 6.5
-Release: 20240928
+Release: 20241006
License: X11
Group: Development/Libraries
Source: ncurses-%{version}-%{release}.tgz
Index: test/blue.c
Prereq: 1.55
--- ncurses-6.5-20240928+/test/blue.c 2022-12-10 23:31:31.000000000 +0000
+++ ncurses-6.5-20241006/test/blue.c 2024-10-05 19:26:24.000000000 +0000

```

```

@@ -1,5 +1,5 @@
/*****

-
* Copyright 2019-2021,2022 Thomas E. Dickey *
+ * Copyright 2019-2022,2024 Thomas E. Dickey *
* Copyright 1998-2016,2017 Free Software Foundation, Inc. *
* *
* Permission is hereby granted, free of charge, to any person obtaining a *
@@ -37,7 +37,7 @@
*****/

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

#include <test.priv.h>
@@ -437,7 +437,7 @@
static void
use_pc_display(void)
{
- char *check = nl_langinfo(CODESET);
+ const char *check = nl_langinfo(CODESET);
    if (!strcmp(check, "UTF-8")) {
#if USE_WIDECHAR_SUPPORT
    suits = uglyphs;
@@ -448,8 +448,8 @@
    !strcmp(check, "CP437") ||
    !strcmp(check,
"IBM850") ||
    !strcmp(check, "CP850")) {
- char *smacs = tigetstr("smacs");
- char *smpch = tigetstr("smpch");
+ const char *smacs = tigetstr("smacs");
+ const char *smpch = tigetstr("smpch");
}
/*
* The ncurses library makes this check to decide whether to allow
* the alternate character set for the (normally) nonprinting codes.
Index: test/bs.c
Prereq: 1.79
--- ncurses-6.5-20240928+/test/bs.c 2023-05-27 20:13:10.000000000 +0000
+++ ncurses-6.5-20241006/test/bs.c 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/*****

- * Copyright 2018-2022,2023 Thomas E. Dickey *
+ * Copyright 2018-2023,2024 Thomas E. Dickey *
* Copyright 1998-2016,2017 Free Software Foundation, Inc. *
* *

```

```

* Permission is hereby granted, free of charge,
to any person obtaining a *
@@ -35,7 +35,7 @@
* v2.0 featuring strict ANSI/POSIX conformance, November 1993.
* v2.1 with ncurses mouse support, September 1995
*
- * $Id: bs.c,v 1.79 2023/05/27 20:13:10 tom Exp $
+ * $Id: bs.c,v 1.80 2024/10/05 19:26:24 tom Exp $
*/

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

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

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

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

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

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

```

* File format: text beginning in column 1 is a title; other text is content.

*/

@@ -161,7 +161,7 @@
}

static CARD *

-find_card(char *title)

+find_card(const char *title)

{
 CARD *card;

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

static void

-read_data(char *fname)

+read_data(const char *fname)

{
 FILE *fp;

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

static FIELD **

-make_fields(CARD * p, int form_high,
 int form_wide)

+make_fields(const CARD * p, int form_high, int form_wide)

{
 FIELD **f = typeCalloc(FIELD *, (size_t) 3);

@@ -385,7 +385,7 @@

/*****

static void

-cardfile(char *fname)

+cardfile(const char *fname)

{
 WINDOW *win;
 CARD *p;

Index: test/chgat.c

Prereq: 1.21

--- ncurses-6.5-20240928+/test/chgat.c 2024-06-29 17:45:32.000000000 +0000

+++ ncurses-6.5-20241006/test/chgat.c 2024-10-06 22:35:55.000000000 +0000

@@ -27,7 +27,7 @@

* authorization. *

*****/

/*

- * \$Id: chgat.c,v 1.21 2024/06/29 17:45:32 tom Exp \$


```

+ * $Id: chgat.c,v 1.23 2024/10/06 22:35:55 tom Exp $
*
* test-driver for chgat/wchgat/mvchgat/mvwchgat
*/
@@ -160,7 +160,7 @@
}

static void
-do_subwindow(WINDOW *win, STATUS *sp, void func(WINDOW *))
+do_subwindow(WINDOW *win, const STATUS
* sp, void func(WINDOW *))
{
    WINDOW *win1 = newwin(sp->y_max - 2, sp->x_max - 2,
        sp->y_beg + 1, sp->x_beg + 1);
@@ -204,7 +204,7 @@
static void
show_help(WINDOW *win)
{
-    static const char *msgs[] =
+    static NCURSES_CONST char *msgs[] =
    {
        "Basic commands:"
        ,"Use h/j/k/l or arrow keys to move the cursor."
Index: test/clip_printw.c
Prereq: 1.23
--- ncurses-6.5-20240928+/test/clip_printw.c 2023-09-30 19:57:44.000000000 +0000
+++ ncurses-6.5-20241006/test/clip_printw.c 2024-10-06 22:36:25.000000000 +0000
@@ -1,5 +1,5 @@
/*****
- * Copyright 1919-2022,2023 Thomas E. Dickey                *
+ * Copyright 1919-2023,2024 Thomas E. Dickey                *
* Copyright 2008-2016,2017 Free Software Foundation, Inc.    *
*                                                              *
* Permission is hereby granted, free of charge,
to any person obtaining a *
@@ -27,7 +27,7 @@
* authorization.                                           *
*****/
/*
- * $Id: clip_printw.c,v 1.23 2023/09/30 19:57:44 tom Exp $
+ * $Id: clip_printw.c,v 1.25 2024/10/06 22:36:25 tom Exp $
*
* demonstrate how to use printw with/without wrapping.
*/
@@ -212,7 +212,7 @@
}

static void

```

```

-do_subwindow(WINDOW *win, STATUS *sp, void func(WINDOW *))
+do_subwindow(WINDOW *win, const STATUS *sp, void func(WINDOW *))
{
    WINDOW *win1 = newwin(sp->y_max - (2 * MARGIN),
        sp->x_max - (2 * MARGIN),
@@ -268,7 +268,7 @@
static void
show_help(WINDOW *win)
{
- static const char *msgs[] =
+ static NCURSES_CONST char *msgs[] =
    {
        "Basic commands:"
        ,"Use h/j/k/l or arrow keys to move the cursor."
Index: test/color_name.h
Prereq: 1.9
--- ncurses-6.5-20240928+/test/color_name.h 2021-04-24 23:25:29.000000000 +0000
+++ ncurses-6.5-20241006/test/color_name.h 2024-10-05
19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/*****
- * Copyright 2018-2020,2021 Thomas E. Dickey                *
+ * Copyright 2018-2021,2024 Thomas E. Dickey                *
 * Copyright 2011-2012,2016 Free Software Foundation, Inc.    *
 *                                                            *
 * Permission is hereby granted, free of charge, to any person obtaining a *
@@ -27,7 +27,7 @@
 * authorization.                                           *
*****/
/*
- * $Id: color_name.h,v 1.9 2021/04/24 23:25:29 tom Exp $
+ * $Id: color_name.h,v 1.10 2024/10/05 19:26:24 tom Exp $
 */

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

    if ((result = (int) strtol(color,
&endp, 0)) >= 0
&& (endp == 0 || *endp == 0)) {
@@ -71,6 +70,7 @@
    } else if (!strcmp(color, "default")) {
result = -1;
    } else {

```

```

+ size_t n;
for (n = 0; n < SIZEOF(the_color_names); ++n) {
    if (!strcmp(the_color_names[n], color)) {
        result = (int) n;
Index: test/demo_defkey.c
Prereq: 1.35
--- ncurses-6.5-20240928+/test/demo_defkey.c 2024-01-20 20:46:12.000000000 +0000
+++ ncurses-6.5-20241006/test/demo_defkey.c 2024-10-05 18:20:04.000000000 +0000
@@ -27,7 +27,7 @@
* authorization.
*****
/*
- * $Id: demo_defkey.c,v 1.35 2024/01/20 20:46:12 tom Exp $
+ * $Id: demo_defkey.c,v 1.36 2024/10/05 18:20:04 tom Exp $
*
* Demonstrate the define_key() function.
* Thomas Dickey - 2002/11/23
@@ -199,7 +199,7 @@
}

```

```

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

    really_define_key(win, string, code);
}

```

Index: test/demo_forms.c

Prereq: 1.63

```

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

```

```
@@ -148,7 +148,7 @@
}
```

```
static FIELD *
-make_label(const char *label, int frow, int fcol)
+make_label(NCURSES_CONST char *label, int frow, int fcol)
{
    FIELD *f = new_field(1, (int) strlen(label), frow, fcol, 0, 0);
```

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

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

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

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

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

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

```
waddstr(win, "\n");
for (nbuf = 0; nbuf <= 2; ++nbuf) {
-    char *buffer;
+    NCURSES_CONST char *buffer;
    if ((buffer = field_buffer(field, nbuf)) != 0) {
        wprintw(win, "buffer %d:", nbuf);
```

```

(void) wattrset(win, A_REVERSE);
@@ -408,8 +408,8 @@
    int c;
    unsigned n = 0;
    int pg;
-   const char *fname;
-   static const char *my_enum[] =
+   NCURSES_CONST char *fname;
+   static NCURSES_CONST char *my_enum[] =
        {"first", "second", "third", 0};

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

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

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

static int
-menu_getc(MENU * m)
+menu_getc(NCURSES_CONST MENU * m)

```

```

{
    return wGetchar(menu_win(m));
}
@@ -214,7 +214,7 @@
my_menu_init(MENU * menu)
{
    Trace(("called MenuHook my_menu_init"));
-   mvwprintw(status, 2, 0, "menu_init %p", (void *) menu);
+   mvwprintw(status, 2, 0, "menu_init %p", (const void *) menu);
    wclrtoeol(status);
    wrefresh(status);
}
@@ -223,7 +223,7 @@
my_menu_term(MENU * menu)
{
    Trace(("called MenuHook my_menu_term"));
-   mvwprintw(status, 2, 0, "menu_term %p", (void *) menu);
+   mvwprintw(status, 2, 0, "menu_term %p", (const void *) menu);
    wclrtoeol(status);
    wrefresh(status);
}
@@ -231,7 +231,7 @@
static void
my_item_init(MENU * menu)
{
-   ITEM *item = current_item(menu);
+   NCURSES_CONST ITEM *item = current_item(menu);
    const char *name = item_name(item);

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

    Trace(("called MenuHook my_item_term (%s)", name));
@@ -348,7 +348,7 @@
/* force the given menu to appear */
static void
-menu_display(MENU * m)
+menu_display(NCURSES_CONST MENU * m)
{
    touchwin(menu_win(m));
    wrefresh(menu_win(m));

```

```

@@ -584,10 +584,10 @@
* the others
*/

static bool
-update_trace_menu(MENU * m)
+update_trace_menu(NCURSES_CONST MENU * m)
{
    ITEM **items;
-   ITEM *i;
+   NCURSES_CONST ITEM *i;
    bool changed = FALSE;

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

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

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

static void
-show_status(int ch, MENU * menu)

```

```

+show_status(int ch, NCURSES_CONST MENU * menu)
{
    wmove(status, 0, 0);
    wprintw(status, "key %s, menu %d, mark %s, match %s",
@@ -919,7 +921,7 @@
    wrefresh(menu_win(last_menu));
    if (code == E_UNKNOWN_COMMAND
        || code == E_NOT_POSTED) {
-    ITEM *item = current_item(last_menu);
+    NCURSES_CONST ITEM *item = current_item(last_menu);
        MENU_DATA *td = (MENU_DATA *) item_userptr(item);
        td->func((int) td->mask);
    }
}
Index: test/demo_new_pair.c
Prereq: 1.28
--- ncurses-6.5-20240928+/test/demo_new_pair.c 2024-06-29
19:30:26.000000000 +0000
+++ ncurses-6.5-20241006/test/demo_new_pair.c 2024-10-05 18:21:44.000000000 +0000
@@ -27,7 +27,7 @@
* authorization.
*
*****
/*
- * $Id: demo_new_pair.c,v 1.28 2024/06/29 19:30:26 tom Exp $
+ * $Id: demo_new_pair.c,v 1.29 2024/10/05 18:21:44 tom Exp $
*
* Demonstrate the alloc_pair() function.
*/
@@ -49,7 +49,7 @@
static bool
valid_cap(NCURSES_CONST char *name)
{
-    char *value = tigetstr(name);
+    const char *value = tigetstr(name);
    return (value != 0 && value != (char *) -1) ? TRUE : FALSE;
}
}
Index: test/demo_panels.c
Prereq: 1.48
--- ncurses-6.5-20240928+/test/demo_panels.c 2022-12-04 00:40:11.000000000 +0000
+++ ncurses-6.5-20241006/test/demo_panels.c 2024-10-06 20:01:21.000000000 +0000
@@ -1,5 +1,5 @@
/*****
-
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```



```

@@ -27,7 +27,7 @@
* authorization.
*
*****/
/*
- * $Id: demo_panels.c,v 1.48 2022/12/04 00:40:11 tom Exp $
+ * $Id: demo_panels.c,v 1.50 2024/10/06 20:01:21 tom Exp $
*
* Demonstrate a variety of functions from the panel library.
*/
@@ -42,7 +42,7 @@
#define TEMP_POS '>'

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

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

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

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

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

```

```

static void
-fill_wide_panel(PANEL *pan)
+fill_wide_panel(NCURSES_CONST PANEL *pan)
{
    WINDOW *win = panel_window(pan);
    int num = ((const char *) panel_userptr(pan))[1];
@@ -453,7 +453,7 @@
#define MAX_PANELS 5

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

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

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

```

```

}

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

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

            int repeat;
            int r_opt = 1;
@@ -867,7 +867,7 @@
+867,7 @@
        } else if ((name = getenv("TERM")) != 0) {
            brute_force(name);
        } else {
-        static char dumb[] = "dumb";
+        static NCURSES_CONST char dumb[] = "dumb";
            brute_force(dumb);
        }
    }
}
@@ -894,7 +894,7 @@
        } else if ((name = getenv("TERM")) != 0) {
            demo_termcap(name);
        } else {
-        static char dumb[] = "dumb";
+        static NCURSES_CONST char dumb[] = "dumb";

```

```

demo_termcap(dumb);
}
}
Index: test/demo_terminfo.c
Prereq: 1.57
--- ncurses-6.5-20240928+/test/demo_terminfo.c 2023-05-27 20:13:10.000000000 +0000
+++ ncurses-6.5-20241006/test/demo_terminfo.c 2024-10-06 21:16:43.000000000 +0000
@@ -1,5 +1,5 @@
/*****
- * Copyright 2019-2022,2023 Thomas E. Dickey                *
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 *
 *
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@@ -30,7 +30,7 @@
/*
 * Author: Thomas E. Dickey
 *
- * $Id: demo_terminfo.c,v 1.57 2023/05/27 20:13:10 tom Exp $
+ * $Id: demo_terminfo.c,v 1.59 2024/10/06 21:16:43 tom Exp $
 *
 * A simple demo of the terminfo interface.
 */
@@ -253,7 +253,7 @@
#define LegalItem(c,n) (n)

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

static void
-demo_terminfo(char *name)
+demo_terminfo(NCURSES_CONST char *name)
{
    unsigned n;
    NCURSES_CONST char *cap;
@@ -366,7 +366,7 @@
    if (x_opt && (my_blob == 0)) {
    if (y_opt) {
#ifdef NCURSES_XNAMES
-    TERMTYPE *term = (TERMTYPE *) cur_term;
+    const TERMTYPE *term = (TERMTYPE *) cur_term;

```

```

    if (term != 0
    && ((NUM_BOOLEANS(term)
    != BOOLCOUNT)
    || (NUM_NUMBERS(term) != NUMCOUNT)
@@ -813,9 +813,9 @@
    int ch;
    int n;
    int repeat;
-   char *name;
+   NCURSES_CONST char *name;
    int r_opt = 1;
-   char *input_name = 0;
+   const char *input_name = 0;

    while ((ch = getopt(argc, argv, OPTS_COMMON "abd:e:fi:nqr:sxy")) != -1) {
switch (ch) {
@@ -891,7 +891,7 @@
    } else if ((name = getenv("TERM")) != 0) {
        brute_force(name);
    } else {
-   static char dumb[] = "dumb";
+   static NCURSES_CONST char dumb[] = "dumb";
        brute_force(dumb);
    }
}
@@@ -918,7 +918,7 @@@
    } else if ((name = getenv("TERM")) != 0) {
        demo_terminfo(name);
    } else {
-   static char dumb[] = "dumb";
+   static NCURSES_CONST char dumb[] = "dumb";
        demo_terminfo(dumb);
    }
}
Index: test/dots.c
Prereq: 1.45
--- ncurses-6.5-20240928+/test/dots.c 2023-01-07 17:21:48.000000000 +0000
+++ ncurses-6.5-20241006/test/dots.c 2024-10-06 21:17:54.000000000 +0000
@@@ -1,5 +1,5 @@@
/*****
-
-   * Copyright 2019-2022,2023 Thomas E. Dickey
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-   *
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@@@ -30,7 +30,7 @@@
/*

```

```

* Author: Thomas E. Dickey <dickey@clark.net> 1999
*
- * $Id: dots.c,v 1.45 2023/01/07 17:21:48 tom Exp $
+ * $Id: dots.c,v 1.46 2024/10/06 21:17:54 tom Exp $
*
* A simple demo of the terminfo interface.
*/
@@ -61,7 +61,7 @@
}

static bool
-outs(const char *s)
+outs(NCURSES_CONST char *s)
{
    if (VALID_STRING(s)) {
        tputs(s, 1, outc);
Index: test/dots_mvcur.c
Prereq: 1.31
--- ncurses-6.5-20240928+/test/dots_mvcur.c 2023-01-07 17:21:48.000000000 +0000
+++ ncurses-6.5-20241006/test/dots_mvcur.c 2024-10-06
21:17:54.000000000 +0000
@@@ -1,5 +1,5 @@@
/*****
- * Copyright 1919-2022,2023 Thomas E. Dickey          *
+ * Copyright 1919-2023,2024 Thomas E. Dickey          *
* Copyright 2007-2013,2017 Free Software Foundation, Inc. *
*
* Permission is hereby granted, free of charge, to any person obtaining a *
@@@ -30,7 +30,7 @@@
/*
* Author: Thomas E. Dickey - 2007
*
- * $Id: dots_mvcur.c,v 1.31 2023/01/07 17:21:48 tom Exp $
+ * $Id: dots_mvcur.c,v 1.32 2024/10/06 21:17:54 tom Exp $
*
* A simple demo of the terminfo interface, and mvcur.
*/
@@@ -62,7 +62,7 @@@
}

static bool
-outs(const char *s)
+outs(NCURSES_CONST char *s)
{
    if (VALID_STRING(s)) {
        tputs(s, 1, outc);
Index: test/dots_termcap.c
Prereq: 1.33

```

```

--- ncurses-6.5-20240928+/test/dots_termcap.c 2024-08-31
15:55:46.000000000 +0000
+++ ncurses-6.5-20241006/test/dots_termcap.c 2024-10-06 21:18:35.000000000 +0000
@@ -30,7 +30,7 @@
/*
 * Author: Thomas E. Dickey
 *
- * $Id: dots_termcap.c,v 1.33 2024/08/31 15:55:46 tom Exp $
+ * $Id: dots_termcap.c,v 1.35 2024/10/06 21:18:35 tom Exp $
 *
 * A simple demo of the termcap interface.
 */
@@ -113,7 +113,7 @@
}

```

```

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

```

Index: test/dup_field.c

Prereq: 1.9

```

--- ncurses-6.5-20240928+/test/dup_field.c 2024-06-29
17:45:32.000000000 +0000
+++ ncurses-6.5-20241006/test/dup_field.c 2024-10-06 20:07:19.000000000 +0000
@@ -26,7 +26,7 @@
 * authorization.
 *
*****/
/*

```

```

- * $Id: dup_field.c,v 1.9 2024/06/29 17:45:32 tom Exp $
+ * $Id: dup_field.c,v 1.11 2024/10/06 20:07:19 tom Exp $
*
* Demonstrate dup_field().
*/
@@ -146,27 +146,27 @@
}

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

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

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

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

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

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

```


Index: test/filter.c

Prereq: 1.38

--- ncurses-6.5-20240928+/test/filter.c 2022-12-04 00:40:11.000000000 +0000

+++ ncurses-6.5-20241006/test/filter.c 2024-10-05 19:26:24.000000000 +0000

@@ -1,5 +1,5 @@

/*****

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* *

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@@

-30,7 +30,7 @@

/*

* Author: Thomas E. Dickey 1998

*

- * \$Id: filter.c,v 1.38 2022/12/04 00:40:11 tom Exp \$

+ * \$Id: filter.c,v 1.39 2024/10/05 19:26:24 tom Exp \$

*

* An example of the 'filter()' function in ncurses, this program prompts

* for commands and executes them (like a command shell). It illustrates

@@ -65,7 +65,7 @@

if (clocked) {

if (limit >= 3) {

time_t now = time((time_t *) 0);

- struct tm *my = localtime(&now);

+ const struct tm *my = localtime(&now);

char buffer[80];

int skip, y, x;

int margin;

Index: test/form_driver_w.c

Prereq: 1.17

--- ncurses-6.5-20240928+/test/form_driver_w.c 2022-12-10 23:31:31.000000000 +0000

+++ ncurses-6.5-20241006/test/form_driver_w.c 2024-10-06 23:13:40.000000000 +0000

@@ -1,5 +1,5 @@

/*****

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* *

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@@ -32,7 +32,7 @@

*****/

/*

- * \$Id: form_driver_w.c,v 1.17 2022/12/10 23:31:31 tom Exp \$

+ * \$Id: form_driver_w.c,v 1.18 2024/10/06 23:13:40 tom Exp \$

```

*
* Test form_driver_w (int, int, wchar_t), a wide char aware
* replacement of form_driver.
@@ -68,7 +68,7 @@
int
main(int argc, char *argv[])
{
- static const char *help[] =
+ static NCURSES_CONST char *help[] =
{
"Commands:",
" ^D,^Q,ESC      - quit program",
Index: test/gdc.c
Prereq: 1.60
--- ncurses-6.5-20240928+/test/gdc.c 2024-06-29 19:59:06.000000000 +0000
+++ ncurses-6.5-20241006/test/gdc.c 2024-10-06 20:08:59.000000000 +0000
@@ -34,7 +34,7 @@
* modified 10-18-89
for curses (jrl)
* 10-18-89 added signal handling
*
- * $Id: gdc.c,v 1.60 2024/06/29 19:59:06 tom Exp $
+ * $Id: gdc.c,v 1.62 2024/10/06 20:08:59 tom Exp $
*/

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

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

    InitAndCatch({
    if (redirected) {

```

```

-   char *name = getenv("TERM");
+   NCURSES_CONST char *name = getenv("TERM");
    if (name == 0
        || newterm(name, ofp, ifp) == 0) {
        fprintf(stderr, "cannot open terminal\n");
@@ -431,7 +431,7 @@
        _nc_STRNCPY(buf, ctime(&now), (size_t) 30);
        {
            char *d2 = buf + 10;
-   char *s2 = buf + 19;
+   NCURSES_CONST char *s2 = buf + 19;
            while ((*d2++ = *s2++) != '\0') ;
        }
        MvAddStr(16, 30, buf);
Index: test/inch_wide.c
Prereq: 1.13
--- ncurses-6.5-20240928+/test/inch_wide.c 2022-12-10 23:55:34.000000000 +0000
+++ ncurses-6.5-20241006/test/inch_wide.c 2024-10-06 23:14:31.000000000 +0000
@@ -1,5 +1,5 @@
/*****
- * Copyright 2019-2020,2022 Thomas E. Dickey
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* Copyright 2007-2010,2017 Free Software Foundation, Inc.
*
* Permission is hereby granted, free of charge, to any person obtaining a
@@ -27,7 +27,7 @@
* authorization.
*****/
/*
- * $Id: inch_wide.c,v 1.13 2022/12/10 23:55:34 tom Exp $
+
* $Id: inch_wide.c,v 1.14 2024/10/06 23:14:31 tom Exp $
*/
/*
    int in_wch(cchar_t *wcval);
@@ -61,7 +61,7 @@
static int
test_inchs(int level, char **argv, WINDOW *chrwin, WINDOW *strwin)
{
-   static const char *help[] =
+   static NCURSES_CONST char *help[] =
    {
        "Test input from screen using inch(), etc., in a moveable viewport.",
        ""
    },
Index: test/inchs.c
Prereq: 1.19
--- ncurses-6.5-20240928+/test/inchs.c 2022-12-11 00:01:39.000000000 +0000
+++ ncurses-6.5-20241006/test/inchs.c 2024-10-06 21:17:54.000000000 +0000

```

```

@@ -1,5 +1,5 @@
/*****
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charge, to any person obtaining a *
@@ -27,7 +27,7 @@
* authorization.
*****/

/*
- * $Id: inchs.c,v 1.19 2022/12/11 00:01:39 tom Exp $
+ * $Id: inchs.c,v 1.20 2024/10/06 21:17:54 tom Exp $
*
* Author: Thomas E Dickey
*/
@@ -71,7 +71,7 @@
static int
test_inchs(int level, char **argv, WINDOW *chrwin, WINDOW *strwin)
{
- static const char *help[] =
+ static NCURSES_CONST char *help[] =
{
"Test input from screen using inch(), etc., in a moveable viewport.",
""
,
Index: test/ins_wide.c
Prereq: 1.30
--- ncurses-6.5-20240928+/test/ins_wide.c 2022-12-10 22:28:50.000000000 +0000
+++ ncurses-6.5-20241006/test/ins_wide.c 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/*****
- * Copyright 2020,2022 Thomas E. Dickey                *
+ * Copyright
2020-2022,2024 Thomas E. Dickey                *
* Copyright 2002-2016,2017 Free Software Foundation, Inc.    *
*
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@@ -27,7 +27,7 @@
* authorization.
*****/

/*
- * $Id: ins_wide.c,v 1.30 2022/12/10 22:28:50 tom Exp $
+ * $Id: ins_wide.c,v 1.31 2024/10/05 19:26:24 tom Exp $
*
* Demonstrate the wins_wstr() and wins_wch functions.
* Thomas Dickey - 2002/11/23
@@ -73,7 +73,7 @@

```

```
static int n_opt = -1;
```

```
static void
```

```
-legend(WINDOW *win, int level, Options state, wchar_t *buffer, int length)
```

```
+legend(WINDOW *win, int level, Options state, const wchar_t *buffer, int length)
```

```
{
```

```
    const char *showstate;
```

```
Index: test/insdelln.c
```

```
Prereq: 1.15
```

```
--- ncurses-6.5-20240928+/test/insdelln.c 2022-12-10
```

```
23:31:31.000000000 +0000
```

```
+++ ncurses-6.5-20241006/test/insdelln.c 2024-10-06 21:08:52.000000000 +0000
```

```
@@ -1,5 +1,5 @@
```

```
/******
```

```
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```

```
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```

```
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```

```
*
```

```
*
```

```
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```

```
@@ -27,7 +27,7 @@
```

```
* authorization. *
```

```
*****/
```

```
/*
```

```
- * $Id: insdelln.c,v 1.15 2022/12/10 23:31:31 tom Exp $
```

```
+ * $Id: insdelln.c,v 1.17 2024/10/06 21:08:52 tom Exp $
```

```
*
```

```
* test-driver for deleteln, wdeleteln, insdelln, winsdelln, insertln, winsertln
```

```
*/
```

```
@@ -160,7 +160,7 @@
```

```
}
```

```
static void
```

```
-do_subwindow(WINDOW *win, STATUS * sp, void func(WINDOW *))
```

```
+do_subwindow(WINDOW *win, const STATUS * sp, void func(WINDOW *))
```

```
{
```

```
    WINDOW *win1 = newwin(sp->y_max - 2, sp->x_max - 2,
```

```
    sp->y_beg + 1, sp->x_beg + 1);
```

```
@@ -204,7 +204,7 @@
```

```
static void
```

```
show_help(WINDOW *win)
```

```
{
```

```
- static const char *table[] =
```

```
+ static NCURSES_CONST char *table[] =
```

```
{
```

```
"Basic commands:"
```

```
,"Use h/j/k/l or arrow keys to move the cursor."
```

```
Index: test/inserts.c
```

Prereq: 1.34

--- ncurses-6.5-20240928+/test/inserts.c 2022-12-10 22:28:50.000000000 +0000

+++ ncurses-6.5-20241006/test/inserts.c 2024-10-05 19:26:24.000000000 +0000

@@ -1,5 +1,5 @@

/*****

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*

*

*

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@@ -27,7 +27,7 @@

* authorization. *

*****/

/*

- * \$Id: inserts.c,v 1.34 2022/12/10 22:28:50 tom Exp \$

+ * \$Id: inserts.c,v 1.35 2024/10/05 19:26:24 tom Exp \$

*

* Demonstrate the winsstr() and winsch functions.

* Thomas Dickey - 2002/10/19

@@ -98,7 +98,7 @@

}

static int

-ColOf(char *buffer, int length, int margin)

+ColOf(const char *buffer, int length, int margin)

{

int n;

int result;

Index: test/knight.c

Prereq: 1.52

--- ncurses-6.5-20240928+/test/knight.c 2022-12-04 00:40:11.000000000 +0000

+++ ncurses-6.5-20241006/test/knight.c 2024-10-05 19:38:58.000000000 +0000

@@ -1,5 +1,5 @@

/*****

- * Copyright

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*

*

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@@ -34,7 +34,7 @@

* Eric S. Raymond <esr@snark.thyrsus.com> July 22 1995. Mouse support

* added September 20th 1995.

*

- * \$Id: knight.c,v 1.52 2022/12/04 00:40:11 tom Exp \$

+ * \$Id: knight.c,v 1.53 2024/10/05 19:38:58 tom Exp \$

*/

```

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

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

    for (k = 0; k < count; ++k) {
- char *value;
+ const char *value;

```

```

set_curterm(terms[k]);
if ((value = termname()) == NULL)
    failed("termname");
Index: test/move_field.c
Prereq: 1.16
--- ncurses-6.5-20240928+/test/move_field.c 2024-06-29 17:45:02.000000000 +0000
+++ ncurses-6.5-20241006/test/move_field.c 2024-10-06 21:12:35.000000000 +0000
@@ -26,7 +26,7 @@
* authorization.
*
*****/
/*
- * $Id: move_field.c,v 1.16 2024/06/29 17:45:02 tom Exp $
+ * $Id: move_field.c,v 1.19 2024/10/06 21:12:35 tom Exp $
*
* Demonstrate move_field().
*/
@@ -146,27 +146,27 @@
}

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

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

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

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

```



```
    form_getyx(form, currow, curcol);
```

```
@@ -245,7 +245,7 @@
```

```
default:
```

```
    modified = (ch < MIN_FORM_COMMAND
```

```
- && isprint(ch));
```

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

```
    break;
```

```
}
```

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

```
/* display a status message to show what's happening */
```

```
static void
```

```
-show_status(FORM *form, FIELD *field)
```

```
+show_status(NCURSES_CONST FORM *form, NCURSES_CONST FIELD  
*field)
```

```
{
```

```
- WINDOW *sub = form_sub(form);
```

```
+ NCURSES_CONST WINDOW *sub = form_sub(form);
```

```
    int currow, curcol;
```

```
    getyx(stdscr, currow, curcol);
```

```
Index: test/movewindow.c
```

```
Prereq: 1.54
```

```
--- ncurses-6.5-20240928+/test/movewindow.c 2023-05-27 20:13:10.000000000 +0000
```

```
+++ ncurses-6.5-20241006/test/movewindow.c 2024-10-06 18:44:26.000000000 +0000
```

```
@@ -1,5 +1,5 @@
```

```
/*  
*****
```

```
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```

```
+ * Copyright 2018-2023,2024 Thomas E. Dickey *
```

```
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```

```
* *
```

```
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```

```
@@ -27,7 +27,7 @@
```

```
* authorization. *
```

```
*****
```

```
/*
```

```
- * $Id: movewindow.c,v 1.54 2023/05/27 20:13:10 tom Exp $
```

```
+ * $Id: movewindow.c,v 1.56 2024/10/06 18:44:26 tom Exp $
```

```
*
```

```
* Demonstrate move functions for windows and derived windows from the curses
```

```
* library.
```

```
@@ -135,7 +135,7 @@
```

```
*/
```

```
static PAIR *
```

```
selectcell(WINDOW *parent,
```

```

- WINDOW *child,
+ NCURSES_CONST WINDOW *child,
  int uli, int ulj,
  int lri, int lrj,
  bool relative,
@@ -252,7 +252,7 @@
  int max_col = (parent == stdscr) ? COL_MAX : getmaxx(parent);
  int min_line = (parent == stdscr) ? LINE_MIN : 0;
  int max_line = (parent == stdscr) ? LINE_MAX : getmaxy(parent);
- PAIR *tmp;
+ NCURSES_CONST PAIR *tmp;
  bool result = FALSE;

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

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

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

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

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

```

```

bool more;

show_derwin(win);
Index: test/ncurses.c
Prereq: 1.538
--- ncurses-6.5-20240928+/test/ncurses.c 2023-11-11 01:23:59.000000000 +0000
+++ ncurses-6.5-20241006/test/ncurses.c 2024-10-06 20:18:59.000000000 +0000
@@ -1,5 +1,5 @@
/*****
- * Copyright 2018-2022,2023 Thomas E. Dickey                      *
+ * Copyright 2018-2023,2024
Thomas E. Dickey                      *
* Copyright 1998-2016,2017 Free Software Foundation, Inc.          *
*                                                                    *
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@@ -41,7 +41,7 @@
Author: Eric S. Raymond <esr@snark.thyrsus.com> 1993
Thomas E. Dickey (beginning revision 1.27 in 1996).

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

*****/

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

if (UseColors) {
- NCURSES_PAIRS_T pair = 0;

```

```

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

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

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

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

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

```

```

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

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

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

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

    move(0, 0);
    clrtoeol();
@@ -5014,7 +5014,8 @@
#if HAVE_WRESIZE
case CTRL('X'): /* resize window */
    if (current) {

```

```

- pair *tmp, ul, lr;
+ NCURSES_CONST pair *tmp;
+ pair ul, lr;
  int mx, my;

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

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

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

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

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

    if (field_info(me, &rows, &cols, &frow, &fcol, &nrow, &nbuf) == E_OK
    && nbuf > 0) {

```

```

- char *source = field_buffer(me, 1);
+ NCURSES_CONST char *source = field_buffer(me, 1);
size_t have = (source ? strlen(source) : 0) + 1;
size_t need
= 80 + have;
char *temp = malloc(need);
@@ -6434,7 +6436,7 @@
    _nc_STRNCPY(temp, source ? source : "", have + 1);
    len = (size_t) (char *) field_userptr(me);
    if (c <= KEY_MAX) {
- if (isgraph(c) && (len + 1) < sizeof(temp)) {
+ if (isgraph(UChar(c)) && (len + 1) < sizeof(temp)) {
        temp[len++] = (char) c;
        temp[len] = 0;
        set_field_buffer(me, 1, temp);
@@ -6484,7 +6486,7 @@
    }

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

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

static void
-overlap_test_4(int flavor, WINDOW *a, WINDOW *b)

```

```

+overlap_test_4(int flavor, NCURSES_CONST WINDOW *a, WINDOW *b)
{
    switch ((otCOPY) flavor) {
        case otCOPY_overwrite:
@@ -7899,7 +7902,7 @@
        bool monochrome = FALSE;
#if HAVE_COLOR_CONTENT
        bool xterm_colors = FALSE;
-   char *palette_file = 0;
+   NCURSES_CONST char *palette_file = 0;
#endif

        setlocale(LC_ALL, "");
Index: test/padview.c
Prereq: 1.22
--- ncurses-6.5-20240928+/test/padview.c 2022-12-04 00:40:11.000000000 +0000
+++ ncurses-6.5-20241006/test/padview.c 2024-10-06 21:08:25.000000000 +0000
@@@ -1,5 +1,5 @@@
/*
*****

- * Copyright 2019-2021,2022 Thomas E. Dickey                *
+ * Copyright 2019-2022,2024 Thomas E. Dickey                *
* Copyright 2017 Free
Software Foundation, Inc.                *
*                                *
* Permission is hereby granted, free of charge, to any person obtaining a *
@@@ -29,7 +29,7 @@@
/*
* clone of view.c, using pads
*
- * $Id: padview.c,v 1.22 2022/12/04 00:40:11 tom Exp $
+ * $Id: padview.c,v 1.24 2024/10/06 21:08:25 tom Exp $
*/

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

#if USE_WIDEC_SUPPORT
    if (!memcmp("\357\273\277", my_blob, 3)) {
-   char *s = my_blob + 3;
+   const char *s = my_blob + 3;
    char *d = my_blob;
    Trace(("trim BOM"));
    do {
@@@ -213,7 +213,7 @@@
        for (k = 0; my_vec[k]; ++k) {
            char *s;
#if USE_WIDEC_SUPPORT
-   char *last = my_vec[k] + (int) strlen(my_vec[k]);

```



```

+ const char *last = my_vec[k] + (int) strlen(my_vec[k]);
wchar_t wch[2];
size_t rc;
#ifdef state_unused
@@ -279,7 +279,7 @@
int
main(int argc, char *argv[])
{
- static const char *help[] =
+ static NCURSES_CONST char *help[] =

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

```

```

- char *data;
+ const char *data;
char ch;

for (max_bits = 0, pwr2 = 1;
Index: test/picsmap.c
Prereq: 1.149
--- ncurses-6.5-20240928+/test/picsmap.c 2023-04-23 23:20:37.000000000 +0000
+++ ncurses-6.5-20241006/test/picsmap.c 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/*****
- * Copyright 2018-2022,2023 Thomas E. Dickey                *
+ * Copyright 2018-2023,2024 Thomas E. Dickey                *
* Copyright 2017,2018 Free Software Foundation, Inc.        *
*
*
*
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@@ -27,7 +27,7 @@
* authorization.
*****/
/*
- * $Id: picsmap.c,v 1.149 2023/04/23 23:20:37 tom Exp $
+ * $Id: picsmap.c,v 1.150 2024/10/05 19:26:24 tom Exp $
*
* Author: Thomas E. Dickey
*
@@ -574,7 +574,7 @@
    _nc_STRCAT(full_name, filename, need);
    if (tries & 4) {
        char *t = s;
- char *tc;
+ const char *tc;
        int num;
        char chr;
        int found = 0;
@@ -1374,8 +1374,8 @@
        int r, g, b, nocolor;
        float rf, gf, bf;
        unsigned check;
- char *t;
- char *s = t = strchr(buffer, '#');
+ char *s = strchr(buffer, '#');
+ const char *t = s;
        bool matched = FALSE;

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

```

```

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

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

```

```

#else
void
-popup_msg(WINDOW *parent, const char *const *msg)
+popup_msg(WINDOW *parent, NCURSES_CONST char *const *msg)
{
    (void) parent;
    (void) msg;
Index: test/popup_msg.h
Prereq: 1.5
--- ncurses-6.5-20240928+/test/popup_msg.h 2020-02-02 23:34:34.000000000 +0000
+++ ncurses-6.5-20241006/test/popup_msg.h 2024-10-06 21:17:54.000000000 +0000
@@ -1,5 +1,5 @@
/*****
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 *
 *
 * Permission is hereby granted, free of charge, to any person obtaining a *
@@ -27,7 +27,7 @@
 * authorization.                                             *
 *****/
/*
- * $Id: popup_msg.h,v 1.5 2020/02/02 23:34:34 tom Exp $
+ * $Id: popup_msg.h,v 1.6 2024/10/06 21:17:54 tom Exp $
 *
 * Utility functions for a popup-message or help-screen.
 */
@@ -37,7 +37,7 @@

#include <test.priv.h>

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

#endif /* POPUP_MSG_H_incl */
Index: test/railroad.c
Prereq: 1.26
--- ncurses-6.5-20240928+/test/railroad.c 2022-12-11 00:12:13.000000000 +0000
+++ ncurses-6.5-20241006/test/railroad.c 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/*****
-
+ * Copyright 2019-2020,2022 Thomas E. Dickey                *
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+ * Copyright 2000-2013,2017 Free Software Foundation, Inc.   *
 *
 *

```

```

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@@ -30,7 +30,7 @@
/*
* Author: Thomas E. Dickey - 2000
*
- * $Id: railroad.c,v 1.26 2022/12/11 00:12:13 tom Exp $
+ * $Id: railroad.c,v 1.27 2024/10/05 19:26:24 tom Exp $
*
* A simple demo of the termcap interface.
*/
@@ -113,7 +113,7 @@
static void
ShowSign(char *string)
{
- char *base = string;
+ const char *base = string;
    int first, last;

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

struct DATA;

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

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

static void
-part1(DATA * drop)
+part1(const DATA * drop)

```

```

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

static void
-part2(DATA * drop)
+part2(const DATA * drop)
{
    MvAddCh(drop->y, drop->x, 'o');
}

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

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

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

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

static void
-draw_part(void (*func) (DATA *), int state, DATA * data)
+draw_part(void (*func) (const DATA *), int state, DATA * data)

```

```

{
    data->func = func;
    data->state = state;
@@ -328,7 +328,7 @@
int
main(int argc, char *argv[])
{
-   static const char *help[] =
+   static NCURSES_CONST char *help[] =
    {
        "Commands:",
        " q/Q      exit the program",
Index: test/redraw.c
Prereq: 1.17
--- ncurses-6.5-20240928+/test/redraw.c 2022-12-10 22:28:50.000000000 +0000
+++ ncurses-6.5-20241006/test/redraw.c 2024-10-06 21:17:54.000000000 +0000
@@@ -1,5 +1,5 @@@
/*****
-
* Copyright 2020-2021,2022 Thomas E. Dickey                *
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* Copyright 2006-2012,2017 Free Software Foundation, Inc.    *
*                                                              *
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@@@ -27,7 +27,7 @@@
* authorization.
*****/
/*
- * $Id: redraw.c,v 1.17 2022/12/10 22:28:50 tom Exp $
+ * $Id: redraw.c,v 1.18 2024/10/06 21:17:54 tom Exp $
*
* Demonstrate the redrawwin() and wredrawln() functions.
* Thomas Dickey - 2006/11/4
@@@ -61,7 +61,7 @@@
static void
test_redraw(WINDOW *win)
{
-   static const char *help[] =
+   static NCURSES_CONST char *help[] =
    {
        "Commands:",
        " ^Q/ESC/q - quit",
Index: test/savescreen.c
Prereq:
1.62
--- ncurses-6.5-20240928+/test/savescreen.c 2022-12-10 23:23:27.000000000 +0000
+++ ncurses-6.5-20241006/test/savescreen.c 2024-10-06 21:10:09.000000000 +0000
@@@ -1,5 +1,5 @@@

```

```

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*
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@@ -27,7 +27,7 @@
* authorization.
*****/

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

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

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

    if (filename != 0) {
@@ -216,7 +216,7 @@
static void
editor_help(void)
{
- static const char *msgs[] =
+ static NCURSES_CONST char *msgs[] =
    {
        "You are now in the screen-editor, which allows you to make some",
        "lines on the screen, as well as save copies of the screen to a",
@@ -238,7 +238,7 @@
static void
replay_help(void)
{
- static const char *msgs[] =

```



```

+ static NCURSES_CONST char *msgs[] =
{
    "You are now in the screen-loader, which allows you to view",
    "the dumped/restored screens.",
@@ -286,7 +286,7 @@
    bool replaying = FALSE;
    bool done = FALSE;
    char **files;
-
    char *fill_by = 0;
+ NCURSES_CONST char *fill_by = 0;
#if USE_WIDEC_SUPPORT
    cchar_t mycc;
    static const wchar_t mywc[2] =
Index: test/tclock.c
Prereq: 1.48
--- ncurses-6.5-20240928+/test/tclock.c 2023-02-25 16:42:22.000000000 +0000
+++ ncurses-6.5-20241006/test/tclock.c 2024-10-05 18:47:56.000000000 +0000
@@@ -1,4 +1,4 @@@
-/* $Id: tclock.c,v 1.48 2023/02/25 16:42:22 tom Exp $ */
+/* $Id: tclock.c,v 1.49 2024/10/05 18:47:56 tom Exp $ */

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

-/* $Id: test.priv.h,v 1.219 2024/08/31 10:46:01 Rafael.Kitover Exp $ */
+/* $Id: test.priv.h,v 1.220 2024/10/05 19:01:00 tom Exp $ */

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

```

```

#define VERSION_COMMON() \
static char *version_common(char **argv) { \
- char *base = argv[0]; \
- char *part = strrchr(base, '/'); \
+ const char *base = argv[0]; \
+ const char *part = strrchr(base, '/'); \
size_t need = strlen(base) + 80; \
char *result = malloc(need); \
if (result != NULL) { \
@@ -916,8 +916,8 @@
* Workaround in case getcchar() returns a positive value when the source
* string produces only a L'\0'.
*/
-#define TEST_CCHAR(s, count, then_stmt, else_stmt) \
- if ((count = getcchar(s, NULL, NULL, NULL, NULL)) > 0) { \
+#define TEST_CCHAR(s, then_stmt, else_stmt) \
+ if (getcchar(s, NULL, NULL,
NULL, NULL) > 0) { \
    wchar_t test_wch[CCHARW_MAX + 2]; \
    attr_t test_attrs; \
    NCURSES_PAIRS_T test_pair; \
Index: test/test_add_wchstr.c
Prereq: 1.34
--- ncurses-6.5-20240928+/test/test_add_wchstr.c 2022-12-10 22:28:50.000000000 +0000
+++ ncurses-6.5-20241006/test/test_add_wchstr.c 2024-10-05 19:26:24.000000000 +0000
@@@ -1,5 +1,5 @@@
/*****
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*                                                              *
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@@@ -27,7 +27,7 @@@
* authorization.                                           *
*****/
/*
- * $Id: test_add_wchstr.c,v 1.34 2022/12/10 22:28:50 tom Exp $
+ * $Id: test_add_wchstr.c,v 1.35 2024/10/05 19:26:24 tom Exp $
*
* Demonstrate the waddwchstr() and wadd_wch functions.
* Thomas Dickey - 2009/9/12
@@@ -158,7 +158,7 @@@
}

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

```

```
const char *showstate;
```

Index: test/test_addchstr.c

Prereq: 1.29

--- ncurses-6.5-20240928+/test/test_addchstr.c 2022-12-10 22:28:50.000000000 +0000

+++ ncurses-6.5-20241006/test/test_addchstr.c 2024-10-05 19:26:24.000000000 +0000

@@ -1,5 +1,5 @@

/*****

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*

*

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@@ -27,7 +27,7 @@

* authorization. *

*****/

/*

- * \$Id: test_addchstr.c,v 1.29 2022/12/10 22:28:50 tom Exp \$

+ * \$Id: test_addchstr.c,v 1.30 2024/10/05 19:26:24 tom Exp \$

*

* Demonstrate the waddchstr() and waddch functions.

* Thomas Dickey - 2009/9/12

@@ -169,7 +169,7 @@

}

static int

-ColOf(char *buffer, int length, int margin)

+ColOf(const char *buffer, int length, int margin)

{

int n;

int result;

Index: test/test_addstr.c

Prereq: 1.20

--- ncurses-6.5-20240928+/test/test_addstr.c 2022-12-10 22:28:50.000000000 +0000

+++ ncurses-6.5-20241006/test/test_addstr.c 2024-10-05 19:27:33.000000000 +0000

@@ -1,5 +1,5 @@

/*****

-

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*

*

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@@ -27,7 +27,7 @@

* authorization. *

*****/

/*

- * \$Id: test_addstr.c,v 1.20 2022/12/10 22:28:50 tom Exp \$

+ * \$Id: test_addstr.c,v 1.21 2024/10/05 19:27:33 tom Exp \$

*

* Demonstrate the waddstr() and waddch functions.

* Thomas Dickey - 2009/9/12

@@ -91,7 +91,7 @@

}

static int

-ColOf(char *buffer, int length, int margin)

+ColOf(const char *buffer, int length, int margin)

{

int n;

int result;

Index: test/test_addwstr.c

Prereq: 1.22

ncurses-6.5-20240928+/test/test_addwstr.c 2023-05-27 20:13:10.000000000 +0000

+++ ncurses-6.5-20241006/test/test_addwstr.c 2024-10-05 19:27:33.000000000 +0000

@@ -1,5 +1,5 @@

/*****

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*

*

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@@ -27,7 +27,7 @@

* authorization. *

*****/

/*

- * \$Id: test_addwstr.c,v 1.22 2023/05/27 20:13:10 tom Exp \$

+ * \$Id: test_addwstr.c,v 1.23 2024/10/05 19:27:33 tom Exp \$

*

* Demonstrate the waddwstr() and wadd_wch

functions.

* Thomas Dickey - 2009/9/12

@@ -82,7 +82,7 @@

static int n_opt = -1;

static void

-legend(WINDOW *win, int level, Options state, wchar_t *buffer, int length)

+legend(WINDOW *win, int level, Options state, const wchar_t *buffer, int length)

{

const char *showstate;

Index: test/test_endwin.c

Prereq: 1.2

--- ncurses-6.5-20240928+/test/test_endwin.c 2023-11-10 15:17:19.000000000 +0000

+++ ncurses-6.5-20241006/test/test_endwin.c 2024-10-05 19:27:33.000000000 +0000

```

@@ -1,5 +1,5 @@
/*****

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@@ -26,7 +26,7 @@
* authorization.
*****/

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

@@ -67,7 +67,7 @@
    int rc_e1 = OK;
    int rc_e2 = OK;
    int rc_e3 = OK;
-   SCREEN *sp = NULL;
+   const SCREEN *sp = NULL;
    bool opt_e = FALSE;
    bool opt_i = FALSE;
    bool opt_n = FALSE;
Index: test/test_get_wstr.c
Prereq: 1.14
--- ncurses-6.5-20240928+/test/test_get_wstr.c 2022-12-10 23:59:13.000000000 +0000
+++ ncurses-6.5-20241006/test/test_get_wstr.c 2024-10-06 23:15:10.000000000 +0000
@@ -1,5 +1,5 @@
/*****

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@@ -27,7 +27,7 @@
* authorization.
*****/

/*
- * $Id: test_get_wstr.c,v 1.14 2022/12/10 23:59:13 tom Exp $
+ * $Id: test_get_wstr.c,v 1.16 2024/10/06 23:15:10 tom Exp $
*
* Author: Thomas E Dickey
*
@@ -69,7 +69,7 @@
}

```

```

static int
-Remainder(WINDOW *txtwin)
+Remainder(const WINDOW *txtwin)
{
    int result = getmaxx(txtwin) - getcurx(txtwin);
    return (result > 0) ? result : 0;
@@ -138,7 +138,7 @@
static int
recursive_test(int level, char **argv, WINDOW *strwin)
{
- static const char *help[] =
+ static NCURSES_CONST char *help[] =
    {
        "Commands:",
        " q,^Q,ESC      - quit this program",
Index: test/test_getstr.c
Prereq:
    1.16
--- ncurses-6.5-20240928+/test/test_getstr.c 2022-12-10 23:58:37.000000000 +0000
+++ ncurses-6.5-20241006/test/test_getstr.c 2024-10-06 22:36:46.000000000 +0000
@@@ -1,5 +1,5 @@@
/******
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*                                                                *
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@@@ -27,7 +27,7 @@@
* authorization.
*****/
/*
- * $Id: test_getstr.c,v 1.16 2022/12/10 23:58:37 tom Exp $
+ * $Id: test_getstr.c,v 1.19 2024/10/06 22:36:46 tom Exp $
*
* Author: Thomas E Dickey
*
@@@ -76,7 +76,7 @@@
}

static int
-Remainder(WINDOW *txtwin)
+Remainder(NCURSES_CONST WINDOW *txtwin)
{
    int result = getmaxx(txtwin) - getcurx(txtwin);
    return (result > 0) ? result : 0;
@@@ -145,7 +145,7 @@@
static int

```

```

recursive_test(int level, char **argv, WINDOW *strwin)
{
- static const char *help[] =
+ static NCURSES_CONST char *help[] =
{
"Commands:",
" q,^Q,ESC - quit this program",
Index: test/test_instr.c
Prereq: 1.13
--- ncurses-6.5-20240928+/test/test_instr.c 2024-06-29 18:42:53.000000000 +0000
+++ ncurses-6.5-20241006/test/test_instr.c 2024-10-06 21:11:54.000000000 +0000
@@ -27,7 +27,7 @@
* authorization.
*
*****/
/*
- * $Id: test_instr.c,v 1.13 2024/06/29 18:42:53 tom Exp $
+ * $Id: test_instr.c,v 1.15 2024/10/06 21:11:54 tom Exp $
*
* Author: Thomas E Dickey
*
@@ -56,13 +56,13 @@
}

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

static void
-showmore(WINDOW *win, int line, char *buffer)
+showmore(WINDOW *win, int line, NCURSES_CONST char *buffer)
{
wmove(win, line, 0);
wclrtoeol(win);
@@ -72,7 +72,7 @@
static void
show_help(WINDOW *win)
{
- static const char *msgs[] =
+ static NCURSES_CONST char *msgs[] =
{
"Show file contents and a viewport from the variants of winstr."
,"Use h/j/k/l or arrow keys to move the viewport."
Index: test/test_inwstr.c
Prereq: 1.9

```

```

--- ncurses-6.5-20240928+/test/test_inwstr.c 2024-06-29 18:40:02.000000000 +0000
+++ ncurses-6.5-20241006/test/test_inwstr.c 2024-10-06 23:15:38.000000000 +0000
@@ -27,7 +27,7 @@
* authorization.
*
*****/
/*
- * $Id: test_inwstr.c,v
1.9 2024/06/29 18:40:02 tom Exp $
+ * $Id: test_inwstr.c,v 1.11 2024/10/06 23:15:38 tom Exp $
*
* Author: Thomas E Dickey
*
@@ -59,13 +59,13 @@
}

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

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

```



```

*
* Author: Leonid S Usov
*
@@ -38,7 +38,7 @@
static void
raw_loop(void)
{
-   char *xtermcap;
+   const char *xtermcap;

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

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

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

static int
-status_x(WINDOW *stswin, int cell)
+status_x(const WINDOW *stswin, int cell)
{
    return (15 * (cell / getmaxy(stswin)));
}

```

```

}
Index: test/test_sgr.c
Prereq: 1.22
--- ncurses-6.5-20240928+/test/test_sgr.c 2023-05-27 20:13:10.000000000 +0000
+++ ncurses-6.5-20241006/test/test_sgr.c 2024-10-06 21:05:50.000000000 +0000
@@ -1,5 +1,5 @@
/*****
-
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@@ -30,7 +30,7 @@
/*
* Author: Thomas E. Dickey
*
- * $Id: test_sgr.c,v 1.22 2023/05/27 20:13:10 tom Exp $
+ * $Id: test_sgr.c,v 1.25 2024/10/06 21:05:50 tom Exp $
*
* A simple demo of the sgr/sgr0 terminal capabilities.
*/
@@ -142,10 +142,10 @@
#define MASK_REV (1 << 2)

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

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

```

```

+ NCURSES_CONST char *my_sgr0;
+ NCURSES_CONST char *my_bold;
+ NCURSES_CONST char *my_revs;
+ NCURSES_CONST char *my_smso;
  char *my_name = strdup(name);

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

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

```

Index: test/test_tparm.c

Prereq: 1.39

--- ncurses-6.5-20240928+/test/test_tparm.c 2023-11-11 01:00:03.000000000 +0000

+++ ncurses-6.5-20241006/test/test_tparm.c 2024-10-06 20:50:27.000000000 +0000

@@ -1,5 +1,5 @@

/*

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*

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@@ -29,7 +29,7 @@

/*

* Author: Thomas E. Dickey

```

*
- * $Id: test_tparm.c,v 1.39 2023/11/11 01:00:03
tom Exp $
+ * $Id: test_tparm.c,v 1.42 2024/10/06 20:50:27 tom Exp $
*
* Exercise tparm/tparm, either for all possible capabilities with fixed
* parameters, or one capability with specific combinations of parameters.
@@ -107,7 +107,7 @@
}

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

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

```

```

@@ -1,5 +1,5 @@
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@@ -27,7 +27,7 @@
* authorization.
*
*****/

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

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

#include <test.priv.h>
@@ -245,7 +245,7 @@
wclrtoobot(win);
if (c >= KEY_MIN)
    wprintw(win, "Key Pressed: %s", keyname(c));
- else if (isprint(c))
+ else if (isprint(UChar(c)))
    wprintw(win, "Key Pressed: %c", c);
else
    wprintw(win, "Key Pressed: %s", unctrl(UChar(c)));

```

```

@@ -748,8 +748,8 @@
keypad(stdscr, TRUE);
raw();
key = getch();
- if (key < KEY_MIN && key > 0 && isalpha(key)) {
-   if (islower(key))
+ if (key < KEY_MIN && key > 0 && isalpha(UChar(key))) {
+   if (islower(UChar(key)))
    key = toupper(key);
    for (n = 0; n < MAX_OPTIONS; ++n) {
      if (key == command[n].text[0]) {
Index: test/testscanw.c
Prereq: 1.15
--- ncurses-6.5-20240928+/test/testscanw.c 2022-12-11 00:10:29.000000000 +0000
+++ ncurses-6.5-20241006/test/testscanw.c 2024-10-05 19:27:33.000000000 +0000
@@ -1,5 +1,5 @@
/*****
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 *
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*
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@@ -30,7 +30,7 @@
* Date: 1997/03/17
* From: bayern@morpheus.cis.yale.edu
*
- * $Id: testscanw.c,v 1.15 2022/12/11 00:10:29 tom Exp $
+ * $Id: testscanw.c,v 1.16 2024/10/05 19:27:33 tom Exp $
*/
#include <test.priv.h>

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

```

```

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@@ -52,7 +52,7 @@
* scroll operation worked, and the refresh() code only had to do a
* partial repaint.
*
- * $Id: view.c,v 1.145 2022/12/04 00:40:11 tom Exp $
+ * $Id: view.c,v 1.147 2024/10/06 21:08:05 tom Exp $
*/

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

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

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

#if USE_WIDEC_SUPPORT
    if (!memcmp("\357\273\277", my_blob, 3)) {
- char *s = my_blob + 3;
+ const char *s = my_blob + 3;
    char *d = my_blob;
    Trace(("trim BOM"));

```

```

do {
@@ -329,7 +326,7 @@
char *s;
int y, x;
#if USE_WIDEC_SUPPORT
- char *last = my_vec[k] + (int) strlen(my_vec[k]);
+ const char *last = my_vec[k] + (int) strlen(my_vec[k]);
wchar_t wch[2];
size_t rc;
#ifdef state_unused
@@ -408,7 +405,7 @@
int
main(int argc, char *argv[])
{
- static const char *help[] =
+ static NCURSES_CONST char *help[] =
{
"Commands:",
" q,^Q,ESC - quit this program",
@@ -659,7 +656,7 @@
beep();
break;
}
- if (c >= KEY_MIN || (c > 0 && !isdigit(c))) {
+ if (c >= KEY_MIN || (c > 0 && !isdigit(UChar(c)))) {
got_number = FALSE;
value = 0;
}

```

Found in path(s):

* /ncurses-6.5-20241006-patch-gz/ncurses-6.5-20241006.patch

1.38 scanelf 1.3.8-r1

1.38.1 Available under license :

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1.40 skalibs-libs 2.14.3.0-r0

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1.41 auto-sdk 1.1.0

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package version

// Collection is a type that implements the sort.Interface interface

// so that versions can be sorted.

type Collection []*Version

func (v Collection) Len() int {

return len(v)

}

func (v Collection) Less(i, j int) bool {

return v[i].LessThan(v[j])

}

func (v Collection) Swap(i, j int) {

v[i], v[j] = v[j], v[i]

}

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package version

```
import (  
    "reflect"  
    "sort"  
    "testing"  
)  
  
func TestCollection(t *testing.T) {  
    versionsRaw := []string{  
        "1.1.1",  
        "1.0",  
        "1.2",  
    }
```

```

"2",
"0.7.1",
}

versions := make([]*Version, len(versionsRaw))
for i, raw := range versionsRaw {
    v, err := NewVersion(raw)
    if err != nil {
        t.Fatalf("err: %s", err)
    }

    versions[i] = v
}

sort.Sort(Collection(versions))

actual := make([]string, len(versions))
for i, v := range versions {
    actual[i] = v.String()
}

expected := []string{
    "0.7.1",
    "1.0.0",
    "1.1.1",
    "1.2.0",
    "2.0.0",
}

if !reflect.DeepEqual(actual, expected) {
    t.Fatalf("bad: %#v", actual)
}
}

name: go-tests

on: [push]

env:
    TEST_RESULTS: /tmp/test-results

jobs:

    go-tests:
        runs-on: ubuntu-latest
        strategy:
            matrix:
                go-version: [ 1.15.3, 1.19 ]

```

steps:

- name: Setup go

uses: actions/setup-go@41dfa10bad2bb2ae585af6ee5bb4d7d973ad74ed # v5.1.0

with:

go-version: \${{ matrix.go-version }}

- name: Checkout code

uses: actions/checkout@11bd71901bbe5b1630ceea73d27597364c9af683 # v4.2.2

- name: Create test directory

run: |

mkdir -p \${{ env.TEST_RESULTS }}

- name: Download go modules

run: go mod download

- name: Cache / restore go modules

uses: actions/cache@1bd1e32a3bdc45362d1e726936510720a7c30a57 # v4.2.0

with:

path: |

~/go/pkg/mod

key: \${{ runner.os }}-go-\${{ hashFiles('**/go.sum') }}

restore-keys: |

\${{ runner.os }}-go-

Check go fmt output because it does not report
non-zero when there are fmt changes

- name: Run gofmt

run: |

go fmt ./...

files=\$(go fmt ./...)

if [-n "\$files"]; then

echo "The following file(s) do not conform to go fmt:"

echo "\$files"

exit 1

fi

Install gotestsum with go get for 1.15.3; otherwise default to go install

- name: Install gotestsum

run: |

GTS="gotest.tools/gotestsum@v1.8.2"

We use the same error message prefix in either failure case, so just define it once here.

ERROR="Failed to install \$GTS"

First try to 'go install', if that fails try 'go get'...

go install "\$GTS" || go get "\$GTS" || { echo "\$ERROR: both 'go install' and 'go get' failed"; exit 1; }

Check that the gotestsum command was actually installed in the path...

command -v gotestsum > /dev/null 2>&1 || { echo "\$ERROR: gotestsum command not installed"; exit

```

1; }
    echo "OK: Command 'gotestsum' installed ($GTS)"

- name: Run go tests
  run: |
    PACKAGE_NAMES=$(go list ./...)
    gotestsum --format=short-verbose --junitfile $TEST_RESULTS/gotestsum-report.xml --
$PACKAGE_NAMES

# Save coverage report parts
- name: Upload and save artifacts
  uses: actions/upload-artifact@b4b15b8c7c6ac21ea08fcf65892d2ee8f75cf882 # v4.4.3
  with:
    name: Test Results
    path: ${ env.TEST_RESULTS }

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```

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Versioning Library for Go

![Build Status](https://github.com/hashicorp/go-version/actions/workflows/go-tests.yml/badge.svg)
[![GoDoc](https://godoc.org/github.com/hashicorp/go-version?status.svg)](https://godoc.org/github.com/hashicorp/go-version)

go-version is a library for parsing versions and version constraints, and verifying versions against a set of constraints. go-version can sort a collection of versions properly, handles prerelease/beta versions, can increment versions, etc.

Versions used with go-version must follow [SemVer](http://semver.org/).

Installation and Usage

Package documentation can be found on
[GoDoc](http://godoc.org/github.com/hashicorp/go-version).

Installation can be done with a normal `go get`:

```
...
```

```
$ go get github.com/hashicorp/go-version
```

```
...
```

Version Parsing and Comparison

```
```go
```

```
v1, err := version.NewVersion("1.2")
```

```
v2, err := version.NewVersion("1.5+metadata")
```

```
// Comparison example. There is also GreaterThan, Equal, and just
```

```
// a simple Compare
```

```
that returns an int allowing easy >=, <=, etc.
```

```
if v1.LessThan(v2) {
```

```
 fmt.Printf("%s is less than %s", v1, v2)
```

```
}
```

```
...
```

#### #### Version Constraints

```
```go
```

```
v1, err := version.NewVersion("1.2")
```

```
// Constraints example.
```

```
constraints, err := version.NewConstraint(">= 1.0, < 1.4")
```

```
if constraints.Check(v1) {
```

```
    fmt.Printf("%s satisfies constraints %s", v1, constraints)
```

```
}
```

```
...
```

Version Sorting

```
```go
```

```
versionsRaw := []string{"1.1", "0.7.1", "1.4-beta", "1.4", "2"}
```

```
versions := make([]*version.Version, len(versionsRaw))
```

```
for i, raw := range versionsRaw {
```

```
 v, _ := version.NewVersion(raw)
```

```
 versions[i] = v
```

```
}
```

```
// After this, the versions are properly sorted
```

```
sort.Sort(version.Collection(versions))
```

```
...
```

#### ## Issues and Contributing

If you find an issue with this library, please report an issue. If you'd like, we welcome any contributions. Fork this library and submit a pull request.

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package version

```
import (
 "encoding/json"
 "fmt"
 "reflect"
 "testing"
)
```

```

func TestNewVersion(t *testing.T) {
 cases := []struct {
 version string
 err bool
 }{
 {"", true},
 {"1.2.3", false},
 {"1.0", false},
 {"1", false},
 {"1.2.beta", true},
 {"1.21.beta", true},
 {"foo", true},
 {"1.2-5", false},
 {"1.2-beta.5", false},
 {"\n1.2", true},
 {"1.2.0-x.Y.0+metadata", false},
 {"1.2.0-x.Y.0+metadata-width-hyphen", false},
 {"1.2.3-rc1-with-hyphen", false},
 {"1.2.3.4", false},
 {"1.2.0.4-x.Y.0+metadata", false},
 {"1.2.0.4-x.Y.0+metadata-width-hyphen", false},
 {"1.2.0-X-1.2.0+metadata~dist", false},
 {"1.2.3.4-rc1-with-hyphen", false},
 {"1.2.3.4", false},
 {"v1.2.3", false},
 {"foo1.2.3", true},
 {"1.7rc2", false},
 {"v1.7rc2", false},
 {"1.0-", false},
 }

 for _, tc := range cases {
 _, err := NewVersion(tc.version)
 if tc.err && err == nil {
 t.Fatalf("expected error for version:
 %q", tc.version)
 } else if !tc.err && err != nil {
 t.Fatalf("error for version %q: %s", tc.version, err)
 }
 }
}

func TestNewSemver(t *testing.T) {
 cases := []struct {
 version string
 err bool
 }{

```

```

{"", true},
{"1.2.3", false},
{"1.0", false},
{"1", false},
{"1.2.beta", true},
{"1.21.beta", true},
{"foo", true},
{"1.2-5", false},
{"1.2-beta.5", false},
{"\n1.2", true},
{"1.2.0-x.Y.0+metadata", false},
{"1.2.0-x.Y.0+metadata-width-hyphen", false},
{"1.2.3-rc1-with-hyphen", false},
{"1.2.3.4", false},
{"1.2.0.4-x.Y.0+metadata", false},
{"1.2.0.4-x.Y.0+metadata-width-hyphen", false},
{"1.2.0-X-1.2.0+metadata~dist", false},
{"1.2.3.4-rc1-with-hyphen", false},
{"1.2.3.4", false},
{"v1.2.3", false},
{"foo1.2.3", true},
{"1.7rc2", true},
{"v1.7rc2", true},
{"1.0-", true},
}

```

```

for _, tc := range cases {
 _, err := NewSemver(tc.version)
 if tc.err && err == nil {
 t.Fatalf("expected error for version: %q", tc.version)
 } else
 if !tc.err && err != nil {
 t.Fatalf("error for version %q: %s", tc.version, err)
 }
}
}

```

```

func TestCore(t *testing.T) {
 cases := []struct {
 v1 string
 v2 string
 }{
 {"1.2.3", "1.2.3"},
 {"2.3.4-alpha1", "2.3.4"},
 {"3.4.5alpha1", "3.4.5"},
 {"1.2.3-2", "1.2.3"},
 {"4.5.6-beta1+meta", "4.5.6"},
 {"5.6.7.1.2.3", "5.6.7"},
 }
}

```

```

}

for _, tc := range cases {
 v1, err := NewVersion(tc.v1)
 if err != nil {
 t.Fatalf("error for version %q: %s", tc.v1, err)
 }
 v2, err := NewVersion(tc.v2)
 if err != nil {
 t.Fatalf("error for version %q: %s", tc.v2, err)
 }

 actual := v1.Core()
 expected := v2

 if !reflect.DeepEqual(actual, expected) {
 t.Fatalf("expected: %s\nactual: %s", expected, actual)
 }
}
}

```

```

func TestVersionCompare(t *testing.T) {
 cases := []struct {
 v1 string
 v2 string
 expected int
 }{
 {"1.2.3", "1.4.5", -1},
 {"1.2-beta", "1.2-beta", 0},
 {"1.2", "1.1.4", 1},
 {"1.2", "1.2-beta", 1},
 {"1.2+foo", "1.2+beta", 0},
 {"v1.2", "v1.2-beta",
1},
 {"v1.2+foo", "v1.2+beta", 0},
 {"v1.2.3.4", "v1.2.3.4", 0},
 {"v1.2.0.0", "v1.2", 0},
 {"v1.2.0.0.1", "v1.2", 1},
 {"v1.2", "v1.2.0.0", 0},
 {"v1.2", "v1.2.0.0.1", -1},
 {"v1.2.0.0", "v1.2.0.0.1", -1},
 {"v1.2.3.0", "v1.2.3.4", -1},
 {"1.7rc2", "1.7rc1", 1},
 {"1.7rc2", "1.7", -1},
 {"1.2.0", "1.2.0-X-1.2.0+metadata~dist", 1},
 }

 for _, tc := range cases {

```



```

v1, err := NewVersion(tc.v1)
if err != nil {
 t.Fatalf("err: %s", err)
}

v2, err := NewVersion(tc.v2)
if err != nil {
 t.Fatalf("err: %s", err)
}

actual := v1.Compare(v2)
expected := tc.expected
if actual != expected {
 t.Fatalf(
 "%s <=> %s\nexpected: %d\nactual: %d",
 tc.v1, tc.v2,
 expected, actual)
}
}
}

func TestVersionCompare_versionAndSemver(t *testing.T) {
 cases := []struct {
 versionRaw string
 semverRaw string
 expected int
 }{
 {"0.0.2", "0.0.2", 0},
 {"1.0.2alpha", "1.0.2-alpha", 0},
 {"v1.2+foo", "v1.2+beta", 0},
 {"v1.2", "v1.2+meta", 0},
 {"1.2",
 "1.2-beta", 1},
 {"v1.2", "v1.2-beta", 1},
 {"1.2.3", "1.4.5", -1},
 {"v1.2", "v1.2.0.0.1", -1},
 {"v1.0.3-", "v1.0.3", -1},
 }

 for _, tc := range cases {
 ver, err := NewVersion(tc.versionRaw)
 if err != nil {
 t.Fatalf("err: %s", err)
 }

 semver, err := NewSemver(tc.semverRaw)
 if err != nil {
 t.Fatalf("err: %s", err)
 }
 }
}

```

```

}

actual := ver.Compare(semver)
if actual != tc.expected {
 t.Fatalf(
 "%s <=> %s\nexpected: %d\n actual: %d",
 tc.versionRaw, tc.semverRaw, tc.expected, actual,
)
}
}
}
}

```

```

func TestVersionEqual_nil(t *testing.T) {
 mustVersion := func(v string) *Version {
 ver, err := NewVersion(v)
 if err != nil {
 t.Fatal(err)
 }
 return ver
 }
 cases := []struct {
 leftVersion *Version
 rightVersion *Version
 expected bool
 }{
 {mustVersion("1.0.0"), nil, false},
 {nil, mustVersion("1.0.0"), false},
 {nil, nil, true},
 }
}

```

```

for _, tc := range cases {
 given := tc.leftVersion.Equal(tc.rightVersion)
 if given != tc.expected {
 t.Fatalf("expected
Equal to nil to be %t", tc.expected)
 }
}
}

```

```

func TestComparePreReleases(t *testing.T) {
 cases := []struct {
 v1 string
 v2 string
 expected int
 }{
 {"1.2-beta.2", "1.2-beta.2", 0},
 {"1.2-beta.1", "1.2-beta.2", -1},
 {"1.2-beta.2", "1.2-beta.11", -1},
 }
}

```

```

{"3.2-alpha.1", "3.2-alpha", 1},
{"1.2-beta.2", "1.2-beta.1", 1},
{"1.2-beta.11", "1.2-beta.2", 1},
{"1.2-beta", "1.2-beta.3", -1},
{"1.2-alpha", "1.2-beta.3", -1},
{"1.2-beta", "1.2-alpha.3", 1},
{"3.0-alpha.3", "3.0-rc.1", -1},
{"3.0-alpha3", "3.0-rc1", -1},
{"3.0-alpha.1", "3.0-alpha.beta", -1},
{"5.4-alpha", "5.4-alpha.beta", 1},
{"v1.2-beta.2", "v1.2-beta.2", 0},
{"v1.2-beta.1", "v1.2-beta.2", -1},
{"v3.2-alpha.1", "v3.2-alpha", 1},
{"v3.2-rc.1-1-g123", "v3.2-rc.2", 1},
}

```

```

for _, tc := range cases {
 v1, err := NewVersion(tc.v1)
 if err != nil {
 t.Fatalf("err: %s", err)
 }

```

```

 v2, err := NewVersion(tc.v2)
 if err != nil {
 t.Fatalf("err: %s", err)
 }

```

```

 actual
:= v1.Compare(v2)
 expected := tc.expected
 if actual != expected {
 t.Fatalf(
 "%s <=> %s\nexpected: %d\nactual: %d",
 tc.v1, tc.v2,
 expected, actual)
 }
}
}

```

```

func TestVersionMetadata(t *testing.T) {
 cases := []struct {
 version string
 expected string
 }{
 {"1.2.3", ""},
 {"1.2-beta", ""},
 {"1.2.0-x.Y.0", ""},
 {"1.2.0-x.Y.0+metadata", "metadata"},
 }

```

```

{"1.2.0-metadata-1.2.0+metadata~dist", "metadata~dist"},
}

for _, tc := range cases {
 v, err := NewVersion(tc.version)
 if err != nil {
 t.Fatalf("err: %s", err)
 }

 actual := v.Metadata()
 expected := tc.expected
 if actual != expected {
 t.Fatalf("expected: %s\nactual: %s", expected, actual)
 }
}

func TestVersionPrerelease(t *testing.T) {
 cases := []struct {
 version string
 expected string
 }{
 {"1.2.3", ""},
 {"1.2-beta", "beta"},
 {"1.2.0-x.Y.0", "x.Y.0"},
 {"1.2.0-7.Y.0", "7.Y.0"},
 {"1.2.0-x.Y.0+metadata", "x.Y.0"},
 {"1.2.0-metadata-1.2.0+metadata~dist", "metadata-1.2.0"},
 {"17.03.0-ce",
"ce"}, // zero-padded fields
 }

 for _, tc := range cases {
 v, err := NewVersion(tc.version)
 if err != nil {
 t.Fatalf("err: %s", err)
 }

 actual := v.Prerelease()
 expected := tc.expected
 if actual != expected {
 t.Fatalf("expected: %s\nactual: %s", expected, actual)
 }
 }

 func TestVersionSegments(t *testing.T) {
 cases := []struct {

```

```

version string
expected []int
}{
{"1.2.3", []int{1, 2, 3}},
{"1.2-beta", []int{1, 2, 0}},
{"1-x.Y.0", []int{1, 0, 0}},
{"1.2.0-x.Y.0+metadata", []int{1, 2, 0}},
{"1.2.0-metadata-1.2.0+metadata~dist", []int{1, 2, 0}},
{"17.03.0-ce", []int{17, 3, 0}}, // zero-padded fields
}

for _, tc := range cases {
v, err := NewVersion(tc.version)
if err != nil {
t.Fatalf("err: %s", err)
}

actual := v.Segments()
expected := tc.expected
if !reflect.DeepEqual(actual, expected) {
t.Fatalf("expected: %#v\nactual: %#v", expected, actual)
}
}
}

func TestVersionSegments64(t *testing.T) {
cases
:= []struct {
version string
expected []int64
}{
{"1.2.3", []int64{1, 2, 3}},
{"1.2-beta", []int64{1, 2, 0}},
{"1-x.Y.0", []int64{1, 0, 0}},
{"1.2.0-x.Y.0+metadata", []int64{1, 2, 0}},
{"1.4.9223372036854775807", []int64{1, 4, 9223372036854775807}},
}

for _, tc := range cases {
v, err := NewVersion(tc.version)
if err != nil {
t.Fatalf("err: %s", err)
}

actual := v.Segments64()
expected := tc.expected
if !reflect.DeepEqual(actual, expected) {
t.Fatalf("expected: %#v\nactual: %#v", expected, actual)
}
}
}

```

```

}

{
 expected := actual[0]
 actual[0]++
 actual = v.Segments64()
 if actual[0] != expected {
 t.Fatalf("Segments64 is mutable")
 }
}
}
}

func TestJsonMarshal(t *testing.T) {
 cases := []struct {
 version string
 err bool
 }{
 {"1.2.3", false},
 {"1.2.0-x.Y.0+metadata", false},
 {"1.2.0-x.Y.0+metadata-width-hyphen", false},
 {"1.2.3-rc1-with-hyphen", false},
 {"1.2.3.4", false},
 {"1.2.0.4-x.Y.0+metadata", false},
 {"1.2.0.4-x.Y.0+metadata-width-hyphen",
 false},
 {"1.2.0-X-1.2.0+metadata~dist", false},
 {"1.2.3.4-rc1-with-hyphen", false},
 {"1.2.3.4", false},
 }

 for _, tc := range cases {
 v, err1 := NewVersion(tc.version)
 if err1 != nil {
 t.Fatalf("error for version %q: %s", tc.version, err1)
 }

 parsed, err2 := json.Marshal(v)
 if err2 != nil {
 t.Fatalf("error marshaling version %q: %s", tc.version, err2)
 }
 result := string(parsed)
 expected := fmt.Sprintf("%q", tc.version)
 if result != expected && !tc.err {
 t.Fatalf("Error marshaling unexpected marshaled content: result=%q expected=%q", result, expected)
 }
 }
}

```

```

func TestJsonUnmarshal(t *testing.T) {
 cases := []struct {
 version string
 err bool
 }{
 {"1.2.3", false},
 {"1.2.0-x.Y.0+metadata", false},
 {"1.2.0-x.Y.0+metadata-width-hyphen", false},
 {"1.2.3-rc1-with-hyphen", false},
 {"1.2.3.4", false},
 {"1.2.0.4-x.Y.0+metadata", false},
 {"1.2.0.4-x.Y.0+metadata-width-hyphen", false},
 {"1.2.0-X-1.2.0+metadata~dist",
false},
 {"1.2.3.4-rc1-with-hyphen", false},
 {"1.2.3.4", false},
 }

 for _, tc := range cases {
 expected, err1 := NewVersion(tc.version)
 if err1 != nil {
 t.Fatalf("err: %s", err1)
 }

 actual := &Version{}
 err2 := json.Unmarshal([]byte(fmt.Sprintf("%q", tc.version)), actual)
 if err2 != nil {
 t.Fatalf("error unmarshaling version: %s", err2)
 }
 if !reflect.DeepEqual(actual, expected) {
 t.Fatalf("error unmarshaling, unexpected object content: actual=%q expected=%q", actual, expected)
 }
 }
}

func TestVersionString(t *testing.T) {
 cases := [][]string{
 {"1.2.3", "1.2.3"},
 {"1.2-beta", "1.2.0-beta"},
 {"1.2.0-x.Y.0", "1.2.0-x.Y.0"},
 {"1.2.0-x.Y.0+metadata", "1.2.0-x.Y.0+metadata"},
 {"1.2.0-metadata-1.2.0+metadata~dist", "1.2.0-metadata-1.2.0+metadata~dist"},
 {"17.03.0-ce", "17.3.0-ce"}, // zero-padded fields
 }

 for _, tc := range cases {
 v, err := NewVersion(tc[0])

```

```

if err != nil {
 t.Fatalf("err: %s", err)
}

actual := v.String()
expected
:= tc[1]
if actual != expected {
 t.Fatalf("expected: %s\nactual: %s", expected, actual)
}
if actual := v.Original(); actual != tc[0] {
 t.Fatalf("expected original: %q\nactual: %q", tc[0], actual)
}
}
}

func TestEqual(t *testing.T) {
 cases := []struct {
 v1 string
 v2 string
 expected bool
 }{
 {"1.2.3", "1.4.5", false},
 {"1.2-beta", "1.2-beta", true},
 {"1.2", "1.1.4", false},
 {"1.2", "1.2-beta", false},
 {"1.2+foo", "1.2+beta", true},
 {"v1.2", "v1.2-beta", false},
 {"v1.2+foo", "v1.2+beta", true},
 {"v1.2.3.4", "v1.2.3.4", true},
 {"v1.2.0.0", "v1.2", true},
 {"v1.2.0.0.1", "v1.2", false},
 {"v1.2", "v1.2.0.0", true},
 {"v1.2", "v1.2.0.0.1", false},
 {"v1.2.0.0", "v1.2.0.0.1", false},
 {"v1.2.3.0", "v1.2.3.4", false},
 {"1.7rc2", "1.7rc1", false},
 {"1.7rc2", "1.7", false},
 {"1.2.0", "1.2.0-X-1.2.0+metadata~dist", false},
 }

 for _, tc := range cases {
 v1, err := NewVersion(tc.v1)
 if err != nil {
 t.Fatalf("err:
%s", err)
 }
 }
}

```



```

v2, err := NewVersion(tc.v2)
if err != nil {
 t.Fatalf("err: %s", err)
}

actual := v1.Equal(v2)
expected := tc.expected
if actual != expected {
 t.Fatalf(
 "%s <=> %s\nexpected: %t\nactual: %t",
 tc.v1, tc.v2,
 expected, actual)
}
}
}

func TestGreaterThan(t *testing.T) {
 cases := []struct {
 v1 string
 v2 string
 expected bool
 }{
 {"1.2.3", "1.4.5", false},
 {"1.2-beta", "1.2-beta", false},
 {"1.2", "1.1.4", true},
 {"1.2", "1.2-beta", true},
 {"1.2+foo", "1.2+beta", false},
 {"v1.2", "v1.2-beta", true},
 {"v1.2+foo", "v1.2+beta", false},
 {"v1.2.3.4", "v1.2.3.4", false},
 {"v1.2.0.0", "v1.2", false},
 {"v1.2.0.0.1", "v1.2", true},
 {"v1.2", "v1.2.0.0", false},
 {"v1.2", "v1.2.0.0.1", false},
 {"v1.2.0.0", "v1.2.0.0.1", false},
 {"v1.2.3.0", "v1.2.3.4", false},
 {"1.7rc2", "1.7rc1", true},
 {"1.7rc2", "1.7", false},
 {"1.2.0", "1.2.0-X-1.2.0+metadata~dist", true},
 }

 for _, tc := range cases {
 v1,
 err := NewVersion(tc.v1)
 if err != nil {
 t.Fatalf("err: %s", err)
 }
 }
}

```

```

v2, err := NewVersion(tc.v2)
if err != nil {
 t.Fatalf("err: %s", err)
}

actual := v1.GreaterThan(v2)
expected := tc.expected
if actual != expected {
 t.Fatalf(
 "%s > %s\nexpected: %t\nactual: %t",
 tc.v1, tc.v2,
 expected, actual)
}
}
}

func TestLessThan(t *testing.T) {
 cases := []struct {
 v1 string
 v2 string
 expected bool
 }{
 {"1.2.3", "1.4.5", true},
 {"1.2-beta", "1.2-beta", false},
 {"1.2", "1.1.4", false},
 {"1.2", "1.2-beta", false},
 {"1.2+foo", "1.2+beta", false},
 {"v1.2", "v1.2-beta", false},
 {"v1.2+foo", "v1.2+beta", false},
 {"v1.2.3.4", "v1.2.3.4", false},
 {"v1.2.0.0", "v1.2", false},
 {"v1.2.0.0.1", "v1.2", false},
 {"v1.2", "v1.2.0.0", false},
 {"v1.2", "v1.2.0.0.1", true},
 {"v1.2.0.0", "v1.2.0.0.1", true},
 {"v1.2.3.0", "v1.2.3.4", true},
 {"1.7rc2", "1.7rc1", false},
 {"1.7rc2", "1.7", true},
 {"1.2.0", "1.2.0-X-1.2.0+metadata~dist",
false},
 }

 for _, tc := range cases {
 v1, err := NewVersion(tc.v1)
 if err != nil {
 t.Fatalf("err: %s", err)
 }
 }
}

```

```

v2, err := NewVersion(tc.v2)
if err != nil {
 t.Fatalf("err: %s", err)
}

actual := v1.LessThan(v2)
expected := tc.expected
if actual != expected {
 t.Fatalf(
 "%s < %s\nexpected: %t\nactual: %t",
 tc.v1, tc.v2,
 expected, actual)
}
}
}

func TestGreaterThanOrEqual(t *testing.T) {
 cases := []struct {
 v1 string
 v2 string
 expected bool
 }{
 {"1.2.3", "1.4.5", false},
 {"1.2-beta", "1.2-beta", true},
 {"1.2", "1.1.4", true},
 {"1.2", "1.2-beta", true},
 {"1.2+foo", "1.2+beta", true},
 {"v1.2", "v1.2-beta", true},
 {"v1.2+foo", "v1.2+beta", true},
 {"v1.2.3.4", "v1.2.3.4", true},
 {"v1.2.0.0", "v1.2", true},
 {"v1.2.0.0.1", "v1.2", true},
 {"v1.2", "v1.2.0.0", true},
 {"v1.2", "v1.2.0.0.1", false},
 {"v1.2.0.0", "v1.2.0.0.1", false},
 {"v1.2.3.0", "v1.2.3.4", false},
 {"1.7rc2", "1.7rc1", true},
 {"1.7rc2",
"1.7", false},
 {"1.2.0", "1.2.0-X-1.2.0+metadata~dist", true},
 }

 for _, tc := range cases {
 v1, err := NewVersion(tc.v1)
 if err != nil {
 t.Fatalf("err: %s", err)
 }
 }
}

```

```

v2, err := NewVersion(tc.v2)
if err != nil {
 t.Fatalf("err: %s", err)
}

actual := v1.GreaterThanOrEqualTo(v2)
expected := tc.expected
if actual != expected {
 t.Fatalf(
 "%s >= %s\nexpected: %t\nactual: %t",
 tc.v1, tc.v2,
 expected, actual)
}
}
}

func TestLessThanOrEqualTo(t *testing.T) {
 cases := []struct {
 v1 string
 v2 string
 expected bool
 }{
 {"1.2.3", "1.4.5", true},
 {"1.2-beta", "1.2-beta", true},
 {"1.2", "1.1.4", false},
 {"1.2", "1.2-beta", false},
 {"1.2+foo", "1.2+beta", true},
 {"v1.2", "v1.2-beta", false},
 {"v1.2+foo", "v1.2+beta", true},
 {"v1.2.3.4", "v1.2.3.4", true},
 {"v1.2.0.0", "v1.2", true},
 {"v1.2.0.0.1", "v1.2", false},
 {"v1.2", "v1.2.0.0", true},
 {"v1.2", "v1.2.0.0.1", true},
 {"v1.2.0.0", "v1.2.0.0.1", true},
 {"v1.2.3.0",
 "v1.2.3.4", true},
 {"1.7rc2", "1.7rc1", false},
 {"1.7rc2", "1.7", true},
 {"1.2.0", "1.2.0-X-1.2.0+metadata~dist", false},
 }

 for _, tc := range cases {
 v1, err := NewVersion(tc.v1)
 if err != nil {
 t.Fatalf("err: %s", err)
 }
 }
}

```

```

v2, err := NewVersion(tc.v2)
if err != nil {
 t.Fatalf("err: %s", err)
}

actual := v1.LessThanOrEqual(v2)
expected := tc.expected
if actual != expected {
 t.Fatalf(
 "%s <= %s\nexpected: %t\nactual: %t",
 tc.v1, tc.v2,
 expected, actual)
}
}
}

```

Data model artifacts for Prometheus.

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# 1.7.0 (May 24, 2024)

#### ENHANCEMENTS:

- Remove `reflect` dependency ([#91](https://github.com/hashicorp/go-version/pull/91))
- Implement the `database/sql.Scanner` and `database/sql/driver.Value` interfaces for `Version` ([#133](https://github.com/hashicorp/go-version/pull/133))

#### INTERNAL:

- [COMPLIANCE] Add Copyright and License Headers ([#115](https://github.com/hashicorp/go-version/pull/115))
- [COMPLIANCE] Update MPL-2.0 LICENSE ([#105](https://github.com/hashicorp/go-version/pull/105))
- Bump actions/cache from 3.0.11 to 3.2.5 ([#116](https://github.com/hashicorp/go-version/pull/116))
- Bump actions/checkout from 3.2.0 to 3.3.0 ([#111](https://github.com/hashicorp/go-version/pull/111))
- Bump actions/upload-artifact from 3.1.1 to 3.1.2 ([#112](https://github.com/hashicorp/go-version/pull/112))
- GHA Migration ([#103](https://github.com/hashicorp/go-version/pull/103))
- github: Pin external GitHub Actions to hashes ([#107](https://github.com/hashicorp/go-version/pull/107))
- SEC-090:  
Automated trusted workflow pinning (2023-04-05) ([#124](https://github.com/hashicorp/go-version/pull/124))
- update readme ([#104](https://github.com/hashicorp/go-version/pull/104))

# 1.6.0 (June 28, 2022)

#### FEATURES:

- Add `Prerelease` function to `Constraint` to return true if the version includes a prerelease field ([#100](https://github.com/hashicorp/go-version/pull/100))

# 1.5.0 (May 18, 2022)

#### FEATURES:

- Use `encoding` `TextMarshaler` & `TextUnmarshaler` instead of JSON equivalents ([#95](https://github.com/hashicorp/go-version/pull/95))
- Add JSON handlers to allow parsing from/to JSON ([#93](https://github.com/hashicorp/go-version/pull/93))

# 1.4.0 (January 5, 2022)

#### FEATURES:

- Introduce `MustConstraints()` ([#87](https://github.com/hashicorp/go-version/pull/87))
- `Constraints`: Introduce `Equals()` and `sort.Interface` methods ([#88](https://github.com/hashicorp/go-version/pull/88))

# 1.3.0 (March 31, 2021)

Please note that CHANGELOG.md does not exist in the source code prior to this release.

#### FEATURES:

- Add `Core` function to return a version without prerelease or metadata ([#85](https://github.com/hashicorp/go-version/pull/85))

# 1.2.1 (June 17, 2020)

#### BUG FIXES:

- Prevent `Version.Equal` method from panicking on `nil` encounter ([#73](https://github.com/hashicorp/go-version/pull/73))

# 1.2.0 (April 23, 2019)

#### FEATURES:

- Add `GreaterThanOrEqual` and `LessThanOrEqual` helper methods ([#53](https://github.com/hashicorp/go-version/pull/53))

# 1.1.0 (Jan 07, 2019)

#### FEATURES:

- Add `NewSemver` constructor ([#45](https://github.com/hashicorp/go-version/pull/45))



# 1.0.0 (August 24, 2018)

Initial release.

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

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```

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package version

import (
 "fmt"
 "regexp"
 "sort"
 "strings"
)

// Constraint represents a single constraint for a version, such as
// ">= 1.0".
type Constraint struct {
 f constraintFunc
 op operator
 check *Version
 original string
}

func (c *Constraint) Equals(con *Constraint) bool {
 return c.op == con.op && c.check.Equal(con.check)
}

// Constraints is a slice of constraints. We make a custom type so that
// we can add methods to it.
type Constraints []*Constraint

type constraintFunc func(v, c *Version) bool

var constraintOperators map[string]constraintOperation

type constraintOperation struct {
 op operator
 f constraintFunc
}

var constraintRegexp *regexp.Regexp

func init() {
 constraintOperators = map[string]constraintOperation{
 "": {op: equal, f: constraintEqual},
 "=": {op: equal, f: constraintEqual},
 "!=": {op: notEqual, f: constraintNotEqual},
 ">": {op: greaterThan, f: constraintGreaterThan},
 "<":
 }
}

```

```

{op: lessThan, f: constraintLessThan},
">=": {op: greaterThanEqual, f: constraintGreaterThanOrEqual},
"<=": {op: lessThanEqual, f: constraintLessThanEqual},
"~>": {op: pessimistic, f: constraintPessimistic},
}

ops := make([]string, 0, len(constraintOperators))
for k := range constraintOperators {
 ops = append(ops, regexp.QuoteMeta(k))
}

constraintRegex = regexp.MustCompile(fmt.Sprintf(
 `^\s*(%s)\s*(%s)\s*$`,
 strings.Join(ops, "|"),
 VersionRegexRaw))
}

// NewConstraint will parse one or more constraints from the given
// constraint string. The string must be a comma-separated list of
// constraints.
func NewConstraint(v string) (Constraints, error) {
 vs := strings.Split(v, ",")
 result := make([]*Constraint, len(vs))
 for i, single := range vs {
 c, err := parseSingle(single)
 if err != nil {
 return nil, err
 }

 result[i] = c
 }

 return Constraints(result), nil
}

// MustConstraints is a helper that wraps a call to a function
//
// returning (Constraints, error) and panics if error is non-nil.
func MustConstraints(c Constraints, err error) Constraints {
 if err != nil {
 panic(err)
 }

 return c
}

// Check tests if a version satisfies all the constraints.
func (cs Constraints) Check(v *Version) bool {

```

```

for _, c := range cs {
 if !c.Check(v) {
 return false
 }
}

return true
}

// Equals compares Constraints with other Constraints
// for equality. This may not represent logical equivalence
// of compared constraints.
// e.g. even though '>0.1,>0.2' is logically equivalent
// to '>0.2' it is *NOT* treated as equal.
//
// Missing operator is treated as equal to '=', whitespaces
// are ignored and constraints are sorted before comparison.
func (cs Constraints) Equals(c Constraints) bool {
 if len(cs) != len(c) {
 return false
 }

 // make copies to retain order of the original slices
 left := make(Constraints, len(cs))
 copy(left, cs)
 sort.Stable(left)
 right := make(Constraints, len(c))
 copy(right, c)
 sort.Stable(right)

 //
 compare sorted slices
 for i, con := range left {
 if !con.Equals(right[i]) {
 return false
 }
 }

 return true
}

func (cs Constraints) Len() int {
 return len(cs)
}

func (cs Constraints) Less(i, j int) bool {
 if cs[i].op < cs[j].op {
 return true
 }
}

```



```

 }
 if cs[i].op > cs[j].op {
 return false
 }

 return cs[i].check.LessThan(cs[j].check)
}

func (cs Constraints) Swap(i, j int) {
 cs[i], cs[j] = cs[j], cs[i]
}

// Returns the string format of the constraints
func (cs Constraints) String() string {
 csStr := make([]string, len(cs))
 for i, c := range cs {
 csStr[i] = c.String()
 }

 return strings.Join(csStr, ",")
}

// Check tests if a constraint is validated by the given version.
func (c *Constraint) Check(v *Version) bool {
 return c.f(v, c.check)
}

// Prerelease returns true if the version underlying this constraint
// contains a prerelease field.
func (c *Constraint) Prerelease() bool {
 return len(c.check.Prerelease()) > 0
}

func (c *Constraint) String()
string {
 return c.original
}

func parseSingle(v string) (*Constraint, error) {
 matches := constraintRegexp.FindStringSubmatch(v)
 if matches == nil {
 return nil, fmt.Errorf("Malformed constraint: %s", v)
 }

 check, err := NewVersion(matches[2])
 if err != nil {
 return nil, err
 }

```

```

cop := constraintOperators[matches[1]]

return &Constraint{
 f: cop.f,
 op: cop.op,
 check: check,
 original: v,
}, nil
}

func prereleaseCheck(v, c *Version) bool {
 switch vPre, cPre := v.Prerelease() != "", c.Prerelease() != ""; {
 case cPre && vPre:
 // A constraint with a pre-release can only match a pre-release version
 // with the same base segments.
 return v.equalSegments(c)

 case !cPre && vPre:
 // A constraint without a pre-release can only match a version without a
 // pre-release.
 return false

 case cPre && !vPre:
 // OK, except with the pessimistic operator
 case !cPre && !vPre:
 // OK
 }
 return true
}

//-----
//
// Constraint functions
//-----

type operator rune

const (
 equal operator = '='
 notEqual operator = "
 greaterThan operator = '>'
 lessThan operator = '<'
 greaterThanEqual operator = "
 lessThanEqual operator = "
 pessimistic operator = '~'
)

```

```

func constraintEqual(v, c *Version) bool {
 return v.Equal(c)
}

func constraintNotEqual(v, c *Version) bool {
 return !v.Equal(c)
}

func constraintGreaterThan(v, c *Version) bool {
 return prereleaseCheck(v, c) && v.Compare(c) == 1
}

func constraintLessThan(v, c *Version) bool {
 return prereleaseCheck(v, c) && v.Compare(c) == -1
}

func constraintGreaterThanEqual(v, c *Version) bool {
 return prereleaseCheck(v, c) && v.Compare(c) >= 0
}

func constraintLessThanEqual(v, c *Version) bool {
 return prereleaseCheck(v, c) && v.Compare(c) <= 0
}

func constraintPessimistic(v, c *Version) bool {
 // Using a pessimistic
 // constraint with a pre-release, restricts versions to pre-releases
 if !prereleaseCheck(v, c) || (c.Prerelease() != "" && v.Prerelease() == "") {
 return false
 }

 // If the version being checked is naturally less than the constraint, then there
 // is no way for the version to be valid against the constraint
 if v.LessThan(c) {
 return false
 }

 // We'll use this more than once, so grab the length now so it's a little cleaner
 // to write the later checks
 cs := len(c.segments)

 // If the version being checked has less specificity than the constraint, then there
 // is no way for the version to be valid against the constraint
 if cs > len(v.segments) {
 return false
 }

 // Check the segments in the constraint against those in the version. If the version
 // being checked, at any point, does not have the same values in each index of the

```

```

// constraints segments, then it cannot be valid against the constraint.
for i := 0; i < c.si-1; i++ {
 if v.segments[i] != c.segments[i]
 {
 return false
 }
}

// Check the last part of the segment in the constraint. If the version segment at
// this index is less than the constraints segment at this index, then it cannot
// be valid against the constraint
if c.segments[cs-1] > v.segments[cs-1] {
 return false
}

// If nothing has rejected the version by now, it's valid
return true
}

version: 2
updates:
- package-ecosystem: "gomod"
 directory: "/"
 schedule:
 interval: "daily"
 labels: ["dependencies"]

- package-ecosystem: github-actions
 directory: /
 schedule:
 interval: monthly
 labels:
 - dependencies
 # only update HashiCorp actions, external actions managed by TSCCR
 allow:
 - dependency-name: hashicorp/*
 groups:
 github-actions-breaking:
 update-types:
 - major
 github-actions-backward-compatible:
 update-types:
 - minor
 - patch

```

Common libraries shared by Prometheus Go components.

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module github.com/hashicorp/go-version

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-----

Files: s2/cmd/internal/filepathx/\*

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package version

```
import (
 "fmt"
 "reflect"
 "sort"
 "testing"
)

func TestNewConstraint(t *testing.T) {
 cases := []struct {
 input string
 count int
 err bool
 }{
 {">= 1.2", 1, false},
 {"1.0", 1, false},
 {">= 1.x", 0, true},
 {">= 1.2, < 1.0", 2, false},

 // Out of bounds
 {"1138777878078144567552950000000000000000", 0, true},
 }

 for _, tc := range cases {
 v, err := NewConstraint(tc.input)
 if tc.err && err == nil {
 t.Fatalf("expected error for input: %s", tc.input)
 } else if !tc.err && err != nil {
 t.Fatalf("error for input %s: %s", tc.input, err)
 }

 if len(v) != tc.count {
 t.Fatalf("input: %s\nexpected len: %d\nactual: %d",
 tc.input, tc.count, len(v))
 }
 }
}

func TestConstraintCheck(t *testing.T) {
 cases := []struct {
 constraint string
 version string
 check bool
 }{
 {">= 1.0, < 1.2", "1.1.5", true},
 {"< 1.0, < 1.2", "1.1.5", false},
 {"= 1.0", "1.1.5",
```

```

false},
{"= 1.0", "1.0.0", true},
{"1.0", "1.0.0", true},
{"~> 1.0", "2.0", false},
{"~> 1.0", "1.1", true},
{"~> 1.0", "1.2.3", true},
{"~> 1.0.0", "1.2.3", false},
{"~> 1.0.0", "1.0.7", true},
{"~> 1.0.0", "1.1.0", false},
{"~> 1.0.7", "1.0.4", false},
{"~> 1.0.7", "1.0.7", true},
{"~> 1.0.7", "1.0.8", true},
{"~> 1.0.7", "1.0.7.5", true},
{"~> 1.0.7", "1.0.6.99", false},
{"~> 1.0.7", "1.0.8.0", true},
{"~> 1.0.9.5", "1.0.9.5", true},
{"~> 1.0.9.5", "1.0.9.4", false},
{"~> 1.0.9.5", "1.0.9.6", true},
{"~> 1.0.9.5", "1.0.9.5.0", true},
{"~> 1.0.9.5", "1.0.9.5.1", true},
{"~> 2.0", "2.1.0-beta", false},
{"~> 2.1.0-a", "2.2.0", false},
{"~> 2.1.0-a", "2.1.0", false},
{"~> 2.1.0-a", "2.1.0-beta", true},
{"~> 2.1.0-a", "2.2.0-alpha", false},
{"> 2.0", "2.1.0-beta", false},
{">= 2.1.0-a", "2.1.0-beta", true},
{">= 2.1.0-a", "2.1.1-beta", false},
{">= 2.0.0", "2.1.0-beta", false},
{">= 2.1.0-a", "2.1.1", true},
{">= 2.1.0-a", "2.1.1-beta",
false},
{">= 2.1.0-a", "2.1.0", true},
{"<= 2.1.0-a", "2.0.0", true},
}

```

```

for _, tc := range cases {
 c, err := NewConstraint(tc.constraint)
 if err != nil {
 t.Fatalf("err: %s", err)
 }

```

```

 v, err := NewVersion(tc.version)
 if err != nil {
 t.Fatalf("err: %s", err)
 }

```

```

 actual := c.Check(v)

```

```

expected := tc.check
if actual != expected {
 t.Fatalf("Version: %s\nConstraint: %s\nExpected: %#v",
 tc.version, tc.constraint, expected)
}
}
}

```

```

func TestConstraintPrerelease(t *testing.T) {
 cases := []struct {
 constraint string
 prerelease bool
 }{
 {"= 1.0", false},
 {"= 1.0-beta", true},
 {"~> 2.1.0", false},
 {"~> 2.1.0-dev", true},
 {"> 2.0", false},
 {">= 2.1.0-a", true},
 }
}

```

```

for _, tc := range cases {
 c, err := parseSingle(tc.constraint)
 if err != nil {
 t.Fatalf("err: %s", err)
 }
}

```

```

actual := c.Prerelease()
expected := tc.prerelease
if actual != expected {
 t.Fatalf("Constraint: %s\nExpected: %#v",
 tc.constraint, expected)
}
}
}

```

```

func
TestConstraintEqual(t *testing.T) {
 cases := []struct {
 leftConstraint string
 rightConstraint string
 expectedEqual bool
 }{
 {
 "0.0.1",
 "0.0.1",
 true,
 },
 }
}

```

```

{ // whitespaces
" 0.0.1 ",
"0.0.1",
true,
},
{ // equal op implied
"=0.0.1 ",
"0.0.1",
true,
},
{ // version difference
"=0.0.1",
"=0.0.2",
false,
},
{ // operator difference
">0.0.1",
"=0.0.1",
false,
},
{ // different order
">0.1.0, <=1.0.0",
"<=1.0.0, >0.1.0",
true,
},
}

```

```

for _, tc := range cases {
 leftCon, err := NewConstraint(tc.leftConstraint)
 if err != nil {
 t.Fatalf("err: %s", err)
 }
 rightCon, err := NewConstraint(tc.rightConstraint)
 if err != nil {
 t.Fatalf("err: %s", err)
 }

 actual := leftCon.Equals(rightCon)
 if actual != tc.expectedEqual {
 t.Fatalf("Constraints: %s vs %s\nExpected: %t\nActual: %t",
 tc.leftConstraint, tc.rightConstraint, tc.expectedEqual, actual)
 }
}
}

```

```

func TestConstraint_sort(t
*testing.T) {
 cases := []struct {

```



```

constraint string
expectedConstraints string
}{
{
 ">= 0.1.0,< 1.12",
 "< 1.12,>= 0.1.0",
},
{
 "< 1.12,>= 0.1.0",
 "< 1.12,>= 0.1.0",
},
{
 "< 1.12,>= 0.1.0,0.2.0",
 "< 1.12,0.2.0,>= 0.1.0",
},
{
 ">1.0,>0.1.0,>0.3.0,>0.2.0",
 ">0.1.0,>0.2.0,>0.3.0,>1.0",
},
}

for i, tc := range cases {
t.Run(fmt.Sprintf("%d", i), func(t *testing.T) {
 c, err := NewConstraint(tc.constraint)
 if err != nil {
 t.Fatalf("err: %s", err)
 }

 sort.Sort(c)

 actual := c.String()

 if !reflect.DeepEqual(actual, tc.expectedConstraints) {
 t.Fatalf("unexpected order\nexpected: %#v\nactual: %#v",
 tc.expectedConstraints, actual)
 }
})
}

func TestConstraintsString(t *testing.T) {
cases := []struct {
 constraint string
 result string
}{
{">= 1.0, < 1.2", ""},
{"~> 1.0.7", ""},
}

```

```

for _, tc := range cases {
 c, err := NewConstraint(tc.constraint)
 if err != nil {
 t.Fatalf("err:
%s", err)
 }

 actual := c.String()
 expected := tc.result
 if expected == "" {
 expected = tc.constraint
 }

 if actual != expected {
 t.Fatalf("Constraint: %s\nExpected: %#v\nActual: %s",
 tc.constraint, expected, actual)
 }
}
}

```

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package version

import (

"bytes"

"database/sql/driver"

"fmt"

"regexp"

"strconv"

"strings"

)

// The compiled regular expression used to test the validity of a version.

var (

versionRegexp \*regexp.Regexp

semverRegexp \*regexp.Regexp

)

// The raw regular expression string used for testing the validity

// of a version.

const (

VersionRegexpRaw string = `v?([0-9]+(\.[0-9]+)\*?)` +

`(-([0-9]+[0-9A-Za-z\-\~]\*\.[0-9A-Za-z\-\~]+)\*)(-?([A-Za-z\-\~]+[0-9A-Za-z\-\~]\*\.[0-9A-Za-z\-\~]+)\*)))?` +

`\+([0-9A-Za-z\-\~]+(\.[0-9A-Za-z\-\~]+)\*)))?` +

`?`

// SemverRegexpRaw requires a separator between version and prerelease

SemverRegexpRaw string = `v?([0-9]+(\.[0-9]+)\*?)` +

`(-([0-9]+[0-9A-Za-z\-\~]\*\.[0-9A-Za-z\-\~]+)\*)(-([A-Za-z\-\~]+[0-9A-Za-z\-\~]\*\.[0-9A-Za-z\-\~]+)\*)))?` +

`\+([0-9A-Za-z\-\~]+(\.[0-9A-Za-z\-\~]+)\*)))?` +

`?`

)

// Version represents a single version.

type Version struct {

metadata string

pre

string

segments []int64

si int

original string

}

func init() {

versionRegexp = regexp.MustCompile("^" + VersionRegexpRaw + "\$")

```

semverRegexp = regexp.MustCompile("^" + SemverRegexpRaw + "$")
}

// NewVersion parses the given version and returns a new
// Version.
func NewVersion(v string) (*Version, error) {
 return newVersion(v, versionRegexp)
}

// NewSemver parses the given version and returns a new
// Version that adheres strictly to SemVer specs
// https://semver.org/
func NewSemver(v string) (*Version, error) {
 return newVersion(v, semverRegexp)
}

func newVersion(v string, pattern *regexp.Regexp) (*Version, error) {
 matches := pattern.FindStringSubmatch(v)
 if matches == nil {
 return nil, fmt.Errorf("Malformed version: %s", v)
 }
 segmentsStr := strings.Split(matches[1], ".")
 segments := make([]int64, len(segmentsStr))
 for i, str := range segmentsStr {
 val, err := strconv.ParseInt(str, 10, 64)
 if err != nil {
 return nil, fmt.Errorf(
 "Error parsing version:
%s", err)
 }

 segments[i] = val
 }

 // Even though we could support more than three segments, if we
 // got less than three, pad it with 0s. This is to cover the basic
 // default usecase of semver, which is MAJOR.MINOR.PATCH at the minimum
 for i := len(segments); i < 3; i++ {
 segments = append(segments, 0)
 }

 pre := matches[7]
 if pre == "" {
 pre = matches[4]
 }

 return &Version{
 metadata: matches[10],

```

```

pre: pre,
segments: segments,
si: len(segmentsStr),
original: v,
}, nil
}

// Must is a helper that wraps a call to a function returning (*Version, error)
// and panics if error is non-nil.
func Must(v *Version, err error) *Version {
 if err != nil {
 panic(err)
 }

 return v
}

// Compare compares this version to another version. This
// returns -1, 0, or 1 if this version is smaller, equal,
// or larger than the other version, respectively.
//
// If you want boolean results, use the LessThan, Equal,
// GreaterThan, GreaterThanOrEqual or LessThanOrEqual
// methods.
func (v *Version) Compare(other *Version) int {
 // A quick, efficient equality check
 if v.String() == other.String() {
 return 0
 }

 // If the segments are the same, we must compare on prerelease info
 if v.equalSegments(other) {
 preSelf := v.Prerelease()
 preOther := other.Prerelease()
 if preSelf == "" && preOther == "" {
 return 0
 }
 if preSelf == "" {
 return 1
 }
 if preOther == "" {
 return -1
 }

 return comparePrereleases(preSelf, preOther)
 }

 segmentsSelf := v.Segments64()

```

```

segmentsOther := other.Segments64()
// Get the highest specificity (hS), or if they're equal, just use segmentSelf length
lenSelf := len(segmentsSelf)
lenOther := len(segmentsOther)
hS := lenSelf
if lenSelf < lenOther {
 hS = lenOther
}
// Compare the segments
// Because a constraint could have more/less specificity than the version it's
// checking, we need to account for a lopsided or jagged comparison
for i := 0; i < hS; i++ {
 if i > lenSelf-1 {
 //
 This means Self had the lower specificity
 // Check to see if the remaining segments in Other are all zeros
 if !allZero(segmentsOther[i:]) {
 // if not, it means that Other has to be greater than Self
 return -1
 }
 break
 } else if i > lenOther-1 {
 // this means Other had the lower specificity
 // Check to see if the remaining segments in Self are all zeros -
 if !allZero(segmentsSelf[i:]) {
 // if not, it means that Self has to be greater than Other
 return 1
 }
 break
 }
 lhs := segmentsSelf[i]
 rhs := segmentsOther[i]
 if lhs == rhs {
 continue
 } else if lhs < rhs {
 return -1
 }
 // Otherwis, rhs was > lhs, they're not equal
 return 1
}

// if we got this far, they're equal
return 0
}

func (v *Version) equalSegments(other *Version) bool {
 segmentsSelf := v.Segments64()
 segmentsOther := other.Segments64()

```

```

if len(segmentsSelf) != len(segmentsOther) {
 return false
}
for i, v := range segmentsSelf {
 if v != segmentsOther[i]
 {
 return false
 }
}
return true
}

func allZero(segs []int64) bool {
 for _, s := range segs {
 if s != 0 {
 return false
 }
 }
 return true
}

func comparePart(preSelf string, preOther string) int {
 if preSelf == preOther {
 return 0
 }

 var selfInt int64
 selfNumeric := true
 selfInt, err := strconv.ParseInt(preSelf, 10, 64)
 if err != nil {
 selfNumeric = false
 }

 var otherInt int64
 otherNumeric := true
 otherInt, err = strconv.ParseInt(preOther, 10, 64)
 if err != nil {
 otherNumeric = false
 }

 // if a part is empty, we use the other to decide
 if preSelf == "" {
 if otherNumeric {
 return -1
 }
 }
 return 1
}

```

```

if preOther == "" {
 if selfNumeric {
 return 1
 }
 return -1
}

if selfNumeric && !otherNumeric {
 return -1
} else if !selfNumeric && otherNumeric {
 return 1
} else if !selfNumeric && !otherNumeric && preSelf > preOther {
 return 1
} else if selfInt > otherInt {
 return 1
}

return -1
}

func comparePrereleases(v string, other string)
int {
 // the same pre release!
 if v == other {
 return 0
 }

 // split both pre releases for analyse their parts
 selfPreReleaseMeta := strings.Split(v, ".")
 otherPreReleaseMeta := strings.Split(other, ".")

 selfPreReleaseLen := len(selfPreReleaseMeta)
 otherPreReleaseLen := len(otherPreReleaseMeta)

 biggestLen := otherPreReleaseLen
 if selfPreReleaseLen > otherPreReleaseLen {
 biggestLen = selfPreReleaseLen
 }

 // loop for parts to find the first difference
 for i := 0; i < biggestLen; i = i + 1 {
 partSelfPre := ""
 if i < selfPreReleaseLen {
 partSelfPre = selfPreReleaseMeta[i]
 }

 partOtherPre := ""

```

```

 if i < otherPreReleaseLen {
 partOtherPre = otherPreReleaseMeta[i]
 }

 compare := comparePart(partSelfPre, partOtherPre)
 // if parts are equals, continue the loop
 if compare != 0 {
 return compare
 }
}

return 0
}

// Core returns a new version constructed from only the MAJOR.MINOR.PATCH
// segments of the version, without prerelease or metadata.
func
(v *Version) Core() *Version {
 segments := v.Segments64()
 segmentsOnly := fmt.Sprintf("%d.%d.%d", segments[0], segments[1], segments[2])
 return Must(NewVersion(segmentsOnly))
}

// Equal tests if two versions are equal.
func (v *Version) Equal(o *Version) bool {
 if v == nil || o == nil {
 return v == o
 }

 return v.Compare(o) == 0
}

// GreaterThan tests if this version is greater than another version.
func (v *Version) GreaterThan(o *Version) bool {
 return v.Compare(o) > 0
}

// GreaterThanOrEqual tests if this version is greater than or equal to another version.
func (v *Version) GreaterThanOrEqual(o *Version) bool {
 return v.Compare(o) >= 0
}

// LessThan tests if this version is less than another version.
func (v *Version) LessThan(o *Version) bool {
 return v.Compare(o) < 0
}

// LessThanOrEqual tests if this version is less than or equal to another version.

```

```

func (v *Version) LessThanOrEqual(o *Version) bool {
 return v.Compare(o) <= 0
}

// Metadata returns any metadata
// that was part of the version
// string.
//
// Metadata is anything that comes after the "+" in the version.
// For example, with "1.2.3+beta", the metadata is "beta".
func (v *Version) Metadata() string {
 return v.metadata
}

// Prerelease returns any prerelease data that is part of the version,
// or blank if there is no prerelease data.
//
// Prerelease information is anything that comes after the "-" in the
// version (but before any metadata). For example, with "1.2.3-beta",
// the prerelease information is "beta".
func (v *Version) Prerelease() string {
 return v.pre
}

// Segments returns the numeric segments of the version as a slice of ints.
//
// This excludes any metadata or pre-release information. For example,
// for a version "1.2.3-beta", segments will return a slice of
// 1, 2, 3.
func (v *Version) Segments() []int {
 segmentSlice := make([]int, len(v.segments))
 for i, v := range v.segments {
 segmentSlice[i] = int(v)
 }
 return segmentSlice
}

// Segments64 returns the
// numeric segments of the version as a slice of int64s.
//
// This excludes any metadata or pre-release information. For example,
// for a version "1.2.3-beta", segments will return a slice of
// 1, 2, 3.
func (v *Version) Segments64() []int64 {
 result := make([]int64, len(v.segments))
 copy(result, v.segments)
 return result
}

```



```

// String returns the full version string included pre-release
// and metadata information.
//
// This value is rebuilt according to the parsed segments and other
// information. Therefore, ambiguities in the version string such as
// prefixed zeroes (1.04.0 => 1.4.0), `v` prefix (v1.0.0 => 1.0.0), and
// missing parts (1.0 => 1.0.0) will be made into a canonicalized form
// as shown in the parenthesized examples.
func (v *Version) String() string {
 var buf bytes.Buffer
 fmtParts := make([]string, len(v.segments))
 for i, s := range v.segments {
 // We can ignore err here since we've pre-parsed the values in segments
 str := strconv.FormatInt(s, 10)
 fmtParts[i]
 }
 = str
 }
 fmt.Fprintf(&buf, strings.Join(fmtParts, "."))
 if v.pre != "" {
 fmt.Fprintf(&buf, "-%s", v.pre)
 }
 if v.metadata != "" {
 fmt.Fprintf(&buf, "+%s", v.metadata)
 }
 }

 return buf.String()
}

// Original returns the original parsed version as-is, including any
// potential whitespace, `v` prefix, etc.
func (v *Version) Original() string {
 return v.original
}

// UnmarshalText implements encoding.TextUnmarshaler interface.
func (v *Version) UnmarshalText(b []byte) error {
 temp, err := NewVersion(string(b))
 if err != nil {
 return err
 }

 *v = *temp

 return nil
}

// MarshalText implements encoding.TextMarshaler interface.

```

```

func (v *Version) MarshalText() ([]byte, error) {
 return []byte(v.String()), nil
}

// Scan implements the sql.Scanner interface.
func (v *Version) Scan(src interface{}) error {
 switch src := src.(type) {
 case string:
 return v.UnmarshalText([]byte(src))
 case nil:
 return nil
 default:
 return fmt.Errorf("cannot scan %T as Version", src)
 }
}

//
// Value implements the driver.Valuer interface.
func (v *Version) Value() (driver.Value, error) {
 return v.String(), nil
}

```

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## 1.48 stdr 1.2.2

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## 1.52 s2a-go 0.1.9

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## 1.53 alpine-baselayout-data 3.6.8-r1

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```
Automatically generated by apkbuild-cpan, template 1
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pkgname=perl-software-license
_pkgreal=Software-License
pkgver=0.103004
pkgrel=0
pkgdesc="packages that provide templated software licenses"
url="http://search.cpan.org/dist/Software-License/"
arch="noarch"
license="GPL PerlArtistic"
cpandepends="perl-text-template perl-data-section perl-sub-install"
```

```
cpanmakedepends=""
depends="$cpandepends"
makedepends="perl-dev $cpanmakedepends"
subpackages="$pkgname-doc"
source="http://search.cpan.org/CPAN/authors/id/R/RJ/RJBS/${_pkgreal}-${pkgver}.tar.gz"
```

```
_builddir="${srcdir}/${_pkgreal}-${pkgver}"
```

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

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

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

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

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95052.

```
Contributor: Fabian Affolter <fabian@affolter-engineering.ch>
Maintainer: Fabian Affolter <fabian@affolter-engineering.ch>
pkgname=py-flake8-copyright
_pkgname=flake8-copyright
pkgver=0.2.0
pkgrel=0
pkgdesc="Extension for flake8 which checks for copyrights"
url="https://github.com/savoirfairelinux/flake8-copyright"
arch="noarch"
license="MIT"
depends="flake8"
makedepends="python3-dev"
source="https://files.pythonhosted.org/packages/source/${_pkgname:0:1}/${_pkgname}/${_pkgname}-${pkgver}.tar.gz"
builddir="$srcdir"/$_pkgname-$pkgver
```

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

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

```
md5sums="c6348990c6d74933bf5d5f6a55a14bdf flake8-copyright-0.2.0.tar.gz"
sha256sums="aeef26eb4d5223c9cd5b101e68175fcef6d2b353bf36da688fdde62fccfe2b73 flake8-copyright-0.2.0.tar.gz"
sha512sums="bab1bfaeed3a525ac3c7da12b1f2ec338c204cc69b72d05cd39560e528faff5d586c3b1be9570f4a977a7e2417b586e543bfba12abce256b2023c8c4993eeb90 flake8-copyright-0.2.0.tar.gz"
```

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# Maintainer: Natanael Copa <ncopa@alpinelinux.org>

pkgname=libart-lgpl

pkgver=2.3.21

pkgrel=5

pkgdesc="A library for high-performance 2D graphics"

url="http://www.levien.com/libart/"

arch="all"

license="LGPL"

depends=

makedepends=

subpackages="\$pkgname-dev"

source="http://ftp.gnome.org/pub/GNOME/sources/libart-lgpl/2.3/libart-lgpl-\$pkgver.tar.bz2"

"

\_builddir="\$srcdir"/libart-lgpl-\$pkgver

prepare() {

cd "\$\_builddir"

update\_config\_sub || return 1

}

build() {

cd "\$\_builddir"

./configure \

--build=\$CBUILD \

--host=\$CHOST \

--prefix=/usr \

|| return 1

make || return 1

}

package() {

cd "\$\_builddir"

make DESTDIR="\$pkgdir" install || return 1

}

md5sums="08559ff3c67fd95d57b0c5e91a6b4302 libart-lgpl-2.3.21.tar.bz2"

# Automatically generated by apkbuild-cpan, template 1

# Contributor: Valery Kartel <valery.kartel@gmail.com>

# Maintainer: Valery Kartel <valery.kartel@gmail.com>

```

pkgname=perl-bsd-resource
_pkgreal=BSD-Resource
pkgver=1.2909
pkgrel=1
pkgdesc="Perl extension implements the BSD process resource limit functions"
url="http://search.cpan.org/dist/BSD-Resource/"
arch="all"
license="GPL PerlArtistic"
cpandepends=""
cpanmakedepends=""
depends="$cpandepends"
makedepends="perl-dev $cpanmakedepends"
subpackages="$pkgname-doc"
source="http://search.cpan.org/CPAN/authors/id/J/JH/JHI/${_pkgreal}-${pkgver}.tar.gz"

_buildddir="$srcdir/${_pkgreal}-${pkgver}"

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

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

package() {
 cd "$_buildddir"
 make DESTDIR="$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="5f489eaac5089e82081b7cf51d62638750e443751b49415407354da96b17771819b5e6e85529faa41ddd85743363750157943c7f7700276cce2bd40a429fa430 BSD-Resource-1.2909.tar.gz"

```

## 1.54 [github.com/google/s2a-go](https://github.com/google/s2a-go) 0.1.9

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## 1.55 go-cleanhttp 0.5.2

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## 1.59 golang-genproto 0.0.0

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# 1.62 vault-api 1.16.0

## 1.62.1 Available under license :

{{!

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~}}

```
<LicenseInfo
 @startTime={{this.model.startTime}}
 @expirationTime={{this.model.expirationTime}}
 @licenseId={{this.model.licenseId}}
 @features={{this.model.features}}
 @autoloaded={{this.model.autoloaded}}
 @performanceStandbyCount={{this.model.performanceStandbyCount}}
/>
```

---

layout: docs

page\_title: Automated license utilization reporting

description: >-

Learn what data HashiCorp collects to meter Enterprise license utilization. Enable or disable reporting. Review sample payloads and logs.

---

# Automated license utilization reporting

@include 'alerts/enterprise-only.mdx'

Automated license utilization reporting sends license utilization data to HashiCorp without requiring you to manually collect and report them. It also lets you review your license usage with the monitoring solution you already use (for example Splunk, Datadog, or others) so you can optimize and manage your deployments. Use these reports to understand how much more you can deploy under your current contract, protect against overutilization, and budget for predicted consumption.

Automated reporting shares the minimum data required to validate license utilization as defined in our contracts. They consist of mostly computed metrics and will never contain Personal Identifiable Information

(PII) or other

sensitive information. Automated reporting shares the data with HashiCorp using a secure, unidirectional HTTPS API and makes an auditable record in the product logs each time it submits a report. The reporting process is GDPR compliant and submits reports roughly once every 24 hours.

## Enable automated reporting

To enable automated reporting, you need to make sure that outbound network traffic is configured correctly and upgrade your enterprise product to a version that supports it. If your installation is air-gapped or network settings are not in place, automated reporting will not work.

### 1. allow outbound HTTPS traffic on port 443

Make sure that your network allows HTTPS egress on port 443 to <https://reporting.hashicorp.services> by allow-listing the following IP addresses:

- 100.20.70.12
- 35.166.5.222
- 23.95.85.111
- 44.215.244.1

### ### 2. upgrade

Upgrade to a release that supports license utilization reporting. These releases include:

- [Vault Enterprise 1.14.0](<https://releases.hashicorp.com/vault/>) and later
- [Vault Enterprise 1.13.4](<https://releases.hashicorp.com/vault/>) and later 1.13.x versions
- [Vault Enterprise 1.12.8](<https://releases.hashicorp.com/vault/>) and later 1.12.x versions
- [Vault Enterprise 1.11.12](<https://releases.hashicorp.com/vault/>)

### ### 3. check logs

Automatic license utilization reporting will start sending data within roughly 24 hours. Check the server logs for records that the data sent successfully.

You will find log entries similar to the following:

<CodeBlockConfig hideClipboard>

...

```
[DEBUG] core.reporting: beginning snapshot export
[DEBUG] core.reporting: creating payload
[DEBUG] core.reporting: marshalling payload to json
[DEBUG] core.reporting: generating authentication headers
[DEBUG] core.reporting: creating request
[DEBUG] core.reporting: sending request
[DEBUG] core.reporting: performing request: method=POST url=https://reporting.hashicorp.services
[DEBUG] core.reporting: recording audit
record
[INFO] core.reporting: Report sent:
auditRecord="{\"payload\":{\"payload_version\":\"1\",\"license_id\":\"97afe7b4-b9c8-bf19-bf35-b89b5cc0efea\",\"product\":\"vault\",\"product_version\":\"1.14.0-rc1+ent\",\"export_timestamp\":\"2023-06-01T09:34:44.215133-04:00\",\"snapshots\":{\"\"snapshot_version\":\"1\",\"snapshot_id\":\"0001J7H7KMEDRXKM5C1QJGBXV3\",\"process_id\":\"01H1T45CZK2GN9WR22863W2K32\",\"timestamp\":\"2023-06-01T09:34:44.215001-04:00\",\"schema_version\":\"1.0.0\",\"service\":\"vault\",\"metrics\":{\"\"clientcount.current_month_estimate\":{\"key\":\"clientcount.current_month_estimate\",\"kind\":\"sum\",\"mode\":\"write\",\"labels\":{\"type\":{\"entity\":20,\"nonentity\":11}}},\"clientcount.previous_month_complete\":{\"key\":\"clientcount.previous_month_complete\",\"kind\"
```

```
":"sum","mode":"write","labels":{"type":{"entity":10,"nonentity":11}}}],{"metadata":{"vault":{"billing_start":"2023-03-01T00:00:00Z","cluster_id":"a8d95acc-ec0a-6087-d7f6-4f054ab2e7fd"}}}}"
[DEBUG]
core.reporting: completed recording audit record
[DEBUG] core.reporting: export finished successfully
...
```

</CodeBlockConfig>

If your installation is air-gapped or your network doesn't allow the correct egress, logs will show an error.

<CodeBlockConfig hideClipboard>

```
...
[DEBUG] core.reporting: beginning snapshot export
[DEBUG] core.reporting: creating payload
[DEBUG] core.reporting: marshalling payload to json
[DEBUG] core.reporting: generating authentication headers
[DEBUG] core.reporting: creating request
[DEBUG] core.reporting: sending request
[DEBUG] core.reporting: performing request: method=POST url=https://reporting.hashicorp.services
[DEBUG] core.reporting: error status code received: statusCode=403
...
```

</CodeBlockConfig>

In this case, reconfigure your network to allow egress and check back in 24 hours.

## ## Opt out

If your installation is air-gapped or you want to manually collect and report on the same license utilization metrics, you can opt-out of automated reporting.

Manually reporting these metrics can be time consuming. Opting out of automated reporting does not mean that you also opt out from sending license utilization metrics. Customers who opt out of automated reporting will still be required to manually collect and send license utilization metrics to HashiCorp.

If you are considering opting out because you're worried about the data, we strongly recommend that you review the [example payloads](#example-payloads) before opting out. If you have concerns with any of the automatically-reported data please bring them to your account manager.

You have two options to opt out of automated reporting:

- HCL configuration (recommended)
- Environment variable (requires restart)

#### #### HCL configuration

Opting out in your products configuration file doesn't require a system restart, and is the method we recommend. Add the following block to your server configuration file (e.g. `vault-config.hcl`).

```
```hcl
reporting {
  license
  {
    enabled = false
  }
}
```
```

<Warning>

When you have a cluster, each node must have the reporting stanza in its configuration to be consistent. In the event of leadership change, nodes will use its server configuration to determine whether or not to opt-out the automated reporting. Inconsistent configuration between nodes will change the reporting status upon active unseal.

</Warning>

You will find the following entries in the server log.

<CodeBlockConfig hideClipboard>

```
```
[DEBUG] core: reloading automated reporting
[INFO] core: opting out of automated reporting
[DEBUG] activity: there is no reporting agent configured, skipping counts reporting
```
```

</CodeBlockConfig>

#### #### Environment variable

If you need to, you can also opt out using an environment variable, which will provide a startup message confirming that you have disabled automated reporting. This option requires a system restart.

<Note>

If the reporting stanza exists in the configuration file, the  
`OPTOUT\_LICENSE\_REPORTING`  
value overrides the configuration.

</Note>

Set the following environment variable.

```
```shell-session
$ export OPTOUT_LICENSE_REPORTING=true
```
```

Now, restart your [Vault servers](/vault/docs/commands/server) from the shell  
where you set the environment variable.

You will find the following entries in the server log.

<CodeBlockConfig hideClipboard>

...

```
[INFO] core: automated reporting disabled via environment variable: env=OPTOUT_LICENSE_REPORTING
[INFO] core: opting out of automated reporting
[DEBUG] activity: there is no reporting agent configured, skipping counts reporting
...
```

</CodeBlockConfig>

Check your product logs roughly 24 hours after opting out to make sure that the system  
isn't trying to send reports.

If your configuration file and environment variable differ, the environment  
variable setting will take precedence.

## Example payloads

HashiCorp collects the following utilization data as JSON payloads:

- `payload\_version` - The version of this payload schema
- `license\_id` - The license ID for this product
- `product` - The product that this contribution is for
- `product\_version` - The product version this contribution is for
- `export\_timestamp` - The date and time for this contribution
- `snapshots` - An array of snapshot details. A snapshot is a structure that represents a single data collection

- `snapshot\_version` - The version of the snapshot package that produced this snapshot
- `snapshot\_id` - A unique identifier for this particular snapshot
- `process\_id` - An identifier for the system that produced this snapshot
- `timestamp` - The date and time for this snapshot
- `schema\_version` - The version of the schema associated with this snapshot
- `service` - The service that produced this snapshot (likely to be product name)
- `metrics` - A map of representations of snapshot metrics contained within this snapshot
  - `key` - The key name associated with this metric
  - `kind`
    - The kind of metric (feature, counter, sum, or mean)
    - `mode` - The mode of operation associated with this metric (write or collect)
    - `labels` - The labels associated with each collected metric
      - `entity` - The sum of tokens generated for a unique client identifier
      - `nonentity` - The sum of tokens without an entity attached
- `metadata` - Optional product-specific metadata
  - `billing\_start` - The billing start date associated with the reporting cluster (license start date if not configured)
  - `cluster\_id` - The cluster UUID as shown by `vault status` on the reporting cluster

<CodeBlockConfig hideClipboard>

```
```json
{
  "payload_version": "1",
  "license_id": "97afe7b4-b9c8-bf19-bf35-b89b5cc0efea",
  "product": "vault",
  "product_version": "1.14.0-rc1+ent",
  "export_timestamp": "2023-06-01T11:39:00.76643-04:00",
  "snapshots": [
    {
      "snapshot_version": 1,
      "snapshot_id": "0001J7HEWM1PEHPMF5YZT8EV65",
      "process_id":
"01H1VSQMNYAP77R566F1Y03GE6",
      "timestamp": "2023-06-01T11:39:00.766099-04:00",
      "schema_version": "1.0.0",
      "service": "vault",
      "metrics": {
        "clientcount.current_month_estimate": {
          "key": "clientcount.current_month_estimate",
          "kind": "sum",
          "mode": "write",
          "labels": {
            "type": {
```



```

{{#if (and this.licenseExpired (not this.expiredDismissed))}}
<Hds::Alert
  @type="inline"
  @color="critical"
  @onDismiss={{fn this.dismissBanner "expired"}}
  data-test-license-banner-expired
  as |A|
>
  <A.Title>License expired</A.Title>
  <A.Description>
    Your Vault license expired on
    {{date-format @expiry "MMM d, yyyy"}}. Add a new license to your configuration and restart Vault.
  </A.Description>
  <A.Description class="has-top-margin-xs">
    <DocLink @path="/vault/tutorials/enterprise/hashicorp-enterprise-license">
      Read documentation
      <Icon @name="learn-link" />
    </DocLink>
  </A.Description>
</Hds::Alert>
{{else if (and (lte this.licenseExpiringInDays 30) (not this.warningDismissed))}}
<Hds::Alert
  @type="inline"
  @color="warning"
  @onDismiss={{fn this.dismissBanner "warning"}}
  data-test-license-banner-warning
  as |A|
>
  <A.Title>Vault license expiring</A.Title>
  <A.Description>
    Your Vault license will expire in
    {{this.licenseExpiringInDays}}
    days at
    {{date-format @expiry "hh:mm:ss a"}}
    on
    {{date-format @expiry "MMM d, yyyy"}}.
    {{if
      @autoloaded
      "Add a new license to your configuration."
      "Keep in mind that your next license will need to be autoloaded."
    }}
  </A.Description>
  <A.Description class="has-top-margin-xs">
    <DocLink @path="/vault/tutorials/enterprise/hashicorp-enterprise-license">
      Read documentation
      <Icon @name="learn-link" />
    </DocLink>

```

</A.Description>

</Hds::Alert>

{{/if}}

layout: docs

page_title: license get - Command

description: |-

The "license get" command reports on the license in use.

license get

The `license get` command reports on the license in use. With the `-signed` flag, it will return the actual license string, but only if the license is stored, as opposed to [autoloading](/vault/docs/enterprise/license/autoloading).

Examples

Describe current license:

```
```shell-session
```

```
$ vault license get
```

```
Key Value
```

```

```

```

```

```
expiration_time 2022-05-17T23:59:59Z
```

```
features [HSM Performance Replication DR Replication MFA Sentinel Seal Wrapping Control Groups
Performance Standby Namespaces KMIP Entropy Augmentation Transform Secrets Engine Lease Count Quotas
Key Management Secrets Engine Automated Snapshots]
```

```
license_id 060d7820-fa59-f95c-832b-395db0aeb9ba
```

```
performance_standby_count 9999
```

```
start_time 2021-05-17T00:00:00Z
```

```
termination_time
```

```
2031-05-17T23:59:59Z
```

```
```
```

Get stored license string:

```
```shell-session
```

```
$ vault license get -signed
```

```
02MV4UU43BK5H...
```

```
```
```

Try to get stored license string when using autoloading:

```
```shell-session
```

```
$ vault license get -signed
```

```
License not found or using a temporary license.
```

```
```
```

Usage

The following flags are available in addition to the [standard set of flags](/vault/docs/commands) included on all commands.

Command options

- `-signed` (bool: false)`` - Return the signed license string when using a stored license.

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layout: api

page_title: /sys/license/status - HTTP API

description: |-

The `/sys/license/status`` endpoint is used to view the license used in Vault.

`/sys/license/status``

@include 'alerts/enterprise-only.mdx'

The `/sys/license/status`` endpoint is used to view update the license used in Vault.

License status

This endpoint returns information about licensing. See [license autoloading](/vault/docs/enterprise/license/autoloading) for additional background.

In the response:

- `autoloading_used`` will be true if an autoloaded license was provided to the node, false otherwise. This should always be true from Vault 1.11.0 onward.
- `autoloaded`` is the autoloaded license if `autoloading_used` is true.
- `persisted_autoload`` is the autoloaded license the active node last wrote to storage; this is only used to detect inconsistently licensed nodes in the cluster. It cannot be used as a license itself.
- `stored`` was used for the stored license prior to Vault 1.11.0. Stored licenses are no longer supported.

`autoloaded``, and `persisted_autoload`` will both have the same structure.

Method	Path
<code>GET`</code>	<code>/sys/license/status`</code>

Sample request

```
```shell-session
```

```
$ curl \
```

```
--header "X-Vault-Token: ..." \
```

```
http://127.0.0.1:8200/v1/sys/license/status
```

```
```
```

Sample response

```
```json
{
 "data": {
 "autoloading_used": true,
 "autoloaded": {
 "expiration_time": "2022-05-17T23:59:59Z",
 "features": [
 "HSM",
 "Performance Replication",
 "DR Replication",
 "MFA",
 "Sentinel",
 "Seal Wrapping",
 "Control Groups",
 "Performance Standby",
 "Namespaces",
 "KMIP",
 "Entropy Augmentation",
 "Transform Secrets Engine",
 "Lease Count Quotas",
 "Key Management Secrets Engine",
 "Automated Snapshots"
],
 "license_id": "060d7820-fa59-f95c-832b-395db0aeb9ba",
 "performance_standby_count":
9999,
 "start_time": "2021-05-17T00:00:00Z",
 "termination_time": "2031-05-17T23:59:59Z"
 },
 "persisted_autoload": {
 "expiration_time": "2022-05-17T23:59:59Z",
 "features": [
 "HSM",
 "Performance Replication",
 "DR Replication",
 "MFA",
 "Sentinel",
 "Seal Wrapping",
 "Control Groups",
 "Performance Standby",
 "Namespaces",
 "KMIP",
 "Entropy Augmentation",
 "Transform Secrets Engine",
 "Lease Count Quotas",
 "Key Management Secrets Engine",
```

```

 "Automated Snapshots"
],
 "license_id": "060d7820-fa59-f95c-832b-395db0aeb9ba",
 "performance_standby_count": 9999,
 "start_time": "2021-05-17T00:00:00Z",
 "termination_time": "2031-05-17T23:59:59Z"
}
}
}
...
{!!
Copyright (c) HashiCorp, Inc.
SPDX-License-Identifier: BUSL-1.1
~}}

```

```

<PageHeader as |p|>
<p.levelLeft>
 <h1 class="title is-3">License</h1>
</p.levelLeft>
</PageHeader>

```

```

<section class="box is-sideless is-marginless is-shadowless is-fullwidth">
Details
<div class="field box is-fullwidth is-shadowless is-paddingless is-marginless">
 <InfoTableRow @label="License ID" @value={{@licenseId}} data-test-detail-row />
 <InfoTableRow @label="Valid from" @value={{@startTime}} data-test-detail-row>
 {{date-format @startTime "MMM dd, yyyy hh:mm:ss a"}}
 to
 {{date-format @expirationTime "MMM dd, yyyy hh:mm:ss a"}}
 </InfoTableRow>
 <InfoTableRow @label="License state" @value={{ "Autoloaded" }} data-test-detail-row />
</div>
</section>

```

```

<section class="box is-sideless is-marginless is-shadowless is-fullwidth">
Features
<div class="field box is-fullwidth is-shadowless is-paddingless is-marginless">
 {{#each this.featuresInfo as |info|}}
 <InfoTableRow @label={{info.name}} @value={{if info.active "Active" "Not Active"}} data-test-feature-row>
 {{#if info.active}}
 <Icon @name="check-circle" class="icon-true" />

 Active
 {{#if info.count}}— {{info.count}} standby nodes allotted{{/if}}

 {{else}}
 <Icon @name="x-circle" class="icon-false" />
 Not Active
 {{/if}}
 </InfoTableRow>
 {{/each}}
</div>
</section>

```

```
{{/if}}
</InfoTableRow>
{{/each}}
</div>
</section>
The MIT License (MIT)
```

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---

layout: docs

page\_title: Manual license utilization reporting

description: >-

Manual license utilization reporting allows you to export, review, and send license utilization data to HashiCorp through the CLI or HCP Web Portal.

---

# Manual license utilization reporting

@include 'alerts/enterprise-only.mdx'

Manual license utilization reporting allows you to export, review, and send license utilization data to HashiCorp via the CLI or HCP Web Portal. Use these reports to understand how much more you can deploy under your current contract, protect against overutilization, and budget for predicted consumption. Manual reporting shares the minimum data required to validate license utilization as defined in our contracts. The reports consist of mostly computed metrics and will never contain Personal Identifiable Information (PII) or other sensitive information.

Manual license utilization shares the same data as automated license utilization but is more time consuming. Unless you are running in an air-gapped environment or have another reason to report data manually, we strongly recommend using automated reporting instead. If you have disabled automated license reporting, you can re-enable it by reversing the opt-out process described in the [documentation](/vault/docs/enterprise/license/utilization-reporting#opt-out).

If you are considering manual reporting because you're worried about your data, we strongly recommend that you review the [example payloads](#data-file-content), which are the same for automated and manual reporting. If you have further concerns with any of the automatically-reported data please bring them to your account manager before opting out of automated reporting in favor of manual reporting.

## ## How to manually send data reports

### ### Generate a data bundle

Data bundles include collections of JSON snapshots that contain license utilization information.

1. Login into your [cluster node](/vault/tutorials/cloud/vault-access-cluster).

1. Run

this CLI command to generate a data bundle:

```
```shell-session
$ vault operator utilization
```
```

By default, the bundle will include all historical snapshots.

You can provide context about the conditions under which the report was generated and submitted by providing a comment. This optional comment will not be included in the license utilization bundle, but will be included in the Vault server logs.

**\*\*Example:\*\***

```
```shell-session
$ vault operator utilization -message=Change Control 654987 \
  -output=/utilization/reports/latest.json
```
```

This command will export all the persisted snapshots into a bundle. The message Change Control 654987 will not be included in the bundle but will be included in Vault server logs. The `-output` flags specifies the output location of the JSON bundle.`



**\*\*Available command flags:\*\***

- `-message` `(string: )`` - Provide context about the conditions under which the report was generated and submitted. This message is not included in the license utilization bundle but will be included in the vault server logs. (optional)
- `-today-only` `(bool: false)`` - To include only today's snapshot, no historical snapshots. If no snapshots were persisted in the last 24 hrs, it takes a snapshot and exports it to a bundle. (optional)
- `-output` `(string: )`` - Specifies the output path for the bundle. Defaults to a time-based generated file name. (optional)

**### Send the data bundle to HashiCorp**

1. Go to <https://portal.cloud.hashicorp.com/license-utilization/reports/create>

1. Click on **\*\*Choose files\*\***, or drop your file(s) into the container.

a. If the upload succeeded, the HCP user interface will change the file status to **\*\*Uploaded\*\*** in green.

b. If the upload failed, the file status will say **\*\*Failed\*\*** in red, and will include error information.

If the upload fails make sure you haven't modified the file signature. If the error persists, please contact your account representative.

**## Enable manual reporting**

Upgrade to a release that supports manual license utilization reporting. These releases include:

- Vault Enterprise 1.16.0 and later
- Vault Enterprise 1.15.6 and later
- Vault Enterprise 1.14.10 and later

**## Configuration**

Administrators can manage disk space for storing snapshots by defining the number of days snapshots can be retained.

```hcl

```
reporting {
  snapshot_retention_time = "2400h"
}
...
```

The default retention period is 400 days.

Data file content

<CodeBlockConfig hideClipboard>

```
```json
{
 "snapshot_version": 2,
 "id": "0001JWAY00BRF8TEXC9CVRHBAC",
 "timestamp": "2024-02-08T16:55:28.085215-08:00",
 "schema_version": "2.0.0",
 "product": "vault",
 "process_id": "01HP5NJS21HN50FY0CBS0SYGCH",
 "metrics": {
 "clientcount.current_month_estimate.type.entity": {
 "key": "clientcount.current_month_estimate.type.entity",
 "value": 20,
 "mode": "write"
 },
 "clientcount.current_month_estimate.type.nonentity": {
 "key": "clientcount.current_month_estimate.type.nonentity",
 "value": 11,
 "mode": "write"
 },
 "clientcount.current_month_estimate.type.secret_sync": {
 "key": "clientcount.current_month_estimate.type.secret_sync",
 "value": 0,
 "mode": "write"
 },
 "clientcount.previous_month_complete.type.entity": {
 "key": "clientcount.previous_month_complete.type.entity",
 "value": 0,
 "mode": "write"
 },
 "clientcount.previous_month_complete.type.nonentity": {
 "key": "clientcount.previous_month_complete.type.nonentity",
 "value": 0,
 "mode": "write"
 },
 "clientcount.previous_month_complete.type.secret_sync": {
 "key": "clientcount.previous_month_complete.type.secret_sync",
```

```

 "value": 0,
 "mode": "write"
 }
},
"product_version": "1.16.0+ent",
"license_id": "7d68b16a-74fe-3b9f-a1a7-08cf461fff1c",
"checksum": 6861637915450723051,
"metadata":
{
 "billing_start": "2023-05-04T00:00:00Z",
 "cluster_id": "16d0ff5b-9d40-d7a7-384c-c9b95320c60e"
}
```

```

</CodeBlockConfig>

layout: docs

page_title: Vault Enterprise License

description: An overview of license.

Vault license

@include 'alerts/enterprise-only.mdx'

Licenses and EULA enhancements have been introduced in Vault 1.8 release. Please refer to the [FAQ](/vault/docs/enterprise/license/faq) for common questions concerning these changes.

The [Install a HashiCorp Enterprise License](/vault/tutorials/enterprise/hashicorp-enterprise-license) tutorial provides the instruction to load your Vault license.

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layout: docs

page_title: Frequently Asked Questions (FAQ)

description: An overview of license.

License FAQ

This FAQ section is for license changes and updates introduced for Vault Enterprise.

- [Q: How do the license termination changes affect upgrades?](#q-how-do-the-license-termination-changes-affect-upgrades)
- [Q: What impact on upgrades do the license termination behavior changes pose?](#q-what-impact-on-upgrades-do-the-license-termination-behavior-changes-pose)
- [Q: Will these license changes impact HCP Vault?](#q-will-these-license-changes-impact-hcp-vault)
- [Q: Do these license changes impact all Vault customers/licenses?](#q-do-these-license-changes-impact-all-vault-customers-licenses)
- [Q: What is the product behavior change introduced by the licensing changes?](#q-what-is-the-product-behavior-change-introduced-by-the-licensing-changes)
- [Q: How will Vault behave at startup when a license expires or terminates?](#q-how-will-vault-behave-at-startup-when-a-license-expires-or-terminates)
- - [Q: What is the impact on evaluation licenses due to this change?](#q-what-is-the-impact-on-evaluation-licenses-due-to-this-change)
 - [Q: Are there any changes to existing methods for manual license loading (API or CLI)?](#q-are-there-any-changes-to-existing-methods-for-manual-license-loading-api-or-cli)
 - [Q: Is there a grace period when evaluation licenses expire?](#q-is-there-a-grace-period-when-evaluation-licenses-expire)
 - [Q: Are the license files locked to a specific cluster?](#q-are-the-license-files-locked-to-a-specific-cluster)
 - [Q: Will a EULA check happen every time a Vault restarts?](#q-will-a-eula-check-happen-every-time-a-vault-restarts)
 - [Q: What scenarios should a customer plan for due to these license changes?](#q-what-scenarios-should-a-customer-plan-for-due-to-these-license-changes)
 - [Q: What is the migration path for customers who want to migrate from their existing license-as-applied-via-the-CLI flow to the license on disk flow?](#q-what-is-the-migration-path-for-customers-who-want-to-migrate-from-their-existing-license-as-applied-via-the-cli-flow-to-the-license-on-disk-flow)
- - [Q: What is the path for customers who want to downgrade/rollback from Vault 1.11 or later (auto-loaded license mandatory) to a pre-Vault 1.11 (auto-loading not mandatory, stored license supported)?](#q-what-is-the-path-for-customers-who-want-to-downgrade-rollback-from-vault-1-11-or-later-auto-loaded-license-mandatory-to-a-pre-vault-1-11-auto-loading-not-mandatory-stored-license-supported)
 - [Q: Is there a limited time for support of licenses that are in storage?](#q-is-there-a-limited-time-for-support-of-licenses-that-are-in-storage)
 - [Q: What are the steps to upgrade from one autoloading license to another autoloading license?](#q-what-are-the-steps-to-upgrade-from-one-autoloading-license-to-another-autoloading-license)

- [Q: What are the Vault ADP module licensing changes introduced in 1.8?](#q-what-are-the-vault-adp-module-licensing-changes-introduced-in-1-8)

-

[Q: How can the new ADP modules be purchased and what features are customer entitled to as part of that purchase?](#q-how-can-the-new-adp-modules-be-purchased-and-what-features-are-customer-entitled-to-as-part-of-that-purchase)

- [Q: What is the impact to customers based on these ADP module licensing changes?](#q-what-is-the-impact-to-customers-based-on-these-adp-module-licensing-changes)

Q: what is the product behavior change introduced by the licensing changes?

Per the [feature deprecation plans](/vault/docs/deprecation), Vault will no longer support licenses in storage. An [auto-loaded license](/vault/docs/enterprise/license/autoloading) must be used instead. If you are using stored licenses, you must migrate to auto-loaded licenses prior to upgrading to Vault 1.11

Vault 1.12 will also introduce different termination behavior for evaluation licenses versus non-evaluation licenses. An evaluation license will include a 30-day trial period after which a running Vault server will terminate. Vault servers using a non-evaluation license will not terminate.

Q: how do the license termination changes affect upgrades?

Vault 1.12 will introduce changes to the license termination behavior. Upgrades when using expired licenses will now be limited.

Vault will not startup if the build date of the binary is `_after_` the expiration date of a license. License expiration date and binary build date compatibility can be verified using the [Check for Autoloaded License](/vault/docs/commands/operator/diagnose#check-for-autoloaded-license) check performed by the ``vault operator diagnose`` command.

The build date of a binary can also be found using the [vault version](/vault/docs/commands/version#version) command.

A user can expect the following to occur based on the following scenarios:

****Evaluation or non-evaluation license is valid:****

Vault will start normally

****Evaluation or non-evaluation license is expired, binary build date `_before_` license expiry date:****

Vault will start normally

****Evaluation or non-evaluation license is expired, binary build date `_after_` license expiry date:****

Vault will not start

****Evaluation license is terminated:****

Vault will not start independent of the binary's build date

****Non-evaluation license is terminated, binary build date `_before_` license expiry date:****

Vault will start normally

****Non-evaluation license is terminated, binary build date `_after_` license expiry date:****

Vault will not start

The Vault support team can issue you a temporary evaluation license to allow for security upgrades if your license has expired.

Q: will these license changes impact HCP Vault?

No, these changes will not impact HCP Vault.

Q: do these license changes impact all Vault customers/licenses?

Customer/licenses	Impacted?
-----	-----
ENT binaries (evaluation or non-evaluation downloaded from [releases.hashicorp.com](https://releases.hashicorp.com/vault/))	Yes
Business-Source (BSL)	No

Q: what is the product behavior change introduced by the licensing changes?

With Vault 1.11, the use of an [auto-loaded license](/vault/docs/enterprise/license/autoloading) is required for Vault to start successfully.

Q: how will Vault behave at startup when a license expires or terminates?

When a license expires, Vault continues to function until the license terminates. This behavior exists today and remains unchanged in Vault 1.11. The grace period, defined as the time between license expiration and license termination, is one day for evaluation licenses (as of 1.8), and ten years for non-evaluation licenses.

Customers must provide a

valid license before the grace period expires. This license is required to be [auto-loaded](/vault/docs/enterprise/license/autoloading). When license terminates (upon grace period expiry), Vault will seal itself and customers will need a valid license in order to successfully bring-up Vault. If a valid license was not installed after license expiry, customers will need to provide one, and this license will need to be auto-loaded.

Vault 1.12 changes the license expiration and termination behavior. Evaluation licenses include a 30-day trial period after which a running Vault server will terminate. Non-evaluation licenses, however, will no longer terminate. When a non-evaluation license expires, Vault will continue to function but upgrades will be limited. The build date of the upgrade binary must be before the expiration date of the license.

Vault will not start when attempting to use an expired license and binary with a build date after the license expiration date. Attempting to [reload](/vault/api-docs/system/config-reload#reload-license-file) an expired license will result in an error if the build date of the running Vault server is after the license expiration date.

License expiration date and binary build date compatibility can be verified using the [Check for Autoloaded License](/vault/docs/commands/operator/diagnose#check-for-autoloaded-license) check performed by the `vault operator diagnose` command. The build date of a binary can also be found using the [vault version](/vault/docs/commands/version#version) command.

Q: what is the impact on evaluation licenses due to this change?

As of Vault 1.8, any Vault cluster deployed must have a valid [auto-loaded](/vault/docs/enterprise/license/autoloading) license.

Vault 1.12 introduces [expiration and termination behavior changes](#q-how-will-vault-behave-at-startup-when-a-license-expires-or-terminates) for non-evaluation licenses. Evaluation licenses will continue to have a 1-day grace period upon license expiry after which they will terminate. Vault will seal itself and shutdown once an evaluation license terminates.

Q: are there any changes to existing methods for manual license loading (API or CLI)?

The ["/sys/license"](/vault/api-docs/v1.10.x/system/license#install-license) and ["/sys/license/signed"](/vault/api-docs/v1.10.x/system/license#read-signed-license) endpoints have been removed as of Vault 1.11. With that said, it is no longer possible to provide a license via the "/sys/license" endpoint. License [auto-loading](/vault/docs/enterprise/license/autoloading) must be used instead. The ["/sys/config/reload/license"](/vault/api-docs/system/config-reload#reload-license-file) endpoint can be used to reload an auto-loaded license provided as a path via an environment variable or configuration.

Q: is there a grace period when evaluation licenses expire?

Evaluation licenses have a 1-day grace period. The grace period is the time until the license expires. Upon expiration, Vault will seal and will require a valid license to unseal and function properly.

Q: are the license files locked to a specific cluster?

The changes to licenses apply to all nodes in a cluster. The license files are not locked to a cluster, but are independently applied to the appropriate clusters.

Q: will a EULA check happen every time a Vault restarts?

Yes, starting with Vault 1.8, ENT binaries will be subjected to a EULA check. The release of Vault 1.8 introduces the EULA check for evaluation licenses (non-evaluation licenses are evaluated with a EULA check during contractual agreement) .

Although the agreement to a EULA occurs only once (when the user receives their license), Vault will check for the presence of a valid license every time a node is restarted.

Starting Vault 1.11, when customers deploy new Vault clusters, or upgrade existing Vault clusters, a valid [auto-loaded](/vault/docs/enterprise/license/autoloading) license must exist for the upgrade to be successful.

###

Q: what scenarios should a customer plan for due to these license changes?

- **New Cluster Deployment**: When a customer deploys new clusters to Vault 1.11 or later, a valid license must exist to successfully deploy. This valid license must be on-disk ([auto-loaded](/vault/docs/enterprise/license/autoloading)).

- **Eventual Migration**: Vault 1.11 removes support for in-storage licenses. Migrating to an auto-loaded license is required for Vault to start successfully using version 1.11 or greater. Pre-existing license storage entries will be automatically removed from storage upon startup.

Q: what is the migration path for customers who want to migrate from their existing license-as-applied-via-the-CLI flow to the license on disk flow?

If a Vault cluster using a stored license is planned to be upgraded to Vault 1.11 or greater, the operator must migrate to using an auto-loaded license. The `[`vault license get -signed`](/vault/docs/v1.10.x/commands/license/get)` command

(or underlying `[`/sys/license/signed`](/vault/api-docs/v1.10.x/system/license#read-signed-license)` endpoint) can be used to retrieve the license from storage in a running cluster.

It is not necessary to remove the stored license entry. That will occur automatically upon startup in Vault 1.11 or greater. Prior to completing the [recommended upgrade steps](/vault/docs/upgrading), perform the following to ensure your license is properly configured:

1. Use the command ``vault license get -signed`` to retrieve the license from storage of your running cluster.
2. Put the license on disk
3. Configure license auto-loading by specifying the `[`license_path`](/vault/docs/configuration#license_path)` config option or setting the `[`VAULT_LICENSE`](/vault/docs/commands#vault_license)` or `[`VAULT_LICENSE_PATH`](/vault/docs/commands#vault_license_path)` environment variable.

Q: what is the path for customers who want to downgrade/rollback from Vault 1.11 or later (auto-loaded license mandatory) to a pre-Vault 1.11 (auto-loading not mandatory, stored license supported)?

The downgrade procedure remains the same for Vault customers who are currently on Vault 1.11 or later, have a license installed via auto-loading, and would like to downgrade their cluster to a pre-1.11 version. Please refer to the [upgrade procedures](/vault/tutorials/standard-procedures/sop-upgrade) that remind the customers that they must take a snapshot before the upgrade. Customers will need to restore their version from the snapshot, apply the pre-1.11 enterprise binary version they wish to roll back, and bring up the clusters.

Q: is there a limited time for support of licenses that are in storage?

The support of licenses installed by alternative means often leads to difficulties providing the appropriate support. To provide the support expected by our customers, as we have announced in [Vault feature deprecations and plans](/vault/docs/deprecation) we are removing support for licenses in storage with

Vault 1.11. This implies licensing endpoints that deal with licenses in storage will be removed, and Vault will no longer check for valid licenses in storage. This change requires that all customers have [auto-loaded](/vault/docs/enterprise/license/autoloading) licenses to upgrade to 1.11(+) successfully.

Q: what are the steps to upgrade from one autoloaded license to another autoloaded license?

Follow these steps to migrate from one autoloaded license to another autoloaded license.

1. Use the `[`vault license inspect`](/vault/docs/commands/license/inspect)` command to compare the new license against the output of the `[`vault license get`](/vault/docs/commands/license/get)` command. This is to ensure that you have the correct license.

1. Backup the old license file in a safe location.
1. Replace the old license file on each Vault server with the new one.
1. Invoke the [reload command](/vault/api-docs/system/config-reload#reload-license-file) on each individual Vault server, starting with the standbys and doing the leader last. Invoking in this manner reduces possible disruptions if something was performed incorrectly with the above steps. You can either use the [reload command](/vault/api-docs/system/config-reload#reload-license-file) or send a SIGHUP.
1. On each node, ensure that the new license is in use by using the [`vault license get`](/vault/docs/commands/license/get) command and/or checking the logs.

ADP licensing

This FAQ section is for the Advanced Data Protection (ADP) license changes introduced in Vault Enterprise 1.8.

Q: what are the Vault ADP module licensing changes introduced in 1.8?

As of Vault Enterprise 1.8, the functionality formerly sold as the Vault ADP module is now separated between two new modules:

****ADP-KM**** includes:

- [Key Management Secrets Engine (KMSE)](/vault/docs/secrets/key-management)
- [Key Management Interoperability (KMIP)](/vault/docs/secrets/kmip)
- [MSSQL Transparent Data Encryption (TDE)](<https://www.hashicorp.com/blog/enabling-transparent-data-encryption-for-microsoft-sql-with-vault>)

****ADP-Transform****

includes:

- [Transform Secrets Engine (TSE)](/vault/docs/secrets/transform)

Q: how can the new ADP modules be purchased and what features are customer entitled to as part of that purchase?

****ADP-KM includes**:**

- This is the first Vault Enterprise module that can be purchased standalone. This means it can be purchased without the purchase of a Vault Enterprise Standard license.
- ADP-KM still requires a Vault Enterprise binary. The Vault Enterprise Standard license is automatically included with the ADP-KM module, but customers are contractually prohibited from using any features besides those in Vault Community Edition and ADP-KM (KMSE and KMIP).

****ADP-Transform includes**:**

- This module cannot be purchased as a standalone. It requires a Vault Enterprise binary, and customers must purchase the base Vault Enterprise Standard license (at least) to use the corresponding Enterprise features.

-

The ADP-Transform SKU can be applied as an add-on. This workflow is similar to the consolidated ADP SKU.

Q: what is the impact to customers based on these ADP module licensing changes?

Customers need to be aware of the following as a result of these changes:

- **New customers** may choose to purchase either or both of these modules. The old (consolidated) module is not available to them as an option.
- **Existing customers** may continue with the consolidated Vault ADP module uninterrupted. They will only be converted to one or both new ADP modules the next time they make a change to their licensing details (i.e. contract change).

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SPDX-License-Identifier: BUSL-1.1

```
variable "file_name" {}
```

```
output "license" {  
  value = file(var.file_name)  
}
```

layout: docs

page_title: License Autoloading

description: An overview of license autoloading.

License autoloading

@include 'alerts/enterprise-only.mdx'

Prior to Vault 1.8, Vault Enterprise would be licensed using special binaries that contained embedded licenses, or via a license written into Vault storage using the [POST sys/license API](/vault/api-docs/system/license#install-license).

As of Vault 1.8 those options still exist but are deprecated, and the recommended mechanism for managing licenses is called License Autoloading. New clusters are required to use the autoloading method.

License Autoloading can be done using one of these mechanisms, in decreasing order of priority (i.e. `VAULT_LICENSE` takes precedence over `VAULT_LICENSE_PATH`, which takes precedence over `license_path` in config.)

- [VAULT_LICENSE environment variable](/vault/docs/commands#vault_license)
- [VAULT_LICENSE_PATH environment variable](/vault/docs/commands#vault_license_path)
- [license_path in config](/vault/docs/configuration#license_path)

Nodes within a cluster should be consistently licensed. All nodes in a cluster should use autoloading, or none should. If autoloading is used, all nodes should

use the same license string. Warnings will be written to the log when there are discrepancies.

If autoloading is used, any existing stored license will be ignored. The presence of a stored license in conjunction with an autoloaded license will also result in logged warnings, which may require a service restart to clear.

layout: docs

page_title: license inspect - Command

description: |-

The "license inspect" command describes the contents of a signed license string.

license inspect

The `license inspect` command describes the contents of a signed license string.

Examples

Describe license in the environment (either `VAULT\_LICENSE` for a raw value or `VAULT\_LICENSE\_PATH` for the path to a file containing the value):

```
```shell-session
```

```
$ vault license inspect
```

```
Source: /Users/ncc/vaults/license
```

```
Product: vault
```

```
License ID: 060d7820-fa59-f95c-832b-395db0aeb9ba
```

```
Customer ID: 5401ae3b-136b-3e47-3b43-432927fa03e7
```

```
Installation ID: *
```

```
Issue Time: 2021-05-17 19:33:47.93981585 +0000 UTC
```

```
Start Time: 2021-05-17 00:00:00 +0000 UTC
```

```
Expiration Time: 2022-05-17 23:59:59.999 +0000 UTC
```

```
Termination Time: 2031-05-17 23:59:59.999 +0000 UTC
```

```
{"license_id":"060d7820-fa59-f95c-832b-395db0aeb9ba","customer_id":"5401ae3b-136b-3e47-3b43-432927fa03e7","installation_id":"*","issue_time":"2021-05-17T19:33:47.93981585Z","start_time":"2021-05-17T00:00:00Z","expiration_time":"2022-05-17T23:59:59.999Z","flags":{"modules":["multi-dc-scale","governance-policy","advanced-data-protection"]},"features":["HSM","Performance Replication","DR Replication","MFA","Sentinel","Seal Wrapping","Control Groups","Performance Standby","Namespaces","KMIP","Entropy Augmentation","Transform Secrets Engine","Lease Count Quotas","Key Management Secrets Engine","Automated Snapshots"],"performance_standby_count":9999}
```

```
License is valid
```

```
```
```

Describe license at given path:

```
```shell-session
```

```
$ vault license inspect ~/vaults/license
```

```

Source: /Users/ncc/vaults/license
Product: vault
License ID: 060d7820-fa59-f95c-832b-395db0aeb9ba
Customer ID: 5401ae3b-136b-3e47-3b43-432927fa03e7
Installation ID: *
Issue Time: 2021-05-17 19:33:47.93981585 +0000 UTC
Start Time: 2021-05-17 00:00:00 +0000 UTC
Expiration Time: 2022-05-17 23:59:59.999 +0000 UTC
Termination Time: 2031-05-17 23:59:59.999 +0000 UTC
{"license_id":"060d7820-fa59-f95c-832b-395db0aeb9ba","customer_id":"5401ae3b-136b-3e47-3b43-432927fa03e7","installation_id":"*","issue_time":"2021-05-17T19:33:47.93981585Z","start_time":"2021-05-17T00:00:00Z","expiration_time":"2022-05-17T23:59:59.999Z","flags":{"modules":["multi-dc-scale","governance-policy","advanced-data-protection"]},"features":["HSM","Performance Replication","DR Replication","MFA","Sentinel","Seal Wrapping","Control Groups","Performance Standby","Namespaces","KMIP","Entropy Augmentation","Transform Secrets Engine","Lease Count Quotas","Key Management Secrets Engine","Automated Snapshots"],"performance_standby_count":9999}

```

```

License is valid
...

```

## ## Usage

The following flags are available in addition to the [standard set of flags](/vault/docs/commands) included on all commands.

### ### Command options

```

- `--installation-id` (string: "") - Installation ID to validate the license against
Enterprise licenses

```

In versions 1.2.6, 1.3.9, 1.4.5, and 1.5.2, the enterprise licenses were not incorporated correctly into the build and we have issued patch releases (x.y.z.1) for enterprise customers containing the proper license. As the previous builds were both not working and causing confusion, we have removed the binaries.

```

// Copyright (c) HashiCorp, Inc.
// SPDX-License-Identifier: MPL-2.0

```

package license

```

// Features is a bitmask of feature flags
type Features uint

```

```

const FeatureNone Features = 0

```

```

func (f Features) HasFeature(flag Features) bool {
 return false
}

```

```
vault.core.license.expiration_time_epoch ((#vault-core-license-expiration_time_epoch))
```

```
Metric type | Value | Description
```

```
----- | ----- | -----
```

```
gauge | timestamp | Epoch time (seconds since 1970-01-01) at which the license will expire
```

```

```

```
layout: docs
```

```
page_title: license - Command
```

```
description: |-
```

```
The "license" command groups subcommands for interacting with Vault licenses.
```

```

```

```
license
```

The `license` command groups subcommands for interacting with Vault licenses

For more information, please see the [license documentation](/vault/docs/enterprise/license)

```
Examples
```

Query current license in use by a node:

```
```shell-session
```

```
$ vault license get
```

```
Key Value
```

```
---
```

```
expiration_time 2022-05-17T23:59:59.999Z
```

```
features [HSM Performance Replication DR Replication MFA Sentinel Seal Wrapping Control Groups
```

```
Performance Standby Namespaces KMIP Entropy Augmentation Transform Secrets Engine Lease Count Quotas
```

```
Key Management Secrets Engine Automated Snapshots]
```

```
license_id 060d7820-fa59-f95c-832b-395db0aeb9ba
```

```
performance_standby_count 9999
```

```
start_time 2021-05-17T00:00:00Z
```

```
```
```

Inspect a license string:

```
```shell-session
```

```
$
```

```
vault license inspect ~/vaults/license
```

```
Source: /Users/ncc/vaults/license
```

```
Product: vault
```

```
License ID: 060d7820-fa59-f95c-832b-395db0aeb9ba
```

```
Customer ID: 5401ae3b-136b-3e47-3b43-432927fa03e7
```

```
Installation ID: *
```

```
Issue Time: 2021-05-17 19:33:47.93981585 +0000 UTC
```

```
Start Time: 2021-05-17 00:00:00 +0000 UTC
```

```
Expiration Time: 2022-05-17 23:59:59.999 +0000 UTC
```

```
{"license_id":"060d7820-fa59-f95c-832b-395db0aeb9ba","customer_id":"5401ae3b-136b-3e47-3b43-432927fa03e7","installation_id":"*","issue_time":"2021-05-17T19:33:47.93981585Z","start_time":"2021-05-17T00:00:00Z","expiration_time":"2022-05-17T23:59:59.999Z","flags":{"modules":["multi-dc-scale","governance-policy","advanced-data-protection"]},"features":["HSM","Performance Replication","DR Replication","MFA","Sentinel","Seal Wrapping","Control Groups","Performance Standby","Namespaces","KMIP","Entropy Augmentation","Transform Secrets Engine","Lease Count Quotas","Key Management Secrets Engine","Automated Snapshots"],"performance_standby_count":9999}
```

License
is valid

...

Usage

```text

Usage: vault license <subcommand> [options] [args]

# ...

Subcommands:

get     Query Vault's license

inspect View the contents of a license string

...

For more information, examples, and usage about a subcommand, click on the name of the subcommand in the sidebar.

## 1.63 x-time 0.11.0

### 1.63.1 Available under license :

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## 1.64 x-time-rate 0.11.0

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No license file was found, but licenses were detected in source scan.

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Found in path(s):

\* /time-refs-tags-v0-11-0-rate-tar-gz/rate\_test.go

\* /time-refs-tags-v0-11-0-rate-tar-gz/rate.go

No license file was found, but licenses were detected in source scan.

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Found in path(s):

\* /time-refs-tags-v0-11-0-rate-tar-gz/sometimes\_test.go

\* /time-refs-tags-v0-11-0-rate-tar-gz/sometimes.go

## 1.65 go-secure-stdlib-parseutil 0.2.0

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## 1.74 clientmodel 0.6.2

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## 1.77 cloud.google.com/go/auth/oauth2adapt

### 0.2.8

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
 if err != nil {
 // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
 }
}

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//

```

```

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package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.

```

```

// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c,
err := procurement.NewLicenseManagementRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

// TODO: Use client.
_ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
 // TODO: Fill request struct fields.
 // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 //
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)

```

```

if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &procurementpb.EnumerateLicensedUsersRequest{
 // TODO: Fill request struct fields.
 // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicensedUsersRequest.
}
it := c.EnumerateLicensedUsers(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
 break
 }
 if err != nil {
 // TODO: Handle error.
 }
 //
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
}
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
 // TODO: Fill request struct fields.
 //

```

See

<https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRequest>.

```
}
```

```
resp, err := c.GetLicensePool(ctx, req)
```

```
if err != nil {
```

```
 // TODO: Handle error.
```

```
}
```

```
// TODO: Use resp.
```

```
_ = resp
```

```
}
```

```
func ExampleLicenseManagementClient_Unassign() {
```

```
 ctx := context.Background()
```

```
 // This snippet has been automatically generated and should be regarded as a code template only.
```

```
 // It will require modifications to work:
```

```
 // - It may require correct/in-range values for request initialization.
```

```
 // - It may require specifying regional endpoints when creating the service client as shown in:
```

```
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
```

```
 c, err := procurement.NewLicenseManagementClient(ctx)
```

```
 if err != nil {
```

```
 // TODO: Handle error.
```

```
 }
```

```
 defer c.Close()
```

```
 req := &procurementpb.UnassignRequest{
```

```
 // TODO: Fill request struct fields.
```

```
 // See
```

<https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest>.

```
 }
```

```
 resp,
```

```
 err := c.Unassign(ctx, req)
```

```
 if err != nil {
```

```
 // TODO: Handle error.
```

```
 }
```

```
// TODO: Use resp.
```

```
_ = resp
```

```
}
```

```
func ExampleLicenseManagementClient_UpdateLicensePool() {
```

```
 ctx := context.Background()
```

```
 // This snippet has been automatically generated and should be regarded as a code template only.
```

```
 // It will require modifications to work:
```

```
 // - It may require correct/in-range values for request initialization.
```

```
 // - It may require specifying regional endpoints when creating the service client as shown in:
```

```
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
```

```
 c, err := procurement.NewLicenseManagementClient(ctx)
```

```
 if err != nil {
```

```

// TODO: Handle error.
}
defer c.Close()

req := &procurementpb.UpdateLicensePoolRequest{
// TODO: Fill request struct fields.
// See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoolRequest.
}
resp, err := c.UpdateLicensePool(ctx, req)
if err != nil {
// TODO: Handle error.
}
//
TODO: Use resp.
_ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := procurement.NewLicenseManagementClient(ctx)
if err != nil {
// TODO: Handle error.
}
defer c.Close()

req := &longrunningpb.GetOperationRequest{
// TODO: Fill request struct fields.
// See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
}
resp, err := c.GetOperation(ctx, req)
if err != nil {
// TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
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```

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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/compute_pb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
```

```

// TODO: Handle error.
}
defer c.Close()

req := &computepb.DeleteLicenseRequest{
//
TODO: Fill request struct fields.
// See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
}
op, err := c.Delete(ctx, req)
if err != nil {
// TODO: Handle error.
}

err = op.Wait(ctx)
if err != nil {
// TODO: Handle error.
}
}

func ExampleLicensesClient_Get() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
// TODO: Handle error.
}
defer c.Close()

req := &computepb.GetLicenseRequest{
// TODO: Fill request struct fields.
// See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
}
resp,
err := c.Get(ctx, req)
if err != nil {
// TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
ctx := context.Background()

```



```

// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.GetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#GetIamPolicyLicenseRequest.
}
resp, err := c.GetIamPolicy(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_Insert()
{
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {

```

```

// TODO: Handle error.
}
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 // only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
 resp, err := it.Next()
 if err == iterator.Done {
 break
 }
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.

```

```

// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.SetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#SetIamPolicyLicenseRequest.
}
resp, err := c.SetIamPolicy(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 // generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

```

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## END OF TERMS AND CONDITIONS

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete []gax.CallOption
 Get []gax.CallOption
 GetIamPolicy []gax.CallOption
 Insert []gax.CallOption
 List []gax.CallOption
 SetIamPolicy []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {

```

```

return &LicensesCallOptions{
Delete: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
},
Get: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier: 1.30,
 },
 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
 }),
},
GetIamPolicy:
[]gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier: 1.30,
 },
 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
 }),
},
Insert: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
},
List: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier: 1.30,
 },
 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
 }),
},
SetIamPolicy: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
},
TestIamPermissions: []gax.CallOption{

```

```

 gax.WithTimeout(600000 * time.Millisecond),
 },
}
}

//
internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
 error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
 error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
 (*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.

```

```

func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection
// to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
// creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
// who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty
// if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are
// creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
// party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
// belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
// list of publicly-available licenses,
// use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution
// This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)

```

```

*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)

```

```

if err != nil {
 return nil, err
}

callOpts := defaultLicensesRESTCallOptions()
c := &licensesRESTClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,
 logger: internaloption.GetLogger(opts),
}
c.setGoogleClientInfo()

o := []option.ClientOption{
 option.WithHTTPClient(httpClient),
 option.WithEndpoint(endpoint),
}
opC, err := NewGlobalOperationsRESTClient(ctx, o...)
if err != nil {
 return nil, err
}
c.operationClient = opC

return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
 internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()...),
 internaloption.EnableNewAuthLibrary(),
 }
}

//
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapi", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

```

```

}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient
 with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
 return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
// creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *compute.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client
 and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}

```

```

resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
 if err != nil {
 return err
 }

 if err := unmarshal(buf,
resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
}
op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project: req.GetProject(),
 },
}
return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
// who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.

```



```

hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

hds = append(c.xGoogHeaders,
hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.License{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource
exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),

```

```

req.GetResource())

params := url.Values{}
if req != nil && req.OptionsRequestedPolicyVersion != nil {
 params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds,
"Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Policy{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil

```

```

}

// Insert create a License resource in the specified project. Caution This resource is intended
// for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx,
 hds...)
 opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")

```

```

if err != nil {
 return err
}

if err := unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project: req.GetProject(),
 },
}
return op, nil
}

// List retrieves the
// list of licenses available in the specified project. This method does not get any licenses that belong to other projects,
// including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available
// licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud.
// Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
 resp := &computepb.LicensesListResponse{}
 if pageToken != "" {
 req.PageToken = proto.String(pageToken)
 }
 if pageSize > math.MaxInt32 {
 {
 req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
 } else if pageSize != 0 {
 req.MaxResults = proto.Uint32(uint32(pageSize))
 }
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, "", err
 }
 }
}

```

```
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())
```

```
params := url.Values{}
if req != nil && req.Filter != nil {
 params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
}
if req != nil && req.MaxResults != nil {
 params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
}
if req != nil && req.OrderBy != nil {
 params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
}
if req != nil && req.PageToken != nil {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
}
if req != nil && req.ReturnPartialSuccess != nil {
 params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
}
```

```
baseUrl.RawQuery = params.Encode()
```

```
// Build HTTP headers from
client and context metadata.
```

```
hds := append(c.xGoogHeaders, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq.Header = headers
```

```
 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
 if err != nil {
 return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }
```

```
 return nil
}, opts...)
if e != nil {
 return nil, "", e
}
```

```

it.Response = resp
return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
if err != nil {
return "", err
}
it.items = append(it.items, items...)
return nextPageToken,
nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
m := protojson.MarshalOptions{AllowPartial: true}
body := req.GetGlobalSetPolicyRequestResource()
jsonReq, err := m.Marshal(body)
if err != nil {
return nil, err
}

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

// Build HTTP headers from client and context metadata.
hds
:= []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()),
"resource", url.QueryEscape(req.GetResource()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =

```

```

append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Policy{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
 if err != nil {
 return err
 }

 if
err := unm.Unmarshal(buf, resp); err != nil {
 return err
}

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

```

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```

func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

```

```

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, err
}

```

```

}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params",
fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.TestPermissionsResponse{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
if settings.Path != "" {
baseUrl.Path = settings.Path
}
httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
if err != nil {
return err
}
httpReq = httpReq.WithContext(ctx)
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
if err !=
nil {
return err
}

if err := unm.Unmarshal(buf, resp); err != nil {
return err
}

return nil
}, opts...)
if e != nil {
return nil, e
}
return resp, nil
}
// Copyright 2025 Google LLC
//
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```



```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
// protoc-gen-go v1.35.2
// protoc v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const

```

```

(
// Verify that this generated code is sufficiently up-to-date.
_ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
// Verify that runtime/protoimpl is sufficiently up-to-date.
_ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GrantType int32

const (
// The default value. This value is unused.
Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GrantType = 0
// Represents a user. When set, you must provide email_address for the user.
Permission_USER Permission_GrantType = 1
// Represents a group. When set, you must provide email_address for the
// group.
Permission_GROUP Permission_GrantType = 2
// Represents access to everyone. No extra information is required.
Permission_EVERYONE Permission_GrantType = 3
)

// Enum value maps for Permission_GrantType.
var (
Permission_GrantType_name = map[int32]string{
0: "GRANTEE_TYPE_UNSPECIFIED",
1: "USER",
2:
"GROUP",
3: "EVERYONE",
}
Permission_GrantType_value = map[string]int32{
"GRANTEE_TYPE_UNSPECIFIED": 0,
"USER": 1,
"GROUP": 2,
"EVERYONE": 3,
}
)

func (x Permission_GrantType) Enum() *Permission_GrantType {
p := new(Permission_GrantType)
*p = x
return p
}

func (x Permission_GrantType) String() string {
return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

```

```

func (Permission_GrantType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GrantType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GrantType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GrantType.Descriptor instead.
func (Permission_GrantType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
 0: "ROLE_UNSPECIFIED",
 1: "OWNER",
 2: "WRITER",
 3: "READER",
 }
 Permission_Role_value = map[string]int32{
 "ROLE_UNSPECIFIED": 0,
 "OWNER": 1,
 "WRITER": 2,
 "READER": 3,
 }
)

```

```

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
// you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

```

```

// Output only. Identifier. The permission name. A unique name will be
// generated on create. Examples:
//
// tunedModels/{tuned_model}/permissions/{permission}
// corpora/{corpus}/permissions/{permission}
//
// Output only.
Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
// Optional. Immutable. The type of the grantee.
GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Permission_GranteeType,oneof"
json:"grantee_type,omitempty"`
// Optional. Immutable. The email address of the user of group which this
// permission refers. Field is not set when permission's grantee type is
// EVERYONE.
EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
// Required. The role granted by this permission.
Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
*x = Permission{}
mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
{
mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
if x != nil {
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
if ms.LoadMessageInfo() == nil {
ms.StoreMessageInfo(mi)
}
}
return ms
}

```

```

return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
 return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
 return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
 return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
 return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,

```

0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,  
0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,  
0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,  
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,  
0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,  
0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,  
0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,  
0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,  
0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,  
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,  
0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,  
0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,  
0x01, 0x01, 0x12,  
0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,  
0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,  
0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,  
0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,  
0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,  
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,  
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,  
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,  
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,  
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,  
0x54,  
0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,  
0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,  
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,  
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,  
0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,  
0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,  
0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,  
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,  
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,  
0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,  
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69,  
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,  
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,  
0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,  
0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,  
0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,  
0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,  
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,  
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,  
0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,  
0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,  
0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f,  
0x72, 0x6f, 0x6c, 0x65, 0x42,  
0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,

```

0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
0x72,
0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
 protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GrantType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GrantType
 (Permission_Role)(0), // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil), // 2: google.ai.generativelanguage.v1beta.Permission
}

var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
 google.ai.generativelanguage.v1beta.Permission.GrantType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
 google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }

```



```

func file_google_ai_generativelanguage_v1beta_permission_proto_init()
{
if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
return
}
file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
type x struct{}
out := protoimpl.TypeBuilder{
File: protoimpl.DescBuilder{
GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
NumEnums: 2,
NumMessages: 1,
NumExtensions: 0,
NumServices: 0,
},
GoTypes: file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
EnumInfos: file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
MessageInfos: file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1beta_permission_proto = out.File
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
= nil
file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
"context"

```

```

compute "cloud.google.com/go/compute/apiv1"
computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
 // TODO: Fill request
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

```

```

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"

```

```

"math"
"net/http"
"net/url"

procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
gax "github.com/googleapis/gax-go/v2"
"google.golang.org/api/iterator"
"google.golang.org/api/option"
"google.golang.org/api/option/internaloption"
gtransport
"google.golang.org/api/transport/grpc"
httptransport "google.golang.org/api/transport/http"
"google.golang.org/grpc"
"google.golang.org/protobuf/encoding/protojson"
"google.golang.org/protobuf/proto"
)

var newLicenseManagementClientHook clientHook

// LicenseManagementCallOptions contains the retry settings for each method of LicenseManagementClient.
type LicenseManagementCallOptions struct {
 GetLicensePool []gax.CallOption
 UpdateLicensePool []gax.CallOption
 Assign []gax.CallOption
 Unassign []gax.CallOption
 EnumerateLicensedUsers []gax.CallOption
 GetOperation []gax.CallOption
}

func defaultLicenseManagementGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("cloudcommerceconsumerprocurement.googleapis.com:443"),
 internaloption.WithDefaultEndpointTemplate("cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN:443"),
 ,
 internaloption.WithDefaultMTLSEndpoint("cloudcommerceconsumerprocurement.mtls.googleapis.com:443"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()),
 internaloption.EnableJwtWithScope(),
 internaloption.EnableNewAuthLibrary(),
 option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
 grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func

```

```

defaultLicenseManagementCallOptions() *LicenseManagementCallOptions {
return &LicenseManagementCallOptions{
 GetLicensePool: []gax.CallOption{},
 UpdateLicensePool: []gax.CallOption{},
 Assign: []gax.CallOption{},
 Unassign: []gax.CallOption{},
 EnumerateLicensedUsers: []gax.CallOption{},
 GetOperation: []gax.CallOption{},
}
}

func defaultLicenseManagementRESTCallOptions() *LicenseManagementCallOptions {
return
&LicenseManagementCallOptions{
 GetLicensePool: []gax.CallOption{},
 UpdateLicensePool: []gax.CallOption{},
 Assign: []gax.CallOption{},
 Unassign: []gax.CallOption{},
 EnumerateLicensedUsers: []gax.CallOption{},
 GetOperation: []gax.CallOption{},
}
}

// internalLicenseManagementClient is an interface that defines the methods available from Cloud Commerce
// Consumer Procurement API.
type internalLicenseManagementClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 GetLicensePool(context.Context, *procurementpb.GetLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 UpdateLicensePool(context.Context, *procurementpb.UpdateLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 Assign(context.Context, *procurementpb.AssignRequest, ...gax.CallOption) (*procurementpb.AssignResponse,
error)
 Unassign(context.Context, *procurementpb.UnassignRequest,
...gax.CallOption) (*procurementpb.UnassignResponse, error)
 EnumerateLicensedUsers(context.Context, *procurementpb.EnumerateLicensedUsersRequest, ...gax.CallOption)
*LicensedUserIterator
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
}

// LicenseManagementClient is a client for interacting with Cloud Commerce Consumer Procurement API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
//
// Service for managing licenses.

```

```

type LicenseManagementClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseManagementClient

 // The call options for this service.
 CallOptions *LicenseManagementCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseManagementClient)
 Close() error {
 return c.internalClient.Close()
 }

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseManagementClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseManagementClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// GetLicensePool gets the license pool.
func (c *LicenseManagementClient) GetLicensePool(ctx context.Context, req
 *procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 return c.internalClient.GetLicensePool(ctx, req, opts...)
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *LicenseManagementClient)
 UpdateLicensePool(ctx context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
 (*procurementpb.LicensePool, error) {
 return c.internalClient.UpdateLicensePool(ctx, req, opts...)
 }

// Assign assigns a license to a user.
func (c *LicenseManagementClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
 ...gax.CallOption) (*procurementpb.AssignResponse, error) {

```

```

return c.internalClient.Assign(ctx, req, opts...)
}

// Unassign unassigns a license from a user.
func (c *LicenseManagementClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest, opts
...gax.CallOption) (*procurementpb.UnassignResponse, error) {
return c.internalClient.Unassign(ctx, req, opts...)
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *LicenseManagementClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
return c.internalClient.EnumerateLicensedUsers(ctx,
req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *LicenseManagementClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
return c.internalClient.GetOperation(ctx, req, opts...)
}

// licenseManagementGRPCClient is a client for interacting with Cloud Commerce Consumer Procurement API
over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementGRPCClient struct {
// Connection pool of gRPC connections to the service.
connPool gtransport.ConnPool

// Points back to the CallOptions field of the containing LicenseManagementClient
CallOptions **LicenseManagementCallOptions

// The gRPC API client.
licenseManagementClient procurementpb.LicenseManagementServiceClient

operationsClient longrunningpb.OperationsClient

//
The x-goog-* metadata to be sent with each request.
xGoogHeaders []string

logger *slog.Logger
}

// NewLicenseManagementClient creates a new license management service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.

```

```

//
// Service for managing licenses.
func NewLicenseManagementClient(ctx context.Context, opts ...option.ClientOption) (*LicenseManagementClient,
error) {
 clientOpts := defaultLicenseManagementGRPCClientOptions()
 if newLicenseManagementClientHook != nil {
 hookOpts, err := newLicenseManagementClientHook(ctx, clientHookParams{})
 if err != nil {
 return nil, err
 }
 clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
 return nil, err
 }
 client := LicenseManagementClient{CallOptions: defaultLicenseManagementCallOptions()}

 c := &licenseManagementGRPCClient{
 connPool:
 connPool,
 licenseManagementClient: procurementpb.NewLicenseManagementServiceClient(connPool),
 CallOptions: &client.CallOptions,
 logger: internaloption.GetLogger(opts),
 operationsClient: longrunningpb.NewOperationsClient(connPool),
 }
 c.setGoogleClientInfo()

 client.internalClient = c

 return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *licenseManagementGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc",

```



```

 grpc.Version)
 c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
type licenseManagementRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 logger *slog.Logger
}

// NewLicenseManagementRESTClient creates a new license management service rest client.
//
// Service for managing licenses.
func NewLicenseManagementRESTClient(ctx context.Context, opts ...option.ClientOption)
(*LicenseManagementClient, error) {
 clientOpts := append(defaultLicenseManagementRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
 return nil, err
 }

 callOpts := defaultLicenseManagementRESTCallOptions()
 c := &licenseManagementRESTClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,
 logger: internaloption.GetLogger(opts),
 }
}

```

```

c.setGoogleClientInfo()

return &LicenseManagementClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseManagementRESTClientOptions() []option.ClientOption {
return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://cloudcommerceconsumerprocurement.googleapis.com"),
internaloption.WithDefaultEndpointTemplate("https://cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN"),
 internaloption.WithDefaultMTLSEndpoint("https://cloudcommerceconsumerprocurement.mtls.googleapis.com"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()),
 internaloption.EnableNewAuthLibrary(),
}
}

//
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementRESTClient) setGoogleClientInfo(keyval ...string) {
kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
}
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementRESTClient) Close() error {
// Replace httpClient with nil to force cleanup.
c.httpClient = nil
return nil
}

// Connection
// returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseManagementRESTClient) Connection() *grpc.ClientConn {
return nil
}

func (c *licenseManagementGRPCClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

```

```

hds = append(c.xGoogHeaders, hds...)
ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicensePool)], opts...)
var resp *procurementpb.LicensePool
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.licenseManagementClient.GetLicensePool, req, settings.GRPC, c.logger,
"GetLicensePool")
 return err
}, opts...)
if err != nil {
 return
 nil, err
}
return resp, nil
}

```

```

func (c *licenseManagementGRPCClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

```

```

hds = append(c.xGoogHeaders, hds...)
ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).UpdateLicensePool)], opts...)
var resp *procurementpb.LicensePool
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.licenseManagementClient.UpdateLicensePool, req, settings.GRPC, c.logger,
"UpdateLicensePool")
 return err
}, opts...)
if err != nil {
 return nil, err
}
return resp, nil
}

```

```

func (c *licenseManagementGRPCClient) Assign(ctx context.Context,
req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

```

```

hds = append(c.xGoogHeaders, hds...)

```

```

ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
var resp *procurementpb.AssignResponse
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.licenseManagementClient.Assign, req, settings.GRPC, c.logger, "Assign")
 return err
}, opts...)
if err != nil {
 return nil, err
}
return resp, nil
}

func (c *licenseManagementGRPCClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds
 = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 var resp *procurementpb.UnassignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.licenseManagementClient.Unassign, req, settings.GRPC, c.logger, "Unassign")
 return err
 }, opts...)
 if err != nil {
 return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
 append((*c.CallOptions).EnumerateLicensedUsers[0:len((*c.CallOptions).EnumerateLicensedUsers):len((*c.CallOp
tions).EnumerateLicensedUsers)],
 opts...)
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
 resp := &procurementpb.EnumerateLicensedUsersResponse{}

```

```

if pageToken != "" {
 req.PageToken = pageToken
}
if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
} else if pageSize != 0 {
 req.PageSize = int32(pageSize)
}
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.licenseManagementClient.EnumerateLicensedUsers, req, settings.GRPC, c.logger,
"EnumerateLicensedUsers")
 return err
}, opts...)
if err != nil {
 return nil, "", err
}

it.Response = resp
return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
}
fetch := func(pageSize int,
pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

func (c *licenseManagementGRPCClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 var resp *longrunningpb.Operation

```

```

err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
error {
 var err error
 resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
 return err
}, opts...)
if err != nil {
 return nil, err
}
return resp, nil
}

// GetLicensePool gets the license pool.
func (c *licenseManagementRESTClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)],
 opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

```

```

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLicensePool")
if err != nil {
 return err
}

if err := unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *licenseManagementRESTClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest,
opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetLicensePool()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetLicensePool().GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetUpdateMask() != nil {
 field, err := protojson.Marshal(req.GetUpdateMask())
 if err != nil {
 return nil, err
 }
 params.Add("updateMask", string(field[1:len(field)-1]))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.

```

```

hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers
:= gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &procurementpb.LicensePool{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateLicensePool")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Assign assigns a license to a user.
func (c *licenseManagementRESTClient) Assign(ctx
context.Context, req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
 return nil, err
 }

```



```

}

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/v1/%v:assign", req.GetParent())

params := url.Values{}
params.Add("$salt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp
:= &procurementpb.AssignResponse{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Assign")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}

```

```

return resp, nil
}

// Unassign unassigns a license from a user.
func (c *licenseManagementRESTClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
jsonReq, err := m.Marshal(req)
if err != nil {
return
nil, err
}

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
return nil, err
}
baseUrl.Path += fmt.Sprintf("/v1/%v:unassign", req.GetParent())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &procurementpb.UnassignResponse{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
if settings.Path != "" {
baseUrl.Path = settings.Path
}
httpReq, err := http.NewRequest("POST", baseUrl.String(),
bytes.NewReader(jsonReq))
if err != nil {
return err
}
httpReq = httpReq.WithContext(ctx)
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Unassign")
if err != nil {
return err
}

```

```

}

if err := unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *licenseManagementRESTClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 unmarshal := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
 resp := &procurementpb.EnumerateLicensedUsersResponse{}
 if
 pageToken != "" {
 req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
 req.PageSize = int32(pageSize)
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:enumerateLicensedUsers", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetPageSize() != 0 {
 params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()
 }
}

```

```

// Build HTTP headers from client and context metadata.
hds := append(c.xGoogHeaders, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq,
err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "EnumerateLicensedUsers")
 if err != nil {
 return err
 }
 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, "", e
}
it.Response = resp
return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

```

// GetOperation is a utility method from google.longrunning.Operations.

```

func (c
*licenseManagementRESTClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
 if err != nil {
 return err
 }

 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)

```

```

if e != nil {
 return nil, e
}
return resp, nil
}
// Copyright 2025 Google LLC
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// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
 // TODO: Fill request struct fields.

```

```

// See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
}
for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
 if err != nil {
 // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
}
}
// Copyright 2025 Google LLC
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// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
// http://www.apache.org/licenses/LICENSE-2.0
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// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
// protoc-gen-go v1.35.2
// protoc v4.25.3
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.

```

```

_ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GrantType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GrantType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GrantType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GrantType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GrantType = 3
)

// Enum value maps for Permission_GrantType.
var (
 Permission_GrantType_name = map[int32]string{
 0: "GRANTEE_TYPE_UNSPECIFIED",
 1: "USER",
 2:
 "GROUP",
 3: "EVERYONE",
 }
 Permission_GrantType_value = map[string]int32{
 "GRANTEE_TYPE_UNSPECIFIED": 0,
 "USER": 1,
 "GROUP": 2,
 "EVERYONE": 3,
 }
)

func (x Permission_GrantType) Enum() *Permission_GrantType {
 p := new(Permission_GrantType)
 *p = x
 return p
}

func (x Permission_GrantType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protorelect.EnumNumber(x))
}

func (Permission_GrantType) Descriptor() protorelect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

```



```

func (Permission_GrantType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GrantType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GrantType.Descriptor instead.
func (Permission_GrantType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
 0: "ROLE_UNSPECIFIED",
 1: "OWNER",
 2: "WRITER",
 3: "READER",
 }
 Permission_Role_value = map[string]int32{
 "ROLE_UNSPECIFIED": 0,
 "OWNER": 1,
 "WRITER": 2,
 "READER": 3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
}

```

```

return p
}

func (x Permission_Role) String() string
{
return protoimpl.X.EnumStringOf(x.Descriptor(), protorelect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protorelect.EnumDescriptor {
return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protorelect.EnumType {
return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protorelect.EnumNumber {
return protorelect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
// accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
state protoimpl.MessageState
sizeCache protoimpl.SizeCache
unknownFields protoimpl.UnknownFields

// Output only. Identifier. The permission name. A unique name will be
// generated on create. Examples:
//

```

```

// tunedModels/{tuned_model}/permissions/{permission}
// corpora/{corpus}/permissions/{permission}
//
// Output only.
Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
// Optional. Immutable. The type of the grantee.
GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_GranteeType,oneof"
json:"grantee_type,omitempty"`
// Optional. Immutable. The email address of the user of group which this
// permission refers. Field is not set when permission's grantee type is
// EVERYONE.
EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
// Required. The role granted by this permission.
Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
*x = Permission{}
mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
{
mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
if x != nil {
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
if ms.LoadMessageInfo() == nil {
ms.StoreMessageInfo(mi)
}
return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.

```

```

func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
 return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
 return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
 return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
 return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,

```

0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,  
0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,  
0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,  
0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,  
0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,  
0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,  
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,  
0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,  
0x65, 0x54, 0x79, 0x70, 0x65, 0x88,  
0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,  
0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,  
0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,  
0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,  
0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,  
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,  
0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,  
0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,  
0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,  
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,  
0x4e,  
0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,  
0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,  
0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,  
0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,  
0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,  
0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,  
0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,  
0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,  
0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,  
0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,  
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0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,  
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0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,  
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,  
0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,  
0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,  
0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,  
0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,  
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,  
0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,  
0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,  
0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,  
0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,  
0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,  
0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,  
0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,  
0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,

```

0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
0x61, 0x67,
0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
 protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes =
 []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GranteeType
 (Permission_Role)(0), // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil), // 2: google.ai.generativelanguage.v1alpha.Permission
 }
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
 google.ai.generativelanguage.v1alpha.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
 google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
}
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
 return
 }

```

```

}
file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
type x struct{}
out := protoimpl.TypeBuilder{
 File: protoimpl.DescBuilder{
 GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
 RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
 NumEnums: 2,
 NumMessages: 1,
 NumExtensions: 0,
 NumServices: 0,
 },
 GoTypes: file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
 DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
 EnumInfos: file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
 MessageInfos: file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
= nil
file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}

```

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```

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// limitations under the License.

// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
// protoc-gen-go v1.35.2
// protoc v4.25.3
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType

```



```

isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
 return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType); ok {
 return x.ManualAssignmentType
 }
}

```

```

return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
return x.AutoAssignmentType
}
return nil
}

type isAssignmentProtocol_AssignmentType interface {
isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
// Allow manual assignments triggered by administrative operations only.
ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
AssignmentProtocol_AutoAssignmentType_ struct {
// Allow automatic assignments triggered by data plane operations.
AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
state protoimpl.MessageState
sizeCache protoimpl.SizeCache
unknownFields protoimpl.UnknownFields

// Identifier. Format:
// `billingAccounts/{billing_account}/orders/{order}/licensePool`
Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
// Required. Assignment protocol for the license pool.
LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
json:"license_assignment_protocol,omitempty"`
// Output only. Licenses count that are available to be assigned.
AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`

```

```

// Output only. Total number of licenses in the pool.
TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
 return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {

```

```

 if x != nil {
 return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
 return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
 return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
// license pool.
type GetLicensePoolRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=

```

```

&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if
ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
}
return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
 return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
 json:"license_pool,omitempty"`
 //
 // Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
 json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=

```

```

&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
// instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
 return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
 return x.UpdateMask
 }
 return nil
}

// Request message for
//

```

```

[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign].
type AssignRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
(x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{4}
}

```

```

func (x *AssignRequest) GetParent()
string {
if x != nil {
return x.Parent
}
return ""
}

func (x *AssignRequest) GetUsernames() []string {
if x != nil {
return x.Usernames
}
return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign].
type AssignResponse struct {
state protoimpl.MessageState
sizeCache protoimpl.SizeCache
unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
*x = AssignResponse{}
mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
if x
!= nil {
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
if ms.LoadMessageInfo() == nil {
ms.StoreMessageInfo(mi)

```



```

 }
 return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign].
type UnassignRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
{
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {

```

```

ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
}
return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
 return
x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
 return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

```

```

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
 ms
:= protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

```

```

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo()
 == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
 return x.Parent
 }
 return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
 return x.PageSize
 }
 return 0
}

```

```

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
 return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 // Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
 json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
 `protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
 json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if

```

```

x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
 return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
 return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
 return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
// [LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
// ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

```

```

// The list of licensed users.
LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
// A token that can be sent as `page_token` to retrieve the next page.
// If this field is omitted, there are no subsequent pages.
NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
*x = EnumerateLicensedUsersResponse{}
mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
(x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
if x != nil {
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
if ms.LoadMessageInfo() == nil {
ms.StoreMessageInfo(mi)
}
return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
if x != nil {
return x.LicensedUsers
}
}

```

```

return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
 return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated:
// Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {

```



```

return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
 `protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
 json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {

```

```

return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 1}
}

```

```

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
if x != nil {
return x.InactiveLicenseTtl
}
return nil
}

```

```

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

```

```

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
0x6f,
0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f,
0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f,
0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x1a, 0x1e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x62, 0x75, 0x66, 0x2f, 0x64,
0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x2e, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70,
0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e,
0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc3, 0x03, 0x0a, 0x12, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,
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var (
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```

```

= file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(func() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
 protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData)
})
return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
 // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),
 // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),
 // 2:
 google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),
 // 3:
 google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),
 // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),
 // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),
 // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),
 // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),
 // 8:
 google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
 // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),
 // 10:
 google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
 google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil), // 12:
 google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),
 // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),
 // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),
 // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
 google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name

```



```

-> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
0, // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
1, // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
-> google.protobuf.Timestamp
9, // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
2, // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
3, // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
4, // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
6, // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
-> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
8, // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_ty
pe -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
1, // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
1, // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
5, // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
7, // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
pe
-> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
14, // [14:19] is the sub-list for method output_type
9, // [9:14] is the sub-list for method input_type
9, // [9:9] is the sub-list for extension type_name

```

```

9, // [9:9] is the sub-list for extension extendee
0, // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}

func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
 return
 }
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
 (*AssignmentProtocol_ManualAssignmentType_)(nil),
 (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
 File:
 protoimpl.DescBuilder{
 GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
 RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
 NumEnums: 0,
 NumMessages: 13,
 NumExtensions: 0,
 NumServices: 1,
 },
 GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
 DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
 MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.

```

```

const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
 "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
 "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out, opts...)
}

```

```

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

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in, out, opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign", in, out, opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out, opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest)

```

```

(*AssignResponse, error)
// Unassigns a license from a user.
Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
// Enumerates all users assigned a license.
EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
(*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in);
 err != nil {
 return nil, err
 }
 if interceptor == nil {
 return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
}

```

```

info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: "/google.cloud.commerce.consumer.prourement.v1.LicenseManagementService/GetLicensePool",
}
handler := func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
}
return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
 return nil, err
 }
 if interceptor == nil {
 return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: "/google.cloud.commerce.consumer.prourement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
:= func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
}
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
 return nil, err
 }
 if interceptor == nil {
 return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: "/google.cloud.commerce.consumer.prourement.v1.LicenseManagementService/Assign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

```

```

func _LicenseManagementService_Unassign_Handler(srv
interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
 return nil, err
 }
 if interceptor == nil {
 return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

```

```

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
 return nil, err
 }
 if
 interceptor == nil {
 return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

```

```

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
 {

```

```

MethodName: "GetLicensePool",
Handler: _LicenseManagementService_GetLicensePool_Handler,
},
{
MethodName: "UpdateLicensePool",
Handler: _LicenseManagementService_UpdateLicensePool_Handler,
},
{
MethodName: "Assign",
Handler:
 _LicenseManagementService_Assign_Handler,
},
{
MethodName: "Unassign",
Handler: _LicenseManagementService_Unassign_Handler,
},
{
MethodName: "EnumerateLicensedUsers",
Handler: _LicenseManagementService_EnumerateLicensedUsers_Handler,
},
},
Streams: []grpc.StreamDesc{},
Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}

```

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package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
 Get: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier: 1.30,
 })
 })
 },
 }
}
```

```

 },
 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
)),
},
TestIamPermissions: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
},
}
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
 Close()
 error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
 (*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return c.internalClient.Close()
}

//
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {

```

```

c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
// License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
// Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
// intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger
}

// NewLicenseCodesRESTClient

```

```

creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
 return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,
 logger: internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
 internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()),
 internaloption.EnableNewAuthLibrary(),
 }
}

//
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gpic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.

```



```

func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection
returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
// License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
// Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

```

```

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
if err != nil {
 return err
}

if err := unm.Unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified
// resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
// images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
 req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
 url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type",
 "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
 append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
 tIamPermissions)], opts...)

```

```

unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.TestPermissionsResponse{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

```

## 1.78 go-jose-go-jose 4.1.0

### 1.78.1 Available under license :

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# 1.79 confluentinc-confluent-kafka-go 2.10.0

## 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"
```



```

)

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

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

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

type ListReceivedLicensesInput struct {

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

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

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

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

 noSmithyDocumentSerde
}

```

```

type ListReceivedLicensesOutput struct {

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

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

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

 noSmithyDocumentSerde
}

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

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

```

```

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

```

```

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

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
 Region: region,
 ServiceID: ServiceID,
 OperationName: "ListReceivedLicenses",
 }
}

DeleteLicense
Initialize stack step
 spanInitializeStart
 RegisterServiceMetadata
 legacyEndpointContextSetter
 SetLogger
 OperationInputValidation
 spanInitializeEnd
Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware

```

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

on: [pull\_request]

jobs:

licensescan:

name: License Scan

runs-on: ubuntu-latest

strategy:

matrix:

python-version: [3.9]

steps:

- name: Checkout target

uses: actions/checkout@v2

with:

path: sdkbase

ref: \${ { github.base\_ref } }

- name: Checkout this ref

uses: actions/checkout@v2

with:

path: new-ref

fetch-depth: 0

```

- name: Get Diff
 run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${ github.event.pull_request.base.sha }
${ github.sha } > refDiffFiles.txt
- name: Get Target Files
 run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
- name: Checkout scancode
 uses: actions/checkout@v2
 with:
 repository: nexB/scancode-toolkit
 path: scancode-toolkit
 fetch-depth: 1
- name: Set up Python ${ matrix.python-version }
 uses: actions/setup-python@v2
 with:
 python-version: ${ matrix.python-version }
ScanCode
- name: Self-configure scancode
 working-directory: ./scancode-toolkit
 run: ./scancode --help
- name: Run Scan code on target
 run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
- name: Run Scan code on pr ref
 run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
compare
- name: License test
 run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
ListLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection

```

```

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

package licensemanager

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

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

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

```

```

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

```

```

type CreateLicenseInput struct {

```

```

 // License beneficiary.

```

```

 //

```

```

 // This member is required.

```

```

 Beneficiary *string

```

```

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

```

```

 //

```

```

 //

```

```

 This member is required.

```

```

 ClientToken *string

```

```

 // Configuration for consumption of the license. Choose a provisional

```

```

 // configuration for workloads running with continuous connectivity. Choose a

```

```

 // borrow configuration for workloads with offline usage.

```

```

 //

```

```

 // This member is required.

```

```

 ConsumptionConfiguration *types.ConsumptionConfiguration

```

```

 // License entitlements.

```

```

 //

```

```

 // This member is required.

```

```

 Entitlements []types.Entitlement

```

```

 // Home Region for the license.

```

```

 //

```

```

 // This member is required.

```

```

 HomeRegion *string

```

```

 // License issuer.

```

```

 //

```

```

 // This member is required.

```

```

 Issuer *types.Issuer

```

```

 // License name.

```

```

 //

```

```

 // This member is required.

```

```

 LicenseName *string

```

```

 // Product name.

```

```

 //

```



```

// This member is required.
ProductName *string

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

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

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

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

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

// License status.
Status types.LicenseStatus

// License version.
Version *string

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

noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
if err != nil {
return err
}

```

```

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

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

```

```

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

```

```

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

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

package grafana

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

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

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

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

type DisassociateLicenseInput struct {

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

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //

```

```

// This member is required.
WorkspaceId *string

noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

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

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

noSmithyDocumentSerde
}

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

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

```

```

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

```

```

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

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

package licensemanager

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

```

```

"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

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

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

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

type DeleteLicenseInput struct {

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

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

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

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

 // License status.
 Status types.LicenseDeletionStatus

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

```



```
noSmithyDocumentSerde
}
```

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

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

```

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

```

```

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

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

package licensemanager

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

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

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

```

```

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

type ListLicensesInput struct {

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

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

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

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

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

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

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

 noSmithyDocumentSerde
}

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

```

```

}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

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

```

```

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

```

```

 return err
}
return nil
}

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

```

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



```

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

```

```
package licensemanager
```

```
import (
 "context"
```

```

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

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

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

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

type GetLicenseInput struct {

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

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
GetLicenseOutput struct {

 // License details.
 License *types.License

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

 noSmithyDocumentSerde
}

```

```

}

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

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

```

```

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

```

```

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

```

```

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
 Region: region,
 ServiceID: ServiceID,
 OperationName: "GetLicense",
 }
}

```

AWS SDK for Go

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AssociateLicense

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

SetCredentialSourceMiddleware

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

spanBuildRequestEnd

Finalize stack step

spanRetryLoop

Retry

RetryMetricsHeader

```

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

package licensemanager

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

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

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

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

```

```

type CheckoutBorrowLicenseInput struct {

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

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

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

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

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

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

```

```

type CheckoutBorrowLicenseOutput struct {

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

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

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

```

```

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

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

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

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

noSmithyDocumentSerde
}

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

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

```



```

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

```

```

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

```

```

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
 Region: region,
 ServiceID: ServiceID,
 OperationName: "CheckoutBorrowLicense",
}
}
{
 "smithy": "2.0",
 "shapes": {
 "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
 "type": "integer"
 },
 },
}

```

```

"com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
 "type": "long"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
 "type": "operation",
 "input": {
 "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
 },
 "output": {
 "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
 },
 "errors": [
 {
 "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerErrorException"
 },
 {
 "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#InternalServerErrorException"
 },
 {
 "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#InternalServerError"
 },
 {
 "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 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 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\t
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#InternalServerError": {
 "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"
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 "properties": {},
 "headers": {}
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 "type": "endpoint"
 }
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}

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 "rules": [
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 "conditions": [
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 "fn": "isSet",
 "argv": [
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 "ref": "Region"
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}

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

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```

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

"rules": [

 {
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 "endpoint": {
 "url": "https://license-manager-linux-subscriptions-
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",
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 "fn": "booleanEquals",
 "argv": [
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 "ref": "UseFIPS"
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 "conditions": [
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 "argv": [
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 "fn": "getAttr",
 "argv": [
 {
 "ref": "PartitionResult"
 },
 "supportsFIPS"
]
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]
 }
]
 }
],

```

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

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 "argv": [
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]
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 "conditions": [],
 "rules": [
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 "conditions": [],
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
 "properties": {},
 "headers": {}
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 "type": "endpoint"
 }
],
 "type": "tree"
 }
],
 "type": "tree"
 },
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 "conditions": [],
 "error": "DualStack is enabled but this partition does not support DualStack",
 "type": "error"
 }
],
"type": "tree"
},
{
 "conditions": [],
 "rules": [

```

```

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 "endpoint": {
 "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
 "properties": {},
 "headers": {}
 },
 "type": "endpoint"
 }
],
 "type": "tree"
}
],
"type": "tree"
}
],
"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": {
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 }
 },
 "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
 }
},
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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.amazonaws.com.cn"
 }
 },
 "params": {
 "Region": "cn-north-1",

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

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

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

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

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```

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

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```

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

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```

 "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#InternalServerErrorException"
 },
 {
 "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": {}
 }
 }
}

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```

 "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
\n \t<code>Value</code>, such as <code>us-west</code>.</p>\n \t<p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n \tto streamline results:</p>\n \t\n \t\n \t
<p>\n \t\t<code>AccountID</code>\n \t\t</p>\n \t\t\n \t\t\n \t\t<p>\n \t\t\t<code>AmiID</code>\n \t\t\t</p>\n \t\t\t\n \t\t\t\n \t\t\t<p>\n \t\t\t\t<code>DualSubscription</code>\n \t\t\t\t</p>\n \t\t\t\t\n \t\t\t\t\n \t\t\t\t<p>\n \t\t\t\t\t<code>InstanceID</code>\n \t\t\t\t\t</p>\n \t\t\t\t\t\n \t\t\t\t\t\n \t\t\t\t\t<p>\n \t\t\t\t\t\t<code>InstanceType</code>\n \t\t\t\t\t\t</p>\n \t\t\t\t\t\t\n \t\t\t\t\t\t\n \t\t\t\t\t\t<p>\n \t\t\t\t\t\t\t<code>ProductCode</code>\n \t\t\t\t\t\t\t</p>\n \t\t\t\t\t\t\t\n \t\t\t\t\t\t\t\n \t\t\t\t\t\t\t<p>\n \t\t\t\t\t\t\t\t<code>Region</code>\n \t\t\t\t\t\t\t\t</p>\n \t\t\t\t\t\t\t\t\n \t\t\t\t\t\t\t\t\n \t\t\t\t\t\t\t\t<p>\n \t\t\t\t\t\t\t\t\t<code>Status</code>\n \t\t\t\t\t\t\t\t\t</p>\n \t\t\t\t\t\t\t\t\t\n \t\t\t\t\t\t\t\t\t\n \t\t\t\t\t\t\t\t\t<p>\n \t\t\t\t\t\t\t\t\t\t<code>UsageOperation</code>\n \t\t\t\t\t\t\t\t\t\t</p>\n \t\t\t\t\t\t\t\t\t\t\n \t\t\t\t\t\t\t\t\t\t\n \t\t\t\t\t\t\t\t\t\t<p>For each filter, you can use
one of the following <code>Operator</code>
values to \n \tto define the behavior of the filter:</p>\n \t\t\t\t\t\t\t\t\t\t\n \t\t\t\t\t\t\t\t\t\t\n \t\t\t\t\t\t\t\t\t\t<p>\n \t\t\t\t\t\t\t\t\t\t\t<code>contains</code>\n \t\t\t\t\t\t\t\t\t\t\t</p>\n \t\t\t\t\t\t\t\t\t\t\t\n \t\t\t\t\t\t\t\t\t\t\t\n \t\t\t\t\t\t\t\t\t\t\t<p>\n \t\t\t\t\t\t\t\t\t\t\t\t<code>equals</code>\n \t\t\t\t\t\t\t\t\t\t\t\t</p>\n \t\t\t\t\t\t\t\t\t\t\t\t\n \t\t\t\t\t\t\t\t\t\t\t\t\n \t\t\t\t\t\t\t\t\t\t\t\t<p>\n \t\t\t\t\t\t\t\t\t\t\t\t\t<code>NotEqual</code>\n \t\t\t\t\t\t\t\t\t\t\t\t\t</p>\n \t\t\t\t\t\t\t\t\t\t\t\t\t\n \t\t\t\t\t\t\t\t\t\t\t\t"
 }
 },
 "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": {

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 "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\field
isn't empty, there are additional elements that the service hasn't \n\included in this request. Use this token with the
next request to retrieve \n\additional 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#InternalServerErrorException"
 },
 {
 "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 \n
\n <p>\n <code>Subscription</code>\n </p>\n \n \n
<p>The
valid Operators for this filter are:</p>\n \n \n <p>\n
<code>contains</code>\n </p>\n \n \n <p>\n
<code>equals</code>\n </p>\n \n \n <p>\n
<code>Notequal</code>\n </p>\n \n "
 }
 },
 "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": {

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 "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#InternalServerError"
 }
]
}

```



```

 },
 {
 "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\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": {

```





```

"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#InternalServerErrorException"
 },
 {
 "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"

```



```

"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\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-\\.]{1,510}/[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"
 }
]
 }
},
"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"
 },

```



```

 }

},
"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#InternalServerError"
 },
 {
 "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 resource.</p>",
 "smithy.api#httpQuery": "tagKeys",
 "smithy.api#required": {}
 }
 }
 },
 "traits": {
 "smithy.api#input": {}
 }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
 "type": "structure",
 "members": {},
 "traits": {

```

```

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

```

```

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

```



```

 "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
 "traits": {
 "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n subscriptions.</p>"
 }
 }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
 "type": "structure",
 "members": {
 "message": {
 "target": "smithy.api#String"
 }
 },
 "traits": {
 "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
 "smithy.api#error": "client"
 }
}
}
}

```

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

```
package grafana
```

```

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

```

```

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

```

```

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

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

type AssociateLicenseInput struct {

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

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

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

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
struct {

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

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

 noSmithyDocumentSerde
}

```

```

}

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

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

```

```

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

```

```

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

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

package licensemanager

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

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

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

```

```

}

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

type CheckoutLicenseInput struct {

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

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

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

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

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

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.

```

CheckoutType types.CheckoutType

// Allowed license entitlements.

EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.

Expiration \*string

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

IssuedAt \*string

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

LicenseArn

\*string

// License consumption token.

LicenseConsumptionToken \*string

// Node ID.

NodeId \*string

// Signed token.

SignedToken \*string

// Metadata pertaining to the operation's result.

ResultMetadata middleware.Metadata

noSmithyDocumentSerde

}

func (c \*Client) addOperationCheckoutLicenseMiddlewares(stack \*middleware.Stack, options Options) (err error) {

if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {

return err

}

err = stack.Serialize.Add(&awsAwsjson11\_serializeOpCheckoutLicense{}, middleware.After)

if err != nil {

return err

}

err = stack.Deserialize.Add(&awsAwsjson11\_deserializeOpCheckoutLicense{}, middleware.After)

if err != nil {

return err

}

if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {

return fmt.Errorf("add protocol finalizers: %v", err)

}

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

return err

```

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

```



```

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

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

```

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

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

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```
{
 "smithy": "2.0",
 "shapes": {
 "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
 "type": "structure",
 "members": {
 "message": {
 "target": "smithy.api#String"
 }
 },
 "traits": {
 "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
 "smithy.api#error": "client"
 }
 },
 "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
 "type": "structure",
 "members": {
 "DirectoryId": {
 "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
 "traits": {
 "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
 }
 }
 },
 "ActiveDirectorySettings": {
 "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
 "traits": {
 "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains details about 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.licenseanagerusersubscriptions#ActiveDirectoryType",
 "traits": {
 "smithy.api#documentation": "<p>The type of Active Directory either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
 }
 }
},
"traits": {
 "smithy.api#documentation": "<p>Details about an Active Directory identity
provider.</p>"
}
},
"com.amazonaws.licenseanagerusersubscriptions#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.licenseanagerusersubscriptions#Ipv4List",
 "traits": {
 "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
 "smithy.api#length": {
 "min": 1,
 "max": 2
 }
 }
 }
 },
 "DomainCredentialsProvider": {
 "target":
"com.amazonaws.licenseanagerusersubscriptions#CredentialsProvider",
 "traits": {
 "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
 }
 },
 "DomainNetworkSettings": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#DomainNetworkSettings",
 "traits": {
 "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
 }
 }
}

```



```
{
 {
 "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerErrorException"
 },
 {
 "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
 },
 {
 "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
 },
 {
 "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
 },
 {
 "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
 }
],
 "traits": {
 "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n <note>\n \n <p>>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing
status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\tmonthly
charges in the <i>Amazon Web Services Billing User Guide</i></p>\n </note>",
 "smithy.api#http":

{
 "code": 200,
 "method": "POST",
 "uri": "/user/AssociateUser"
},
 "smithy.api#idempotent": {}
 }
},
 "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
 "type": "structure",
 "members": {
 "Username": {
 "target": "smithy.api#String",
 "traits": {
 "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
 "smithy.api#required": {}
 }
 },
 "InstanceId": {
 "target": "smithy.api#String",
 "traits": {
 "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>"
```

```

 "smithy.api#required": {}
 },
 "IdentityProvider": {
 "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
 "traits": {
 "smithy.api#documentation": "<p>The identity provider for the user.</p>",
 "smithy.api#required": {}
 }
 },
 "Domain": {
 "target": "smithy.api#String",
 "traits": {
 "smithy.api#documentation": "<p>The domain name of the Active Directory that contains
information for the user to associate.</p>"
 }
 },
 "Tags": {
 "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
 "traits": {
 "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
 }
 },
 "traits": {
 "smithy.api#input": {}
 },
 "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
 "type": "structure",
 "members": {
 "InstanceUserSummary": {
 "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
 "traits": {
 "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
 "smithy.api#required": {}
 }
 }
 },
 "traits": {
 "smithy.api#output": {}
 }
 },
 "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
 "type": "integer"
 },
 "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {

```



```

 "type": "structure",
 "members": {
 "message": {
 "target": "smithy.api#String"
 }
 },
 "traits": {
 "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n\t\t\t\tresource.</p>",
 "smithy.api#error": "server"
 }
},
"com.amazonaws.licenseanagerusersubscriptions#CreateLicenseServerEndpoint": {
 "type": "operation",
 "input": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#CreateLicenseServerEndpointRequest"
 },
 "output": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#CreateLicenseServerEndpointResponse"
 },
 "errors": [
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#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.licenseanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
 "type": "structure",
 "members": {
 "IdentityProviderArn": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#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.licenseanagerusersubscriptions#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.licenseanagerusersubscriptions#Tags",
 "traits": {
 "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
 }
 }
 },
 "traits": {
 "smithy.api#input": {}
 }
},
"com.amazonaws.licenseanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
 "type": "structure",
 "members": {
 "IdentityProviderArn": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#Arn",
 "traits": {
 "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider

```



```

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

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

```

```

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

```

```

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

```

```

 "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
 "smithy.api#required": {}
 }
},
"traits": {
 "smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Directory": {
 "type": "string",
 "traits": {
 "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
 }
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
 "type": "operation",
 "input": {
 "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
 },
 "output": {
 "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
 },
 "errors": [
 {
 "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
 },
 {
 "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
 },
 {
 "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerError"
 },
 {
 "target": "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.licenseanagerusersubscriptions#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.licenseanagerusersubscriptions#IdentityProvider",
 "traits": {
 "smithy.api#documentation": "<p>An object that specifies details for the Active
Directory identity provider.</p>"
 }
 },
 "InstanceUserArn": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#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.licenseanagerusersubscriptions#DisassociateUserResponse": {
 "type": "structure",
 "members": {
 "InstanceUserSummary": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummary",
 "traits": {
 "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
 "smithy.api#required": {}
 }
 }
 },
 "traits": {
 "smithy.api#output": {}
 }
},
"com.amazonaws.licenseanagerusersubscriptions#DomainNetworkSettings": {
 "type": "structure",
 "members": {
 "Subnets": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#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.licenseanagerusersubscriptions#Filter": {
 "type": "structure",
 "members": {
 "Attribute": {
 "target": "smithy.api#String",

```



```

"IdentityProvider": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
 "traits": {
 "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
 "smithy.api#required": {}
 }
},
"Settings": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#Settings",
 "traits": {
 "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the
registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC
endpoints.</p>",
 "smithy.api#required": {}
 }
},
"Product": {
 "target": "smithy.api#String",
 "traits": {
 "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
 "smithy.api#required": {}
 }
},
"Status": {
 "target": "smithy.api#String",
 "traits": {
 "smithy.api#documentation": "<p>The status of the
identity provider.</p>",
 "smithy.api#required": {}
 }
},
"IdentityProviderArn": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#Arn",
 "traits": {
 "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
 }
},
"FailureMessage": {
 "target": "smithy.api#String",
 "traits": {
 "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
 }
}
},
"traits": {
 "smithy.api#documentation": "<p>Describes an identity provider.</p>"
}

```

```

 },
 "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummaryList": {
 "type": "list",
 "member": {

 "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary"
 }
 },
 "com.amazonaws.licenseanagerusersubscriptions#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.licenseanagerusersubscriptions#StringList",
 "traits": {
 "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
 "smithy.api#required": {}
 }
 },
 "LastStatusCheckDate": {
 "target": "smithy.api#String",
 "traits": {
 "smithy.api#documentation": "<p>The date of the last status check.</p>"
 }
 },
 "StatusMessage": {
 "target": "smithy.api#String",
 "traits": {
 "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
 }
 }
 },
 "traits": {
 "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
 }
 }
 }

```

```

 }
 },
 "com.amazonaws.licenseanagerusersubscriptions#InstanceSummaryList":
 {
 "type": "list",
 "member": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceSummary"
 }
 },
 "com.amazonaws.licenseanagerusersubscriptions#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.licenseanagerusersubscriptions#IdentityProvider",
 "traits": {
 "smithy.api#documentation": "\n\t\t\tThe <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.licenseanagerusersubscriptions#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": "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.licenseanagerusersubscriptions#InstanceUserSummaryList": {
 "type": "list",
 "member": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummary"
 }
 },
 "com.amazonaws.licenseanagerusersubscriptions#InternalServerError": {
 "type": "structure",
 "members": {
 "message": {
 "target": "smithy.api#String"
 }
 }
 },
 "traits": {
 "smithy.api#documentation": "<p>An exception occurred with the service.</p>",

```

```

 "smithy.api#error": "server",
 "smithy.api#httpError": 500
 }
},
"com.amazonaws.licensemanagerusersubscriptions#IPv4": {
 "type": "string",
 "traits": {
 "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
 }
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"com.amazonaws.licensemanagerusersubscriptions#IPv4List": {
 "type": "list",
 "member": {
 "target": "com.amazonaws.licensemanagerusersubscriptions#IPv4"
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"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
 "type": "service",
 "version": "2018-05-10",
 "operations": [
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 "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
 },
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 "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"
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 "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",

```



[illegible]

```

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

```

```

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

```

true

]

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

```

```

 "rules": [
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 "conditions": [],
 "endpoint": {
 "url": "https://license-manager-user-subscriptions-
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"
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 "conditions": [
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 "fn": "booleanEquals",
 "argv": [
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 "ref": "UseFIPS"
 },
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]
 }
],
 "rules": [
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 "conditions": [
 {
 "fn": "booleanEquals",
 "argv": [
 {
 "fn": "getAttr",
 "argv": [

```

```

{
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 "supportsFIPS"
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 "headers": {}
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 "type": "endpoint"
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],
 "type": "tree"
 },
 {
 "conditions": [],
 "error": "FIPS is enabled but this partition does not support FIPS",
 "type": "error"
 }
}

],
 "type": "tree"
 },
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 "conditions": [
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 "fn": "booleanEquals",
 "argv": [
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 "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": [
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 "ref": "PartitionResult"
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 "supportsDualStack"
]
 }
]
 }
],
"rules": [
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
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 "headers": {}
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 "type": "endpoint"
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 "type": "tree"
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 "type": "error"
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],
 "type": "tree"
},
{
 "conditions": [],
 "endpoint": {
 "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

```

```

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

```

```

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

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 "UseDualStack": true
 }
},
{
 "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
 "expect": {
 "endpoint": {
 "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
 }
 },
 "params": {
 "Region": "us-iso-east-1",
 "UseFIPS": true,
 "UseDualStack": false
 }
}

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

```

```

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

```

```

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

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```
"Endpoint": "https://example.com"
 }
 },
 {
 "documentation": "Missing region",
 "expect": {
 "error": "Invalid Configuration: Missing Region"
 }
 }
],
"version": "1.0"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
 "type": "structure",
 "members": {
 "ProvisioningStatus": {
 "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
 "traits": {
 "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS\n\t\t\t\t\tlicense server.</p>"
 }
 },
 "HealthStatus": {
 "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
 "traits": {
 "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
 }
 },
 "Ipv4Address": {
 "target": "smithy.api#String",
 "traits": {
 "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS\n\t\t\t\t\tlicense server.</p>"
 }
 }
 },
 "traits": {
 "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license server.</p>"
 }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
 "type": "structure",
 "members": {
 "IdentityProviderArn": {
```

```

 "target": "smithy.api#String",
 "traits": {
 "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
 }
 },
 "ServerType": {
 "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
 "traits": {
 "smithy.api#documentation": "<p>The type of license server.</p>"
 }
 },
 "ServerEndpoint": {
 "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

 "traits": {
 "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
 }
 },
 "StatusMessage": {
 "target": "smithy.api#String",
 "traits": {
 "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
 }
 },
 "LicenseServerEndpointId": {
 "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
 "traits": {
 "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
 }
 },
 "LicenseServerEndpointArn": {
 "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
 "traits": {
 "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
 }
 },
 "LicenseServerEndpointProvisioningStatus": {
 "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
 "traits": {
 "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
 }
 }
}

```



```

 },
 "LicenseServers": {
 "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
 "traits": {
 "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
 }
 },
 "CreationTime": {
 "target": "smithy.api#Timestamp",
 "traits": {
 "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
 }
 },
 "traits": {
 "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
 }
 },
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
 "type": "string"
 },
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
 "type": "list",
 "member": {
 "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
 }
 },
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
 "type": "string",
 "traits": {
 "smithy.api#enum": [
 {
 "name": "PROVISIONING",
 "value": "PROVISIONING",
 "documentation": ""
 },
 {
 "name": "PROVISIONING_FAILED",
 "value": "PROVISIONING_FAILED",
 "documentation": ""
 },
 {
 "name": "PROVISIONED",

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 "value": "PROVISIONED",
 "documentation": ""
 },
 {
 "name": "DELETING",
 "value": "DELETING",
 "documentation": ""
 },
 {
 "name": "DELETION_FAILED",
 "value": "DELETION_FAILED",
 "documentation": ""
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{
 "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.licenseanagerusersubscriptions#LicenseServerSettings": {
 "type": "structure",
 "members": {
 "ServerType": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ServerType",
 "traits": {
 "smithy.api#documentation": "<p>The type of license server.</p>",
 "smithy.api#required": {}
 }
 },
 "ServerSettings": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ServerSettings",
 "traits": {
 "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
your \n\t\t\tserver.</p>",
 "smithy.api#required": {}
 }
 }
 },
 "traits": {
 "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
 }
 },
 "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProviders": {
 "type": "operation",
 "input": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersRequest"
 },
 "output": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersResponse"
 },
 "errors": [
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
 }
]
 }
}

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 {
 "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
 },
 {
 "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
 },
 {
 "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
 }
],
 "traits": {
 "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
 "smithy.api#http": {
 "code": 200,
 "method": "POST",
 "uri": "/identity-provider/ListIdentityProviders"
 },
 "smithy.api#paginated": {
 "inputToken": "NextToken",
 "outputToken": "NextToken",
 "pageSize": "MaxResults",
 "items": "IdentityProviderSummaries"
 }
 }
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
 "type": "structure",
 "members": {
 "MaxResults": {
 "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
 "traits": {
 "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
 }
 },
 "Filters": {
 "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
 "traits": {
 "smithy.api#documentation": "<p>You can use
the following filters to streamline results:</p>\n \n \n <p>Product</p>\n \n \n <p>DirectoryId</p>\n \n "
 }
 },
 "NextToken": {
 "target": "smithy.api#String",
 "traits": {
 "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken

```



```

 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
 },
],
 "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.licenseanagerusersubscriptions#ListInstancesRequest": {
 "type": "structure",
 "members": {
 "MaxResults": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
 "traits": {
 "smithy.api#documentation": "<p>The maximum number of results to return from a single request.</p>"
 }
 },
 "NextToken": {
 "target": "smithy.api#String",
 "traits": {
 "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken\n\tfrom a previously truncated response.</p>"
 }
 }
 }
 }
}

```

```

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

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 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#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.licenseanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
 "type": "structure",
 "members": {
 "MaxResults": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#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
 }
 }
 }
 }
 }
}

```





```

 "target": "com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptionsRequest"
 },
 "output": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptionsResponse"
 },
 "errors": [
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#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.licenseanagerusersubscriptions#ListProductSubscriptionsRequest":
{
 "type": "structure",
 "members": {

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 "Product": {
 "target": "smithy.api#String",
 "traits": {
 "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
 <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
 <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
 \n<code>REMOTE_DESKTOP_SERVICES</code>\n </p>"
 }
 },
 "IdentityProvider": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
 "traits": {
 "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
 "smithy.api#required": {}
 }
 },
 "MaxResults": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
 "traits": {
 "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
 }
 },
 "Filters": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#FilterList",
 "traits": {
 "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
 \n \n <p>Status</p>\n \n \n <p>Username</p>\n \n \n <p>Domain</p>\n \n "
 }
 },
 "NextToken": {
 "target": "smithy.api#String",
 "traits": {
 "smithy.api#documentation": "<p>A token to specify where to start paginating.
This is the nextToken \n\tfrom a previously truncated response.</p>"
 }
 },
 "traits": {
 "smithy.api#input": {}
 }
 },
 "com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptionsResponse": {
 "type": "structure",
 "members": {
 "ProductUserSummaries": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummaryList",

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

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 "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#InternalServerError"
 }
]
 }
}

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 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#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.licenseanagerusersubscriptions#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.licenseanagerusersubscriptions#IdentityProvider",
 "traits": {
 "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
 "smithy.api#required": {}
 }
 }
 },
 "MaxResults": {

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 "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
 "traits": {
 "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
 }
 },
 "Filters": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#FilterList",
 "traits": {
 "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n \n
\n <p>Status</p>\n \n \n <p>Username</p>\n \n
\n <p>Domain</p>\n \n "
 }
 },
 "NextToken": {
 "target": "smithy.api#String",
 "traits": {
 "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
 }
 },
 "traits": {
 "smithy.api#input": {}
 }
},
"com.amazonaws.licenseanagerusersubscriptions#ListUserAssociationsResponse": {
 "type": "structure",
 "members": {
 "InstanceUserSummaries": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummaryList",
 "traits": {
 "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
 }
 },
 "NextToken": {
 "target": "smithy.api#String",
 "traits": {
 "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
 }
 }
 },
 "traits": {
 "smithy.api#output": {}
 }
}

```

```

 }
 },
 "com.amazonaws.licenseanagerusersubscriptions#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.licenseanagerusersubscriptions#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.licenseanagerusersubscriptions#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.licenseanagerusersubscriptions#ProductUserSummaryList": {
 "type":
"list",
 "member": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummary"
 }
 },
 "com.amazonaws.licenseanagerusersubscriptions#RdsSalSettings": {
 "type": "structure",
 "members": {
 "RdsSalCredentialsProvider": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#CredentialsProvider",
 "traits": {
 "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
 "smithy.api#required": {}
 }
 }
 },
 "traits": {
 "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
 }
 }

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 },
 "com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProvider":
 {
 "type": "operation",
 "input": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProviderRequest"
 },
 "output": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProviderResponse"
 },
 "errors": [
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
 },
 {
 "target":
"com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#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.licenseanagerusersubscriptions#RegisterIdentityProviderRequest": {
 "type": "structure",
 "members": {
 "IdentityProvider": {

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

```







```
"traits": {
 "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
 "smithy.api#required": {}
},
"IdentityProvider": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
 "traits": {
 "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
 "smithy.api#required": {}
 }
},
"Product": {
 "target": "smithy.api#String",
 "traits": {
 "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n <p>Valid values:
<code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code></p>",
 "smithy.api#required": {}
 }
},
"Domain": {
 "target": "smithy.api#String",
 "traits": {
 "smithy.api#documentation": "<p>The domain name of the Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
 }
},
"Tags": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#Tags",
 "traits": {
 "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
 }
}
},
"traits": {
 "smithy.api#input": {}
}
},
"com.amazonaws.licenseanagerusersubscriptions#StartProductSubscriptionResponse": {
 "type": "structure",
 "members": {
 "ProductUserSummary": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#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#InternalServerErrorException"
 },
 {
 "target": "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.licenseanagerusersubscriptions#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.licenseanagerusersubscriptions#IdentityProvider",
 "traits": {
 "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
 }
 },
 "Product": {
 "target": "smithy.api#String",
 "traits": {
 "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n </p>"
 }
 },
 "ProductUserArn": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#Arn",
 "traits": {
 "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
 }
 },
 "Domain": {
 "target": "smithy.api#String",
 "traits": {
 "smithy.api#documentation": "<p>The domain name of the Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
 }
 }
 },
 "traits": {
 "smithy.api#input": {}
 }
}

```

```

 },
 "com.amazonaws.licenseanagerusersubscriptions#StopProductSubscriptionResponse": {
 "type": "structure",
 "members": {
 "ProductUserSummary": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummary",
 "traits": {
 "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
 "smithy.api#required": {}
 }
 }
 }
 },
 "traits": {
 "smithy.api#output": {}
 }
 },
 "com.amazonaws.licenseanagerusersubscriptions#StringList": {
 "type": "list",
 "member": {
 "target": "smithy.api#String"
 }
 },
 "com.amazonaws.licenseanagerusersubscriptions#Subnet": {
 "type": "string",
 "traits": {
 "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
 }
 },
 "com.amazonaws.licenseanagerusersubscriptions#Subnets": {
 "type": "list",
 "member": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#Subnet"
 }
 },
 "com.amazonaws.licenseanagerusersubscriptions#TagKeyList": {
 "type": "list",
 "member": {
 "target": "smithy.api#String"
 },
 "traits": {
 "smithy.api#length": {
 "min": 0,
 "max": 50
 }
 },
 "smithy.api#sensitive": {}
 }
}

```

```

 }
 },
 "com.amazonaws.licenseanagerusersubscriptions#TagResource": {
 "type": "operation",
 "input": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#TagResourceRequest"
 },
 "output": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#TagResourceResponse"
 },
 "errors": [
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#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.licenseanagerusersubscriptions#TagResourceRequest": {
 "type": "structure",
 "members": {
 "ResourceArn": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#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.licenseanagerusersubscriptions#Tags",
 "traits": {
 "smithy.api#documentation":

```

```

"<p>The tags to apply to the specified resource.</p>",
 "smithy.api#required": {}
 }
},
"traits": {
 "smithy.api#input": {}
}
},
"com.amazonaws.licenseanagerusersubscriptions#TagResourceResponse": {
 "type": "structure",
 "members": {},
 "traits": {
 "smithy.api#output": {}
 }
},
"com.amazonaws.licenseanagerusersubscriptions#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.licenseanagerusersubscriptions#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.licenseanagerusersubscriptions#UntagResource": {
 "type": "operation",

```

```

"input": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#UntagResourceRequest"
},
"output": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#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.licenseanagerusersubscriptions#UntagResourceRequest": {
 "type": "structure",
 "members": {
 "ResourceArn": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#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.licenseanagerusersubscriptions#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.licenseanagerusersubscriptions#UntagResourceResponse": {
 "type": "structure",
 "members": {},
 "traits": {
 "smithy.api#output": {}
 }
 },
 "com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettings": {
 "type": "operation",
 "input": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
 },
 "output": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
 },
 "errors": [
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
 },
 {
 "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
 }
],
 "traits": {
 "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\t\t\tprovider.</p>",
 "smithy.api#http": {

 "code": 200,
 "method": "POST",
 "uri": "/identity-provider/UpdateIdentityProviderSettings"
 },
 "smithy.api#idempotent": {}
 }
 },
 "com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
 "type": "structure",
 "members": {
 "IdentityProvider": {
 "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider"
 }
 }
 }
}

```







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ListReceivedLicenses

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

SetCredentialSourceMiddleware

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

spanBuildRequestEnd

Finalize stack step

spanRetryLoop

Retry

RetryMetricsHeader

ResolveAuthScheme

GetIdentity

ResolveEndpointV2

disableHTTPS

ComputePayloadHash

setLegacyContextSigningOptions

```

Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

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

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

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

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

type CheckInLicenseInput struct {

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

```

```

// License beneficiary.
Beneficiary *string

noSmithyDocumentSerde
}

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

noSmithyDocumentSerde
}

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

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

```



```

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

```

```

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

```

```

func newServiceMetadataMiddleware_opCheckInLicense(region
string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
 Region: region,
 ServiceID: ServiceID,
 OperationName: "CheckInLicense",
}
}
{
 "smithy": "2.0",
 "metadata": {
 "suppressions": [
 {
 "id": "HttpMethodSemantics",
 "namespace": "*"
 },
 {
 "id": "HttpStatusCodeSemantics",
 "namespace": "*"
 },
 {
 "id": "PaginatedTrait",
 "namespace": "*"
 },
],
 },
}

```

```

 {
 "id": "HttpHeaderTrait",
 "namespace": "*"
 },
 {
 "id": "HttpUriConflict",
 "namespace": "*"
 },
 {
 "id": "Service",
 "namespace": "*"
 }
]
},
"shapes": {
 "com.amazonaws.licensemanager#AWSLicenseManager": {
 "type": "service",
 "version": "2018-08-01",
 "operations": [
 {
 "target": "com.amazonaws.licensemanager#AcceptGrant"
 },
 {
 "target": "com.amazonaws.licensemanager#CheckInLicense"
 },
 {
 "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
 },
 {
 "target": "com.amazonaws.licensemanager#CheckoutLicense"
 },
 {
 "target": "com.amazonaws.licensemanager#CreateGrant"
 },
 {
 "target": "com.amazonaws.licensemanager#CreateGrantVersion"
 },
 {
 "target": "com.amazonaws.licensemanager#CreateLicense"
 },
 {
 "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
 },
 {
 "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
 },
 {

```

```

 "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
 },
 {
 "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
 },
 {
 "target": "com.amazonaws.licensemanager#CreateToken"
 },
 {
 "target": "com.amazonaws.licensemanager#DeleteGrant"
 },
 {
 "target": "com.amazonaws.licensemanager#DeleteLicense"
 },
 {
 "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
 },
 {
 "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
 },
 {
 "target": "com.amazonaws.licensemanager#DeleteToken"
 },
 {
 "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"
 },
},
{
 "target": "com.amazonaws.licensemanager#GetAccessToken"
},
{
 "target": "com.amazonaws.licensemanager#GetGrant"
},
{
 "target": "com.amazonaws.licensemanager#GetLicense"
},
{
 "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
 "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
 "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
 "target": "com.amazonaws.licensemanager#GetLicenseUsage"
},

```

```

{
 "target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
 "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
 "target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
 "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
 "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
 "target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
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 "endpointPrefix": "license-manager"
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 "aws.protocols#awsJson1_1": {},
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 "smithy.api#title": "AWS License Manager",
 "smithy.api#xmlNamespace": {
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but this partition does not support DualStack"
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 "Endpoint": "https://example.com"
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 "Region": "us-east-1",
 "UseFIPS": false,
 "UseDualStack": true,
 "Endpoint": "https://example.com"
 }
 },
 {
 "documentation": "Missing region",
 "expect": {
 "error": "Invalid Configuration: Missing Region"
 }
 }
],
 "version": "1.0"
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
 "type": "operation",
 "input": {
 "target": "com.amazonaws.licensemanager#AcceptGrantRequest"
 },
 "output": {
 "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
 },
 "errors": [
 {
 "target": "com.amazonaws.licensemanager#AccessDeniedException"
 },
 {
 "target": "com.amazonaws.licensemanager#AuthorizationException"
 },
 {
 "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
 },
 {
 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#ServerInternalException"

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

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

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

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 "max":
7 }
 }
 },
 "com.amazonaws.licensemanager#Arn": {
 "type": "string",
 "traits": {
 "smithy.api#length": {
 "min": 0,
 "max": 2048
 },
 "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:([A-Za-
z0-9_/.-]{0,63}:([A-Za-z0-9_/.-]{0,63}:([A-Za-z0-9][A-Za-z0-9:/+=, @.-]{0,1023})$)"
 }
 },
 "com.amazonaws.licensemanager#ArnList": {
 "type": "list",
 "member": {
 "target": "com.amazonaws.licensemanager#Arn"
 }
 },
 "com.amazonaws.licensemanager#AuthorizationException": {
 "type": "structure",
 "members": {
 "Message": {
 "target": "com.amazonaws.licensemanager#Message"
 }
 },
 "traits": {
 "aws.protocols#awsQueryError":
{
 "code": "AuthorizationFailure",
 "httpResponseCode": 403
 },
 "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n policy associated with this account.</p>",
 "smithy.api#error": "client",
 "smithy.api#httpError": 403
 }
 },
 "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
 "type": "structure",
 "members": {
 "LastRunTime": {
 "target": "com.amazonaws.licensemanager#DateTime",
 "traits": {
 "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
 }
 }
 }
 }
}

```



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

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

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

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

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

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

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

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

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 "smithy.api#documentation": "<p>Checkout type.</p>",
 "smithy.api#required": {}
 },
 "KeyFingerprint": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
 "smithy.api#required": {}
 }
 },
 "Entitlements": {
 "target": "com.amazonaws.licensemanager#EntitlementDataList",
 "traits": {
 "smithy.api#documentation": "<p>License entitlements.</p>",
 "smithy.api#required": {}
 }
 },
 "ClientToken": {
 "target": "com.amazonaws.licensemanager#ClientToken",
 "traits": {
 "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
 "smithy.api#required": {}
 }
 },
 "Beneficiary": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>License beneficiary.</p>"
 }
 },
 "NodeId": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Node ID.</p>"
 }
 },
 "traits": {
 "smithy.api#input": {}
 },
 "com.amazonaws.licensemanager#CheckoutLicenseResponse": {
 "type": "structure",
 "members": {

```



```

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

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

```

```

 },
 "traits": {
 "aws.protocols#awsQueryError": {
 "code": "ConflictException",
 "httpResponseCode":
409
 },
 "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
 "smithy.api#error": "client",
 "smithy.api#httpError": 409
 }
 },
 "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
 "type": "structure",
 "members": {
 "ResourceType": {
 "target": "com.amazonaws.licensemanager#ResourceType",
 "traits": {
 "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
 }
 },
 "ConsumedLicenses": {
 "target": "com.amazonaws.licensemanager#BoxLong",
 "traits": {
 "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
 }
 }
 }
 },
 "traits": {
 "smithy.api#documentation": "<p>Details about license consumption.</p>"
 },
 "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
 "type": "list",
 "member": {
 "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
 }
 },
 "com.amazonaws.licensemanager#ConsumptionConfiguration": {
 "type": "structure",
 "members": {
 "RenewType": {
 "target": "com.amazonaws.licensemanager#RenewType",
 "traits": {
 "smithy.api#documentation": "<p>Renewal frequency.</p>"
 }
 }
 }
 }
}

```

```

 },
 "ProvisionalConfiguration": {
 "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
 "traits": {
 "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
 }
 },
 "BorrowConfiguration": {
 "target": "com.amazonaws.licensemanager#BorrowConfiguration",
 "traits": {
 "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
 }
 }
 },
 "traits": {
 "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
 }
},
"com.amazonaws.licensemanager#CreateGrant": {
 "type": "operation",
 "input": {
 "target": "com.amazonaws.licensemanager#CreateGrantRequest"
 },
 "output": {
 "target": "com.amazonaws.licensemanager#CreateGrantResponse"
 },
 "errors": [
 {
 "target": "com.amazonaws.licensemanager#AccessDeniedException"
 },
 {
 "target":
"com.amazonaws.licensemanager#AuthorizationException"
 },
 {
 "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
 },
 {
 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#ServerInternalException"
 },
 {
 "target": "com.amazonaws.licensemanager#ValidationException"
 }
]
}

```

```

 }
],
 "traits": {
 "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager in the <i>License Manager User Guide</i>.</p>"
 }
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
 "type": "structure",
 "members": {
 "ClientToken": {
 "target": "com.amazonaws.licensemanager#ClientToken",
 "traits": {
 "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
 "smithy.api#required": {}
 }
 },
 "GrantName": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Grant name.</p>",
 "smithy.api#required": {}
 }
 }
 },
 "LicenseArn": {
 "target": "com.amazonaws.licensemanager#Arn",
 "traits": {
 "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
 "smithy.api#required": {}
 }
 },
 "Principals": {
 "target": "com.amazonaws.licensemanager#PrincipalArnList",
 "traits": {
 "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an
Amazon Resource Name\n (ARN):</p>\n \n \n <p>An Amazon Web Services
account, which includes only the account specified.</p>\n \n \n \n \n <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n \n \n \n <p>An organization, which will include all accounts across your organization.</p>\n \n \n ",
 "smithy.api#required": {}
 }
 }
}

```

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 },
 "HomeRegion": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Home Region of the grant.</p>",
 "smithy.api#required": {}
 }
 },
 },
 "AllowedOperations": {
 "target": "com.amazonaws.licensemanager#AllowedOperationList",
 "traits": {
 "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
 "smithy.api#required": {}
 }
 }
 },
 "traits": {
 "smithy.api#input": {}
 }
},
"com.amazonaws.licensemanager#CreateGrantResponse": {
 "type": "structure",
 "members": {
 "GrantArn": {
 "target": "com.amazonaws.licensemanager#Arn",
 "traits": {
 "smithy.api#documentation": "<p>Grant ARN.</p>"
 }
 },
 "Status": {
 "target": "com.amazonaws.licensemanager#GrantStatus",
 "traits": {
 "smithy.api#documentation": "<p>Grant status.</p>"
 }
 },
 "Version": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Grant version.</p>"
 }
 }
 },
 "traits": {
 "smithy.api#output": {}
 }
},
"com.amazonaws.licensemanager#CreateGrantVersion":

```

```

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

```

```

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

```



```

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

```

```

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

```

all of these), license affinity to host (how long a license must be associated with a host), and the number of licenses purchased and used.

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

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

```

```

 }
 },

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

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

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```

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

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

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

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```

 "target": "com.amazonaws.licensemanager#ReportTypeList",
 "traits": {
 "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be
generated:</p>\n \n \n <p>License configuration report - Reports the number and
details of consumed licenses for a license configuration.</p>\n \n \n <p>Resource
report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n \n
",
 "smithy.api#required": {}
 }
 },
 "ReportContext": {
 "target": "com.amazonaws.licensemanager#ReportContext",
 "traits": {
 "smithy.api#documentation": "<p>Defines the type of license configuration the report generator
tracks.</p>",
 "smithy.api#required": {}
 }
 },
 "ReportFrequency": {
 "target": "com.amazonaws.licensemanager#ReportFrequency",
 "traits": {
 "smithy.api#documentation": "<p>Frequency by which reports are generated. Reports can be
generated daily, monthly, or weekly.</p>",
 "smithy.api#required": {}
 }
 },
 "ClientToken": {
 "target": "com.amazonaws.licensemanager#ClientRequestToken",
 "traits": {
 "smithy.api#documentation": "<p>Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
 "smithy.api#required": {}
 }
 },
 "Description": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Description of the report generator.</p>"
 }
 },
 "Tags": {
 "target": "com.amazonaws.licensemanager#TagList",
 "traits": {
 "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
 }
 }
},

```



```

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

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```

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

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

```

```

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

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

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workloads with offline\n usage.</p>",
 "smithy.api#required": {}
 }
 },

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

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

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 "target": "com.amazonaws.licensemanager#LicenseStatus",
 "traits": {
 "smithy.api#documentation": "<p>License status.</p>"
 }
 },
 "traits": {
 "smithy.api#output":
 }
},
"com.amazonaws.licensemanager#CreateToken": {
 "type": "operation",
 "input": {
 "target": "com.amazonaws.licensemanager#CreateTokenRequest"
 },
 "output": {
 "target": "com.amazonaws.licensemanager#CreateTokenResponse"
 },
 "errors": [
 {
 "target": "com.amazonaws.licensemanager#AccessDeniedException"
 },
 {
 "target": "com.amazonaws.licensemanager#AuthorizationException"
 },
 {
 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#RedirectException"
 },
 {
 "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
 },
 {
 "target": "com.amazonaws.licensemanager#ServerInternalException"
 },
 {
 "target": "com.amazonaws.licensemanager#ValidationException"
 }
],
 "traits": {
 "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n <p>A refresh token is a JWT"
 }
}

```

token used to get an access token. With an access token, you can call AssumeRoleWithWebIdentity to get role credentials that you can use to call License Manager to manage the specified license.

```

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

```



```

},
"com.amazonaws.licensemanager#CreateTokenResponse": {
 "type": "structure",
 "members": {
 "TokenId": {
 "target": "com.amazonaws.licensemanager#String",

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

```

```

 "traits": {
 "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
 }
 },
 "com.amazonaws.licensemanager#DeleteGrant": {
 "type": "operation",
 "input": {
 "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
 },
 "output": {
 "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
 },
 "errors": [
 {
 "target": "com.amazonaws.licensemanager#AccessDeniedException"
 },
 {
 "target": "com.amazonaws.licensemanager#AuthorizationException"
 },
 {
 "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
 },
 {
 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#ServerInternalException"
 },
 {
 "target": "com.amazonaws.licensemanager#ValidationException"
 }
],
 "traits": {
 "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
 }
 },
 "com.amazonaws.licensemanager#DeleteGrantRequest": {
 "type": "structure",
 "members": {
 "GrantArn": {
 "target": "com.amazonaws.licensemanager#Arn",
 "traits": {
 "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
 "smithy.api#required": {}
 }
 }
 }
 }
}

```

```

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

```

```

"com.amazonaws.licensemanager#DeleteLicense": {
 "type": "operation",
 "input": {
 "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
 },
 "output": {
 "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
 },
 "errors": [
 {
 "target": "com.amazonaws.licensemanager#AccessDeniedException"
 },
 {
 "target": "com.amazonaws.licensemanager#AuthorizationException"
 },
 {
 "target": "com.amazonaws.licensemanager#ConflictException"
 },
 {
 "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
 }
],
 {
 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#RedirectException"
 },
 {
 "target": "com.amazonaws.licensemanager#ServerInternalException"
 },
 {
 "target": "com.amazonaws.licensemanager#ValidationException"
 }
],
 "traits": {
 "smithy.api#documentation": "<p>Deletes the specified license.</p>"
 }
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
 "type": "operation",
 "input": {
 "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
 },
 "output": {
 "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
 },

```

```

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

```

```

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

```

```

 },
 "traits": {

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

```

```

 "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
 }
}
},
"traits": {
 "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
 "type": "operation",
 "input": {
 "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
 },
 "output": {
 "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
 },
 "errors": [
 {
 "target": "com.amazonaws.licensemanager#AccessDeniedException"
 },
 {
 "target": "com.amazonaws.licensemanager#AuthorizationException"
 },
 {
 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#RedirectException"
 },
 {
 "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
 },
 {
 "target": "com.amazonaws.licensemanager#ServerInternalException"
 },
 {
 "target": "com.amazonaws.licensemanager#ValidationException"
 }
],
 "traits": {
 "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
 }
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
 "type": "structure",
 "members": {

```



```

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

```

```

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

```

```

 "Unit": {
 "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
 "traits": {
 "smithy.api#documentation": "<p>Entitlement data unit.</p>",
 "smithy.api#required": {}
 }
 },
 "traits": {
 "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
 },
 "com.amazonaws.licensemanager#EntitlementDataList": {
 "type": "list",
 "member": {
 "target": "com.amazonaws.licensemanager#EntitlementData"
 }
 },
 "com.amazonaws.licensemanager#EntitlementDataUnit": {
 "type": "enum",
 "members": {
 "COUNT": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "Count"
 }
 },
 "NONE": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "None"
 }
 },
 "SECONDS": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "Seconds"
 }
 },
 "MICROSECONDS": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "Microseconds"
 }
 },
 "MILLISECONDS": {
 "target": "smithy.api#Unit",

```

```

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

```

```

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

```

```

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

```

```

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

```

```

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

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```

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

```

```

 "target": "smithy.api#Unit",
 "traits": {

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

```

```

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

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

```

```

"errors": [
 {
 "target": "com.amazonaws.licensemanager#AccessDeniedException"
 },
 {
 "target": "com.amazonaws.licensemanager#AuthorizationException"
 },
 {
 "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
 },
 {
 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
 },
 {
 "target": "com.amazonaws.licensemanager#ServerInternalException"
 },
 {
 "target": "com.amazonaws.licensemanager#ValidationException"
 }
],
"traits": {
 "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
 "type": "structure",
 "members": {
 "LicenseConsumptionToken": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>License consumption token.</p>",
 "smithy.api#required": {}
 }
 }
 },
 "DryRun": {
 "target": "com.amazonaws.licensemanager#Boolean",
 "traits": {
 "smithy.api#default": false,
 "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions.</p>"
 }
 }
},
"traits": {

```

```

 "smithy.api#input": {}
 },
 "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
 "type": "structure",
 "members": {
 "LicenseConsumptionToken": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>License consumption token.</p>"
 }
 },
 "Expiration": {
 "target": "com.amazonaws.licensemanager#ISO8601DateTime",
 "traits": {
 "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
 }
 }
 },
 "traits": {
 "smithy.api#output": {}
 }
 },
 "com.amazonaws.licensemanager#FailedDependencyException": {
 "type": "structure",
 "members": {
 "Message": {
 "target": "com.amazonaws.licensemanager#Message"
 },
 "ErrorCode": {
 "target": "com.amazonaws.licensemanager#String"
 }
 },
 "traits": {
 "aws.protocols#awsQueryError": {
 "code": "FailedDependency",
 "httpResponseCode": 424
 },
 "smithy.api#documentation":
 "<p>A dependency required to run the API is missing.</p>",
 "smithy.api#error": "client",
 "smithy.api#httpError": 424
 }
 },
 "com.amazonaws.licensemanager#Filter": {
 "type": "structure",
 "members": {

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

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```

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

```

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tokens\n are valid for one hour.</p>"
 }
 },
 "com.amazonaws.licensemanager#GetAccessTokenRequest": {
 "type": "structure",
 "members": {
 "Token": {
 "target": "com.amazonaws.licensemanager#TokenString",
 "traits": {
 "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
 "smithy.api#required": {}
 }
 }
 },
 "TokenProperties": {
 "target": "com.amazonaws.licensemanager#MaxSize3StringList",
 "traits": {
 "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
 }
 },
 "traits": {
 "smithy.api#input": {}
 }
 },
 "com.amazonaws.licensemanager#GetAccessTokenResponse":
 {
 "type": "structure",
 "members": {
 "AccessToken": {
 "target": "com.amazonaws.licensemanager#TokenString",
 "traits": {
 "smithy.api#documentation": "<p>Temporary access token.</p>"
 }
 }
 },
 "traits": {
 "smithy.api#output": {}
 }
 },
 "com.amazonaws.licensemanager#GetGrant": {
 "type": "operation",
 "input": {
 "target": "com.amazonaws.licensemanager#GetGrantRequest"
 },
 "output": {
 "target": "com.amazonaws.licensemanager#GetGrantResponse"
 },
 },

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```

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

```

```

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

"smithy.api#output": {}
 },
 "com.amazonaws.licensemanager#GetLicense": {
 "type": "operation",
 "input": {
 "target": "com.amazonaws.licensemanager#GetLicenseRequest"
 },
 "output": {
 "target": "com.amazonaws.licensemanager#GetLicenseResponse"
 },
 "errors": [
 {
 "target": "com.amazonaws.licensemanager#AccessDeniedException"
 },
 {
 "target": "com.amazonaws.licensemanager#AuthorizationException"
 },
 {
 "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
 },
 {
 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#ServerInternalException"
 }
],
 {
 "target": "com.amazonaws.licensemanager#ValidationException"
 }
],
 "traits": {
 "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
 }
 }

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```

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

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```

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

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 "traits": {
 "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
 }
 },
 "ConsumedLicenses": {
 "target": "com.amazonaws.licensemanager#BoxLong",
 "traits": {
 "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
 }
 },
 "Status": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>License configuration status.</p>"
 }
 },
},
"OwnerAccountId": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
 }
},
"ConsumedLicenseSummaryList": {
 "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
 "traits": {
 "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
 }
},
"ManagedResourceSummaryList": {
 "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
 "traits": {
 "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
 }
},
"Tags": {
 "target": "com.amazonaws.licensemanager#TagList",
 "traits": {
 "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
 }
},
"ProductInformationList": {
 "target": "com.amazonaws.licensemanager#ProductInformationList",
 "traits": {
 "smithy.api#documentation": "<p>Product information.</p>"
 }
},
"AutomatedDiscoveryInformation": {

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 "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
 "traits": {
 "smithy.api#documentation": "<p>Automated discovery information.</p>"
 }
 },
 "DisassociateWhenNotFound": {
 "target": "com.amazonaws.licensemanager#BoxBoolean",
 "traits": {
 "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
 }
 },
 "traits": {
 "smithy.api#output": {}
 }
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
 "type": "operation",
 "input": {
 "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
 },
 "output": {
 "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
 },
 "errors": [
 {
 "target": "com.amazonaws.licensemanager#AccessDeniedException"
 },
 {
 "target": "com.amazonaws.licensemanager#AuthorizationException"
 },
 {
 "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
 },
 {
 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#ServerInternalException"
 }
],
 "traits": {
 "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
 }
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {

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

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```

 }
 },
 "Status": {
 "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
 "traits": {
 "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
 }
 },

 "StartTime": {
 "target": "com.amazonaws.licensemanager#DateTime",
 "traits": {
 "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
 }
 },

 "LicenseConversionTime": {
 "target": "com.amazonaws.licensemanager#DateTime",
 "traits": {
 "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
 }
 },

 "EndTime": {
 "target": "com.amazonaws.licensemanager#DateTime",
 "traits": {
 "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
 }
 },

 "traits": {
 "smithy.api#output": {}
 }
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
 "type": "operation",
 "input": {
 "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
 },
 "output": {
 "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
 },
 "errors": [
 {
 "target": "com.amazonaws.licensemanager#AccessDeniedException"
 },
 {
 "target": "com.amazonaws.licensemanager#AuthorizationException"
 }
]
}

```



```

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

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```

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

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```

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

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```

 "LicenseUsage": {
 "target":
"com.amazonaws.licensemanager#LicenseUsage",
 "traits": {
 "smithy.api#documentation": "<p>License usage details.</p>"
 }
 },
 "traits": {
 "smithy.api#output": {}
 }
 },
 "com.amazonaws.licensemanager#GetServiceSettings": {
 "type": "operation",
 "input": {
 "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
 },
 "output": {
 "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
 },
 "errors": [
 {
 "target": "com.amazonaws.licensemanager#AccessDeniedException"
 },
 {
 "target": "com.amazonaws.licensemanager#AuthorizationException"
 },
 {
 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#ServerInternalException"
 }
],
 "traits": {
 "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
 }
 },
 "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
 "type": "structure",
 "members": {},
 "traits": {
 "smithy.api#input": {}
 }
 },
 "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
 "type": "structure",
 "members": {

```

```

 "S3BucketArn": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n and so on.</p>"
 }
 },
 "SnsTopicArn": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
 }
 },
 "OrganizationConfiguration": {
 "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
 "traits": {
 "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n cross-account discovery.</p>"
 }
 },
 "EnableCrossAccountsDiscovery": {
 "target": "com.amazonaws.licensemanager#BoxBoolean",
 "traits": {
 "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
 }
 },
 },
 "LicenseManagerResourceShareArn": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n provides member accounts with access to this share.</p>"
 }
 },
 "traits": {
 "smithy.api#output": {}
 },
},
"com.amazonaws.licensemanager#Grant": {
 "type": "structure",
 "members": {
 "GrantArn": {
 "target": "com.amazonaws.licensemanager#Arn",
 "traits": {
 "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",

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```

 "smithy.api#required": {}
 },
 "GrantName": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Grant name.</p>",
 "smithy.api#required": {}
 }
 },
 "ParentArn": {
 "target": "com.amazonaws.licensemanager#Arn",
 "traits": {
 "smithy.api#documentation": "<p>Parent ARN.</p>",
 "smithy.api#required": {}
 }
 },
 "LicenseArn": {
 "target": "com.amazonaws.licensemanager#Arn",
 "traits": {
 "smithy.api#documentation": "<p>License ARN.</p>",
 "smithy.api#required": {}
 }
 },
 "GranteePrincipalArn": {
 "target": "com.amazonaws.licensemanager#Arn",
 "traits": {
 "smithy.api#documentation": "<p>The grantee principal ARN.</p>",
 "smithy.api#required": {}
 }
 },
 "HomeRegion": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Home Region of the grant.</p>",
 "smithy.api#required": {}
 }
 },
 "GrantStatus": {
 "target": "com.amazonaws.licensemanager#GrantStatus",
 "traits": {
 "smithy.api#documentation": "<p>Grant status.</p>",
 "smithy.api#required": {}
 }
 },
 "StatusReason": {

```

```

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

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 "traits": {
 "smithy.api#enumValue": "PENDING_ACCEPT"
 }
 },
 "REJECTED": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "REJECTED"
 }
 },
 "ACTIVE": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "ACTIVE"
 }
 },
 "FAILED_WORKFLOW": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "FAILED_WORKFLOW"
 }
 },
 "DELETED": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "DELETED"
 }
 },
 "PENDING_DELETE": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "PENDING_DELETE"
 }
 },
 "DISABLED": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "DISABLED"
 }
 },
 "WORKFLOW_COMPLETED": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "WORKFLOW_COMPLETED"
 }
 }
}

```



```

 }
 },
 "com.amazonaws.licensemanager#GrantedLicense": {
 "type": "structure",
 "members": {
 "LicenseArn": {
 "target": "com.amazonaws.licensemanager#Arn",
 "traits": {
 "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
 }
 },
 "LicenseName": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>License name.</p>"
 }
 }
 },
 "ProductName": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Product name.</p>"
 }
 },
 "ProductSKU": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Product SKU.</p>"
 }
 },
 "Issuer": {
 "target": "com.amazonaws.licensemanager#IssuerDetails",
 "traits": {
 "smithy.api#documentation": "<p>Granted license issuer.</p>"
 }
 },
 "HomeRegion": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Home Region of the granted license.</p>"
 }
 },
 "Status": {
 "target": "com.amazonaws.licensemanager#LicenseStatus",
 "traits": {
 "smithy.api#documentation": "<p>Granted license status.</p>"
 }
 }
 }
}

```

```

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

```

```

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

```

```

 "type": "structure",
 "members": {
 "Message": {
 "target": "com.amazonaws.licensemanager#Message"
 }
 },
 "traits": {
 "aws.protocols#awsQueryError": {
 "code": "InvalidResourceState",
 "httpResponseCode": 400
 },
 "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
 "smithy.api#error": "client",
 "smithy.api#httpError": 400
 }
 },
 "com.amazonaws.licensemanager#InventoryFilter": {
 "type": "structure",
 "members": {
 "Name": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Name of the filter.</p>",
 "smithy.api#required": {}
 }
 },
 "Condition": {
 "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
 "traits": {
 "smithy.api#documentation": "<p>Condition of the filter.</p>",
 "smithy.api#required": {}
 }
 },
 "Value": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Value of the filter.</p>"
 }
 }
 },
 "traits": {
 "smithy.api#documentation": "<p>An inventory filter.</p>"
 }
 },

```

```

"com.amazonaws.licensemanager#InventoryFilterCondition": {
 "type": "enum",
 "members": {
 "EQUALS": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "EQUALS"
 }
 },
 "NOT_EQUALS": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "NOT_EQUALS"
 }
 },
 "BEGINS_WITH": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "BEGINS_WITH"
 }
 },
 "CONTAINS": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "CONTAINS"
 }
 }
 }
},
"com.amazonaws.licensemanager#InventoryFilterList": {
 "type": "list",
 "member": {
 "target": "com.amazonaws.licensemanager#InventoryFilter"
 }
},
"com.amazonaws.licensemanager#Issuer": {
 "type": "structure",
 "members": {
 "Name": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Issuer name.</p>",
 "smithy.api#required": {}
 }
 },
 "SignKey": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {

```

```

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

```

```

 "target": "com.amazonaws.licensemanager#String",
 "traits": {

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

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

```

```

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

```



```

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

```

```

 },
 "ConsumedLicenses": {
 "target": "com.amazonaws.licensemanager#BoxLong",
 "traits": {
 "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
 }
 },
 "Status": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Status of the license configuration.</p>"
 }
 },
 "OwnerAccountId": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"
 }
 },
 "ConsumedLicenseSummaryList": {
 "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
 "traits": {
 "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
 }
 },
 "ManagedResourceSummaryList": {
 "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
 "traits": {
 "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
 }
 },
 "ProductInformationList": {
 "target": "com.amazonaws.licensemanager#ProductInformationList",
 "traits": {
 "smithy.api#documentation": "<p>Product information.</p>"
 }
 },
 "AutomatedDiscoveryInformation": {
 "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
 "traits": {
 "smithy.api#documentation": "<p>Automated discovery information.</p>"
 }
 },
 "traits": {
 "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license

```

agreement that can be consumed and enforced by License Manager. Components include specifications for the license type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used.</p>"

```

 }
 },
 "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
 "type": "structure",
 "members": {
 "ResourceArn": {
 "type": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
 }
 },
 "ResourceType": {
 "target": "com.amazonaws.licensemanager#ResourceType",
 "traits": {
 "smithy.api#documentation": "<p>Type of server resource.</p>"
 }
 },
 "ResourceOwnerId": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource consuming licenses.</p>"
 }
 },
 "AssociationTime": {
 "target": "com.amazonaws.licensemanager#DateTime",
 "traits": {
 "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
 }
 },
 "AmiAssociationScope": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
 }
 },
 "traits": {
 "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
 }
 },
 },

```

```

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

```

```

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

 "ConsumedLicenses": {
 "target": "com.amazonaws.licensemanager#BoxLong",
 "traits": {
 "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
 }
 },
 "traits": {
 "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license
configuration.</p>"
 },
 "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
 "type": "list",
 "member": {
 "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
 }
 },
 "com.amazonaws.licensemanager#LicenseConfigurations": {
 "type": "list",
 "member": {
 "target": "com.amazonaws.licensemanager#LicenseConfiguration"
 }
 },
 "com.amazonaws.licensemanager#LicenseConversionContext": {
 "type": "structure",
 "members": {
 "UsageOperation": {
 "target": "com.amazonaws.licensemanager#UsageOperation",
 "traits": {
 "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from. For more information about which platforms correspond to which usage
operation values see <a href='\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\\n \\n </p>"
 }
 }
 }
 }

```

```

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

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

```

```

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

 "smithy.api#length": {
 "min": 0,
 "max": 50
 },
 "smithy.api#pattern": "^\\ct-[a-zA-Z0-9]*$"
 }
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
 "type": "enum",
 "members": {
 "IN_PROGRESS": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "IN_PROGRESS"
 }
 },
 "SUCCEEDED": {

```

```

 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "SUCCEEDED"
 }
 },
 "FAILED": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "FAILED"
 }
 }
}
},
"com.amazonaws.licensemanager#LicenseConversionTasks":
{
 "type": "list",
 "member": {
 "target": "com.amazonaws.licensemanager#LicenseConversionTask"
 }
},
"com.amazonaws.licensemanager#LicenseCountingType": {
 "type": "enum",
 "members": {
 "VCPU": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "vCPU"
 }
 },
 "INSTANCE": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "Instance"
 }
 },
 "CORE": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "Core"
 }
 },
 "SOCKET": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "Socket"
 }
 }
 }
}
}

```



```

},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
 "type": "enum",
 "members": {
 "PENDING_DELETE": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "PENDING_DELETE"
 }
 },
 "DELETED": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "DELETED"
 }
 }
 }
},
"com.amazonaws.licensemanager#LicenseList": {
 "type": "list",
 "member": {
 "target": "com.amazonaws.licensemanager#License"
 }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {
 "type": "structure",
 "members": {
 "ResourceArn": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
 }
 },
 "ResourceType": {
 "target": "com.amazonaws.licensemanager#ResourceType",
 "traits": {
 "smithy.api#documentation": "<p>Resource type.</p>"
 }
 },
 "ErrorMessage": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Error message.</p>"
 }
 },
 "FailureTime": {
 "target": "com.amazonaws.licensemanager#DateTime",

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 "traits": {

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

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

```

```

 "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

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

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

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

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 "aws.protocols#awsQueryError": {
 "code": "LicenseUsageFailure",
 "httpResponseCode": 412
 },
 "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
 "smithy.api#error": "client",
 "smithy.api#httpError": 412
 }
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
 "type": "operation",
 "input": {
 "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
 },
 "output": {
 "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
 },
 "errors": [
 {
 "target": "com.amazonaws.licensemanager#AccessDeniedException"
 },
 {
 "target": "com.amazonaws.licensemanager#AuthorizationException"
 },
 {
 "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
 },
 {
 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#ServerInternalException"
 }
],
 "traits": {
 "smithy.api#documentation": "<p>Lists the resource associations for the
specified license configuration.</p>\n <p>Resource associations need not consume licenses from a license
configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
 }
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
 "type": "structure",

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

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"com.amazonaws.licensemanager#ListDistributedGrants": {
 "type": "operation",
 "input": {
 "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
 },
 "output": {
 "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
 },
 "errors": [
 {
 "target": "com.amazonaws.licensemanager#AccessDeniedException"
 },
 {
 "target": "com.amazonaws.licensemanager#AuthorizationException"
 },
 {
 "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
 },
 {
 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#ServerInternalException"
 },
 {
 "target": "com.amazonaws.licensemanager#ValidationException"
 }
],
 "traits": {
 "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
 }
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
 "type": "structure",
 "members": {
 "GrantArns": {
 "target": "com.amazonaws.licensemanager#ArnList",
 "traits": {
 "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
 }
 },
 "Filters": {
 "target": "com.amazonaws.licensemanager#FilterList",
 "traits": {

```

```

 "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n \n \n <p>\n <code>LicenseArn</code>\n </p>\n \n \n <p>\n <code>GrantStatus</code>\n </p>\n \n \n <p>\n <code>GranteePrincipalARN</code>\n </p>\n \n \n <p>\n <code>ProductSKU</code>\n </p>\n \n \n <p>\n <code>LicenseIssuerName</code>\n </p>\n \n \n }\n },\n \"NextToken\": {\n \"target\": \"com.amazonaws.licensemanager#String\",\n \"traits\": {\n \"smithy.api#documentation\": \"<p>Token for the next set of results.</p>\"\n }\n },\n \"MaxResults\": {\n \"target\": \"com.amazonaws.licensemanager#MaxSize100\",\n \"traits\": {\n \"smithy.api#documentation\": \"<p>Maximum number of results to return in a single call.</p>\"\n }\n }\n},\n\"traits\": {\n \"smithy.api#input\": {}\n},\n},\n\"com.amazonaws.licensemanager#ListDistributedGrantsResponse\": {\n \"type\": \"structure\",\n \"members\": {\n \"Grants\": {\n \"target\": \"com.amazonaws.licensemanager#GrantList\",\n\n \"traits\": {\n \"smithy.api#documentation\": \"<p>Distributed grant details.</p>\"\n }\n },\n \"NextToken\": {\n \"target\": \"com.amazonaws.licensemanager#String\",\n \"traits\": {\n \"smithy.api#documentation\": \"<p>Token for the next set of results.</p>\"\n }\n }\n },\n \"traits\": {\n \"smithy.api#output\": {}\n }\n},\n\"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations\": {\n
```



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

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

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

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<code>NOT_EQUALS</code>.</p>\n
\n \n <p>\n <code>usagelimitExceeded</code> - A Boolean value that
 indicates whether the available licenses have been exceeded. \n Logical operators are
 <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n \n "
 }
 },
 "traits": {
 "smithy.api#input": {}
 }
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
 "type": "structure",
 "members": {
 "LicenseConfigurations": {
 "target": "com.amazonaws.licensemanager#LicenseConfigurations",
 "traits": {
 "smithy.api#documentation": "<p>Information about the license configurations.</p>"
 }
 },
 "NextToken": {
 "target": "com.amazonaws.licensemanager#String",

 "traits": {
 "smithy.api#documentation": "<p>Token for the next set of results.</p>"
 }
 }
 },
 "traits": {
 "smithy.api#output": {}
 }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
 "type": "operation",
 "input": {
 "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
 },
 "output": {
 "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
 },
 "errors": [
 {
 "target": "com.amazonaws.licensemanager#AccessDeniedException"
 },
 {
 "target": "com.amazonaws.licensemanager#AuthorizationException"
 }
]
}

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 "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
 },
 {
 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#ServerInternalException"
 }
],
"traits": {
 "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
 "type": "structure",
 "members": {
 "NextToken": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Token for the next set of results.</p>"
 }
 },
 "MaxResults": {
 "target": "com.amazonaws.licensemanager#BoxInteger",
 "traits": {
 "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
 }
 },
 "Filters": {
 "target": "com.amazonaws.licensemanager#Filters",
 "traits": {
 "smithy.api#documentation": "<p>\n Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n </p>"
 }
 }
 },
 "traits": {
 "smithy.api#input": {}
 }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
 "type": "structure",
 "members": {
 "LicenseConversionTasks": {
 "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
 "traits": {
 "smithy.api#documentation": "<p>Information about the license configuration tasks for your

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

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

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 "smithy.api#documentation": "<p>Token for the next set of results.</p>"
 }

}

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

```



```

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

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

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

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

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

```

```

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

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

```

```

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

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

```

specifying the recipient as this Amazon Web Services account, your organization, or an organizational unit (OU) to which this member account belongs.

```
 }
 },
 "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
 "type": "operation",
 "input": {
 "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
 },
 "output": {
 "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
 },
 "errors": [
 {
 "target": "com.amazonaws.licensemanager#AccessDeniedException"
 },
 {
 "target": "com.amazonaws.licensemanager#AuthorizationException"
 },
 {
 "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
 },
 {
 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#ServerInternalException"
 },
 {
 "target":
"com.amazonaws.licensemanager#ValidationException"
 }
],
 "traits": {
 "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
 }
 },
 "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
 "type": "structure",
 "members": {
 "LicenseArn": {
 "target": "com.amazonaws.licensemanager#Arn",
 "traits": {
 "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
 "smithy.api#required": {}
 }
 }
 }
 }
}
```

```

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

```

```

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

```



```

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

```

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{
 "type": "operation",
 "input": {
 "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
 },
 "output": {
 "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
 },
 "errors": [
 {
 "target": "com.amazonaws.licensemanager#AccessDeniedException"
 },
 {
 "target": "com.amazonaws.licensemanager#AuthorizationException"
 },
 {
 "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
 },
 {
 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#ServerInternalException"
 },
 {
 "target": "com.amazonaws.licensemanager#ValidationException"
 }
],
 "traits": {
 "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
 }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
 "type": "structure",
 "members": {
 "Filters": {
 "target": "com.amazonaws.licensemanager#FilterList",
 "traits": {
 "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n \n \n <p>\n <code>Beneficiary</code>\n </p>\n \n \n <p>\n <code>ProductSKU</code>\n </p>\n \n "
 }
 }
 },

```

```

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

```

```

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

```

```

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

```

```

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

```

```

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

```

```

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

```



```

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

```

```

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

```

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

 "LicenseConfigurationUsageList": {
 "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
 "traits": {
 "smithy.api#documentation": "<p>Information about the license configurations.</p>"
 }
 },
 "NextToken": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {

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```

 "smithy.api#documentation": "<p>Token for the next set of results.</p>"
 }
}
},
"traits": {
 "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Location": {
 "type": "string"
},
"com.amazonaws.licensemanager#Long": {
 "type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
 "type": "structure",
 "members": {
 "ResourceType":
{
 "target": "com.amazonaws.licensemanager#ResourceType",
 "traits": {
 "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
 }
 },
 "AssociationCount": {
 "target": "com.amazonaws.licensemanager#BoxLong",
 "traits": {
 "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
 }
 }
 },
 "traits": {
 "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
 }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
 "type": "list",
 "member": {
 "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
 }
},
"com.amazonaws.licensemanager#MaxSize100": {
 "type": "integer",
 "traits": {
 "smithy.api#range": {
 "min": 1,
 "max": 100
 }
 }
}

```

```

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

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 "Message": {
 "target": "com.amazonaws.licensemanager#Message"
 },
 "traits": {
 "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement
maximum count is reached.</p>",
 "smithy.api#error": "client",
 "smithy.api#httpError": 400
 },
 "com.amazonaws.licensemanager#Options": {
 "type": "structure",
 "members": {
 "ActivationOverrideBehavior": {
 "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
 "traits": {
 "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of
activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web
Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n
<code>Status</code> parameter.</p>\n \n \n <p>As a license administrator, you can
optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n
 \n \n <p>As a grantor, you can optionally specify an\n
<code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your
organization.</p>\n \n \n <p>As a grantee, if the grantor creating the distributed
grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one
when you\n are activating the grant.</p>\n \n \n <dl>\n
 <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n <p>Use this value to activate a grant
without replacing any member accounts\n active grants for the same product.</p>\n </dd>\n
 <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n <p>Use this value to activate a
grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated
grant.</p>\n </dd>\n </dl>"
 }
 }
 },
 "traits": {
 "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant,
such as activation\n override behavior. For more information, see Granted licenses in
License Manager in the <i>License Manager User Guide</i>.</p>"
 }
 },
 "com.amazonaws.licensemanager#OrganizationConfiguration": {
 "type": "structure",
 "members": {
 "EnableIntegration": {
 "target": "com.amazonaws.licensemanager#Boolean",

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 "traits": {
 "smithy.api#default": false,
 "smithy.api#documentation":
"<p>Enables Organizations integration.</p>",
 "smithy.api#required": {}
 }
 },
 "traits": {
 "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
 }
},
"com.amazonaws.licensemanager#PrincipalArnList": {
 "type": "list",
 "member": {
 "target": "com.amazonaws.licensemanager#Arn"
 },
 "traits": {
 "smithy.api#length": {
 "min": 1,
 "max": 1
 }
 }
},
"com.amazonaws.licensemanager#ProductInformation": {
 "type": "structure",
 "members": {
 "ResourceType": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
 "smithy.api#required": {}
 }
 }
 },
 "ProductInformationFilterList": {
 "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
 "traits": {
 "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>.</p>\n <p>The following filters and are supported when
the resource type \n is <code>SSM_MANAGED</code>:</p>\n
 \n \n <p>\n <code>Application Name</code> - The name of the
application.\n Logical operator is <code>EQUALS</code>.</p>\n \n \n <p>\n <code>Application Publisher</code> - The publisher of the application.\n Logical

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

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 "traits": {
 "smithy.api#documentation": "<p>Filter value.</p>"
 }
 },
 "ProductInformationFilterComparator": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Logical operator.</p>",
 "smithy.api#required": {}
 }
 },
 "traits": {
 "smithy.api#documentation": "<p>Describes product information filters.</p>"
 }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
 "type": "list",
 "member": {
 "target": "com.amazonaws.licensemanager#ProductInformationFilter"
 }
},
"com.amazonaws.licensemanager#ProductInformationList": {
 "type": "list",
 "member": {
 "target": "com.amazonaws.licensemanager#ProductInformation"
 }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
 "type": "structure",
 "members": {
 "MaxTimeToLiveInMinutes": {
 "target": "com.amazonaws.licensemanager#BoxInteger",
 "traits": {
 "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
 "smithy.api#required": {}
 }
 }
 }
},
"traits": {
 "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
 "type": "structure",
 "members": {
 "Message": {
 "target": "com.amazonaws.licensemanager#Message"
 }
 }
}

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 }
 },
 "traits": {
 "aws.protocols#awsQueryError": {
 "code": "RateLimitExceeded",
 "httpResponseCode": 429
 },
 "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
 "smithy.api#error": "client",
 "smithy.api#httpError": 429
 }
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
 "type": "structure",
 "members": {
 "ReceivedStatus": {
 "target": "com.amazonaws.licensemanager#ReceivedStatus",
 "traits": {
 "smithy.api#documentation": "<p>Received status.</p>"
 }
 },
 "ReceivedStatusReason": {
 "target": "com.amazonaws.licensemanager#StatusReasonMessage",
 "traits": {
 "smithy.api#documentation": "<p>Received
status reason.</p>"
 }
 },
 "AllowedOperations": {
 "target": "com.amazonaws.licensemanager#AllowedOperationList",
 "traits": {
 "smithy.api#documentation": "<p>Allowed operations.</p>"
 }
 }
 },
 "traits": {
 "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
 }
},
"com.amazonaws.licensemanager#ReceivedStatus": {
 "type": "enum",
 "members": {
 "PENDING_WORKFLOW": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "PENDING_WORKFLOW"
 }
 }
 }
}

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 },
 "PENDING_ACCEPT": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue":
"PENDING_ACCEPT"
 }
 },
 "REJECTED": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "REJECTED"
 }
 },
 "ACTIVE": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "ACTIVE"
 }
 },
 "FAILED_WORKFLOW": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "FAILED_WORKFLOW"
 }
 },
 "DELETED": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "DELETED"
 }
 },
 "DISABLED": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "DISABLED"
 }
 },
 "WORKFLOW_COMPLETED": {
 "target": "smithy.api#Unit",
 "traits": {
 "smithy.api#enumValue": "WORKFLOW_COMPLETED"
 }
 }
}
},
"com.amazonaws.licensemanager#RedirectException": {
 "type": "structure",

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

```

```

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

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

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

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

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

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

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generator.</p>"
 }
 },
 "Description": {
 "target": "com.amazonaws.licensemanager#String",

 "traits": {
 "smithy.api#documentation": "<p>Description of the report generator.</p>"
 }
 },
 "S3Location": {
 "target": "com.amazonaws.licensemanager#S3Location",
 "traits": {
 "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
 }
 },
 "CreateTime": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Time the report was created.</p>"
 }
 },
 "Tags": {
 "target": "com.amazonaws.licensemanager#TagList",
 "traits": {
 "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
 }
 }
},
"traits": {
 "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
 "type": "list",
 "member": {
 "target": "com.amazonaws.licensemanager#ReportGenerator"
 }
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
 "type": "string",
 "traits": {
 "smithy.api#length": {
 "min": 1,
 "max": 100
 }
 }
}

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

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

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

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```

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

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

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

```

```

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

```

```

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

```



```

format.</p>"
 }
 },
 "TokenProperties": {
 "target": "com.amazonaws.licensemanager#MaxSize3StringList",
 "traits": {
 "smithy.api#documentation": "<p>Data specified by the caller.</p>"
 }
 },
 "RoleArns": {
 "target": "com.amazonaws.licensemanager#ArnList",
 "traits": {
 "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
 }
 },
 "Status": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
 }
 },
 "traits": {
 "smithy.api#documentation": "<p>Describes a token.</p>"
 },
 "com.amazonaws.licensemanager#TokenList": {
 "type": "list",
 "member": {
 "target": "com.amazonaws.licensemanager#TokenData"
 }
 },
 "com.amazonaws.licensemanager#TokenString": {
 "type": "string",
 "traits": {
 "smithy.api#length": {
 "min": 0,
 "max": 4096
 },
 "smithy.api#pattern": "^\\S+$"
 }
 },
 "com.amazonaws.licensemanager#TokenType": {
 "type": "enum",
 "members": {

```

```

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

```

```

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

```

```

 {
 "target": "com.amazonaws.licensemanager#AuthorizationException"
 },
 {
 "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
 },
 {
 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#ServerInternalException"
 }
],
 "traits": {
 "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
 }
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
 "type": "structure",
 "members": {
 "LicenseConfigurationArn": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
 "smithy.api#required": {}
 }
 },
 "LicenseConfigurationStatus": {
 "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
 "traits": {
 "smithy.api#documentation": "<p>New status of the license configuration.</p>"
 }
 },
 "LicenseRules": {
 "target": "com.amazonaws.licensemanager#StringList",
 "traits": {
 "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\nconfiguration is licenseAffinityToHost.</p>"
 }
 },
 "LicenseCount": {
 "target": "com.amazonaws.licensemanager#BoxLong",
 "traits": {

```

```

 "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
 },
 "LicenseCountHardLimit": {
 "target": "com.amazonaws.licensemanager#BoxBoolean",
 "traits": {
 "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
 }
 },
 "Name": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>New name
of the license configuration.</p>"
 }
 },
 "Description": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>New description of the license configuration.</p>"
 }
 },
 "ProductInformationList": {
 "target": "com.amazonaws.licensemanager#ProductInformationList",
 "traits": {
 "smithy.api#documentation": "<p>New product information.</p>"
 }
 },
 "DisassociateWhenNotFound": {
 "target": "com.amazonaws.licensemanager#BoxBoolean",
 "traits": {
 "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
 }
 },
 "traits": {
 {
 "smithy.api#input": {}
 }
 },
 "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
 "type": "structure",
 "members": {},
 "traits": {
 "smithy.api#output": {}
 }
 }
}

```

```

 },
 "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
 "type": "operation",
 "input": {
 "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
 },
 "output": {
 "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
 },
 "errors": [
 {
 "target": "com.amazonaws.licensemanager#AccessDeniedException"
 },
 {
 "target": "com.amazonaws.licensemanager#AuthorizationException"
 },
 {
 "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
 },
 {
 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
 },
 {
 "target": "com.amazonaws.licensemanager#ServerInternalException"
 },
 {
 "target": "com.amazonaws.licensemanager#ValidationException"
 }
],
 "traits": {
 "smithy.api#documentation": "<p>Updates a report generator.</p>\n <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
 }
 },
 "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest":
 {
 "type": "structure",
 "members": {
 "LicenseManagerReportGeneratorArn": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to

```

```

update.</p>",
 "smithy.api#required": {}
 },
 "ReportGeneratorName": {
 "target": "com.amazonaws.licensemanager#ReportGeneratorName",
 "traits": {
 "smithy.api#documentation": "<p>Name of the report generator.</p>",
 "smithy.api#required": {}
 }
 },
 "Type": {
 "target": "com.amazonaws.licensemanager#ReportTypeList",
 "traits": {
 "smithy.api#documentation":
 "<p>Type of reports to generate. The following report types are supported:</p>\n \n \n <p>License configuration report - Reports the number and details of consumed licenses for a license\n configuration.</p>\n \n \n <p>Resource report - Reports the tracked licenses and\n resource consumption for a license configuration.</p>\n \n ",
 "smithy.api#required": {}
 }
 },
 "ReportContext": {
 "target": "com.amazonaws.licensemanager#ReportContext",
 "traits": {
 "smithy.api#documentation": "<p>The report context.</p>",
 "smithy.api#required": {}
 }
 },
 "ReportFrequency": {
 "target": "com.amazonaws.licensemanager#ReportFrequency",
 "traits": {
 "smithy.api#documentation": "<p>Frequency by which reports are generated.</p>",
 "smithy.api#required": {}
 }
 },
 "ClientToken": {
 "target": "com.amazonaws.licensemanager#ClientRequestToken",
 "traits": {
 "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the\n idempotency of the request.</p>",
 "smithy.api#required": {}
 }
 },
 "Description": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {

```

```

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

```



```

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

 "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
 "type": "structure",
 "members": {
 "ResourceArn": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services resource.</p>",
 "smithy.api#required": {}
 }
 },
 "AddLicenseSpecifications": {
 "target": "com.amazonaws.licensemanager#LicenseSpecifications",
 "traits": {
 "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
 }
 },
 "RemoveLicenseSpecifications": {
 "target": "com.amazonaws.licensemanager#LicenseSpecifications",
 "traits": {
 "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
 }
 }
 },
 "traits": {
 "smithy.api#input": {}
 }
 },

 "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
 "type": "structure",
 "members": {},
 "traits": {
 "smithy.api#output": {}
 }
 },

 "com.amazonaws.licensemanager#UpdateServiceSettings": {
 "type": "operation",
 "input": {
 "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
 }
 }
}

```

```

 },
 "output": {
 "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
 },
 "errors": [
 {
 "target": "com.amazonaws.licensemanager#AccessDeniedException"
 },
 {
 "target": "com.amazonaws.licensemanager#AuthorizationException"
 },
 {
 "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
 },
 {
 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
 },
 {
 "target": "com.amazonaws.licensemanager#ServerInternalException"
 }
],
 "traits": {
 "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
 }
 },
 "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
 "type": "structure",
 "members": {
 "S3BucketArn": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where
the License
Manager information is stored.</p>"
 }
 },
 "SnsTopicArn": {
 "target": "com.amazonaws.licensemanager#String",
 "traits": {
 "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used
for License Manager alerts.</p>"
 }
 },
 "OrganizationConfiguration": {
 "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
 "traits": {
 "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account
discovery.</p>"
 }
 }
 }
 }
}

```

```

 }
 },
 "EnableCrossAccountsDiscovery": {
 "target": "com.amazonaws.licensemanager#BoxBoolean",
 "traits": {
 "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
 }
 }
},
"traits": {
 "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
 "type": "structure",
 "members": {},
 "traits": {
 "smithy.api#output": {}
 }
},
"com.amazonaws.licensemanager#UsageOperation": {
 "type": "string",
 "traits": {
 "smithy.api#length": {
 "min": 0,
 "max": 50
 }
 }
},
"com.amazonaws.licensemanager#ValidationException": {
 "type": "structure",
 "members": {
 "Message": {
 "target": "com.amazonaws.licensemanager#Message"
 }
 },
 "traits": {
 "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
 "smithy.api#error": "client",
 "smithy.api#httpError": 400
 }
}
}
}
CheckoutLicense
Initialize stack step

```

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

## 1.80 procfs 0.16.1

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## 1.82 golang 1.24.3

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package copyright

```
import (
 "bytes"
 "internal/testenv"
```

```

"io"
"io/fs"
"os"
"path/filepath"
"testing"
)

var copyright = []byte("Copyright")

var permitted = [][]byte{
 []byte("// Code generated by "),
 []byte("// Code generated from "),
 []byte("// Created by cgo -cdefs"),
 []byte("// DO NOT EDIT\n// generated by:"),
 []byte("// Empty assembly file"),
 []byte("// Generated using cgo"),
 []byte("// Original source:\n/\thttp://www.zorinaq.com/papers/md5-amd64.html"), // public domain crypto/md5
 []byte("// created by cgo -cdefs"),
 []byte("// go run mkasm.go"),
 []byte("// mkerrors"),
 []byte("// mksys"),
 []byte("// run\n// Code generated by"), // cmd/compile/internal/test/constFold_test.go
}

func TestCopyright(t *testing.T) {
 buf := make([]byte, 2048)
 filepath.WalkDir(filepath.Join(testenv.GOROOT(t), "src"), func(path string,
 d fs.DirEntry, err error) error {
 if d.IsDir() && (d.Name() == "testdata" || d.Name() == "vendor") {
 return filepath.SkipDir
 }
 switch filepath.Ext(d.Name()) {
 default:
 return nil
 case ".s", ".go":
 // check
 }

 f, err := os.Open(path)
 if err != nil {
 t.Error(err)
 return nil
 }
 defer f.Close()
 n, err := f.Read(buf)
 if err != nil && err != io.EOF {
 t.Error(err)
 return nil
 }
 }
}

```

```

}
b := buf[:n]
if bytes.Contains(b, copyright) {
 return nil
}
for _, ok := range permitted {
 if bytes.HasPrefix(b, ok) {
 return nil
 }
}
t.Errorf("%s: missing copyright notice", path)
return nil
})
}

```

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```

```
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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## 1.87 x-crypto 0.38.0

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# 1.88 go-auth-oauth2adapt 0.2.8

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```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
```

```

to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
}
for resp, err := range c.List(ctx, req).All() {
 if err != nil {
 // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
}
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

```

```

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

```

```

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

```

```

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
}

```

```

defer c.Close()

req := &procurementpb.AssignRequest{
 // TODO: Fill request struct fields.
 // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
}
resp, err := c.Assign(ctx, req)
if err != nil {
 // TODO: Handle error.
}
//
TODO: Use resp.
_ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
 // TODO: Fill request struct fields.
 // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicensedUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
 resp, err := it.Next()
 if err == iterator.Done {
 break
 }
 if err != nil {
 // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
 }
}

```

```

// If you need to access the underlying RPC response,
// you can do so by casting the `Response` as below.
// Otherwise, remove this line. Only populated after
// first call to Next(). Not safe for concurrent access.
_ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
}
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
 // TODO: Fill request struct fields.
 //
 // See
 https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRequest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()
}

```

```

req := &procurementpb.UnassignRequest{
 // TODO: Fill request struct fields.
 // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
}
resp,
err := c.Unassign(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

```

```

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

```

```

req := &procurementpb.UpdateLicensePoolRequest{
 // TODO: Fill request struct fields.
 // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoolRequest.
}
resp, err := c.UpdateLicensePool(ctx, req)
if err != nil {
 // TODO: Handle error.
}
//
// TODO: Use resp.
_ = resp
}

```

```

func ExampleLicenseManagementClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.

```

```

// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := procurement.NewLicenseManagementClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &longrunningpb.GetOperationRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
}
resp, err := c.GetOperation(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/compute_pb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.

```



```

// It will
require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

// TODO: Use client.
_ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
 //
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
 // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:

```

```

// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.GetLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#GetLicenseRequest.
}
resp,
err := c.Get(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()

```

```

{
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.InsertLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
}
op, err := c.Insert(ctx, req)
if err != nil {
 // TODO: Handle error.
}

err = op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
}

func ExampleLicensesClient_List() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template
only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
}
it := c.List(ctx, req)
for {

```

```

resp, err := it.Next()
if err == iterator.Done {
 break
}
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp

// If you need to access the underlying RPC response,
// you can do so by casting the `Response` as below.
// Otherwise, remove this line. Only populated after
// first call to Next(). Not safe for concurrent access.
_ = it.Response.(*computepb.LicensesListResponse)
}
}

func
ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically

```

```

generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &compute.TestIamPermissionsLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#TestIamPermissionsLicenseRequest.
}
resp, err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

```

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END OF TERMS AND CONDITIONS

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// Code generated by protoc-gen-go\_gapic. DO NOT EDIT.

package compute

import (

"bytes"

"context"

"fmt"

"log/slog"

"math"

"net/http"

"net/url"

"time"

computepb "cloud.google.com/go/compute/apiv1/computepb"

```

gax "github.com/googleapis/gax-go/v2"
"google.golang.org/api/iterator"
"google.golang.org/api/option"
"google.golang.org/api/option/internaloption"
httptransport "google.golang.org/api/transport/http"
"google.golang.org/grpc"
"google.golang.org/protobuf/encoding/protojson"
"google.golang.org/protobuf/proto"
)

var
newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
Delete []gax.CallOption
Get []gax.CallOption
GetIamPolicy []gax.CallOption
Insert []gax.CallOption
List []gax.CallOption
SetIamPolicy []gax.CallOption
TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
return &LicensesCallOptions{
Delete: []gax.CallOption{
gax.WithTimeout(600000 * time.Millisecond),
},
Get: []gax.CallOption{
gax.WithTimeout(600000 * time.Millisecond),
gax.WithRetry(func() gax.Retryer {
return gax.OnHTTPCodes(gax.Backoff{
Initial: 100 * time.Millisecond,
Max: 60000 * time.Millisecond,
Multiplier: 1.30,
},
http.StatusGatewayTimeout,
http.StatusServiceUnavailable)
}),
},
GetIamPolicy:
[]gax.CallOption{
gax.WithTimeout(600000 * time.Millisecond),
gax.WithRetry(func() gax.Retryer {
return gax.OnHTTPCodes(gax.Backoff{
Initial: 100 * time.Millisecond,
Max: 60000 * time.Millisecond,

```

```

Multiplier: 1.30,
},
http.StatusGatewayTimeout,
http.StatusServiceUnavailable)
}),
},
Insert: []gax.CallOption{
gax.WithTimeout(600000 * time.Millisecond),
},
List: []gax.CallOption{
gax.WithTimeout(600000 * time.Millisecond),
gax.WithRetry(func() gax.Retryer {
return gax.OnHTTPCodes(gax.Backoff{
Initial: 100 * time.Millisecond,
Max: 60000 * time.Millisecond,
Multiplier: 1.30,
},
http.StatusGatewayTimeout,
http.StatusServiceUnavailable)
}),
},
SetIamPolicy: []gax.CallOption{
gax.WithTimeout(600000 * time.Millisecond),
},
TestIamPermissions: []gax.CallOption{
gax.WithTimeout(600000 * time.Millisecond),
},
}
}

//
internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
Close() error
setGoogleClientInfo(...string)
Connection() *grpc.ClientConn
Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
error)
}

```

```

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection
// to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
// creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
// who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)

```

```

(*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty
// if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are
// creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
// party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
// belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
// list of publicly-available licenses,
// use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution
// This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
// resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
// intended for use only by third-party partners
// who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
type licensesRESTClient struct {

```

```

// The http endpoint to connect to.
endpoint string

// The http client.
httpClient *http.Client

// operationClient is used to call the operation-specific management service.
operationClient *GlobalOperationsClient

// The x-goog-* headers to be sent with each request.
xGoogHeaders []string

// Points back to the CallOptions field of the containing LicensesClient
CallOptions **LicensesCallOptions

logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
 return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,
 logger: internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
 option.WithHTTPClient(httpClient),
 option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
 return nil, err
 }
 c.operationClient = opC

```

```

return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
 internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()),
 internaloption.EnableNewAuthLibrary(),
}
}

//
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
kv = append(kv, "gapi", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
}
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
// Replace httpClient
// with nil to force cleanup.
c.httpClient = nil
if err := c.operationClient.Close(); err != nil {
 return err
}
return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
// creating Cloud Marketplace images.

```



```

func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client
 and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
 if err != nil {
 return err
 }

 if err := unmarshal(buf,
resp); err != nil {
 return err
 }

 return nil
 })

```

```

 }, opts...)
 if e != nil {
 return nil, e
 }
 op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project: req.GetProject(),
 },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
// who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
 url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders,
 hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
 if err != nil {

```

```

 return err
}

if err := unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource
// exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
// images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
 opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
 req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
 params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
 url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
 append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {

```

```

if settings.Path != "" {
 baseUrl.Path = settings.Path
}
httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
if err != nil {
 return err
}
httpReq = httpReq.WithContext(ctx)
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
if err != nil {
 return err
}

if err := unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended
// for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

```

```

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx,
hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &compute.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project: req.GetProject(),
 },
}
return op, nil
}

```

```
// List retrieves the
list of licenses available in the specified project. This method does not get any licenses that belong to other projects,
including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available
licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
 resp := &computepb.LicensesListResponse{}
 if pageToken != "" {
 req.PageToken = proto.String(pageToken)
 }
 if pageSize > math.MaxInt32 {
 req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
 } else if pageSize != 0 {
 req.MaxResults = proto.Uint32(uint32(pageSize))
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.Filter != nil {
 params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req != nil && req.MaxResults != nil {
 params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
 params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
 params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from
```

```

client and context metadata.
hds := append(c.xGoogHeaders, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
 if err != nil {
 return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, "", e
}
it.Response = resp
return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken,
 nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

```

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This

```

resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds
 := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()),
"resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
 if err != nil {
 return err
 }
 })
 if

```



```

err := unm.Unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }

```

```

httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
if err != nil {
 return err
}
httpReq = httpReq.WithContext(ctx)
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
if err !=
nil {
 return err
}

if err := unm.Unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}
// Copyright 2025 Google LLC
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test
// Copyright 2025 Google LLC
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```

```

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// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
// protoc-gen-go v1.35.2
// protoc v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GrantType int32

const (
 // The default value. This value is unused.
 Permission_GRANT_TYPE_UNSPECIFIED Permission_GrantType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GrantType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GrantType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GrantType = 3
)

```

```

// Enum value maps for Permission_GrantType.
var (
 Permission_GrantType_name = map[int32]string{
 0: "GRANTEE_TYPE_UNSPECIFIED",
 1: "USER",
 2:
 "GROUP",
 3: "EVERYONE",
 }
 Permission_GrantType_value = map[string]int32{
 "GRANTEE_TYPE_UNSPECIFIED": 0,
 "USER": 1,
 "GROUP": 2,
 "EVERYONE": 3,
 }
)

func (x Permission_GrantType) Enum() *Permission_GrantType {
 p := new(Permission_GrantType)
 *p = x
 return p
}

func (x Permission_GrantType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GrantType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GrantType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GrantType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GrantType.Descriptor instead.
func (Permission_GrantType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

```

```

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
 0: "ROLE_UNSPECIFIED",
 1: "OWNER",
 2: "WRITER",
 3: "READER",
 }
 Permission_Role_value = map[string]int32{
 "ROLE_UNSPECIFIED": 0,
 "OWNER": 1,
 "WRITER": 2,
 "READER": 3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {

```

```

return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
// you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
 `protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Permission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user or group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
 json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role

```

```

`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
{
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
 return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
 return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

```

```

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
 return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
 return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12,
 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
 0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
 0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,

```



```

0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
0x54,
0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x69, 0x6f,
0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f,
0x72, 0x6f, 0x6c, 0x65, 0x42,
0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
0x72,
0x6f, 0x74, 0x6f, 0x33,
}

```

```

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

```

```

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {

```

```

 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
})
return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GrantType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GrantType
 (Permission_Role)(0), // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil), // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GrantType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
{
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
 return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
 File: protoimpl.DescBuilder{
 GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
 RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
 NumEnums: 2,
 NumMessages: 1,
 NumExtensions: 0,
 NumServices: 0,
 },
 GoTypes: file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
 DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
 EnumInfos: file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
 MessageInfos: file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
 }.Build()
}

```

```

File_google_ai_generativelanguage_v1beta_permission_proto = out.File
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
= nil
file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

```

```

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
 // TODO: Fill request
 struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
}

```

```

}
// TODO: Use resp.
_ = resp
}
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//
// https://www.apache.org/licenses/LICENSE-2.0
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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 // generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
 // TODO: Fill request struct fields.
 // See

```

```

https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
}
for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
 if err != nil {
 // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
}
}
// Copyright 2025 Google LLC
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// http://www.apache.org/licenses/LICENSE-2.0
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// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.
//
// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
// protoc-gen-go v1.35.2
// protoc v4.25.3
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)

```

```

)

// Defines types of the grantee of this permission.
type Permission_GrantType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GrantType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GrantType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GrantType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GrantType = 3
)

// Enum value maps for Permission_GrantType.
var (
 Permission_GrantType_name = map[int32]string{
 0: "GRANTEE_TYPE_UNSPECIFIED",
 1: "USER",
 2:
 "GROUP",
 3: "EVERYONE",
 }
 Permission_GrantType_value = map[string]int32{
 "GRANTEE_TYPE_UNSPECIFIED": 0,
 "USER": 1,
 "GROUP": 2,
 "EVERYONE": 3,
 }
)

func (x Permission_GrantType) Enum() *Permission_GrantType {
 p := new(Permission_GrantType)
 *p = x
 return p
}

func (x Permission_GrantType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GrantType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

```

```

func (Permission_GrantType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GrantType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GrantType.Descriptor instead.
func (Permission_GrantType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
 0: "ROLE_UNSPECIFIED",
 1: "OWNER",
 2: "WRITER",
 3: "READER",
 }
 Permission_Role_value = map[string]int32{
 "ROLE_UNSPECIFIED": 0,
 "OWNER": 1,
 "WRITER": 2,
 "READER": 3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

```



```

}

func (x Permission_Role) String() string
{
return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
// accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
state protoimpl.MessageState
sizeCache protoimpl.SizeCache
unknownFields protoimpl.UnknownFields

// Output only. Identifier. The permission name. A unique name will be
// generated on create. Examples:
//
// tunedModels/{tuned_model}/permissions/{permission}

```

```

// corpora/{corpus}/permissions/{permission}
//
// Output only.
Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
// Optional. Immutable. The type of the grantee.
GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_GranteeType,oneof"
json:"grantee_type,omitempty"`
// Optional. Immutable. The email address of the user of group which this
// permission refers. Field is not set when permission's grantee type is
// EVERYONE.
EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
// Required. The role granted by this permission.
Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
*x = Permission{}
mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
{
mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
if x != nil {
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
if ms.LoadMessageInfo() == nil {
ms.StoreMessageInfo(mi)
}
return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {

```

```

return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
 return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
 return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
 return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
 return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,

```

0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,  
0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,  
0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,  
0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,  
0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,  
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,  
0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,  
0x65, 0x54, 0x79, 0x70, 0x65, 0x88,  
0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,  
0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,  
0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,  
0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,  
0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,  
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,  
0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,  
0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,  
0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,  
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,  
0x4e,  
0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,  
0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,  
0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,  
0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,  
0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,  
0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,  
0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,  
0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,  
0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,  
0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,  
0x2e, 0x63, 0x6f, 0x6d,  
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,  
0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,  
0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,  
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,  
0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,  
0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,  
0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,  
0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,  
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,  
0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,  
0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,  
0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,  
0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,  
0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,  
0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,  
0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,  
0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,  
0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,

```

0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
0x61, 0x67,
0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
 protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes =
 []any{
 (Permission_GrantType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GrantType
 (Permission_Role)(0), // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil), // 2: google.ai.generativelanguage.v1alpha.Permission
 }
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
 google.ai.generativelanguage.v1alpha.Permission.GrantType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
 google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
}
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
 return
 }
}

```

```

file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
type x struct{}
out := protoimpl.TypeBuilder{
 File: protoimpl.DescBuilder{
 GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
 RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
 NumEnums: 2,
 NumMessages: 1,
 NumExtensions: 0,
 NumServices: 0,
 },
 GoTypes: file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
 DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
 EnumInfos: file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
 MessageInfos: file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
= nil
file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}

```

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```

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
// protoc-gen-go v1.35.2
// protoc v4.25.3
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType

```

```

isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
 return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType); ok {
 return x.ManualAssignmentType
 }
}

```



```

return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
return x.AutoAssignmentType
}
return nil
}

type isAssignmentProtocol_AssignmentType interface {
isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
// Allow manual assignments triggered by administrative operations only.
ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
AssignmentProtocol_AutoAssignmentType_ struct {
// Allow automatic assignments triggered by data plane operations.
AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
state protoimpl.MessageState
sizeCache protoimpl.SizeCache
unknownFields protoimpl.UnknownFields

// Identifier. Format:
// `billingAccounts/{billing_account}/orders/{order}/licensePool`
Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
// Required. Assignment protocol for the license pool.
LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
json:"license_assignment_protocol,omitempty"`
// Output only. Licenses count that are available to be assigned.
AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`

```

```

// Output only. Total number of licenses in the pool.
TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
 return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {

```

```

 if x != nil {
 return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
 return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
 return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
// license pool.
type GetLicensePoolRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=

```

```

&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if
ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
}
return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
 return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
 json:"license_pool,omitempty"`
 //
 // Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
 json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=

```

```

&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
// instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
 return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
 return x.UpdateMask
 }
 return nil
}

// Request message for
//

```

```

[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign].
type AssignRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
(x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{4}
}

```

```

func (x *AssignRequest) GetParent()
string {
if x != nil {
return x.Parent
}
return ""
}

func (x *AssignRequest) GetUsernames() []string {
if x != nil {
return x.Usernames
}
return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign].
type AssignResponse struct {
state protoimpl.MessageState
sizeCache protoimpl.SizeCache
unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
*x = AssignResponse{}
mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
if x
!= nil {
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
if ms.LoadMessageInfo() == nil {
ms.StoreMessageInfo(mi)

```

```

 }
 return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign].
type UnassignRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
{
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {

```



```

ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
}
return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
 return
x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
 return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

```

```

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
 ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{7}
}

// Request message for
//
// [LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
// ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

```

```

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo()
 == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
 return x.Parent
 }
 return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
 return x.PageSize
 }
 return 0
}

```

```

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
 return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 // Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
 json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
 `protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
 json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if

```

```

x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
 return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
 return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
 return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
// [LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
// ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

```

```

// The list of licensed users.
LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
// A token that can be sent as `page_token` to retrieve the next page.
// If this field is omitted, there are no subsequent pages.
NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
*x = EnumerateLicensedUsersResponse{}
mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
(x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
if x != nil {
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
if ms.LoadMessageInfo() == nil {
ms.StoreMessageInfo(mi)
}
return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
if x != nil {
return x.LicensedUsers
}
}

```

```

return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
 return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated:
// Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {

```

```

return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
 `protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
 json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {

```



```

return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 1}
}

```

```

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
if x != nil {
return x.InactiveLicenseTtl
}
return nil
}

```

```

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

```

```

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{

```

```

0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
0x6f,
0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f,
0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f,
0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x1a, 0x1e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x62, 0x75, 0x66, 0x2f, 0x64,
0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x2e, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70,
0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e,
0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc3, 0x03, 0x0a, 0x12, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,
0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x8e, 0x01, 0x0a,
0x16, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,
0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x56, 0x2e,
0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d,
0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73,
0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70,
0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,

```

0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c,  
0x2e, 0x4d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,  
0x74, 0x54, 0x79, 0x70, 0x65, 0x48, 0x00, 0x52, 0x14, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41,  
0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x88, 0x01,  
0x0a, 0x14, 0x61, 0x75, 0x74, 0x6f, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,  
0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x03, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x54, 0x2e, 0x67,  
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,  
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,  
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,  
0x73,  
0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x2e,  
0x41, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79,  
0x70, 0x65, 0x48, 0x00, 0x52, 0x12, 0x61, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,  
0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x1a, 0x16, 0x0a, 0x14, 0x4d, 0x61, 0x6e, 0x75,  
0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65,  
0x1a, 0x66, 0x0a, 0x12, 0x41, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,  
0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x50, 0x0a, 0x14, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69,  
0x76, 0x65, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x74, 0x74, 0x6c, 0x18, 0x01,  
0x20, 0x01, 0x28, 0x0b, 0x32, 0x19, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x70, 0x72,  
0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2e, 0x44, 0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x42,  
0x03, 0xe0, 0x41, 0x01,  
0x52, 0x12, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69, 0x76, 0x65, 0x4c, 0x69,  
0x63, 0x65, 0x6e, 0x73, 0x65, 0x54, 0x74, 0x6c, 0x42, 0x11, 0x0a, 0x0f, 0x61, 0x73, 0x73, 0x69,  
0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x22, 0xbe, 0x03, 0x0a, 0x0b,  
0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x12, 0x17, 0x0a, 0x04, 0x6e,  
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0x6e, 0x74, 0x73, 0x2f, 0x2a, 0x2f, 0x6f, 0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c,  
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0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,  
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0x70, 0x6f, 0x6e, 0x73, 0x65, 0x22, 0x58, 0xda, 0x41, 0x10, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74,  
0x2c, 0x75, 0x73, 0x65, 0x72, 0x6e, 0x61, 0x6d, 0x65, 0x73, 0x82, 0xd3, 0xe4, 0x93, 0x02, 0x3f,  
0x3a, 0x01, 0x2a, 0x22, 0x3a, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74,  
0x3d, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73,  
0x2f, 0x2a, 0x2f, 0x6f,  
0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65,  
0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12,  
0xe7, 0x01, 0x0a, 0x08, 0x55, 0x6e, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0x3e, 0x2e, 0x67,  
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,  
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0x73, 0x73, 0x69, 0x67, 0x6e, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73, 0x74, 0x1a, 0x3f, 0x2e, 0x67,  
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0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,  
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x55, 0x6e, 0x61,  
0x73, 0x73, 0x69, 0x67, 0x6e, 0x52, 0x65, 0x73, 0x70,  
0x6f, 0x6e, 0x73, 0x65, 0x22, 0x5a, 0xda,  
0x41, 0x10, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x2c, 0x75, 0x73, 0x65, 0x72, 0x6e, 0x61, 0x6d,  
0x65, 0x73, 0x82, 0xd3, 0xe4, 0x93, 0x02, 0x41, 0x3a, 0x01, 0x2a, 0x22, 0x3c, 0x2f, 0x76, 0x31,  
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0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73, 0x2f, 0x2a, 0x2f, 0x6f, 0x72, 0x64, 0x65, 0x72,  
0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d,  
0x3a, 0x75, 0x6e, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0x92, 0x02, 0x0a, 0x16, 0x45, 0x6e,  
0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55,  
0x73, 0x65, 0x72, 0x73, 0x12, 0x4c, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c,  
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0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,  
0x65, 0x6e,  
0x74, 0x2e, 0x76, 0x31, 0x2e, 0x45, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69,

```

0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x71, 0x75, 0x65,
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0x65, 0x22, 0x5b, 0xda, 0x41, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x82, 0xd3, 0xe4, 0x93,
0x02, 0x4c, 0x12, 0x4a, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d,
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0x2a, 0x2f, 0x6f,
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0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x65, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74,
0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x1a, 0x63,
0xca, 0x41, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65,
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0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f,
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0x72, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x61, 0x70,
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0x64, 0x2e, 0x43,
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0x2e, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x56, 0x31, 0xca,
0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x43,
0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x5c, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
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0x02, 0x32, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a,
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0x6d, 0x65, 0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74,
0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

```

```

var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData

```

```

= file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
})
return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
 // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),
 // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),
 // 2:
 google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),
 // 3:
 google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),
 // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),
 // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),
 // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),
 // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),
 // 8:
 google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
 // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),
 // 10:
 google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
 google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil), // 12:
 google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),
 // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),
 // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),
 // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
 google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name

```

```

-> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
0, // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
1, // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
-> google.protobuf.Timestamp
9, // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
2, // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
3, // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
4, // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
6, // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
-> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
8, // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_ty
pe -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
1, // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
1, // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
5, // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
7, // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
pe
-> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
14, // [14:19] is the sub-list for method output_type
9, // [9:14] is the sub-list for method input_type
9, // [9:9] is the sub-list for extension type_name

```



```

9, // [9:9] is the sub-list for extension extendee
0, // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}

func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
 return
 }
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
 (*AssignmentProtocol_ManualAssignmentType_)(nil),
 (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
 File:
 protoimpl.DescBuilder{
 GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
 RawDescriptor:
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
 NumEnums: 0,
 NumMessages: 13,
 NumExtensions: 0,
 NumServices: 1,
 },
 GoTypes:
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
 DependencyIndexes:
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
 MessageInfos:
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.

```

```

const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
 "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
 "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out, opts...)
}

```

```

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

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in, out, opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign", in, out, opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out, opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest)

```

```

(*AssignResponse, error)
// Unassigns a license from a user.
Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
// Enumerates all users assigned a license.
EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
(*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in);
 err != nil {
 return nil, err
 }
 if interceptor == nil {
 return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
}

```

```

info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: "/google.cloud.commerce.consumer.prourement.v1.LicenseManagementService/GetLicensePool",
}
handler := func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
}
return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
 return nil, err
 }
 if interceptor == nil {
 return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: "/google.cloud.commerce.consumer.prourement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
:= func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
}
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
 return nil, err
 }
 if interceptor == nil {
 return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: "/google.cloud.commerce.consumer.prourement.v1.LicenseManagementService/Assign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

```

```

func _LicenseManagementService_Unassign_Handler(srv
interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
 return nil, err
 }
 if interceptor == nil {
 return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: "/google.cloud.commerce.consumer.prourement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

```

```

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
 return nil, err
 }
 if
interceptor == nil {
 return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod:
"/google.cloud.commerce.consumer.prourement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

```

```

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.prourement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
 {

```

```

MethodName: "GetLicensePool",
Handler: _LicenseManagementService_GetLicensePool_Handler,
},
{
MethodName: "UpdateLicensePool",
Handler: _LicenseManagementService_UpdateLicensePool_Handler,
},
{
MethodName: "Assign",
Handler:
 _LicenseManagementService_Assign_Handler,
},
{
MethodName: "Unassign",
Handler: _LicenseManagementService_Unassign_Handler,
},
{
MethodName: "EnumerateLicensedUsers",
Handler: _LicenseManagementService_EnumerateLicensedUsers_Handler,
},
},
Streams: []grpc.StreamDesc{},
Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}

```

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## 1.90 gax-go 2.14.2

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

// [START discoveryengine_v1_generated_UserLicenseService_ListUserLicenses_sync]

package main

import (
 "context"

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 "google.golang.org/api/iterator"
)

func main() {
 ctx := context.Background()
 // This snippet
 has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
}
```

```

defer c.Close()

req := &discoveryenginepb.ListUserLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#ListUserLicensesRequest.
}
it := c.ListUserLicenses(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
 break
 }
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove
 this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*discoveryenginepb.ListUserLicensesResponse)
}
}

// [END discoveryengine_v1_generated_UserLicenseService_ListUserLicenses_sync]
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement

import (
 "bytes"

```

```

"context"
"fmt"
"log/slog"
"math"
"net/http"
"net/url"

procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
gax "github.com/googleapis/gax-go/v2"
"google.golang.org/api/iterator"
"google.golang.org/api/option"
"google.golang.org/api/option/internaloption"
gtransport
"google.golang.org/api/transport/grpc"
httptransport "google.golang.org/api/transport/http"
"google.golang.org/grpc"
"google.golang.org/protobuf/encoding/protojson"
"google.golang.org/protobuf/proto"
)

var newLicenseManagementClientHook clientHook

// LicenseManagementCallOptions contains the retry settings for each method of LicenseManagementClient.
type LicenseManagementCallOptions struct {
 GetLicensePool []gax.CallOption
 UpdateLicensePool []gax.CallOption
 Assign []gax.CallOption
 Unassign []gax.CallOption
 EnumerateLicensedUsers []gax.CallOption
 GetOperation []gax.CallOption
}

func defaultLicenseManagementGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("cloudcommerceconsumerprocurement.googleapis.com:443"),
 internaloption.WithDefaultEndpointTemplate("cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN:443"),
 ,
 internaloption.WithDefaultMTLSEndpoint("cloudcommerceconsumerprocurement.mtls.googleapis.com:443"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()),
 internaloption.EnableJwtWithScope(),
 internaloption.EnableNewAuthLibrary(),
 option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
 grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

```

```

func
defaultLicenseManagementCallOptions() *LicenseManagementCallOptions {
return &LicenseManagementCallOptions{
 GetLicensePool: []gax.CallOption{},
 UpdateLicensePool: []gax.CallOption{},
 Assign: []gax.CallOption{},
 Unassign: []gax.CallOption{},
 EnumerateLicensedUsers: []gax.CallOption{},
 GetOperation: []gax.CallOption{},
}
}

func defaultLicenseManagementRESTCallOptions() *LicenseManagementCallOptions {
return
&LicenseManagementCallOptions{
 GetLicensePool: []gax.CallOption{},
 UpdateLicensePool: []gax.CallOption{},
 Assign: []gax.CallOption{},
 Unassign: []gax.CallOption{},
 EnumerateLicensedUsers: []gax.CallOption{},
 GetOperation: []gax.CallOption{},
}
}

// internalLicenseManagementClient is an interface that defines the methods available from Cloud Commerce
Consumer Procurement API.
type internalLicenseManagementClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 GetLicensePool(context.Context, *procurementpb.GetLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 UpdateLicensePool(context.Context, *procurementpb.UpdateLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 Assign(context.Context, *procurementpb.AssignRequest, ...gax.CallOption) (*procurementpb.AssignResponse,
error)
 Unassign(context.Context, *procurementpb.UnassignRequest,
...gax.CallOption) (*procurementpb.UnassignResponse, error)
 EnumerateLicensedUsers(context.Context, *procurementpb.EnumerateLicensedUsersRequest, ...gax.CallOption)
*LicensedUserIterator
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
}

// LicenseManagementClient is a client for interacting with Cloud Commerce Consumer Procurement API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.

```

```

//
// Service for managing licenses.
type LicenseManagementClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseManagementClient

 // The call options for this service.
 CallOptions *LicenseManagementCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseManagementClient)
 Close() error {
 return c.internalClient.Close()
 }

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseManagementClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseManagementClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// GetLicensePool gets the license pool.
func (c *LicenseManagementClient) GetLicensePool(ctx context.Context, req
 *procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 return c.internalClient.GetLicensePool(ctx, req, opts...)
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *LicenseManagementClient)
 UpdateLicensePool(ctx context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
 (*procurementpb.LicensePool, error) {
 return c.internalClient.UpdateLicensePool(ctx, req, opts...)
 }

// Assign assigns a license to a user.

```

```

func (c *LicenseManagementClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 return c.internalClient.Assign(ctx, req, opts...)
}

// Unassign unassigns a license from a user.
func (c *LicenseManagementClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest, opts
...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 return c.internalClient.Unassign(ctx, req, opts...)
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *LicenseManagementClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 return c.internalClient.EnumerateLicensedUsers(ctx,
 req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *LicenseManagementClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// licenseManagementGRPCClient is a client for interacting with Cloud Commerce Consumer Procurement API
over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 // The gRPC API client.
 licenseManagementClient procurementpb.LicenseManagementServiceClient

 operationsClient longrunningpb.OperationsClient

 //
 The x-goog-* metadata to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

```

```

// NewLicenseManagementClient creates a new license management service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing licenses.
func NewLicenseManagementClient(ctx context.Context, opts ...option.ClientOption) (*LicenseManagementClient,
error) {
 clientOpts := defaultLicenseManagementGRPCClientOptions()
 if newLicenseManagementClientHook != nil {
 hookOpts, err := newLicenseManagementClientHook(ctx, clientHookParams{})
 if err != nil {
 return nil, err
 }
 clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
 return nil, err
 }
 client := LicenseManagementClient{CallOptions: defaultLicenseManagementCallOptions()}

 c := &licenseManagementGRPCClient{
 connPool:
 connPool,
 licenseManagementClient: procurementpb.NewLicenseManagementServiceClient(connPool),
 CallOptions: &client.CallOptions,
 logger: internaloption.GetLogger(opts),
 operationsClient: longrunningpb.NewOperationsClient(connPool),
 }
 c.setGoogleClientInfo()

 client.internalClient = c

 return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *licenseManagementGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementGRPCClient) setGoogleClientInfo(keyval ...string) {

```

```

kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
kv = append(kv, "gpic", getVersionClient(), "gax", gax.Version, "grpc",
grpc.Version, "pb", protoVersion)
c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
}
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
type licenseManagementRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 logger *slog.Logger
}

// NewLicenseManagementRESTClient creates a new license management service rest client.
//
// Service for managing licenses.
func NewLicenseManagementRESTClient(ctx context.Context,
 opts ...option.ClientOption) (*LicenseManagementClient, error) {
 clientOpts := append(defaultLicenseManagementRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
 return nil, err
 }

 callOpts := defaultLicenseManagementRESTCallOptions()
 c := &licenseManagementRESTClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,

```



```

 logger: internaloption.GetLogger(opts),
}
c.setGoogleClientInfo()

return &LicenseManagementClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseManagementRESTClientOptions() []option.ClientOption {
return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://cloudcommerceconsumerprocurement.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN"),
 internaloption.WithDefaultMTLSEndpoint("https://cloudcommerceconsumerprocurement.mtls.googleapis.com"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()...),
 internaloption.EnableNewAuthLibrary(),
}
}

//
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementRESTClient) setGoogleClientInfo(keyval ...string) {
kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
}
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementRESTClient) Close() error {
// Replace httpClient with nil to force cleanup.
c.httpClient
= nil
return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseManagementRESTClient) Connection() *grpc.ClientConn {
return nil
}
func (c *licenseManagementGRPCClient) GetLicensePool(ctx context.Context, req

```

```

*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

hds = append(c.xGoogHeaders, hds...)
ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicensePool)], opts...)
var resp *procurementpb.LicensePool
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.licenseManagementClient.GetLicensePool, req, settings.GRPC, c.logger,
"GetLicensePool")
 return err
},
opts...)
if err != nil {
 return nil, err
}
return resp, nil
}

func (c *licenseManagementGRPCClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

hds = append(c.xGoogHeaders, hds...)
ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).UpdateLicensePool)], opts...)
var resp *procurementpb.LicensePool
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.licenseManagementClient.UpdateLicensePool, req, settings.GRPC, c.logger,
"UpdateLicensePool")
 return err
}, opts...)
if err != nil {
 return nil, err
}
return resp, nil
}

func (c *licenseManagementGRPCClient)
Assign(ctx context.Context, req *procurementpb.AssignRequest, opts ...gax.CallOption)
(*procurementpb.AssignResponse, error) {

```

```

hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders, hds...)
ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
var resp *procurementpb.AssignResponse
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.licenseManagementClient.Assign, req, settings.GRPC, c.logger, "Assign")
 return err
}, opts...)
if err != nil {
 return nil, err
}
return resp, nil
}

func (c *licenseManagementGRPCClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 var resp *procurementpb.UnassignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.licenseManagementClient.Unassign, req, settings.GRPC, c.logger, "Unassign")
 return err
 }, opts...)
 if err != nil {
 return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts
 =
 append((*c.CallOptions).EnumerateLicensedUsers[0:len((*c.CallOptions).EnumerateLicensedUsers):len((*c.CallOp
tions).EnumerateLicensedUsers)], opts...)
 it := &LicensedUserIterator{}

```

```

req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
 resp := &procurementpb.EnumerateLicensedUsersResponse{}
 if pageToken != "" {
 req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
 req.PageSize = int32(pageSize)
 }
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.licenseManagementClient.EnumerateLicensedUsers, req, settings.GRPC, c.logger,
"EnumerateLicensedUsers")
 return err
 }, opts...)
 if err != nil {
 return nil, "", err
 }

 it.Response = resp
 return resp.GetLicensedUsers(), resp.GetNextPageToken(),
 nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

func (c *licenseManagementGRPCClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =

```

```

append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
var resp *longrunningpb.Operation
err := gax.Invoke(ctx,
func(ctx context.Context, settings gax.CallSettings) error {
var err error
resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
return err
}, opts...)
if err != nil {
return nil, err
}
return resp, nil
}

// GetLicensePool gets the license pool.
func (c *licenseManagementRESTClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
baseUrl, err := url.Parse(c.endpoint)
if err != nil {
return nil, err
}
baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx,
hds...)
opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &procurementpb.LicensePool{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
if settings.Path != "" {
baseUrl.Path = settings.Path
}
httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
if err != nil {
return err

```

```

 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLicensePool")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *licenseManagementRESTClient) UpdateLicensePool(ctx
context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetLicensePool()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetLicensePool().GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetUpdateMask() != nil {
 field, err := protojson.Marshal(req.GetUpdateMask())
 if err != nil {
 return nil, err
 }
 params.Add("updateMask", string(field[1:len(field)-1]))
 }
}

```

```

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds,
"Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &procurementpb.LicensePool{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
if settings.Path != "" {
baseUrl.Path = settings.Path
}
httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
if err != nil {
return err
}
httpReq = httpReq.WithContext(ctx)
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateLicensePool")
if err != nil {
return err
}

if err := unm.Unmarshal(buf, resp); err != nil {
return err
}

return nil
}, opts...)
if e != nil {
return nil, e
}
return resp, nil
}

// Assign assigns a license to a user.
func
(c *licenseManagementRESTClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}

```

```

jsonReq, err := m.Marshal(req)
if err != nil {
 return nil, err
}

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/v1/%v:assign", req.GetParent())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial:
true, DiscardUnknown: true}
resp := &procurementpb.AssignResponse{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Assign")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)

```



```

if e != nil {
 return nil, e
}
return resp, nil
}

// Unassign unassigns a license from a user.
func (c *licenseManagementRESTClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err :=
 m.Marshal(req)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:unassign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.UnassignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq,
 err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

```

```

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Unassign")
if err != nil {
 return err
}

if err := unm.Unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *licenseManagementRESTClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
 resp := &procurementpb.EnumerateLicensedUsersResponse{}
 if
 pageToken != "" {
 req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
 req.PageSize = int32(pageSize)
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:enumerateLicensedUsers", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetPageSize() != 0 {
 params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 }
}

```

```

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := append(c.xGoogHeaders, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "EnumerateLicensedUsers")
 if err != nil {
 return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, "", e
}
it.Response = resp
return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it

```

```

}

// GetOperation is a utility method from
google.longrunning.Operations.
func (c *licenseManagementRESTClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
 append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
 opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx,
 func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
 if err != nil {
 return err
 }

 if err := unmarshal(buf, resp); err != nil {
 return err
 }
 })
}

```

```

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}
// Copyright 2025 Google LLC
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// https://www.apache.org/licenses/LICENSE-2.0
//
// Unless required by applicable law or agreed to in writing, software
// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var

```

```
newLicensesClientHook clientHook
```

```
// LicensesCallOptions contains the retry settings for each method of LicensesClient.
```

```
type LicensesCallOptions struct {
 Delete []gax.CallOption
 Get []gax.CallOption
 GetIamPolicy []gax.CallOption
 Insert []gax.CallOption
 List []gax.CallOption
 SetIamPolicy []gax.CallOption
 TestIamPermissions []gax.CallOption
 Update []gax.CallOption
}
```

```
func defaultLicensesRESTCallOptions() *LicensesCallOptions {
```

```
 return &LicensesCallOptions{
 Delete: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 },
 Get: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier:
1.30,
 },
 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
 }),
 },
 GetIamPolicy: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier: 1.30,
 },
 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
 }),
 },
 Insert: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 },
 List: []gax.CallOption{
```

```

gax.WithTimeout(600000 * time.Millisecond),
gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier: 1.30,
 },
 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
 }),
},
SetIamPolicy: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
},
TestIamPermissions: []gax.CallOption{
 gax.WithTimeout(600000
* time.Millisecond),
},
Update: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
},
}
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
 error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
 error)
 TestIamPermissions(context.Context,
 *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption) (*computepb.TestPermissionsResponse, error)
 Update(context.Context, *computepb.UpdateLicenseRequest, ...gax.CallOption) (*Operation, error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
//
// The Licenses API.
type LicensesClient struct {

```

```

// The internal transport-dependent client.
internalClient internalLicensesClient

// The call options for this service.
CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed
// on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
// creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
// who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req
*computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
// Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts

```



```

...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the
specified project. This method does not get any licenses that belong to other projects, including licenses attached to
publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to
make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return
 c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 return c.internalClient.Update(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type

```

```

licensesRESTClient struct {
// The http endpoint to connect to.
endpoint string

// The http client.
httpClient *http.Client

// operationClient is used to call the operation-specific management service.
operationClient *GlobalOperationsClient

// The x-goog-* headers to be sent with each request.
xGoogHeaders []string

// Points back to the CallOptions field of the containing LicensesClient
CallOptions **LicensesCallOptions

logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
 return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,
 logger:
 internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
 option.WithHTTPClient(httpClient),
 option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
 return nil, err
 }
 c.operationClient = opC

```

```

return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
 internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()...),
 internaloption.EnableNewAuthLibrary(),
}
}

// setGoogleClientInfo sets the name and version of the application in
//
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
}
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
// Replace httpClient with nil to force cleanup.
c.httpClient = nil
if err := c.operationClient.Close(); err != nil {
 return err
}
return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
return nil
}

// Delete deletes the specified license. Caution This resource is intended for use

```

```

only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)],
 opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
 if err != nil {
 return err
 }

 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
 })

```

```

 }, opts...)
 if e != nil {
 return nil, e
 }
 op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project: req.GetProject(),
 },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
// who are creating
// Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
 url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error
 {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")

```

```

 if err != nil {
 return err
 }

 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
// Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
 opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy",
 req.GetProject(), req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
 params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
 url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
 append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
 opts...)
 unmarshal := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if

```

```

settings.Path != "" {
 baseUrl.Path = settings.Path
}
httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
if err != nil {
 return err
}
httpReq = httpReq.WithContext(ctx)
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
if err != nil {
 return err
}

if err := unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if
 err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

```

```

}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &compute.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err
:= http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project: req.GetProject(),
 },
}
return op, nil
}

```



// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

func (c \*licensesRESTClient) List(ctx context.Context, req \*computepb.ListLicensesRequest, opts

```
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
 resp := &computepb.LicensesListResponse{}
 if pageToken != "" {
 req.PageToken = proto.String(pageToken)
 }
 if pageSize > math.MaxInt32 {
 req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
 } else if pageSize != 0 {
 req.MaxResults = proto.Uint32(uint32(pageSize))
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())
```

```
 params := url.Values{}
 if req != nil && req.Filter != nil {
 params.Add("filter",
 fmt.Sprintf("%v", req.GetFilter()))
 }
 if req != nil && req.MaxResults != nil {
 params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
 params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
 params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }
 }
}
```

```
baseUrl.RawQuery = params.Encode()
```

```
// Build HTTP headers from client and context metadata.
```

```

hds := append(c.xGoogHeaders, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq.Header
= headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
 if err != nil {
 return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, "", e
}
it.Response = resp
return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

```

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace

```

images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
 if err != nil {
 return err
 }

 if err := unmarshal(buf, resp); err != nil {
 return err
 }
 })
}

```

```

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx
context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err

```

```

 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Update(ctx context.Context,
req *computepb.UpdateLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }
 if req != nil && req.UpdateMask != nil {
 params.Add("updateMask", fmt.Sprintf("%v", req.GetUpdateMask()))
 }

 baseUrl.RawQuery = params.Encode()

```

```

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds,
"Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Update[0:len((*c.CallOptions).Update):len((*c.CallOptions).Update)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
if settings.Path != "" {
baseUrl.Path = settings.Path
}
httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
if err != nil {
return err
}
httpReq = httpReq.WithContext(ctx)
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Update")
if err != nil {
return err
}

if err := unm.Unmarshal(buf, resp); err != nil {
return err
}

return nil
}, opts...)
if e != nil {
return nil, e
}
op := &Operation{
&globalOperationsHandle{
c: c.operationClient,
proto: resp,
project: req.GetProject(),
},
}
return
op, nil
}

```

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// Code generated by protoc-gen-go\_gapic. DO NOT EDIT.

package compute

import (

"bytes"

"context"

"fmt"

"log/slog"

"net/http"

"net/url"

"time"

computepb "cloud.google.com/go/compute/apiv1/computepb"

gax "github.com/googleapis/gax-go/v2"

"google.golang.org/api/option"

"google.golang.org/api/option/internaloption"

httptransport "google.golang.org/api/transport/http"

"google.golang.org/grpc"

```

"google.golang.org/protobuf/encoding/protojson"
)

var
newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
 Get: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier: 1.30,
 },
 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
 }),
 },
 TestIamPermissions: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
 Close()
 error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
 (*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
//
// The LicenseCodes API.

```

```

type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return c.internalClient.Close()
}

//
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

//
// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
// License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
// Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
// intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

```

```

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger
}

// NewLicenseCodesRESTClient
// creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
 return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,
 logger: internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
 internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 }
}

```

```

internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
internaloption.WithDefaultScopes(DefaultAuthScopes()),
internaloption.EnableNewAuthLibrary(),
}
}

//
setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
c.xGoogHeaders = []string{
"x-goog-api-client", gax.XGoogHeader(kv...),
}
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
// Replace httpClient with nil to force cleanup.
c.httpClient = nil
return
nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
baseUrl, err := url.Parse(c.endpoint)
if err != nil {
return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",

```

```
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}}
```

```
hds
= append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.LicenseCode{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}
```

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }
}
```



```

}

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

hds = append(c.xGoogHeaders, hds...)
hds =
append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).TestIamPermissions)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.TestPermissionsResponse{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil

```

```

}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{

```

```

Get: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier: 1.30,
 },
 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
 }),
 },
TestIamPermissions: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 },
}
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface
{
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
 (*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return

```

```

c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
// License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
// Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
// intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient

```

```

CallOptions **LicenseCodesCallOptions

logger *slog.Logger
}

// NewLicenseCodesRESTClient
// creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
 return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,
 logger: internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
 internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()...),
 internaloption.EnableNewAuthLibrary(),
 }
}

//
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{

```

```

"x-goog-api-client", gax.XGoogHeader(kv...),
}
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return
 nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
// License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
// Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 })
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)

```

```

 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
 if err != nil {
 return err
 }

 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// TestIamPermissions returns permissions that
// a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are
// creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenseCodes/%v/testIamPermissions",
 req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
 url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)

```

```

hds
= append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).TestIamPermissions)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.TestPermissionsResponse{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

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```



```

// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
// protoc-gen-go v1.35.2
// protoc v4.25.7
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 reflect "reflect"
 sync
 "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
 0: "GRANTEE_TYPE_UNSPECIFIED",
 1: "USER",
 2:
 "GROUP",
 3: "EVERYONE",
 }

```

```

}
Permission_GrantType_value = map[string]int32{
 "GRANTEE_TYPE_UNSPECIFIED": 0,
 "USER": 1,
 "GROUP": 2,
 "EVERYONE": 3,
}
)

func (x Permission_GrantType) Enum() *Permission_GrantType {
 p := new(Permission_GrantType)
 *p = x
 return p
}

func (x Permission_GrantType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protorelect.EnumNumber(x))
}

func (Permission_GrantType) Descriptor() protorelect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GrantType) Type() protorelect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GrantType) Number() protorelect.EnumNumber {
 return protorelect.EnumNumber(x)
}

// Deprecated: Use Permission_GrantType.Descriptor instead.
func (Permission_GrantType) EnumDescriptor() ([]byte,
[]int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.

```

```

Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
 0: "ROLE_UNSPECIFIED",
 1: "OWNER",
 2: "WRITER",
 3: "READER",
 }
 Permission_Role_value = map[string]int32{
 "ROLE_UNSPECIFIED": 0,
 "OWNER": 1,
 "WRITER": 2,
 "READER": 3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protorelect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protorelect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protorelect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protorelect.EnumNumber {
 return protorelect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the

```

```

// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
// accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
 `protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
 json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
 `protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
 json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

```

```

}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
{
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
 return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
 return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
 return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {

```

```

if x != nil && x.Role != nil {
 return *x.Role
}
return Permission_ROLE_UNSPECIFIED
}

var
File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
 0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,
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 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,
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 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,
 0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,
 0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,
 0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,
 0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,
 0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,
 0x4e,
 0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,
 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,
 0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,
 0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,
 0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,
 0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,

```

```

0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,
0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,
0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,
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0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,
0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,
0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,
0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,
0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,
0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,
0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
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0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
0x61, 0x67,
0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

```

```

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
 protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes

```

```

= []any{
 (Permission_GrantType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GrantType
 (Permission_Role)(0), // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil), // 2: google.ai.generativelanguage.v1alpha.Permission
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
 google.ai.generativelanguage.v1alpha.Permission.GrantType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
 google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
}

func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
 return
 }
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
 File: protoimpl.DescBuilder{
 GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
 RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
 NumEnums: 2,
 NumMessages: 1,
 NumExtensions: 0,
 NumServices: 0,
 },
 GoTypes: file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
 DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
 EnumInfos: file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
 MessageInfos: file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
 = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}

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```



```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1beta"
 computepb "cloud.google.com/go/compute/apiv1beta/compute_pb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require
 modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute_pb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
 if err != nil {
 // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
 }
}

```

```

}
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package discoveryengine_test

import (
 "context"

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewUserLicenseClient() {
 ctx := context.Background()
 //
 This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewUserLicenseRESTClient() {

```

```

ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := discoveryengine.NewUserLicenseRESTClient(ctx)
if
err != nil {
 // TODO: Handle error.
}
defer c.Close()

// TODO: Use client.
_ = c
}

func ExampleUserLicenseClient_BatchUpdateUserLicenses() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := discoveryengine.NewUserLicenseClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &discoveryenginepb.BatchUpdateUserLicensesRequest{
 // TODO: Fill request struct fields.
 // See
https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#BatchUpdateUserLicensesRequest
}
op, err := c.BatchUpdateUserLicenses(ctx, req)
if err != nil {
 //
 // TODO: Handle error.
}

resp, err := op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp

```

```

}

func ExampleUserLicenseClient_ListUserLicenses() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &discoveryenginepb.ListUserLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#ListUserLicensesRequest.
 }
 it := c.ListUserLicenses(ctx, req)
 for {
 resp, err := it.Next()
 if err == iterator.Done {
 break
 }
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*discoveryenginepb.ListUserLicensesResponse)
 }
}

func ExampleUserLicenseClient_CancelOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)

```

```

if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &longrunningpb.CancelOperationRequest{
 //
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#CancelOperationRequest.
}
err = c.CancelOperation(ctx, req)
if err != nil {
 // TODO: Handle error.
}
}

func ExampleUserLicenseClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp,
 err := c.GetOperation(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleUserLicenseClient_ListOperations() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:

```

```

// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := discoveryengine.NewUserLicenseClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &longrunningpb.ListOperationsRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#ListOperationsRequest.
}
it := c.ListOperations(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
 break
 }
 if err != nil {
 //
 TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*longrunningpb.ListOperationsResponse)
}
}
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
// protoc-gen-go v1.35.2

```

```

// protoc v4.25.7
// source: google/cloud/discoveryengine/v1/user_license_service.proto

package discoveryenginepb

import (
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 context "context"
 _ "google.golang.org/genproto/googleapis/api/annotations"
 status "google.golang.org/genproto/googleapis/rpc/status"
 grpc
 "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status1 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
 reflect "reflect"
 sync "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Request message for
// [UserLicenseService.ListUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.ListUserLicenses].
type ListUserLicensesRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The parent [UserStore][] resource name,
 // format:
 // `projects/{project}/locations/{location}/userStores/{user_store_id}`.
 // Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. Requested page size. Server may return fewer items than
 // requested. If unspecified, defaults to 10. The maximum value is 50; values
 // above 50 will be coerced to 50.
 //
 // If this field is negative, an INVALID_ARGUMENT error is returned.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3" json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `ListUserLicenses` call.
 // Provide this to retrieve the subsequent page.

```

```

//
// When paginating, all other parameters provided to `ListUserLicenses`
// must match the call that provided the page token.
PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
// Optional. Filter for the list request.
//
// Supported fields:
//
// * `license_assignment_state`
//
//
Examples:
//
// * `license_assignment_state = ASSIGNED` to list assigned user licenses.
// * `license_assignment_state = NO_LICENSE` to list not licensed users.
// * `license_assignment_state = NO_LICENSE_ATTEMPTED_LOGIN` to list users
// who attempted login but no license assigned.
// * `license_assignment_state != NO_LICENSE_ATTEMPTED_LOGIN` to filter
// out users who attempted login but no license assigned.
Filter string `protobuf:"bytes,4,opt,name=filter,proto3" json:"filter,omitempty"`
}

func (x *ListUserLicensesRequest) Reset() {
 *x = ListUserLicensesRequest{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *ListUserLicensesRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*ListUserLicensesRequest) ProtoMessage() {}

func (x *ListUserLicensesRequest) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[0]
 if
 x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

```



```

// Deprecated: Use ListUserLicensesRequest.ProtoReflect.Descriptor instead.
func (*ListUserLicensesRequest) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{0}
}

func (x *ListUserLicensesRequest) GetParent() string {
 if x != nil {
 return x.Parent
 }
 return ""
}

func (x *ListUserLicensesRequest) GetPageSize() int32 {
 if x != nil {
 return x.PageSize
 }
 return 0
}

func (x *ListUserLicensesRequest) GetPageToken() string {
 if x != nil {
 return x.PageToken
 }
 return ""
}

func (x *ListUserLicensesRequest) GetFilter() string {
 if x != nil {
 return x.Filter
 }
 return ""
}

// Response message for
// [UserLicenseService.ListUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.ListUserLicenses].
type
ListUserLicensesResponse struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // All the customer's
 // [UserLicense][google.cloud.discoveryengine.v1.UserLicense]s.
 UserLicenses []*UserLicense `protobuf:"bytes,1,rep,name=user_licenses,json=userLicenses,proto3"
 json:"user_licenses,omitempty"`
 // A token, which can be sent as `page_token` to retrieve the next page. If
 // this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"

```

```

json:"next_page_token,omitempty"
}

func (x *ListUserLicensesResponse) Reset() {
 *x = ListUserLicensesResponse{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *ListUserLicensesResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func
(*ListUserLicensesResponse) ProtoMessage() {}

func (x *ListUserLicensesResponse) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[1]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use ListUserLicensesResponse.ProtoReflect.Descriptor instead.
func (*ListUserLicensesResponse) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{1}
}

func (x *ListUserLicensesResponse) GetUserLicenses() []*UserLicense {
 if x != nil {
 return x.UserLicenses
 }
 return nil
}

func (x *ListUserLicensesResponse) GetNextPageToken() string {
 if x != nil {
 return x.NextPageToken
 }
 return ""
}

```

```

// Request message for
//
[UserLicenseService.BatchUpdateUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdateUserLicenses]
//
method.
type BatchUpdateUserLicensesRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The source of the input.
 //
 // Types that are assignable to Source:
 //
 // *BatchUpdateUserLicensesRequest_InlineSource_
 Source isBatchUpdateUserLicensesRequest_Source `protobuf_oneof:"source"`
 // Required. The parent [UserStore][] resource name, format:
 // `projects/{project}/locations/{location}/userStores/{user_store_id}`.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. If true, if user licenses removed associated license config, the
 // user license will be deleted. By default which is false, the user license
 // will be updated to unassigned state.
 DeleteUnassignedUserLicenses bool
 `protobuf:"varint,4,opt,name=delete_unassigned_user_licenses,json=deleteUnassignedUserLicenses,proto3"
 json:"delete_unassigned_user_licenses,omitempty"`
}

func
(x *BatchUpdateUserLicensesRequest) Reset() {
 *x = BatchUpdateUserLicensesRequest{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesRequest) ProtoMessage() {}

func (x *BatchUpdateUserLicensesRequest) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[2]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)

```

```

 }
 return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use BatchUpdateUserLicensesRequest.ProtoReflect.Descriptor instead.
func (*BatchUpdateUserLicensesRequest) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(),
 []int{2}
}

func (m *BatchUpdateUserLicensesRequest) GetSource() isBatchUpdateUserLicensesRequest_Source {
 if m != nil {
 return m.Source
 }
 return nil
}

func (x *BatchUpdateUserLicensesRequest) GetInlineSource() *BatchUpdateUserLicensesRequest_InlineSource {
 if x, ok := x.GetSource().(*BatchUpdateUserLicensesRequest_InlineSource_); ok {
 return x.InlineSource
 }
 return nil
}

func (x *BatchUpdateUserLicensesRequest) GetParent() string {
 if x != nil {
 return x.Parent
 }
 return ""
}

func (x *BatchUpdateUserLicensesRequest) GetDeleteUnassignedUserLicenses() bool {
 if x != nil {
 return x.DeleteUnassignedUserLicenses
 }
 return false
}

type isBatchUpdateUserLicensesRequest_Source interface {
 isBatchUpdateUserLicensesRequest_Source()
}

type BatchUpdateUserLicensesRequest_InlineSource_ struct {
 // The inline source for the input content for document embeddings.
 InlineSource *BatchUpdateUserLicensesRequest_InlineSource
 `protobuf:"bytes,2,opt,name=inline_source,json=inlineSource,proto3,oneof"`
}

```

```

}

func
(*BatchUpdateUserLicensesRequest_InlineSource_) isBatchUpdateUserLicensesRequest_Source() {}

// Metadata related to the progress of the
//
[UserLicenseService.BatchUpdateUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdateUserLicenses]
// operation. This will be returned by the google.longrunning.Operation.metadata
// field.
type BatchUpdateUserLicensesMetadata struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Operation create time.
 CreateTime *timestamppb.Timestamp `protobuf:"bytes,1,opt,name=create_time,json=createTime,proto3"
 json:"create_time,omitempty"`
 // Operation last update time. If the operation is done, this is also the
 // finish time.
 UpdateTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=update_time,json=updateTime,proto3"
 json:"update_time,omitempty"`
 // Count of user licenses successfully updated.
 SuccessCount
 int64 `protobuf:"varint,3,opt,name=success_count,json=successCount,proto3" json:"success_count,omitempty"`
 // Count of user licenses that failed to be updated.
 FailureCount int64 `protobuf:"varint,4,opt,name=failure_count,json=failureCount,proto3"
 json:"failure_count,omitempty"`
}

func (x *BatchUpdateUserLicensesMetadata) Reset() {
 *x = BatchUpdateUserLicensesMetadata{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesMetadata) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesMetadata) ProtoMessage() {}

func (x *BatchUpdateUserLicensesMetadata) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[3]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))

```

```

 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return
ms
}
return mi.MessageOf(x)
}

// Deprecated: Use BatchUpdateUserLicensesMetadata.ProtoReflect.Descriptor instead.
func (*BatchUpdateUserLicensesMetadata) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{3}
}

func (x *BatchUpdateUserLicensesMetadata) GetCreateTime() *timestamppb.Timestamp {
 if x != nil {
 return x.CreateTime
 }
 return nil
}

func (x *BatchUpdateUserLicensesMetadata) GetUpdateTime() *timestamppb.Timestamp {
 if x != nil {
 return x.UpdateTime
 }
 return nil
}

func (x *BatchUpdateUserLicensesMetadata) GetSuccessCount() int64 {
 if x != nil {
 return x.SuccessCount
 }
 return 0
}

func (x *BatchUpdateUserLicensesMetadata) GetFailureCount() int64 {
 if x != nil {
 return x.FailureCount
 }
 return 0
}

// Response message for
//
// [UserLicenseService.BatchUpdateUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdat
eUserLicenses]
// method.
type

```

```

BatchUpdateUserLicensesResponse struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // UserLicenses successfully updated.
 UserLicenses []*UserLicense `protobuf:"bytes,1,rep,name=user_licenses,json=userLicenses,proto3"
 json:"user_licenses,omitempty"`
 // A sample of errors encountered while processing the request.
 ErrorSamples []*status.Status `protobuf:"bytes,2,rep,name=error_samples,json=errorSamples,proto3"
 json:"error_samples,omitempty"`
}

func (x *BatchUpdateUserLicensesResponse) Reset() {
 *x = BatchUpdateUserLicensesResponse{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesResponse) ProtoMessage() {}

func (x *BatchUpdateUserLicensesResponse) ProtoReflect()
 protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[4]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use BatchUpdateUserLicensesResponse.ProtoReflect.Descriptor instead.
func (*BatchUpdateUserLicensesResponse) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{4}
}

func (x *BatchUpdateUserLicensesResponse) GetUserLicenses() []*UserLicense {
 if x != nil {
 return x.UserLicenses
 }
}

```

```

return nil
}

func (x *BatchUpdateUserLicensesResponse) GetErrorSamples() []*status.Status {
if x != nil {
return x.ErrorSamples
}
return nil
}

// The inline source for the input config for BatchUpdateUserLicenses
// method.
type BatchUpdateUserLicensesRequest_InlineSource struct {
state protoimpl.MessageState
sizeCache
 protoimpl.SizeCache
unknownFields protoimpl.UnknownFields

// Required. A list of user licenses to update. Each user license
// must have a valid
// [UserLicense.user_principal][google.cloud.discoveryengine.v1.UserLicense.user_principal].
UserLicenses []*UserLicense `protobuf:"bytes,1,rep,name=user_licenses,json=userLicenses,proto3"
json:"user_licenses,omitempty"`
// Optional. The list of fields to update.
UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) Reset() {
*x = BatchUpdateUserLicensesRequest_InlineSource{}
mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[5]
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) String() string {
return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesRequest_InlineSource)
ProtoMessage() {}

func (x *BatchUpdateUserLicensesRequest_InlineSource) ProtoReflect() protoreflect.Message {
mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[5]
if x != nil {
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
if ms.LoadMessageInfo() == nil {
ms.StoreMessageInfo(mi)

```



```

 }
 return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use BatchUpdateUserLicensesRequest_InlineSource.ProtoReflect.Descriptor instead.
func (*BatchUpdateUserLicensesRequest_InlineSource) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{2, 0}
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) GetUserLicenses() []*UserLicense {
 if x != nil {
 return x.UserLicenses
 }
 return nil
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
 return x.UpdateMask
 }
 return nil
}

var File_google_cloud_discoveryengine_v1_user_license_service_proto
 protoreflect.FileDescriptor

var file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc = []byte{
 0x0a, 0x3a, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x64,
 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x76,
 0x31, 0x2f, 0x75, 0x73, 0x65, 0x72, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x73,
 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x1f, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f,
 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x76, 0x31, 0x1a, 0x1c, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f, 0x74, 0x61,
 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
 0x2e, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e,
 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70,
 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x1a, 0x32, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x64,
 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x76,
 0x31, 0x2f, 0x75, 0x73, 0x65, 0x72, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x2e, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x6c, 0x6f, 0x6e,
 0x67, 0x72, 0x75, 0x6e, 0x6e, 0x69, 0x6e, 0x67, 0x2f, 0x6f, 0x70, 0x65, 0x72, 0x61, 0x74, 0x69,

```

0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c,  
0x65, 0x2f, 0x70,  
0x72, 0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64,  
0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,  
0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d,  
0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67, 0x6f,  
0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x72, 0x70, 0x63, 0x2f, 0x73, 0x74, 0x61, 0x74, 0x75, 0x73, 0x2e,  
0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc6, 0x01, 0x0a, 0x17, 0x4c, 0x69, 0x73, 0x74, 0x55, 0x73,  
0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x73, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73,  
0x74, 0x12, 0x48, 0x0a, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x18, 0x01, 0x20, 0x01, 0x28,  
0x09, 0x42, 0x30, 0xe0, 0x41, 0x02, 0xfa, 0x41, 0x2a, 0x0a, 0x28, 0x64, 0x69, 0x73, 0x63, 0x6f,  
0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,  
0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f,  
0x6d, 0x2f, 0x55, 0x73, 0x65, 0x72, 0x53, 0x74,  
0x6f, 0x72, 0x65, 0x52, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x12, 0x20, 0x0a, 0x09, 0x70,  
0x61, 0x67, 0x65, 0x5f, 0x73, 0x69, 0x7a, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x05, 0x42, 0x03,  
0xe0, 0x41, 0x01, 0x52, 0x08, 0x70, 0x61, 0x67, 0x65, 0x53, 0x69, 0x7a, 0x65, 0x12, 0x22, 0x0a,  
0x0a, 0x70, 0x61, 0x67, 0x65, 0x5f, 0x74, 0x6f, 0x6b, 0x65, 0x6e, 0x18, 0x03, 0x20, 0x01, 0x28,  
0x09, 0x42, 0x03, 0xe0, 0x41, 0x01, 0x52, 0x09, 0x70, 0x61, 0x67, 0x65, 0x54, 0x6f, 0x6b, 0x65,  
0x6e, 0x12, 0x1b, 0x0a, 0x06, 0x66, 0x69, 0x6c, 0x74, 0x65, 0x72, 0x18, 0x04, 0x20, 0x01, 0x28,  
0x09, 0x42, 0x03, 0xe0, 0x41, 0x01, 0x52, 0x06, 0x66, 0x69, 0x6c, 0x74, 0x65, 0x72, 0x22, 0x95,  
0x01, 0x0a, 0x18, 0x4c, 0x69, 0x73, 0x74, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e,  
0x73, 0x65, 0x73, 0x52, 0x65, 0x73, 0x70, 0x6f, 0x6e, 0x73, 0x65, 0x12, 0x51, 0x0a, 0x0d, 0x75,  
0x73, 0x65, 0x72, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x73, 0x18,  
0x01, 0x20, 0x03,  
0x28, 0x0b, 0x32, 0x2c, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75,  
0x64, 0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e,  
0x65, 0x2e, 0x76, 0x31, 0x2e, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,  
0x52, 0x0c, 0x75, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x73, 0x12, 0x26,  
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0x6e, 0x18, 0x02, 0x20, 0x01, 0x28, 0x09, 0x52, 0x0d, 0x6e, 0x65, 0x78, 0x74, 0x50, 0x61, 0x67,  
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0x65, 0x2e, 0x56, 0x31, 0xca, 0x02, 0x1f, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c,
0x6f, 0x75, 0x64, 0x5c, 0x44, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x45, 0x6e, 0x67,
0x69, 0x6e, 0x65, 0x5c, 0x56, 0x31, 0xea, 0x02, 0x22, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a,
0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a, 0x3a, 0x44, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72,
0x79, 0x45, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescOnce sync.Once
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData =
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc
)

func
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP() []byte {
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescOnce.Do(func() {
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData =
 protoimpl.X.CompressGZIP(file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData)
 })
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData
}

var file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 6)
var file_google_cloud_discoveryengine_v1_user_license_service_proto_goTypes = []any{
 (*ListUserLicensesRequest)(nil), // 0: google.cloud.discoveryengine.v1.ListUserLicensesRequest
 (*ListUserLicensesResponse)(nil), // 1: google.cloud.discoveryengine.v1.ListUserLicensesResponse
 (*BatchUpdateUserLicensesRequest)(nil), // 2:
 google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest
 (*BatchUpdateUserLicensesMetadata)(nil), // 3: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesMetadata
 (*BatchUpdateUserLicensesResponse)(nil), // 4:
 google.cloud.discoveryengine.v1.BatchUpdateUserLicensesResponse
 (*BatchUpdateUserLicensesRequest_InlineSource)(nil), // 5:
 google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource
 (*UserLicense)(nil), // 6: google.cloud.discoveryengine.v1.UserLicense
 (*timestamppb.Timestamp)(nil), // 7: google.protobuf.Timestamp
 (*status.Status)(nil), // 8: google.rpc.Status

```

```

(*fieldmaskpb.FieldMask)(nil), // 9: google.protobuf.FieldMask
(*longrunningpb.Operation)(nil), // 10: google.longrunning.Operation
}
var file_google_cloud_discoveryengine_v1_user_license_service_proto_depIdxs = []int32{
 6, // 0: google.cloud.discoveryengine.v1.ListUserLicensesResponse.user_licenses:type_name ->
 google.cloud.discoveryengine.v1.UserLicense
 5, // 1: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.inline_source:type_name ->
 google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource
 7, // 2: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesMetadata.create_time:type_name ->
 google.protobuf.Timestamp
 7, // 3: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesMetadata.update_time:type_name ->
 google.protobuf.Timestamp
 6, // 4: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesResponse.user_licenses:type_name ->
 google.cloud.discoveryengine.v1.UserLicense
 8, // 5: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesResponse.error_samples:type_name ->
 google.rpc.Status
 6, // 6: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource.user_licenses:type_name ->
 google.cloud.discoveryengine.v1.UserLicense
 9, // 7: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource.update_mask:type_name ->
 google.protobuf.FieldMask
 0, // 8: google.cloud.discoveryengine.v1.UserLicenseService.ListUserLicenses:input_type ->
 google.cloud.discoveryengine.v1.ListUserLicensesRequest
 2, // 9: google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdateUserLicenses:input_type ->
 google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest
 1, // 10: google.cloud.discoveryengine.v1.UserLicenseService.ListUserLicenses:output_type ->
 google.cloud.discoveryengine.v1.ListUserLicensesResponse
 10, // 11: google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdateUserLicenses:output_type ->
 google.longrunning.Operation
 10, // [10:12] is the sub-list for method output_type
 8, // [8:10] is the sub-list for method input_type
 8, // [8:8] is the sub-list for extension type_name
 8, // [8:8] is the sub-list for extension extendee
 0, // [0:8] is the sub-list for field type_name
}

func init() { file_google_cloud_discoveryengine_v1_user_license_service_proto_init()
}
func file_google_cloud_discoveryengine_v1_user_license_service_proto_init() {
 if File_google_cloud_discoveryengine_v1_user_license_service_proto != nil {
 return
 }
 file_google_cloud_discoveryengine_v1_user_license_proto_init()
 file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[2].OneofWrappers = []any{
 (*BatchUpdateUserLicensesRequest_InlineSource_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
 File: protoimpl.DescBuilder{

```

```

GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
RawDescriptor: file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc,
NumEnums: 0,
NumMessages: 6,
NumExtensions: 0,
NumServices: 1,
},
GoTypes: file_google_cloud_discoveryengine_v1_user_license_service_proto_goTypes,
DependencyIndexes: file_google_cloud_discoveryengine_v1_user_license_service_proto_depIdxs,
MessageInfos: file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes,
}.Build()
File_google_cloud_discoveryengine_v1_user_license_service_proto
= out.File
file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc = nil
file_google_cloud_discoveryengine_v1_user_license_service_proto_goTypes = nil
file_google_cloud_discoveryengine_v1_user_license_service_proto_depIdxs = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// UserLicenseServiceClient is the client API for UserLicenseService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type UserLicenseServiceClient interface {
 // Lists the User Licenses.
 ListUserLicenses(ctx context.Context, in *ListUserLicensesRequest,
 opts ...grpc.CallOption) (*ListUserLicensesResponse, error)
 // Updates the User License.
 // This method is used for batch assign/unassign licenses to users.
 BatchUpdateUserLicenses(ctx context.Context, in *BatchUpdateUserLicensesRequest, opts ...grpc.CallOption)
 (*longrunningpb.Operation, error)
}

type userLicenseServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewUserLicenseServiceClient(cc grpc.ClientConnInterface) UserLicenseServiceClient {
 return &userLicenseServiceClient{cc}
}

```

```

func (c *userLicenseServiceClient) ListUserLicenses(ctx context.Context, in *ListUserLicensesRequest, opts
...grpc.CallOption) (*ListUserLicensesResponse, error) {
 out := new(ListUserLicensesResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.discoveryengine.v1.UserLicenseService/ListUserLicenses", in, out, opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

func (c *userLicenseServiceClient) BatchUpdateUserLicenses(ctx context.Context, in
*BatchUpdateUserLicensesRequest,
opts ...grpc.CallOption) (*longrunningpb.Operation, error) {
 out := new(longrunningpb.Operation)
 err := c.cc.Invoke(ctx, "/google.cloud.discoveryengine.v1.UserLicenseService/BatchUpdateUserLicenses", in, out,
opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

// UserLicenseServiceServer is the server API for UserLicenseService service.
type UserLicenseServiceServer interface {
 // Lists the User Licenses.
 ListUserLicenses(context.Context, *ListUserLicensesRequest) (*ListUserLicensesResponse, error)
 // Updates the User License.
 // This method is used for batch assign/unassign licenses to users.
 BatchUpdateUserLicenses(context.Context, *BatchUpdateUserLicensesRequest) (*longrunningpb.Operation, error)
}

// UnimplementedUserLicenseServiceServer can be embedded to have forward compatible implementations.
type UnimplementedUserLicenseServiceServer struct {
}

func (*UnimplementedUserLicenseServiceServer) ListUserLicenses(context.Context, *ListUserLicensesRequest)
(*ListUserLicensesResponse, error) {
 return nil, status1.Errorf(codes.Unimplemented, "method ListUserLicenses not implemented")
}

func (*UnimplementedUserLicenseServiceServer) BatchUpdateUserLicenses(context.Context,
*BatchUpdateUserLicensesRequest) (*longrunningpb.Operation, error) {
 return nil, status1.Errorf(codes.Unimplemented, "method BatchUpdateUserLicenses not implemented")
}

func RegisterUserLicenseServiceServer(s *grpc.Server, srv UserLicenseServiceServer) {
 s.RegisterService(&_UserLicenseService_serviceDesc, srv)
}

```



```

func _UserService_ListUserLicenses_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(ListUserLicensesRequest)
 if err := dec(in); err != nil {
 return nil, err
 }
 if interceptor == nil {
 return srv.(UserServiceServer).ListUserLicenses(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: "/google.cloud.discoveryengine.v1.UserService/ListUserLicenses",
 }
 handler
:= func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(UserServiceServer).ListUserLicenses(ctx, req.(*ListUserLicensesRequest))
}
 return interceptor(ctx, in, info, handler)
}

```

```

func _UserService_BatchUpdateUserLicenses_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(BatchUpdateUserLicensesRequest)
 if err := dec(in); err != nil {
 return nil, err
 }
 if interceptor == nil {
 return srv.(UserServiceServer).BatchUpdateUserLicenses(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: "/google.cloud.discoveryengine.v1.UserService/BatchUpdateUserLicenses",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(UserServiceServer).BatchUpdateUserLicenses(ctx, req.(*BatchUpdateUserLicensesRequest))
 }
 return interceptor(ctx,
 in, info, handler)
}

```

```

var _UserService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.discoveryengine.v1.UserService",
 HandlerType: (*UserServiceServer)(nil),
 Methods: []grpc.MethodDesc{
 {
 MethodName: "ListUserLicenses",
 Handler: _UserService_ListUserLicenses_Handler,
 },
 },
}

```

```

{
 MethodName: "BatchUpdateUserLicenses",
 Handler: _UserLicenseService_BatchUpdateUserLicenses_Handler,
},
},
Streams: []grpc.StreamDesc{},
Metadata: "google/cloud/discoveryengine/v1/user_license_service.proto",
}

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1beta"
 computepb "cloud.google.com/go/compute/apiv1beta/compute_pb"
)

func ExampleNewLicenseCodesRESTClient() {

```

```

ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications
to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicenseCodesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

// TODO: Use client.
_ = c
}

func ExampleLicenseCodesClient_Get() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicenseCodesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.GetLicenseCodeRequest{
 // TODO:
 Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#GetLicenseCodeRequest.
}
resp, err := c.Get(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.

```

```

// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicenseCodesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseCodeRequest{
 // TODO: Fill request struct fields.
 // See
 https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#TestIamPermissionsLicenseCodeRequest.
}
resp,
err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
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```

```

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
 if err != nil {
 // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
 }
}

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```

```

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
// protoc-gen-go v1.35.2
// protoc v4.25.7
// source: google/cloud/discoveryengine/v1/user_license.proto

package discoveryenginepb

import (
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
 reflect
 "reflect"
 sync "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// License assignment state enumeration.
type UserLicense_LicenseAssignmentState int32

const (
 // Default value.
 UserLicense_LICENSE_ASSIGNMENT_STATE_UNSPECIFIED UserLicense_LicenseAssignmentState = 0
 // License assigned to the user.
 UserLicense_ASSIGNED UserLicense_LicenseAssignmentState = 1
 // No license assigned to the user.
 // Deprecated, translated to NO_LICENSE.
 UserLicense_UNASSIGNED UserLicense_LicenseAssignmentState = 2
 // No license assigned to the user.
 UserLicense_NO_LICENSE UserLicense_LicenseAssignmentState = 3
 // User attempted to login but no license assigned to the user.
 // This state is only used for no user first time login attempt
 // but cannot
 // get license assigned.
 // Users already logged in but cannot get license assigned will be assigned

```

```

// NO_LICENSE state(License could be unassigned by admin).
UserLicense_NO_LICENSE_ATTEMPTED_LOGIN UserLicense_LicenseAssignmentState = 4
)

// Enum value maps for UserLicense_LicenseAssignmentState.
var (
 UserLicense_LicenseAssignmentState_name = map[int32]string{
 0: "LICENSE_ASSIGNMENT_STATE_UNSPECIFIED",
 1: "ASSIGNED",
 2: "UNASSIGNED",
 3: "NO_LICENSE",
 4: "NO_LICENSE_ATTEMPTED_LOGIN",
 }
 UserLicense_LicenseAssignmentState_value = map[string]int32{
 "LICENSE_ASSIGNMENT_STATE_UNSPECIFIED": 0,
 "ASSIGNED": 1,
 "UNASSIGNED": 2,
 "NO_LICENSE": 3,
 "NO_LICENSE_ATTEMPTED_LOGIN": 4,
 }
)

func (x UserLicense_LicenseAssignmentState) Enum() *UserLicense_LicenseAssignmentState {
 p := new(UserLicense_LicenseAssignmentState)
 *p = x
 return p
}

func (x UserLicense_LicenseAssignmentState)
String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (UserLicense_LicenseAssignmentState) Descriptor() protoreflect.EnumDescriptor {
 return file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes[0].Descriptor()
}

func (UserLicense_LicenseAssignmentState) Type() protoreflect.EnumType {
 return &file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes[0]
}

func (x UserLicense_LicenseAssignmentState) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use UserLicense_LicenseAssignmentState.Descriptor instead.
func (UserLicense_LicenseAssignmentState) EnumDescriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_proto_rawDescGZIP(), []int{0, 0}
}

```

```

}

// User License information assigned by the admin.
type UserLicense struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 //
 // Required. Immutable. The user principal of the User, could be email address
 // or other principal identifier. This field is immutable. Admin assign
 // licenses based on the user principal.
 UserPrincipal string `protobuf:"bytes,1,opt,name=user_principal,json=userPrincipal,proto3"
 json:"user_principal,omitempty"`
 // Optional. The user profile.
 // We use user full name(First name + Last name) as user profile.
 UserProfile string `protobuf:"bytes,3,opt,name=user_profile,json=userProfile,proto3"
 json:"user_profile,omitempty"`
 // Output only. License assignment state of the user.
 // If the user is assigned with a license config, the user login will be
 // assigned with the license;
 // If the user's license assignment state is unassigned or unspecified, no
 // license config will be associated to the user;
 LicenseAssignmentState UserLicense_LicenseAssignmentState
 `protobuf:"varint,4,opt,name=license_assignment_state,json=licenseAssignmentState,proto3,enum=google.cloud.dis
 coverv1.UserLicense_LicenseAssignmentState"
 json:"license_assignment_state,omitempty"`
 // Optional. The full resource name of the Subscription(LicenseConfig)
 // assigned to the user.
 LicenseConfig string `protobuf:"bytes,5,opt,name=license_config,json=licenseConfig,proto3"
 json:"license_config,omitempty"`
 // Output only. User created timestamp.
 CreateTime *timestamppb.Timestamp `protobuf:"bytes,6,opt,name=create_time,json=createTime,proto3"
 json:"create_time,omitempty"`
 // Output only. User update timestamp.
 UpdateTime *timestamppb.Timestamp `protobuf:"bytes,7,opt,name=update_time,json=updateTime,proto3"
 json:"update_time,omitempty"`
 // Output only. User last logged in time.
 // If the user has not logged in yet, this field will be empty.
 LastLoginTime *timestamppb.Timestamp
 `protobuf:"bytes,8,opt,name=last_login_time,json=lastLoginTime,proto3" json:"last_login_time,omitempty"`
}

func (x *UserLicense) Reset() {
 *x = UserLicense{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes[0]
 ms

```



```

:= protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
ms.StoreMessageInfo(mi)
}

func (x *UserLicense) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UserLicense) ProtoMessage() {}

func (x *UserLicense) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes[0]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UserLicense.ProtoReflect.Descriptor instead.
func (*UserLicense) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_proto_rawDescGZIP(), []int{0}
}

func (x *UserLicense) GetUserPrincipal() string {
 if x != nil {
 return x.UserPrincipal
 }
 return ""
}

func (x *UserLicense) GetUserProfile() string {
 if x != nil {
 return x.UserProfile
 }
 return ""
}

func (x *UserLicense) GetLicenseAssignmentState()
 UserLicense_LicenseAssignmentState {
 if x != nil {
 return x.LicenseAssignmentState
 }
 return UserLicense_LICENSE_ASSIGNMENT_STATE_UNSPECIFIED
}

```

```

func (x *UserLicense) GetLicenseConfig() string {
 if x != nil {
 return x.LicenseConfig
 }
 return ""
}

func (x *UserLicense) GetCreateTime() *timestamppb.Timestamp {
 if x != nil {
 return x.CreateTime
 }
 return nil
}

func (x *UserLicense) GetUpdateTime() *timestamppb.Timestamp {
 if x != nil {
 return x.UpdateTime
 }
 return nil
}

func (x *UserLicense) GetLastLoginTime() *timestamppb.Timestamp {
 if x != nil {
 return x.LastLoginTime
 }
 return nil
}

var File_google_cloud_discoveryengine_v1_user_license_proto protoreflect.FileDescriptor

var file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc = []byte{
 0x0a, 0x32, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x64,
 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x76,
 0x31,
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```

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```

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0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDescOnce sync.Once
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData =
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc
)

func file_google_cloud_discoveryengine_v1_user_license_proto_rawDescGZIP() []byte {
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDescOnce.Do(func()
 {
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData =
 protoimpl.X.CompressGZIP(file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData)
 })
 return file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData
}

var file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes = make([]protoimpl.EnumInfo, 1)
var file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_cloud_discoveryengine_v1_user_license_proto_goTypes = []any{
 (UserLicense_LicenseAssignmentState)(0), // 0:
 google.cloud.discoveryengine.v1.UserLicense.LicenseAssignmentState
 (*UserLicense)(nil), // 1: google.cloud.discoveryengine.v1.UserLicense
 (*timestamppb.Timestamp)(nil), // 2: google.protobuf.Timestamp
}
var file_google_cloud_discoveryengine_v1_user_license_proto_depIdxs = []int32{
 0, // 0: google.cloud.discoveryengine.v1.UserLicense.license_assignment_state:type_name
 -> google.cloud.discoveryengine.v1.UserLicense.LicenseAssignmentState
 2, // 1: google.cloud.discoveryengine.v1.UserLicense.create_time:type_name -> google.protobuf.Timestamp
 2, // 2: google.cloud.discoveryengine.v1.UserLicense.update_time:type_name -> google.protobuf.Timestamp
 2, // 3: google.cloud.discoveryengine.v1.UserLicense.last_login_time:type_name -> google.protobuf.Timestamp
 4, // [4:4] is the sub-list for method output_type
 4, // [4:4] is the sub-list for method input_type
 4, // [4:4] is the sub-list for extension type_name

```

```

4, // [4:4] is the sub-list for extension extendee
0, // [0:4] is the sub-list for field type_name
}

func init() { file_google_cloud_discoveryengine_v1_user_license_proto_init() }
func file_google_cloud_discoveryengine_v1_user_license_proto_init() {
if File_google_cloud_discoveryengine_v1_user_license_proto != nil {
 return
}
type x struct{}
out := protoimpl.TypeBuilder{
 File: protoimpl.DescBuilder{
 GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
 RawDescriptor:
file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc,
 NumEnums: 1,
 NumMessages: 1,
 NumExtensions: 0,
 NumServices: 0,
 },
 GoTypes: file_google_cloud_discoveryengine_v1_user_license_proto_goTypes,
 DependencyIndexes: file_google_cloud_discoveryengine_v1_user_license_proto_depIdxs,
 EnumInfos: file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes,
 MessageInfos: file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes,
}.Build()
File_google_cloud_discoveryengine_v1_user_license_proto = out.File
file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc = nil
file_google_cloud_discoveryengine_v1_user_license_proto_goTypes = nil
file_google_cloud_discoveryengine_v1_user_license_proto_depIdxs = nil
}
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// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement_test

```

```

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.

```

```

// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := procurement.NewLicenseManagementClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &procurementpb.AssignRequest{
 // TODO: Fill request struct fields.
 // See
 https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
}
resp, err := c.Assign(ctx, req)
if err != nil {
 // TODO: Handle error.
}
//
// TODO: Use resp.
_ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
 // TODO: Fill request struct fields.
 // See
 https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicensedUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
 resp, err := it.Next()
 if err == iterator.Done {
 break

```

```

 }
 if err != nil {
 // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
}
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
 // TODO: Fill request struct fields.
 //
 See
 https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRequest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:

```



```

// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := procurement.NewLicenseManagementClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &procurementpb.UnassignRequest{
 // TODO: Fill request struct fields.
 // See
 https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
}
resp,
err := c.Unassign(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
 // TODO: Fill request struct fields.
 // See
 https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoolRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 //

```

TODO: Use resp.

```
_ = resp
}
```

```
func ExampleLicenseManagementClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp, err := c.GetOperation(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

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// Code generated by protoc-gen-go\_gapic. DO NOT EDIT.

//go:build go1.23

package compute\_test

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// Code generated by protoc-gen-go\_gapic. DO NOT EDIT.

package compute\_test

import (

"context"

```

compute "cloud.google.com/go/compute/apiv1beta"
computepb "cloud.google.com/go/compute/apiv1beta/compute_pb"
"google.golang.org/api/iterator"
)

```

```

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 //
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

```

```

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &compute.DeleteLicenseRequest{
 //
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute_pb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {

```

```

// TODO: Handle error.
}
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)

```

```

if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_Insert()
{
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
 // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded
 // as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
}

```

```

defer c.Close()

req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#ListLicensesRequest.
}
it := c.List(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
 break
 }
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _
 = it.Response.(*computepb.LicensesListResponse)
}

func ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
}

```

```

// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 //
 This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Update() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require
 modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.UpdateLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#UpdateLicenseRequest.
 }

```



```

op, err := c.Update(ctx, req)
if err != nil {
 // TODO: Handle error.
}

err = op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

```

```

// TODO: Use client.
_ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
 // TODO: Fill request
 struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }

```

```

resp,
err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 // generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

```

```

req := &procurementpb.EnumerateLicensedUsersRequest{
 // TODO: Fill request struct fields.
 // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
 dUsersRequest.
}
for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
 if err != nil {
 // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
}
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package discoveryengine

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 "cloud.google.com/go/longrunning"
 lroauto "cloud.google.com/go/longrunning/autogen"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax

```

```

"github.com/googleapis/gax-go/v2"
"google.golang.org/api/iterator"
"google.golang.org/api/option"
"google.golang.org/api/option/internaloption"
gtransport "google.golang.org/api/transport/grpc"
httptransport "google.golang.org/api/transport/http"
"google.golang.org/grpc"
"google.golang.org/grpc/codes"
"google.golang.org/protobuf/encoding/protojson"
"google.golang.org/protobuf/proto"
)

var newUserLicenseClientHook clientHook

// UserLicenseCallOptions contains the retry settings for each method of UserLicenseClient.
type UserLicenseCallOptions struct {
 ListUserLicenses []gax.CallOption
 BatchUpdateUserLicenses []gax.CallOption
 CancelOperation []gax.CallOption
 GetOperation []gax.CallOption
 ListOperations []gax.CallOption
}

func defaultUserLicenseGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("discoveryengine.googleapis.com:443"),
 internaloption.WithDefaultEndpointTemplate("discoveryengine.UNIVERSE_DOMAIN:443"),
 internaloption.WithDefaultMTLSEndpoint("discoveryengine.mtls.googleapis.com:443"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://discoveryengine.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()),
 internaloption.EnableJwtWithScope(),
 internaloption.EnableNewAuthLibrary(),
 option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
 grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
defaultUserLicenseCallOptions() *UserLicenseCallOptions {
 return &UserLicenseCallOptions{
 ListUserLicenses: []gax.CallOption{},
 BatchUpdateUserLicenses: []gax.CallOption{},
 CancelOperation: []gax.CallOption{
 gax.WithTimeout(30000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnCodes([]codes.Code{
 codes.Unavailable,

```

```

 }, gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 10000 * time.Millisecond,
 Multiplier:
1.30,
 })
}),
},
GetOperation: []gax.CallOption{
 gax.WithTimeout(30000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnCodes([]codes.Code{
 codes.Unavailable,
 }, gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 10000 * time.Millisecond,
 Multiplier: 1.30,
 })
 }),
},
ListOperations: []gax.CallOption{
 gax.WithTimeout(300000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnCodes([]codes.Code{
 codes.Unavailable,
 }, gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 30000 * time.Millisecond,
 Multiplier: 1.30,
 })
 }),
},
}
}

func defaultUserLicenseRESTCallOptions() *UserLicenseCallOptions {
return &UserLicenseCallOptions{
 ListUserLicenses: []gax.CallOption{},
 BatchUpdateUserLicenses: []gax.CallOption{},
 CancelOperation: []gax.CallOption{
 gax.WithTimeout(30000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer
 {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 10000 * time.Millisecond,
 Multiplier: 1.30,
 },
 },

```

```

 http.StatusServiceUnavailable)
)),
},
GetOperation: []gax.CallOption{
 gax.WithTimeout(30000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 10000 * time.Millisecond,
 Multiplier: 1.30,
 }),
 http.StatusServiceUnavailable)
)),
},
ListOperations: []gax.CallOption{
 gax.WithTimeout(300000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 30000 * time.Millisecond,
 Multiplier: 1.30,
 }),
 http.StatusServiceUnavailable)
)),
},
}
}

```

// internalUserLicenseClient is an interface that defines the methods available from Discovery Engine API.

type internalUserLicenseClient

interface {

Close() error

setGoogleClientInfo(...string)

Connection() \*grpc.ClientConn

ListUserLicenses(context.Context, \*discoveryenginepb.ListUserLicensesRequest, ...gax.CallOption)

\*UserLicenseIterator

BatchUpdateUserLicenses(context.Context, \*discoveryenginepb.BatchUpdateUserLicensesRequest, ...gax.CallOption) (\*BatchUpdateUserLicensesOperation, error)

BatchUpdateUserLicensesOperation(name string) \*BatchUpdateUserLicensesOperation

CancelOperation(context.Context, \*longrunningpb.CancelOperationRequest, ...gax.CallOption) error

GetOperation(context.Context, \*longrunningpb.GetOperationRequest, ...gax.CallOption)

(\*longrunningpb.Operation, error)

ListOperations(context.Context, \*longrunningpb.ListOperationsRequest, ...gax.CallOption) \*OperationIterator

}

// UserLicenseClient is a client for interacting with Discovery Engine API.

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.

```

//
// Service for managing
// User Licenses.
type UserLicenseClient struct {
// The internal transport-dependent client.
internalClient internalUserLicenseClient

// The call options for this service.
CallOptions *UserLicenseCallOptions

// LROClient is used internally to handle long-running operations.
// It is exposed so that its CallOptions can be modified if required.
// Users should not Close this client.
LROClient *lroauto.OperationsClient
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *UserLicenseClient) Close() error {
return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *UserLicenseClient) setGoogleClientInfo(keyval ...string) {
c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns
// a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *UserLicenseClient) Connection() *grpc.ClientConn {
return c.internalClient.Connection()
}

// ListUserLicenses lists the User Licenses.
func (c *UserLicenseClient) ListUserLicenses(ctx context.Context, req
*discoveryenginepb.ListUserLicensesRequest, opts ...gax.CallOption) *UserLicenseIterator {
return c.internalClient.ListUserLicenses(ctx, req, opts...)
}

// BatchUpdateUserLicenses updates the User License.
// This method is used for batch assign/unassign licenses to users.

```



```

func (c *UserLicenseClient) BatchUpdateUserLicenses(ctx context.Context, req
*discoveryenginepb.BatchUpdateUserLicensesRequest, opts ...gax.CallOption)
(*BatchUpdateUserLicensesOperation, error) {
 return c.internalClient.BatchUpdateUserLicenses(ctx, req, opts...)
}

// BatchUpdateUserLicensesOperation returns a new BatchUpdateUserLicensesOperation from a given name.
//
// The name must be that of a previously created BatchUpdateUserLicensesOperation, possibly from a different
// process.
func (c *UserLicenseClient) BatchUpdateUserLicensesOperation(name string)
*BatchUpdateUserLicensesOperation {
 return c.internalClient.BatchUpdateUserLicensesOperation(name)
}

// CancelOperation is a utility method from google.longrunning.Operations.
func (c *UserLicenseClient) CancelOperation(ctx context.Context, req *longrunningpb.CancelOperationRequest,
opts ...gax.CallOption) error {
 return c.internalClient.CancelOperation(ctx, req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *UserLicenseClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest, opts
...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// ListOperations is a utility method from google.longrunning.Operations.
func (c *UserLicenseClient) ListOperations(ctx context.Context,
req *longrunningpb.ListOperationsRequest, opts ...gax.CallOption) *OperationIterator {
 return c.internalClient.ListOperations(ctx, req, opts...)
}

// userLicenseGRPCClient is a client for interacting with Discovery Engine API over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
type userLicenseGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing UserLicenseClient
 CallOptions **UserLicenseCallOptions

 // The gRPC API client.
 userLicenseClient discoveryenginepb.UserLicenseServiceClient

 // LROClient is used internally to handle long-running operations.

```

```

// It is exposed so that its CallOptions can be modified if required.
// Users should not Close this client.
LROClient **lroauto.OperationsClient

operationsClient longrunningpb.OperationsClient

// The x-goog-* metadata
// to be sent with each request.
xGoogHeaders []string

logger *slog.Logger
}

// NewUserLicenseClient creates a new user license service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing User Licenses.
func NewUserLicenseClient(ctx context.Context, opts ...option.ClientOption) (*UserLicenseClient, error) {
 clientOpts := defaultUserLicenseGRPCClientOptions()
 if newUserLicenseClientHook != nil {
 hookOpts, err := newUserLicenseClientHook(ctx, clientHookParams{})
 if err != nil {
 return nil, err
 }
 clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
 return nil, err
 }
 client := UserLicenseClient{CallOptions: defaultUserLicenseCallOptions()}

 c := &userLicenseGRPCClient{
 connPool: connPool,
 userLicenseClient: discoveryenginepb.NewUserLicenseServiceClient(connPool),
 CallOptions: &client.CallOptions,
 logger: internaloption.GetLogger(opts),
 operationsClient: longrunningpb.NewOperationsClient(connPool),
 }
 c.setGoogleClientInfo()

 client.internalClient = c

 client.LROClient, err = lroauto.NewOperationsClient(ctx, gtransport.WithConnPool(connPool))
 if err != nil {
 // This error "should not happen", since we are just reusing old connection pool

```

```

// and never actually need to dial.
// If this does happen, we could leak connp. However, we cannot close conn:
// If the user invoked the constructor with option.WithGRPCConn,
// we would close a connection that's still in use.
// TODO: investigate error conditions.
return nil, err
}
c.LROClient = &client.LROClient
return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *userLicenseGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

//
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *userLicenseGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc", grpc.Version, "pb", protoVersion)
 c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *userLicenseGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
type userLicenseRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // LROClient is used internally

```

```

to handle long-running operations.
// It is exposed so that its CallOptions can be modified if required.
// Users should not Close this client.
LROClient **lroauto.OperationsClient

// The x-goog-* headers to be sent with each request.
xGoogHeaders []string

// Points back to the CallOptions field of the containing UserLicenseClient
CallOptions **UserLicenseCallOptions

logger *slog.Logger
}

// NewUserLicenseRESTClient creates a new user license service rest client.
//
// Service for managing User Licenses.
func NewUserLicenseRESTClient(ctx context.Context, opts ...option.ClientOption) (*UserLicenseClient, error) {
 clientOpts := append(defaultUserLicenseRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
 return nil, err
 }

 callOpts := defaultUserLicenseRESTCallOptions()
 c := &userLicenseRESTClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,
 logger: internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 lroOpts
 := []option.ClientOption{
 option.WithHTTPClient(httpClient),
 option.WithEndpoint(endpoint),
 }
 opClient, err := lroauto.NewOperationsRESTClient(ctx, lroOpts...)
 if err != nil {
 return nil, err
 }
 c.LROClient = &opClient

 return &UserLicenseClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultUserLicenseRESTClientOptions() []option.ClientOption {

```

```

return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://discoveryengine.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://discoveryengine.UNIVERSE_DOMAIN"),
 internaloption.WithDefaultMTLSEndpoint("https://discoveryengine.mtls.googleapis.com"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://discoveryengine.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()),
 internaloption.EnableNewAuthLibrary(),
}
}

// setGoogleClientInfo
// sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *userLicenseRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *userLicenseRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *userLicenseRESTClient) Connection() *grpc.ClientConn {
 return nil
}

func (c *userLicenseGRPCClient) ListUserLicenses(ctx context.Context, req
*discoveryenginepb.ListUserLicensesRequest,
opts ...gax.CallOption) *UserLicenseIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).ListUserLicenses[0:len((*c.CallOptions).ListUserLicenses):len((*c.CallOptions).ListUser
Licenses)], opts...)
 it := &UserLicenseIterator{ }

```

```

req = proto.Clone(req).(*discoveryenginepb.ListUserLicensesRequest)
it.InternalFetch = func(pageSize int, pageToken string) ([]*discoveryenginepb.UserLicense, string, error) {
 resp := &discoveryenginepb.ListUserLicensesResponse{}
 if pageToken != "" {
 req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
 req.PageSize = int32(pageSize)
 }
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx,
 c.userLicenseClient.ListUserLicenses, req, settings.GRPC, c.logger, "ListUserLicenses")
 return err
 }, opts...)
 if err != nil {
 return nil, "", err
 }

 it.Response = resp
 return resp.GetUserLicenses(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

func (c *userLicenseGRPCClient) BatchUpdateUserLicenses(ctx context.Context, req
 *discoveryenginepb.BatchUpdateUserLicensesRequest, opts ...gax.CallOption)
(*BatchUpdateUserLicensesOperation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders,
 hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)

```

```

 opts =
append((*c.CallOptions).BatchUpdateUserLicenses[0:len((*c.CallOptions).BatchUpdateUserLicenses):len((*c.CallOptions).BatchUpdateUserLicenses)], opts...)
var resp *longrunningpb.Operation
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.userLicenseClient.BatchUpdateUserLicenses, req, settings.GRPC, c.logger,
"BatchUpdateUserLicenses")
 return err
}, opts...)
if err != nil {
 return nil, err
}
return &BatchUpdateUserLicensesOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, resp),
}, nil
}

func (c *userLicenseGRPCClient) CancelOperation(ctx context.Context, req
*longrunningpb.CancelOperationRequest, opts ...gax.CallOption) error {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx,
hds...)
 opts =
append((*c.CallOptions).CancelOperation[0:len((*c.CallOptions).CancelOperation):len((*c.CallOptions).CancelOp
eration)], opts...)
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 _, err = executeRPC(ctx, c.operationsClient.CancelOperation, req, settings.GRPC, c.logger, "CancelOperation")
 return err
 }, opts...)
 return err
}

func (c *userLicenseGRPCClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context,

```

```

settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
 return err
}, opts...)
if err != nil {
 return nil, err
}
return resp, nil
}

func (c *userLicenseGRPCClient) ListOperations(ctx context.Context, req *longrunningpb.ListOperationsRequest,
opts ...gax.CallOption) *OperationIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).ListOperations[0:len((*c.CallOptions).ListOperations):len((*c.CallOptions).ListOperations
)], opts...)
 it := &OperationIterator{ }
 req = proto.Clone(req).(*longrunningpb.ListOperationsRequest)
 it.InternalFetch = func(pageSize int, pageToken string) (*longrunningpb.Operation, string, error) {
 resp := &longrunningpb.ListOperationsResponse{ }
 if pageToken !=
 "" {
 req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
 req.PageSize = int32(pageSize)
 }
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.operationsClient.ListOperations, req, settings.GRPC, c.logger, "ListOperations")
 return err
 }, opts...)
 if err != nil {
 return nil, "", err
 }

 it.Response = resp
 return resp.GetOperations(), resp.GetNextPageToken(), nil
 }
 fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {

```



```

 return "", err
}
it.items = append(it.items, items...)
return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// ListUserLicenses lists the
// User Licenses.
func (c *userLicenseRESTClient) ListUserLicenses(ctx context.Context, req
*discoveryenginepb.ListUserLicensesRequest, opts ...gax.CallOption) *UserLicenseIterator {
 it := &UserLicenseIterator{}
 req = proto.Clone(req).(*discoveryenginepb.ListUserLicensesRequest)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*discoveryenginepb.UserLicense, string, error) {
 resp := &discoveryenginepb.ListUserLicensesResponse{}
 if pageToken != "" {
 req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
 req.PageSize = int32(pageSize)
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v/userLicenses", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetFilter() != "" {
 params.Add("filter", fmt.Sprintf("%v",
req.GetFilter()))
 }
 if req.GetPageSize() != 0 {
 params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 }
}

```

```

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := append(c.xGoogHeaders, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "ListUserLicenses")
 if err != nil {
 return err
 }
 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, "", e
}
it.Response
= resp
return resp.GetUserLicenses(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it

```

```

}

// BatchUpdateUserLicenses updates the User License.
// This method is used for batch assign/unassign licenses to users.
func (c *userLicenseRESTClient) BatchUpdateUserLicenses(ctx context.Context, req
*discoveryenginepb.BatchUpdateUserLicensesRequest, opts ...gax.CallOption)
(*BatchUpdateUserLicensesOperation, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if
 err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:batchUpdateUserLicenses", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err
:= executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "BatchUpdateUserLicenses")
 if err != nil {
 return err

```

```

 }
 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}

override := fmt.Sprintf("/v1/%s", resp.GetName())
return &BatchUpdateUserLicensesOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, resp),
 pollPath: override,
}, nil
}

// CancelOperation is a utility method from google.longrunning.Operations.
func (c *userLicenseRESTClient) CancelOperation(ctx context.Context, req
*longrunningpb.CancelOperationRequest, opts ...gax.CallOption) error {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
 return err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:cancel", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery
 = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 return gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path

```

```

 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 _, err = executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "CancelOperation")
 return err
}, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *userLicenseRESTClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption)
(*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET",
baseUrl.String(), nil)
 if err != nil {
 return err
 }

```

```

httpReq = httpReq.WithContext(ctx)
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
if err != nil {
 return err
}

if err := unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// ListOperations is a utility method from google.longrunning.Operations.
func (c *userLicenseRESTClient) ListOperations(ctx context.Context, req *longrunningpb.ListOperationsRequest,
opts ...gax.CallOption) *OperationIterator {
 it := &OperationIterator{}
 req = proto.Clone(req).(*longrunningpb.ListOperationsRequest)
 unmarshalOptions := &protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*longrunningpb.Operation, string, error) {
 resp := &longrunningpb.ListOperationsResponse{}
 if pageToken != "" {
 req.PageToken =
 pageToken
 }
 if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
 req.PageSize = int32(pageSize)
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v/operations", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetFilter() != "" {
 params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 }
}

```

```

if req.GetPageSize() != 0 {
 params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
}
if req.GetPageToken() != "" {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := append(c.xGoogHeaders, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path
= settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "ListOperations")
 if err != nil {
 return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, "", e
}
it.Response = resp
return resp.GetOperations(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

```

```

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// BatchUpdateUserLicensesOperation returns a new
// BatchUpdateUserLicensesOperation from a given name.
// The name must be that of a previously created BatchUpdateUserLicensesOperation, possibly from a different
// process.
func (c *userLicenseGRPCClient) BatchUpdateUserLicensesOperation(name string)
*BatchUpdateUserLicensesOperation {
return &BatchUpdateUserLicensesOperation{
lro: longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
}
}

// BatchUpdateUserLicensesOperation returns a new BatchUpdateUserLicensesOperation from a given name.
// The name must be that of a previously created BatchUpdateUserLicensesOperation, possibly from a different
// process.
func (c *userLicenseRESTClient) BatchUpdateUserLicensesOperation(name string)
*BatchUpdateUserLicensesOperation {
override := fmt.Sprintf("/v1/%s", name)
return &BatchUpdateUserLicensesOperation{
lro: longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
pollPath: override,
}
}

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// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

```



```

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1beta/compute_pb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete []gax.CallOption
 Get []gax.CallOption
 GetIamPolicy []gax.CallOption
 Insert []gax.CallOption
 List []gax.CallOption
 SetIamPolicy []gax.CallOption
 TestIamPermissions []gax.CallOption
 Update []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
 Delete: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 },
 Get: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier:

```

```

1.30,
 },
 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
}),
},
GetIamPolicy: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier: 1.30,
 }),
 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
 }),
},
Insert: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
},
List: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier: 1.30,
 }),
 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
 }),
},
SetIamPolicy: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
},
TestIamPermissions: []gax.CallOption{
 gax.WithTimeout(600000
* time.Millisecond),
},
Update: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
},
}
}

```

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.  
type internalLicensesClient interface {

```

Close() error
setGoogleClientInfo(...string)
Connection() *grpc.ClientConn
Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
TestIamPermissions(context.Context,
*computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption) (*computepb.TestPermissionsResponse, error)
Update(context.Context, *computepb.UpdateLicenseRequest, ...gax.CallOption) (*Operation, error)
}

```

// LicensesClient is a client for interacting with Google Compute Engine API.

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.

//

// The Licenses API.

type LicensesClient struct {

// The internal transport-dependent client.

internalClient internalLicensesClient

// The call options for this service.

CallOptions \*LicensesCallOptions

}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when

// the client is no longer required.

func (c \*LicensesClient) Close() error {

return c.internalClient.Close()

}

// setGoogleClientInfo sets the name and version of the application in

// the `x-goog-api-client` header

passed on each request. Intended for

// use by Google-written clients.

func (c \*LicensesClient) setGoogleClientInfo(keyval ...string) {

c.internalClient.setGoogleClientInfo(keyval...)

}

// Connection returns a connection to the API service.

//

// Deprecated: Connections are now pooled so this method does not always

```

// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
// creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
// who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context,
 req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
// Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
// party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available
// in the specified project. This method does not get any licenses that belong to other projects, including licenses
// attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this
// method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This
// resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
// resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return

```

```

c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 return c.internalClient.Update(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type
licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
 return nil, err
 }

```

```

}

callOpts := defaultLicensesRESTCallOptions()
c := &licensesRESTClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,
 logger:
 internaloption.GetLogger(opts),
}
c.setGoogleClientInfo()

o := []option.ClientOption{
 option.WithHTTPClient(httpClient),
 option.WithEndpoint(endpoint),
}
opC, err := NewGlobalOperationsRESTClient(ctx, o...)
if err != nil {
 return nil, err
}
c.operationClient = opC

return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
 internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()),
 internaloption.EnableNewAuthLibrary(),
 }
}

// setGoogleClientInfo sets the name and version of the application
// in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

```

```

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
 return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for
// use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {

```

```

if settings.Path != "" {
 baseUrl.Path = settings.Path
}
httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
if err != nil {
 return err
}
httpReq = httpReq.WithContext(ctx)
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
if err != nil {
 return err
}

if err := unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
}
op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project: req.GetProject(),
 },
}
return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
// who are creating
// Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
 url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

```



```

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.License{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

```

```

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/getIamPolicy",
 req.GetProject(), req.GetResource())

 params := url.Values{}

```

```

if req != nil && req.OptionsRequestedPolicyVersion != nil {
 params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Policy{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error
{
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

```

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-

```

party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err
 := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq,
 err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
 return err
 }
 })
 if err != nil {
 return nil, err
 }
 return resp, nil
}

```

```

}

if err := unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project: req.GetProject(),
 },
}
return op, nil
}

```

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended

for use only by third-party partners who are creating Cloud Marketplace images.

```

func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unmarshalOptions := unmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
 resp := &computepb.LicensesListResponse{}
 if pageToken != "" {
 req.PageToken = proto.String(pageToken)
 }
 if pageSize > math.MaxInt32 {
 req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
 } else if pageSize != 0 {
 req.MaxResults = proto.Uint32(uint32(pageSize))
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}

```

```

if req != nil && req.Filter !=
nil {
 params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
}
if req != nil && req.MaxResults != nil {
 params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
}
if req != nil && req.OrderBy != nil {
 params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
}
if req != nil && req.PageToken != nil {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
}
if req != nil && req.ReturnPartialSuccess != nil {
 params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := append(c.xGoogHeaders, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return
 }
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
 if err != nil {
 return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, "", e
}
it.Response = resp
return resp.GetItems(), resp.GetNextPageToken(), nil

```

```

}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating
Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}

```

```

resp := &computepb.Policy{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
 if err != nil {
 return err
 }

 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
// intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient)
TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts
...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
 req.GetResource())

```

```

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).TestIamPermissions)],
opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.TestPermissionsResponse{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
if settings.Path != "" {
baseUrl.Path = settings.Path
}
httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
if err != nil {
return err
}
httpReq = httpReq.WithContext(ctx)
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
if err != nil {
return err
}

if err := unm.Unmarshal(buf, resp); err != nil {
return err
}

return nil
}, opts...)
if e != nil {
return nil, e
}
return resp, nil
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient)
Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
m := protojson.MarshalOptions{AllowPartial: true}
body := req.GetLicenseResource()
jsonReq, err := m.Marshal(body)

```



```

if err != nil {
 return nil, err
}

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

params := url.Values{}
if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}
if req != nil && req.UpdateMask != nil {
 params.Add("updateMask", fmt.Sprintf("%v", req.GetUpdateMask()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

hds = append(c.xGoogHeaders, hds...)
hds
= append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Update[0:len((*c.CallOptions).Update):len((*c.CallOptions).Update)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &compute.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Update")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {

```

```

 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project:
req.GetProject(),
 },
}
return op, nil
}
// Copyright 2025 Google LLC
//
// Licensed under the Apache License, Version 2.0 (the "License");
// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
// http://www.apache.org/licenses/LICENSE-2.0
//
// Unless required by applicable law or agreed to in writing, software
// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
// protoc-gen-go v1.35.2
// protoc v4.25.7
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 reflect "reflect"
 sync
 "sync"
)

```

```

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
 0: "GRANTEE_TYPE_UNSPECIFIED",
 1: "USER",
 2: "GROUP",
 3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
 "GRANTEE_TYPE_UNSPECIFIED": 0,
 "USER": 1,
 "GROUP": 2,
 "EVERYONE": 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protorelect.EnumNumber(x))
}

```

```

}

func (Permission_GrantType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GrantType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GrantType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GrantType.Descriptor instead.
func (Permission_GrantType) EnumDescriptor() ([]byte,
[]int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
 0: "ROLE_UNSPECIFIED",
 1: "OWNER",
 2: "WRITER",
 3: "READER",
 }
 Permission_Role_value = map[string]int32{
 "ROLE_UNSPECIFIED": 0,
 "OWNER": 1,
 "WRITER": 2,
 "READER": 3,
 }
)

```

```

)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
// you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache

```

unknownFields protoimpl.UnknownFields

```
// Output only. Identifier. The permission name. A unique name will be
// generated on create. Examples:
//
// tunedModels/{tuned_model}/permissions/{permission}
// corpora/{corpus}/permissions/{permission}
//
// Output only.
Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
// Optional. Immutable. The type of the grantee.
GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Permission_GranteeType,oneof"
json:"grantee_type,omitempty"`
// Optional. Immutable. The email address of the user of group which this
// permission refers. Field is not set when permission's grantee type is
// EVERYONE.
EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
// Required. The role granted by this permission.
Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}
```

```
func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}
```

```
func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}
```

```
func (*Permission) ProtoMessage() {}
```

```
func (x *Permission) ProtoReflect() protoreflect.Message
{
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 }
 return ms
}
```

```

}
return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
 return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
 return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
 return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
 return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,

```

0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,  
0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,  
0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,  
0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,  
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,  
0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,  
0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,  
0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,  
0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,  
0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,  
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,  
0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,  
0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,  
0x01, 0x01, 0x12,  
0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,  
0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,  
0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,  
0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,  
0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,  
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,  
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,  
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,  
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,  
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,  
0x54, 0x59,  
0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,  
0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,  
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,  
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,  
0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,  
0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,  
0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,  
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,  
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,  
0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,  
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,  
0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,  
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,  
0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,  
0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,  
0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,  
0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,  
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,  
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,  
0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,  
0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,  
0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,



```

0x6f, 0x6c, 0x65, 0x42,
0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
0x72,
0x6f, 0x74, 0x6f, 0x33,
}

```

```

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

```

```

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
 protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

```

```

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GrantType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GrantType
 (Permission_Role)(0), // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil), // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
 google.ai.generativelanguage.v1beta.Permission.GrantType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
 google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

```

```

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
{
if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
return
}
file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
type x struct{}
out := protoimpl.TypeBuilder{
File: protoimpl.DescBuilder{
GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
NumEnums: 2,
NumMessages: 1,
NumExtensions: 0,
NumServices: 0,
},
GoTypes: file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
EnumInfos: file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
MessageInfos: file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1beta_permission_proto = out.File
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
= nil
file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
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// limitations under the License.
// Code generated by protoc-gen-go_gapic. DO NOT EDIT.
//go:build go1.23
package discoveryengine_test

```

```

import (
 "context"

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
)

func ExampleUserLicenseClient_ListUserLicenses_all() {
 ctx := context.Background()
 //
 This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &discoveryenginepb.ListUserLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#ListUserLicensesRequest.
 }
 for resp, err := range c.ListUserLicenses(ctx, req).All() {
 if err != nil {
 // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
 }
}

func ExampleUserLicenseClient_ListOperations_all() {
 ctx := context.Background()
 //
 This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
}

```

```
defer c.Close()
```

```
req := &longrunningpb.ListOperationsRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#ListOperationsRequest.
}
for resp, err := range c.ListOperations(ctx, req).All() {
 if err != nil {
 // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
}
}
```

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// Code generated by protoc-gen-go. DO NOT EDIT.

// versions:



```

// protoc-gen-go v1.35.2
// protoc v4.25.7
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status "google.golang.org/grpc/status"
 protoreflect
 "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
 reflect "reflect"
 sync "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=

```

```

&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
 return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
 return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
 return x.AutoAssignmentType
 }
}

```

```

}
return nil
}

type isAssignmentProtocol_AssignmentType interface {
isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_struct {
// Allow manual assignments triggered by administrative operations only.
ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
AssignmentProtocol_AutoAssignmentType_struct {
// Allow automatic assignments triggered by data plane operations.
AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
state protoimpl.MessageState
sizeCache protoimpl.SizeCache
unknownFields protoimpl.UnknownFields

// Identifier. Format:
// `billingAccounts/{billing_account}/orders/{order}/licensePool`
Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
// Required. Assignment protocol for the license pool.
LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
json:"license_assignment_protocol,omitempty"`
// Output only. Licenses count that are available to be assigned.
AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
// Output only. Total number of licenses in the pool.
TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {

```

```

*x = LicensePool{}
mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
if
x != nil {
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
if ms.LoadMessageInfo() == nil {
ms.StoreMessageInfo(mi)
}
return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
if x != nil {
return x.Name
}
return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
if x != nil {
return x.LicenseAssignmentProtocol
}
return nil
}

```

```

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
 return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
 return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
// license pool.
type GetLicensePoolRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if
 ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)

```

```

 }
 return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
 return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
 json:"license_pool,omitempty"`
 //
 // Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
 json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {

```

```

return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
// instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
 return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
 return x.UpdateMask
 }
 return nil
}

// Request message for
//
// [LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign].
type AssignRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

```

```

// Required. License pool name.
Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
// Required. Username.
// Format: `name@domain.com`.
Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
(x *AssignRequest) Reset() {
*x = AssignRequest{}
mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
if x != nil {
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
if ms.LoadMessageInfo() == nil {
ms.StoreMessageInfo(mi)
}
return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
string {
if x != nil {
return x.Parent
}
}

```



```

return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
 return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign].
type AssignResponse struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

```

```

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign].
type UnassignRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
{
 *x = UnassignRequest{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
}

```

```

return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
 return
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
 return x.Usernames
 }
 return nil
}

// Response message for
//
// [LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign].
type UnassignResponse struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

```

```

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
 ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

```

```

}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo()
 == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
 return x.Parent
 }
 return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
 return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
 return x.PageToken
 }
 return ""
}

```

```

}

// A licensed user.
type LicensedUser struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 // Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
 json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
 `protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
 json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
}

```

```

return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
 return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
 return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
 return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
// [LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
// ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
 json:"licensed_users,omitempty"`

 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
 json:"next_page_token,omitempty"`
}

```

```

}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
(x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
 return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
 return x.NextPageToken
 }
}

```



```

return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated:
// Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {

```

```

state protoimpl.MessageState
sizeCache protoimpl.SizeCache
unknownFields protoimpl.UnknownFields

// Optional. The time to live for an inactive license. After this time has
// passed, the license will be automatically unassigned from the user. Must
// be at least 7 days, if set. If unset, the license will never expire.
InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {

```

```

return x.InactiveLicenseTtl
}
return nil
}

```

```

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

```

```

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{

```

```

0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
0x6f,
0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f,
0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f,
0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x1a, 0x1e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x62, 0x75, 0x66, 0x2f, 0x64,
0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x2e, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70,
0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e,
0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc3, 0x03, 0x0a, 0x12, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,
0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x8e, 0x01, 0x0a,
0x16, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,
0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x56, 0x2e,
0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d,
0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73,
0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70,
0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,
0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c,
0x2e, 0x4d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,
0x74, 0x54, 0x79, 0x70, 0x65, 0x48, 0x00, 0x52, 0x14, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41,
0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x88, 0x01,
0x0a, 0x14, 0x61, 0x75, 0x74, 0x6f, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,
0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x03, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x54, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,

```

0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,  
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,  
0x73,  
0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x2e,  
0x41, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79,  
0x70, 0x65, 0x48, 0x00, 0x52, 0x12, 0x61, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,  
0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x1a, 0x16, 0x0a, 0x14, 0x4d, 0x61, 0x6e, 0x75,  
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0x1a, 0x66, 0x0a, 0x12, 0x41, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,  
0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x50, 0x0a, 0x14, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69,  
0x76, 0x65, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x74, 0x74, 0x6c, 0x18, 0x01,  
0x20, 0x01, 0x28, 0x0b, 0x32, 0x19, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x70, 0x72,  
0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2e, 0x44, 0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x42,  
0x03, 0xe0, 0x41, 0x01,  
0x52, 0x12, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69, 0x76, 0x65, 0x4c, 0x69,  
0x63, 0x65, 0x6e, 0x73, 0x65, 0x54, 0x74, 0x6c, 0x42, 0x11, 0x0a, 0x0f, 0x61, 0x73, 0x73, 0x69,  
0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x22, 0xbe, 0x03, 0x0a, 0x0b,  
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0x61, 0x6d, 0x65, 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,  
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0x74, 0x65, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x82, 0xd3, 0xe4, 0x93, 0x02, 0x4e, 0x3a, 0x0c, 0x6c,  
0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x70, 0x6f, 0x6f, 0x6c, 0x32, 0x3e, 0x2f, 0x76, 0x31,  
0x2f, 0x7b, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x70, 0x6f, 0x6f, 0x6c, 0x2e, 0x6e,

0x61, 0x6d, 0x65, 0x3d, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75,  
0x6e, 0x74, 0x73, 0x2f, 0x2a, 0x2f, 0x6f, 0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c,  
0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x12, 0xdf, 0x01, 0x0a, 0x06,  
0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0x3c, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,  
0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63,  
0x6f,  
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0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x52, 0x65, 0x71,  
0x75, 0x65, 0x73, 0x74, 0x1a, 0x3d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c,  
0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e,  
0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e,  
0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x52, 0x65, 0x73, 0x70, 0x6f,  
0x6e, 0x73, 0x65, 0x22, 0x58, 0xda, 0x41, 0x10, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x2c, 0x75,  
0x73, 0x65, 0x72, 0x6e, 0x61, 0x6d, 0x65, 0x73, 0x82, 0xd3, 0xe4, 0x93, 0x02, 0x3f, 0x3a, 0x01,  
0x2a, 0x22, 0x3a, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d, 0x62,  
0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73, 0x2f, 0x2a,  
0x2f, 0x6f, 0x72, 0x64,  
0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73,  
0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0xe7, 0x01,  
0x0a, 0x08, 0x55, 0x6e, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0x3e, 0x2e, 0x67, 0x6f, 0x6f,  
0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72,  
0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63,  
0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x55, 0x6e, 0x61, 0x73, 0x73,  
0x69, 0x67, 0x6e, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73, 0x74, 0x1a, 0x3f, 0x2e, 0x67, 0x6f, 0x6f,  
0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72,  
0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63,  
0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x55, 0x6e, 0x61, 0x73, 0x73,  
0x69, 0x67, 0x6e, 0x52, 0x65, 0x73, 0x70, 0x6f, 0x6e,  
0x73, 0x65, 0x22, 0x5a, 0xda, 0x41, 0x10,  
0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x2c, 0x75, 0x73, 0x65, 0x72, 0x6e, 0x61, 0x6d, 0x65, 0x73,  
0x82, 0xd3, 0xe4, 0x93, 0x02, 0x41, 0x3a, 0x01, 0x2a, 0x22, 0x3c, 0x2f, 0x76, 0x31, 0x2f, 0x7b,  
0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63,  
0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73, 0x2f, 0x2a, 0x2f, 0x6f, 0x72, 0x64, 0x65, 0x72, 0x73, 0x2f,  
0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x75,  
0x6e, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0x92, 0x02, 0x0a, 0x16, 0x45, 0x6e, 0x75, 0x6d,  
0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65,  
0x72, 0x73, 0x12, 0x4c, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75,  
0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75,  
0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e,  
0x74, 0x2e,  
0x76, 0x31, 0x2e, 0x45, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65,  
0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73, 0x74,  
0x1a, 0x4d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e,  
0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65,  
0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31,  
0x2e, 0x45, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73,  
0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x73, 0x70, 0x6f, 0x6e, 0x73, 0x65, 0x22,  
0x5b, 0xda, 0x41, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x82, 0xd3, 0xe4, 0x93, 0x02, 0x4c,

```

0x12, 0x4a, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d, 0x62, 0x69,
0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73, 0x2f, 0x2a, 0x2f,
0x6f, 0x72, 0x64,
0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,
0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x65, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c,
0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x1a, 0x63, 0xca, 0x41,
0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x63, 0x6f,
0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e,
0x74, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
0xd2, 0x41, 0x2e, 0x68, 0x74, 0x74, 0x70, 0x73, 0x3a, 0x2f, 0x2f, 0x77, 0x77, 0x77, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x61, 0x75,
0x74, 0x68, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2d, 0x70, 0x6c, 0x61, 0x74, 0x66, 0x6f, 0x72,
0x6d, 0x42, 0xbe, 0x02, 0x0a, 0x31, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65,
0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e,
0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65,
0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x42, 0x1d, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,
0x4d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x65, 0x72, 0x76, 0x69, 0x63,
0x65, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x53, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e,
0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x63, 0x6f,
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0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70, 0x62, 0xaa, 0x02, 0x2d,
0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x2e,
0x43, 0x6f, 0x6d,
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0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x56, 0x31, 0xca, 0x02, 0x2d,
0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x43, 0x6f, 0x6d,
0x6d, 0x65, 0x72, 0x63, 0x65, 0x5c, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x5c, 0x50,
0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x5c, 0x56, 0x31, 0xea, 0x02, 0x32,
0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a, 0x3a, 0x43,
0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x3a, 0x3a, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65,
0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x3a, 0x3a,
0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
= file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f

```



```

unc() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
 protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
 // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil), // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil), // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil), // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil), // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil), // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil), // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil), // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil), // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
 // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil), // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil), // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil), // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil), // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil), // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
-> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0, // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1, // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
}

```

```

13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
-> google.protobuf.Timestamp
9, // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
2, // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
3, // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
4, // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
6, // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
-> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
8, // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_ty
pe -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
1, // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
1, // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
5, // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
7, // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
pe
-> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
14, // [14:19] is the sub-list for method output_type
9, // [9:14] is the sub-list for method input_type
9, // [9:9] is the sub-list for extension type_name
9, // [9:9] is the sub-list for extension extendee
0, // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}

```

```

func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
 return
 }
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
 Wrappers = []any{
 (*AssignmentProtocol_ManualAssignmentType_)(nil),
 (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
 File:
 protoimpl.DescBuilder{
 GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
 RawDescriptor:
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
 NumEnums: 0,
 NumMessages: 13,
 NumExtensions: 0,
 NumServices: 1,
 },
 GoTypes:
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
 DependencyIndexes:
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
 MessageInfos:
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {

```

```

// Gets the license pool.
GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
// Updates the license pool if one exists for this Order.
UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
// Assigns a license to a user.
Assign(ctx context.Context,
in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
// Unassigns a license from a user.
Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
// Enumerates all users assigned a license.
EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
out := new(LicensePool)
err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
if err != nil {
return nil, err
}
return out, nil
}

func
(c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest,
opts ...grpc.CallOption) (*LicensePool, error) {
out := new(LicensePool)
err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
if err != nil {
return nil, err
}
return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)

```

```

(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

```

```

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
in, out, opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

```

```

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

```

// LicenseManagementServiceServer is the server API for LicenseManagementService service.

type LicenseManagementServiceServer interface {

// Gets the license pool.

GetLicensePool(context.Context, \*GetLicensePoolRequest) (\*LicensePool, error)

// Updates the license pool if one exists for this Order.

UpdateLicensePool(context.Context, \*UpdateLicensePoolRequest) (\*LicensePool, error)

// Assigns a license to a user.

Assign(context.Context, \*AssignRequest) (\*AssignResponse,
error)

// Unassigns a license from a user.

Unassign(context.Context, \*UnassignRequest) (\*UnassignResponse, error)

// Enumerates all users assigned a license.

EnumerateLicensedUsers(context.Context, \*EnumerateLicensedUsersRequest)

(\*EnumerateLicensedUsersResponse, error)

}

```

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
(*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in); err != nil
 {
 return nil, err
 }
 if interceptor == nil {
 return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: "/google.cloud.commerce.consumer.prourement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }

```

```

return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
in := new(UpdateLicensePoolRequest)
if err := dec(in); err != nil {
return nil, err
}
if interceptor == nil {
return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
}
info := &grpc.UnaryServerInfo{
Server: srv,
FullMethod: "/google.cloud.commerce.consumer.prourement.v1.LicenseManagementService/UpdateLicensePool",
}
handler
:= func(ctx context.Context, req interface{}) (interface{}, error) {
return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
}
return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
in := new(AssignRequest)
if err := dec(in); err != nil {
return nil, err
}
if interceptor == nil {
return srv.(LicenseManagementServiceServer).Assign(ctx, in)
}
info := &grpc.UnaryServerInfo{
Server: srv,
FullMethod: "/google.cloud.commerce.consumer.prourement.v1.LicenseManagementService/Assign",
}
handler := func(ctx context.Context, req interface{}) (interface{}, error) {
return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
}
return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
in := new(UnassignRequest)
if err := dec(in); err != nil {
return nil, err
}

```

```

}
if interceptor == nil {
 return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
}
info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
}
handler := func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
}
return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
 return nil, err
 }
 if interceptor
 == nil {
 return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
 {
 MethodName: "GetLicensePool",
 Handler: _LicenseManagementService_GetLicensePool_Handler,
 },
 {
 MethodName: "UpdateLicensePool",
 Handler: _LicenseManagementService_UpdateLicensePool_Handler,
 },
 },
}

```



```

{
 MethodName: "Assign",
 Handler: _LicenseManagementService_Assign_Handler,
},
{
 MethodName:
"Unassign",
 Handler: _LicenseManagementService_Unassign_Handler,
},
{
 MethodName: "EnumerateLicensedUsers",
 Handler: _LicenseManagementService_EnumerateLicensedUsers_Handler,
},
},
Streams: []grpc.StreamDesc{},
Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

// [START discoveryengine_v1_generated_UserLicenseService_BatchUpdateUserLicenses_sync]

package main

import (
 "context"

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
)

func main() {
 ctx := context.Background()
 // This snippet has been automatically generated

```

and should be regarded as a code template only.

// It will require modifications to work:

// - It may require correct/in-range values for request initialization.

// - It may require specifying regional endpoints when creating the service client as shown in:

// [https://pkg.go.dev/cloud.google.com/go#hdr-Client\\_Options](https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options)

c, err := discoveryengine.NewUserLicenseClient(ctx)

if err != nil {

    // TODO: Handle error.

}

defer c.Close()

req := &discoveryenginepb.BatchUpdateUserLicensesRequest{

    // TODO: Fill request struct fields.

    // See

<https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#BatchUpdateUserLicensesRequest>.

}

op, err := c.BatchUpdateUserLicenses(ctx, req)

if err != nil {

    // TODO: Handle error.

}

resp, err := op.Wait(ctx)

if err != nil {

    // TODO: Handle error.

}

// TODO: Use resp.

\_ = resp

}

// [END discoveryengine\_v1\_generated\_UserLicenseService\_BatchUpdateUserLicenses\_sync]

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// Code generated by protoc-gen-go\_gapic. DO NOT EDIT.

package compute\_test

```

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
 //
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
}

```

```

}

err = op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }

 resp,
 err := c.Get(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{

```

```

// TODO: Fill request struct fields.
// See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#GetIamPolicyLicenseRequest.
}
resp, err := c.GetIamPolicy(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_Insert()
{
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &compute.InsertLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
 // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 // only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options

```

```

c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#ListLicensesRequest.
}
it := c.List(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
 break
 }
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*computepb.LicensesListResponse)
}
}

func
ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#SetIamPolicyLicenseRequest.
 }

```

```

resp, err := c.SetIamPolicy(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &compute.TestIamPermissionsLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Update() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may
 require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

```

```

req := &computepb.UpdateLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#UpdateLicenseRequest.
}
op, err := c.Update(ctx, req)
if err != nil {
 // TODO: Handle error.
}

err = op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
}

```

# 1.92 prometheus-common 0.64.0

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# 1.93 googlecloudgocomputemetadata 0.7.0

## 1.93.1 Available under license :

```
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

// [START discoveryengine_v1_generated_UserLicenseService_ListUserLicenses_sync]

package main

import (
 "context"

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 "google.golang.org/api/iterator"
)

func main() {
 ctx := context.Background()
 // This snippet
 has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &discoveryenginepb.ListUserLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#ListUserLicensesRequest.
 }
 it := c.ListUserLicenses(ctx, req)
```

```

for {
 resp, err := it.Next()
 if err == iterator.Done {
 break
 }
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove
 this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*discoveryenginepb.ListUserLicensesResponse)
}
}

// [END discoveryengine_v1_generated_UserLicenseService_ListUserLicenses_sync]
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"

```

```

procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
gax "github.com/googleapis/gax-go/v2"
"google.golang.org/api/iterator"
"google.golang.org/api/option"
"google.golang.org/api/option/internaloption"
gtransport
"google.golang.org/api/transport/grpc"
httptransport "google.golang.org/api/transport/http"
"google.golang.org/grpc"
"google.golang.org/protobuf/encoding/protojson"
"google.golang.org/protobuf/proto"
)

var newLicenseManagementClientHook clientHook

// LicenseManagementCallOptions contains the retry settings for each method of LicenseManagementClient.
type LicenseManagementCallOptions struct {
 GetLicensePool []gax.CallOption
 UpdateLicensePool []gax.CallOption
 Assign []gax.CallOption
 Unassign []gax.CallOption
 EnumerateLicensedUsers []gax.CallOption
 GetOperation []gax.CallOption
}

func defaultLicenseManagementGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("cloudcommerceconsumerprocurement.googleapis.com:443"),
 internaloption.WithDefaultEndpointTemplate("cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN:443"),
 ,
 internaloption.WithDefaultMTLSEndpoint("cloudcommerceconsumerprocurement.mtls.googleapis.com:443"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()),
 internaloption.EnableJwtWithScope(),
 internaloption.EnableNewAuthLibrary(),
 option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
 grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
defaultLicenseManagementCallOptions() *LicenseManagementCallOptions {
 return &LicenseManagementCallOptions{
 GetLicensePool: []gax.CallOption{},
 UpdateLicensePool: []gax.CallOption{},
 Assign: []gax.CallOption{},
 }
}

```

```

 Unassign: []gax.CallOption{},
 EnumerateLicensedUsers: []gax.CallOption{},
 GetOperation: []gax.CallOption{},
}
}

func defaultLicenseManagementRESTCallOptions() *LicenseManagementCallOptions {
 return
 &LicenseManagementCallOptions{
 GetLicensePool: []gax.CallOption{},
 UpdateLicensePool: []gax.CallOption{},
 Assign: []gax.CallOption{},
 Unassign: []gax.CallOption{},
 EnumerateLicensedUsers: []gax.CallOption{},
 GetOperation: []gax.CallOption{},
 }
}

// internalLicenseManagementClient is an interface that defines the methods available from Cloud Commerce
// Consumer Procurement API.
type internalLicenseManagementClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 GetLicensePool(context.Context, *procurementpb.GetLicensePoolRequest, ...gax.CallOption)
 (*procurementpb.LicensePool, error)
 UpdateLicensePool(context.Context, *procurementpb.UpdateLicensePoolRequest, ...gax.CallOption)
 (*procurementpb.LicensePool, error)
 Assign(context.Context, *procurementpb.AssignRequest, ...gax.CallOption) (*procurementpb.AssignResponse,
 error)
 Unassign(context.Context, *procurementpb.UnassignRequest,
 ...gax.CallOption) (*procurementpb.UnassignResponse, error)
 EnumerateLicensedUsers(context.Context, *procurementpb.EnumerateLicensedUsersRequest, ...gax.CallOption)
 *LicensedUserIterator
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
 (*longrunningpb.Operation, error)
}

// LicenseManagementClient is a client for interacting with Cloud Commerce Consumer Procurement API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
//
// Service for managing licenses.
type LicenseManagementClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseManagementClient

 // The call options for this service.

```



```

CallOptions *LicenseManagementCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseManagementClient)
Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseManagementClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseManagementClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// GetLicensePool gets the license pool.
func (c *LicenseManagementClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 return c.internalClient.GetLicensePool(ctx, req, opts...)
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *LicenseManagementClient)
UpdateLicensePool(ctx context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 return c.internalClient.UpdateLicensePool(ctx, req, opts...)
}

// Assign assigns a license to a user.
func (c *LicenseManagementClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 return c.internalClient.Assign(ctx, req, opts...)
}

// Unassign unassigns a license from a user.
func (c *LicenseManagementClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest, opts

```

```

...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 return c.internalClient.Unassign(ctx, req, opts...)
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *LicenseManagementClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 return c.internalClient.EnumerateLicensedUsers(ctx,
 req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *LicenseManagementClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
 opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// licenseManagementGRPCClient is a client for interacting with Cloud Commerce Consumer Procurement API
// over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
type licenseManagementGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 // The gRPC API client.
 licenseManagementClient procurementpb.LicenseManagementServiceClient

 operationsClient longrunningpb.OperationsClient

 //
 // The x-goog-* metadata to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

// NewLicenseManagementClient creates a new license management service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing licenses.
func NewLicenseManagementClient(ctx context.Context, opts ...option.ClientOption) (*LicenseManagementClient,
 error) {
 clientOpts := defaultLicenseManagementGRPCClientOptions()

```

```

if newLicenseManagementClientHook != nil {
 hookOpts, err := newLicenseManagementClientHook(ctx, clientHookParams{})
 if err != nil {
 return nil, err
 }
 clientOpts = append(clientOpts, hookOpts...)
}

connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
if err != nil {
 return nil, err
}
client := LicenseManagementClient{CallOptions: defaultLicenseManagementCallOptions()}

c := &licenseManagementGRPCClient{
 connPool:
 connPool,
 licenseManagementClient: procurementpb.NewLicenseManagementServiceClient(connPool),
 CallOptions: &client.CallOptions,
 logger: internaloption.GetLogger(opts),
 operationsClient: longrunningpb.NewOperationsClient(connPool),
}
c.setGoogleClientInfo()

client.internalClient = c

return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *licenseManagementGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gpic", getVersionClient(), "gax", gax.Version, "grpc",
 grpc.Version, "pb", protoVersion)
 c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

```

```

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
type licenseManagementRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 logger *slog.Logger
}

// NewLicenseManagementRESTClient creates a new license management service rest client.
//
// Service for managing licenses.
func NewLicenseManagementRESTClient(ctx context.Context,
 opts ...option.ClientOption) (*LicenseManagementClient, error) {
 clientOpts := append(defaultLicenseManagementRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
 return nil, err
 }

 callOpts := defaultLicenseManagementRESTCallOptions()
 c := &licenseManagementRESTClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,
 logger: internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseManagementClient{internalClient: c, CallOptions: callOpts}, nil
}

```

```

func defaultLicenseManagementRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://cloudcommerceconsumerprocurement.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN"),
 internaloption.WithDefaultMTLSEndpoint("https://cloudcommerceconsumerprocurement.mtls.googleapis.com"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()),
 internaloption.EnableNewAuthLibrary(),
 }
}

//
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient
 = nil
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseManagementRESTClient) Connection() *grpc.ClientConn {
 return nil
}

func (c *licenseManagementGRPCClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
 append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP

```

```

ool)], opts...)
var resp *procurementpb.LicensePool
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.licenseManagementClient.GetLicensePool, req, settings.GRPC, c.logger,
"GetLicensePool")
 return err
},
opts...)
if err != nil {
 return nil, err
}
return resp, nil
}

func (c *licenseManagementGRPCClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.licenseManagementClient.UpdateLicensePool, req, settings.GRPC, c.logger,
"UpdateLicensePool")
 return err
 }, opts...)
 if err != nil {
 return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient)
Assign(ctx context.Context, req *procurementpb.AssignRequest, opts ...gax.CallOption)
(*procurementpb.AssignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 var resp *procurementpb.AssignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {

```

```

var err error
resp, err = executeRPC(ctx, c.licenseManagementClient.Assign, req, settings.GRPC, c.logger, "Assign")
return err
}, opts...)
if err != nil {
return nil, err
}
return resp, nil
}

func (c *licenseManagementGRPCClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
hds := []string{"x-goog-request-params",
fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders, hds...)
ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
var resp *procurementpb.UnassignResponse
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
var err error
resp, err = executeRPC(ctx, c.licenseManagementClient.Unassign, req, settings.GRPC, c.logger, "Unassign")
return err
}, opts...)
if err != nil {
return nil, err
}
return resp, nil
}

func (c *licenseManagementGRPCClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders, hds...)
ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
opts
=
append((*c.CallOptions).EnumerateLicensedUsers[0:len((*c.CallOptions).EnumerateLicensedUsers):len((*c.CallOp
tions).EnumerateLicensedUsers)], opts...)
it := &LicensedUserIterator{}
req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
resp := &procurementpb.EnumerateLicensedUsersResponse{}
if pageToken != "" {
req.PageToken = pageToken
}
if pageSize > math.MaxInt32 {

```

```

 req.PageSize = math.MaxInt32
} else if pageSize != 0 {
 req.PageSize = int32(pageSize)
}
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.licenseManagementClient.EnumerateLicensedUsers, req, settings.GRPC, c.logger,
"EnumerateLicensedUsers")
 return err
}, opts...)
if err != nil {
 return nil, "", err
}

it.Response = resp
return resp.GetLicensedUsers(), resp.GetNextPageToken(),
nil
}
fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

func (c *licenseManagementGRPCClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx,
func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")

```



```

 return err
}, opts...)
if err != nil {
 return nil, err
}
return resp, nil
}

// GetLicensePool gets the license pool.
func (c *licenseManagementRESTClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx,
 hds...)
 opts =
 append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLicensePool")
 if err != nil {
 return err
 }
 })
 if e != nil {
 return nil, e
 }
 return resp, nil
}

```

```

 }

 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *licenseManagementRESTClient) UpdateLicensePool(ctx
context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetLicensePool()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetLicensePool().GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetUpdateMask() != nil {
 field, err := protojson.Marshal(req.GetUpdateMask())
 if err != nil {
 return nil, err
 }
 params.Add("updateMask", string(field[1:len(field)-1]))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)

```

```

hds = append(hds,
"Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).UpdateLicensePool)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &procurementpb.LicensePool{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateLicensePool")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

```

// Assign assigns a license to a user.

```

func
(c *licenseManagementRESTClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
 return nil, err
 }

```

```

 baseUrl, err := url.Parse(c.endpoint)

```

```

 if err != nil {

```

```

return nil, err
}
baseUrl.Path += fmt.Sprintf("/v1/%v:assign", req.GetParent())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial:
true, DiscardUnknown: true}
resp := &procurementpb.AssignResponse{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
if settings.Path != "" {
baseUrl.Path = settings.Path
}
httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
if err != nil {
return err
}
httpReq = httpReq.WithContext(ctx)
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Assign")
if err != nil {
return err
}

if err := unm.Unmarshal(buf, resp); err != nil {
return err
}

return nil
}, opts...)
if e != nil {
return nil, e
}
return resp, nil
}

// Unassign unassigns a license from a user.

```

```

func (c *licenseManagementRESTClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err :=
 m.Marshal(req)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:unassign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.UnassignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq,
 err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Unassign")
 if err != nil {
 return err
 }

 if err := unmarshalOptions.Unmarshal(buf, resp); err != nil {
 return err
 }
 })
 if err != nil {
 return nil, err
 }
 return resp, nil
}

```

```

 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *licenseManagementRESTClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
 resp := &procurementpb.EnumerateLicensedUsersResponse{}
 if
 pageToken != "" {
 req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
 req.PageSize = int32(pageSize)
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:enumerateLicensedUsers", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetPageSize() != 0 {
 params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {

```

```

 if settings.Path != "" {
 baseUrl.Path
 }
 = settings.Path
}
httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
if err != nil {
 return err
}
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "EnumerateLicensedUsers")
if err != nil {
 return err
}
if err := unm.Unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, "", e
}
it.Response = resp
return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// GetOperation is a utility method from
google.longrunning.Operations.
func (c *licenseManagementRESTClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)

```

```

if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &longrunningpb.Operation{}
e := gax.Invoke(ctx,
func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil

```



```

}
// Copyright 2025 Google LLC
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// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete []gax.CallOption
 Get []gax.CallOption
 GetIamPolicy []gax.CallOption

```

```

Insert []gax.CallOption
List []gax.CallOption
SetIamPolicy []gax.CallOption
TestIamPermissions []gax.CallOption
Update []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
return &LicensesCallOptions{
Delete: []gax.CallOption{
gax.WithTimeout(600000 * time.Millisecond),
},
Get: []gax.CallOption{
gax.WithTimeout(600000 * time.Millisecond),
gax.WithRetry(func() gax.Retryer {
return gax.OnHTTPCodes(gax.Backoff{
Initial: 100 * time.Millisecond,
Max: 60000 * time.Millisecond,
Multiplier:
1.30,
},
http.StatusGatewayTimeout,
http.StatusServiceUnavailable)
}),
},
GetIamPolicy: []gax.CallOption{
gax.WithTimeout(600000 * time.Millisecond),
gax.WithRetry(func() gax.Retryer {
return gax.OnHTTPCodes(gax.Backoff{
Initial: 100 * time.Millisecond,
Max: 60000 * time.Millisecond,
Multiplier: 1.30,
},
http.StatusGatewayTimeout,
http.StatusServiceUnavailable)
}),
},
Insert: []gax.CallOption{
gax.WithTimeout(600000 * time.Millisecond),
},
List: []gax.CallOption{
gax.WithTimeout(600000 * time.Millisecond),
gax.WithRetry(func() gax.Retryer {
return gax.OnHTTPCodes(gax.Backoff{
Initial: 100 * time.Millisecond,
Max: 60000 * time.Millisecond,
Multiplier: 1.30,
},

```

```

 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
 }),
 },
 SetIamPolicy: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 },
 TestIamPermissions: []gax.CallOption{
 gax.WithTimeout(600000
* time.Millisecond),
 },
 Update: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 },
 }
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context,
*computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption) (*computepb.TestPermissionsResponse, error)
 Update(context.Context, *computepb.UpdateLicenseRequest, ...gax.CallOption) (*Operation, error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

```

```

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed
// on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
// creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
// who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req
 *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
// Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
 ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
// party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)

```

```

(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the
// specified project. This method does not get any licenses that belong to other projects, including licenses attached to
// publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to
// make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is
// intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
(*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
// resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return
 c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
// intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
// party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 return c.internalClient.Update(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
type
licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.

```

```

operationClient *GlobalOperationsClient

// The x-goog-* headers to be sent with each request.
xGoogHeaders []string

// Points back to the CallOptions field of the containing LicensesClient
CallOptions **LicensesCallOptions

logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
 return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,
 logger:
 internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
 option.WithHTTPClient(httpClient),
 option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
 return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
 }
}

```

```

internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
internaloption.WithDefaultUniverseDomain("googleapis.com"),
internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
internaloption.WithDefaultScopes(DefaultAuthScopes()...),
internaloption.EnableNewAuthLibrary(),
}
}

// setGoogleClientInfo sets the name and version of the application in
//
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
c.xGoogHeaders = []string{
"x-goog-api-client", gax.XGoogHeader(kv...),
}
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
// Replace httpClient with nil to force cleanup.
c.httpClient = nil
if err := c.operationClient.Close(); err != nil {
return err
}
return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
return nil
}

// Delete deletes the specified license. Caution This resource is intended for use
// only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
baseUrl, err := url.Parse(c.endpoint)
if err != nil {
return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

```

```

params := url.Values{}
if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)],
opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project: req.GetProject(),

```



```

 },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
// who are creating
// Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
 url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error
 {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
 if err != nil {
 return err
 }

 if err := unmarshalOptions.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
 })
}

```

```

 }, opts...)
 if e != nil {
 return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
 opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy",
 req.GetProject(), req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
 params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
 url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
 append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
 opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if
 settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

```

```

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
if err != nil {
 return err
}

if err := unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
// party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if
 err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")

```

```

headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err
:= http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project: req.GetProject(),
 },
}
return op, nil
}

```

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```

func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}

```

```

req = proto.Clone(req).(*computepb.ListLicensesRequest)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
 resp := &computepb.LicensesListResponse{}
 if pageToken != "" {
 req.PageToken = proto.String(pageToken)
 }
 if pageSize > math.MaxInt32 {
 req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
 } else if pageSize != 0 {
 req.MaxResults = proto.Uint32(uint32(pageSize))
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.Filter != nil {
 params.Add("filter",
 fmt.Sprintf("%v", req.GetFilter()))
 }
 if req != nil && req.MaxResults != nil {
 params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
 params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
 params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err

```

```

 }
 httpReq.Header
= headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
 if err != nil {
 return err
 }
 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, "", e
}
it.Response = resp
return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }
}

```

```

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Policy{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

```

```

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx
context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)],
 opts...)
 unmarshal := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
 if err != nil {
 return err
 }
 })
}

```



```

 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Update(ctx context.Context,
 req *computepb.UpdateLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }
 if req != nil && req.UpdateMask != nil {
 params.Add("updateMask", fmt.Sprintf("%v", req.GetUpdateMask()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
 url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Update[0:len((*c.CallOptions).Update):len((*c.CallOptions).Update)], opts...)

```

```

unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Update")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project: req.GetProject(),
 },
}
return
op, nil
}

```

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// Code generated by protoc-gen-go\_gapic. DO NOT EDIT.

package compute

import (

"bytes"

"context"

"fmt"

"log/slog"

"net/http"

"net/url"

"time"

computepb "cloud.google.com/go/compute/apiv1beta/computepb"

gax "github.com/googleapis/gax-go/v2"

"google.golang.org/api/option"

"google.golang.org/api/option/internaloption"

httptransport "google.golang.org/api/transport/http"

"google.golang.org/grpc"

"google.golang.org/protobuf/encoding/protojson"

)

var

newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.

type LicenseCodesCallOptions struct {

```

 Get: []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
 Get: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier: 1.30,
 },
 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
 }),
 },
 TestIamPermissions: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
 {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
 (*computepb.TestPermissionsResponse, error)
 }
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

```



```

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return
 c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
// License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
// Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
// intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.

```

```

httpClient *http.Client

// The x-goog-* headers to be sent with each request.
xGoogHeaders []string

// Points back to the CallOptions field of the containing LicenseCodesClient
CallOptions **LicenseCodesCallOptions

logger *slog.Logger
}

// NewLicenseCodesRESTClient
// creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
 return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,
 logger: internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
 internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()),
 internaloption.EnableNewAuthLibrary(),
 }
}

//

```

```

setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return
 nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
// License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
// Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)

```

```

unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.LicenseCode{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

```

// TestIamPermissions returns permissions that

a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```

func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

```

```

baseUrl, err := url.Parse(c.endpoint)

```

```

if err != nil {
 return nil, err
}

```

```

baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenseCodes/%v/testIamPermissions",

```

```

req.GetProject(), req.GetResource())

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

hds = append(c.xGoogHeaders, hds...)
hds
= append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.TestPermissionsResponse{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
if settings.Path != "" {
baseUrl.Path = settings.Path
}
httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
if err != nil {
return err
}
httpReq = httpReq.WithContext(ctx)
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
if err != nil {
return err
}

if err := unm.Unmarshal(buf, resp); err != nil {
return err
}

return nil
}, opts...)
if e != nil {
return nil, e
}
return resp, nil
}
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//

```

```

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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
 Get: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier: 1.30,
 })
 })
 },
 }
}

```

```

 },
 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
)),
},
TestIamPermissions: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
},
}
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
 Close()
 error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
 (*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return c.internalClient.Close()
}

//
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {

```

```

c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
// License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
// Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
// intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger
}

// NewLicenseCodesRESTClient

```



```

creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
 return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,
 logger: internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
 internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()...),
 internaloption.EnableNewAuthLibrary(),
 }
}

//
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gpic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.

```

```

func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return
 nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
// License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
// Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

```

```

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
if err != nil {
 return err
}

if err := unm.Unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// TestIamPermissions returns permissions that a
// caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are
// creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
 req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
 url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds =
 append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
 append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
 tIamPermissions)], opts...)

```

```

unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.TestPermissionsResponse{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
// protoc-gen-go v1.35.2
// protoc v4.25.7
// source: google/ai/generativelanguage/v1alpha/permission.proto

```

```

package generativelanguagepb

import (
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 reflect "reflect"
 sync
 "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GrantType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GrantType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GrantType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GrantType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GrantType = 3
)

// Enum value maps for Permission_GrantType.
var (
 Permission_GrantType_name = map[int32]string{
 0: "GRANTEE_TYPE_UNSPECIFIED",
 1: "USER",
 2: "GROUP",
 3: "EVERYONE",
 }
 Permission_GrantType_value = map[string]int32{
 "GRANTEE_TYPE_UNSPECIFIED": 0,
 "USER": 1,
 "GROUP": 2,
 "EVERYONE": 3,
 }
)

```

```

 }
)

func (x Permission_GrantType) Enum() *Permission_GrantType {
 p := new(Permission_GrantType)
 *p = x
 return p
}

func (x Permission_GrantType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protorelect.EnumNumber(x))
}

func (Permission_GrantType) Descriptor() protorelect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GrantType) Type() protorelect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GrantType) Number() protorelect.EnumNumber {
 return protorelect.EnumNumber(x)
}

// Deprecated: Use Permission_GrantType.Descriptor instead.
func (Permission_GrantType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{

```

```

0: "ROLE_UNSPECIFIED",
1: "OWNER",
2: "WRITER",
3: "READER",
}
Permission_Role_value = map[string]int32{
"ROLE_UNSPECIFIED": 0,
"OWNER": 1,
"WRITER": 2,
"READER": 3,
}
)

func (x Permission_Role) Enum() *Permission_Role {
p := new(Permission_Role)
*p = x
return p
}

func (x Permission_Role) String() string {
return
protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service

```

```

accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
 `protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
 json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
 `protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
 json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

```



```

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
{
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
 return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
 return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
 return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
 return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

```

var

File\_google\_ai\_generativelanguage\_v1alpha\_permission\_proto protoreflect.FileDescriptor

```
var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
 0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,
 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,
 0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,
 0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,
 0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,
 0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,
 0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,
 0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,
 0x4e,
 0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,
 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,
 0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,
 0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,
 0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,
 0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,
 0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,
 0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,
 0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
 0x2e, 0x63, 0x6f, 0x6d,
```

```

0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,
0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,
0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,
0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,
0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,
0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,
0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,
0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,
0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,
0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,
0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,
0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
0x61, 0x67,
0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

```

```

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)

```

```

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
 protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

```

```

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
= []any{
 (Permission_GrantType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GrantType
 (Permission_Role)(0), // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil), // 2: google.ai.generativelanguage.v1alpha.Permission
}

```

```

var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
 google.ai.generativelanguage.v1alpha.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
 google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
}

func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
 return
 }
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
 File: protoimpl.DescBuilder{
 GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
 RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
 NumEnums: 2,
 NumMessages: 1,
 NumExtensions: 0,
 NumServices: 0,
 },
 GoTypes: file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
 DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
 EnumInfos: file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
 MessageInfos: file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
 = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}

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//

```

```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1beta"
 computepb "cloud.google.com/go/compute/apiv1beta/compute_pb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require
 modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute_pb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
 if err != nil {
 // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
 }
}

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```

```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package discoveryengine_test

import (
 "context"

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewUserLicenseClient() {
 ctx := context.Background()
 //
 This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewUserLicenseRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
```

```

// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := discoveryengine.NewUserLicenseRESTClient(ctx)
if
err != nil {
 // TODO: Handle error.
}
defer c.Close()

// TODO: Use client.
_ = c
}

func ExampleUserLicenseClient_BatchUpdateUserLicenses() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &discoveryenginepb.BatchUpdateUserLicensesRequest{
 // TODO: Fill request struct fields.
 // See
 https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#BatchUpdateUserLicensesReque
 st.
 }
 op, err := c.BatchUpdateUserLicenses(ctx, req)
 if err != nil {
 //
 TODO: Handle error.
 }

 resp, err := op.Wait(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleUserLicenseClient_ListUserLicenses() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.

```

```

// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := discoveryengine.NewUserLicenseClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &discoveryenginepb.ListUserLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#ListUserLicensesRequest.
}
it := c.ListUserLicenses(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
 {
 break
 }
 }
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*discoveryenginepb.ListUserLicensesResponse)
}

func ExampleUserLicenseClient_CancelOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

```



```

req := &longrunningpb.CancelOperationRequest{
 //
 TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#CancelOperationRequest.
}
err = c.CancelOperation(ctx, req)
if err != nil {
 // TODO: Handle error.
}
}

func ExampleUserLicenseClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp,
 err := c.GetOperation(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleUserLicenseClient_ListOperations() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
}

```

```

defer c.Close()

req := &longrunningpb.ListOperationsRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#ListOperationsRequest.
}
it := c.ListOperations(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
 break
 }
 if err != nil {
 //
 TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*longrunningpb.ListOperationsResponse)
}
}
// Copyright 2025 Google LLC
//
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// limitations under the License.

// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
// protoc-gen-go v1.35.2
// protoc v4.25.7
// source: google/cloud/discoveryengine/v1/user_license_service.proto

package discoveryenginepb

```

```

import (
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 context "context"
 _ "google.golang.org/genproto/googleapis/api/annotations"
 status "google.golang.org/genproto/googleapis/rpc/status"
 grpc
 "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status1 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
 reflect "reflect"
 sync "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Request message for
// [UserService.ListUserLicenses][google.cloud.discoveryengine.v1.UserService.ListUserLicenses].
type ListUserLicensesRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The parent [UserStore][] resource name,
 // format:
 // `projects/{project}/locations/{location}/userStores/{user_store_id}`.
 // Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. Requested page size. Server may return fewer items than
 // requested. If unspecified, defaults to 10. The maximum value is 50; values
 // above 50 will be coerced to 50.
 //
 // If this field is negative, an INVALID_ARGUMENT error is returned.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3" json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `ListUserLicenses` call.
 // Provide this to retrieve the subsequent page.
 //
 // When paginating, all other parameters provided to `ListUserLicenses`
 // must match the call that provided the page token.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
 // Optional. Filter for the list request.

```

```

//
// Supported fields:
//
// * `license_assignment_state`
//
//
Examples:
//
// * `license_assignment_state = ASSIGNED` to list assigned user licenses.
// * `license_assignment_state = NO_LICENSE` to list not licensed users.
// * `license_assignment_state = NO_LICENSE_ATTEMPTED_LOGIN` to list users
// who attempted login but no license assigned.
// * `license_assignment_state != NO_LICENSE_ATTEMPTED_LOGIN` to filter
// out users who attempted login but no license assigned.
Filter string `protobuf:"bytes,4,opt,name=filter,proto3" json:"filter,omitempty"`
}

func (x *ListUserLicensesRequest) Reset() {
 *x = ListUserLicensesRequest{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *ListUserLicensesRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*ListUserLicensesRequest) ProtoMessage() {}

func (x *ListUserLicensesRequest) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[0]
 if
 x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use ListUserLicensesRequest.ProtoReflect.Descriptor instead.
func (*ListUserLicensesRequest) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{0}
}

```

```

func (x *ListUserLicensesRequest) GetParent() string {
 if x != nil {
 return x.Parent
 }
 return ""
}

func (x *ListUserLicensesRequest) GetPageSize() int32 {
 if x != nil {
 return x.PageSize
 }
 return 0
}

func (x *ListUserLicensesRequest) GetPageToken() string {
 if x != nil {
 return x.PageToken
 }
 return ""
}

func (x *ListUserLicensesRequest) GetFilter() string {
 if x != nil {
 return x.Filter
 }
 return ""
}

// Response message for
// [UserLicenseService.ListUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.ListUserLicenses].
type
ListUserLicensesResponse struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // All the customer's
 // [UserLicense][google.cloud.discoveryengine.v1.UserLicense]s.
 UserLicenses []*UserLicense `protobuf:"bytes,1,rep,name=user_licenses,json=userLicenses,proto3"
 json:"user_licenses,omitempty"`
 // A token, which can be sent as `page_token` to retrieve the next page. If
 // this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
 json:"next_page_token,omitempty"`
}

func (x *ListUserLicensesResponse) Reset() {
 *x = ListUserLicensesResponse{}
}

```

```

mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[1]
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
ms.StoreMessageInfo(mi)
}

func (x *ListUserLicensesResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func
(*ListUserLicensesResponse) ProtoMessage() {}

func (x *ListUserLicensesResponse) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[1]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use ListUserLicensesResponse.ProtoReflect.Descriptor instead.
func (*ListUserLicensesResponse) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{1}
}

func (x *ListUserLicensesResponse) GetUserLicenses() []*UserLicense {
 if x != nil {
 return x.UserLicenses
 }
 return nil
}

func (x *ListUserLicensesResponse) GetNextPageToken() string {
 if x != nil {
 return x.NextPageToken
 }
 return ""
}

// Request message for
//
[UserLicenseService.BatchUpdateUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdat
eUserLicenses]
//

```

```

method.
type BatchUpdateUserLicensesRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The source of the input.
 //
 // Types that are assignable to Source:
 //
 // *BatchUpdateUserLicensesRequest_InlineSource_
 Source isBatchUpdateUserLicensesRequest_Source `protobuf_oneof:"source"`
 // Required. The parent [UserStore][] resource name, format:
 // `projects/{project}/locations/{location}/userStores/{user_store_id}`.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. If true, if user licenses removed associated license config, the
 // user license will be deleted. By default which is false, the user license
 // will be updated to unassigned state.
 DeleteUnassignedUserLicenses bool
 `protobuf:"varint,4,opt,name=delete_unassigned_user_licenses,json=deleteUnassignedUserLicenses,proto3"
 json:"delete_unassigned_user_licenses,omitempty"`
}

func
(x *BatchUpdateUserLicensesRequest) Reset() {
 *x = BatchUpdateUserLicensesRequest{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesRequest) ProtoMessage() {}

func (x *BatchUpdateUserLicensesRequest) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[2]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

```

```

// Deprecated: Use BatchUpdateUserLicensesRequest.ProtoReflect.Descriptor instead.
func (*BatchUpdateUserLicensesRequest) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(),
 []int{2}
}

func (m *BatchUpdateUserLicensesRequest) GetSource() isBatchUpdateUserLicensesRequest_Source {
 if m != nil {
 return m.Source
 }
 return nil
}

func (x *BatchUpdateUserLicensesRequest) GetInlineSource() *BatchUpdateUserLicensesRequest_InlineSource {
 if x, ok := x.GetSource().(*BatchUpdateUserLicensesRequest_InlineSource_); ok {
 return x.InlineSource
 }
 return nil
}

func (x *BatchUpdateUserLicensesRequest) GetParent() string {
 if x != nil {
 return x.Parent
 }
 return ""
}

func (x *BatchUpdateUserLicensesRequest) GetDeleteUnassignedUserLicenses() bool {
 if x != nil {
 return x.DeleteUnassignedUserLicenses
 }
 return false
}

type isBatchUpdateUserLicensesRequest_Source interface {
 isBatchUpdateUserLicensesRequest_Source()
}

type BatchUpdateUserLicensesRequest_InlineSource_ struct {
 // The inline source for the input content for document embeddings.
 InlineSource *BatchUpdateUserLicensesRequest_InlineSource
 `protobuf:"bytes,2,opt,name=inline_source,json=inlineSource,proto3,oneof"`
}

func
 (*BatchUpdateUserLicensesRequest_InlineSource_) isBatchUpdateUserLicensesRequest_Source() {}

```



```

// Metadata related to the progress of the
//
[UserLicenseService.BatchUpdateUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdateUserLicenses]
// operation. This will be returned by the google.longrunning.Operation.metadata
// field.
type BatchUpdateUserLicensesMetadata struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Operation create time.
 CreateTime *timestamppb.Timestamp `protobuf:"bytes,1,opt,name=create_time,json=createTime,proto3"
 json:"create_time,omitempty"`
 // Operation last update time. If the operation is done, this is also the
 // finish time.
 UpdateTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=update_time,json=updateTime,proto3"
 json:"update_time,omitempty"`
 // Count of user licenses successfully updated.
 SuccessCount
 int64 `protobuf:"varint,3,opt,name=success_count,json=successCount,proto3" json:"success_count,omitempty"`
 // Count of user licenses that failed to be updated.
 FailureCount int64 `protobuf:"varint,4,opt,name=failure_count,json=failureCount,proto3"
 json:"failure_count,omitempty"`
}

func (x *BatchUpdateUserLicensesMetadata) Reset() {
 *x = BatchUpdateUserLicensesMetadata{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesMetadata) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesMetadata) ProtoMessage() {}

func (x *BatchUpdateUserLicensesMetadata) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[3]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 }
 return

```

```

ms
}
return mi.MessageOf(x)
}

// Deprecated: Use BatchUpdateUserLicensesMetadata.ProtoReflect.Descriptor instead.
func (*BatchUpdateUserLicensesMetadata) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{3}
}

func (x *BatchUpdateUserLicensesMetadata) GetCreateTime() *timestamppb.Timestamp {
 if x != nil {
 return x.CreateTime
 }
 return nil
}

func (x *BatchUpdateUserLicensesMetadata) GetUpdateTime() *timestamppb.Timestamp {
 if x != nil {
 return x.UpdateTime
 }
 return nil
}

func (x *BatchUpdateUserLicensesMetadata) GetSuccessCount() int64 {
 if x != nil {
 return x.SuccessCount
 }
 return 0
}

func (x *BatchUpdateUserLicensesMetadata) GetFailureCount() int64 {
 if x != nil {
 return x.FailureCount
 }
 return 0
}

// Response message for
//
// [UserLicenseService.BatchUpdateUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdat
eUserLicenses]
// method.
type
BatchUpdateUserLicensesResponse struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

```

```

// UserLicenses successfully updated.
UserLicenses []*UserLicense `protobuf:"bytes,1,rep,name=user_licenses,json=userLicenses,proto3"
json:"user_licenses,omitempty"`
// A sample of errors encountered while processing the request.
ErrorSamples []*status.Status `protobuf:"bytes,2,rep,name=error_samples,json=errorSamples,proto3"
json:"error_samples,omitempty"`
}

func (x *BatchUpdateUserLicensesResponse) Reset() {
*x = BatchUpdateUserLicensesResponse{}
mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[4]
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesResponse) String() string {
return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesResponse) ProtoMessage() {}

func (x *BatchUpdateUserLicensesResponse) ProtoReflect()
protoreflect.Message {
mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[4]
if x != nil {
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
if ms.LoadMessageInfo() == nil {
ms.StoreMessageInfo(mi)
}
return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use BatchUpdateUserLicensesResponse.ProtoReflect.Descriptor instead.
func (*BatchUpdateUserLicensesResponse) Descriptor() ([]byte, []int) {
return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{4}
}

func (x *BatchUpdateUserLicensesResponse) GetUserLicenses() []*UserLicense {
if x != nil {
return x.UserLicenses
}
return nil
}

func (x *BatchUpdateUserLicensesResponse) GetErrorSamples() []*status.Status {

```

```

if x != nil {
 return x.ErrorSamples
}
return nil
}

// The inline source for the input config for BatchUpdateUserLicenses
// method.
type BatchUpdateUserLicensesRequest_InlineSource struct {
 state protoimpl.MessageState
 sizeCache
 protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. A list of user licenses to update. Each user license
 // must have a valid
 // [UserLicense.user_principal][google.cloud.discoveryengine.v1.UserLicense.user_principal].
 UserLicenses []*UserLicense `protobuf:"bytes,1,rep,name=user_licenses,json=userLicenses,proto3"
 json:"user_licenses,omitempty"`
 // Optional. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
 json:"update_mask,omitempty"`
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) Reset() {
 *x = BatchUpdateUserLicensesRequest_InlineSource{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesRequest_InlineSource)
 ProtoMessage() {}

func (x *BatchUpdateUserLicensesRequest_InlineSource) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[5]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

```

```

}

// Deprecated: Use BatchUpdateUserLicensesRequest_InlineSource.ProtoReflect.Descriptor instead.
func (*BatchUpdateUserLicensesRequest_InlineSource) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{2, 0}
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) GetUserLicenses() []*UserLicense {
 if x != nil {
 return x.UserLicenses
 }
 return nil
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
 return x.UpdateMask
 }
 return nil
}

var File_google_cloud_discoveryengine_v1_user_license_service_proto
 protoreflect.FileDescriptor

var file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc = []byte{
 0x0a, 0x3a, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x64,
 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x76,
 0x31, 0x2f, 0x75, 0x73, 0x65, 0x72, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x73,
 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x1f, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f,
 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x76, 0x31, 0x1a, 0x1c, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f, 0x74, 0x61,
 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
 0x2e, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e,
 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70,
 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x1a, 0x32, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x64,
 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x76,
 0x31, 0x2f, 0x75, 0x73, 0x65, 0x72, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x2e, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x6c, 0x6f, 0x6e,
 0x67, 0x72, 0x75, 0x6e, 0x6e, 0x69, 0x6e, 0x67, 0x2f, 0x6f, 0x70, 0x65, 0x72, 0x61, 0x74, 0x69,
 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64,
 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,

```

0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d,  
0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67, 0x6f,  
0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x72, 0x70, 0x63, 0x2f, 0x73, 0x74, 0x61, 0x74, 0x75, 0x73, 0x2e,  
0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc6, 0x01, 0x0a, 0x17, 0x4c, 0x69, 0x73, 0x74, 0x55, 0x73,  
0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x73, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73,  
0x74, 0x12, 0x48, 0x0a, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x18, 0x01, 0x20, 0x01, 0x28,  
0x09, 0x42, 0x30, 0xe0, 0x41, 0x02, 0xfa, 0x41, 0x2a, 0x0a, 0x28, 0x64, 0x69, 0x73, 0x63, 0x6f,  
0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,  
0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f,  
0x6d, 0x2f, 0x55, 0x73, 0x65, 0x72, 0x53, 0x74,  
0x6f, 0x72, 0x65, 0x52, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x12, 0x20, 0x0a, 0x09, 0x70,  
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0xe0, 0x41, 0x01, 0x52, 0x08, 0x70, 0x61, 0x67, 0x65, 0x53, 0x69, 0x7a, 0x65, 0x12, 0x22, 0x0a,  
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0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2d, 0x70, 0x6c, 0x61, 0x74, 0x66, 0x6f, 0x72, 0x6d, 0x42, 0x8a,  
0x02, 0x0a, 0x23, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c,  
0x6f, 0x75, 0x64, 0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67,  
0x69, 0x6e, 0x65, 0x2e, 0x76, 0x31, 0x42, 0x17, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65,  
0x6e, 0x73, 0x65, 0x53, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50,  
0x01, 0x5a, 0x4d, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,  
0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79,  
0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x2f, 0x64, 0x69, 0x73,  
0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x70, 0x62, 0x3b, 0x64,  
0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x70, 0x62,



```

0xa2, 0x02, 0x0f,
0x44, 0x49, 0x53, 0x43, 0x4f, 0x56, 0x45, 0x52, 0x59, 0x45, 0x4e, 0x47, 0x49,
0x4e, 0x45, 0xaa, 0x02, 0x1f, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x44, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x45, 0x6e, 0x67, 0x69, 0x6e,
0x65, 0x2e, 0x56, 0x31, 0xca, 0x02, 0x1f, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c,
0x6f, 0x75, 0x64, 0x5c, 0x44, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x45, 0x6e, 0x67,
0x69, 0x6e, 0x65, 0x5c, 0x56, 0x31, 0xea, 0x02, 0x22, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a,
0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a, 0x3a, 0x44, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72,
0x79, 0x45, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescOnce sync.Once
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData =
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc
)

func
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescZIP() []byte {
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescOnce.Do(func() {
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData =
 protoimpl.X.CompressGZIP(file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData)
 })
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData
}

var file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 6)
var file_google_cloud_discoveryengine_v1_user_license_service_proto_goTypes = []any{
 (*ListUserLicensesRequest)(nil), // 0: google.cloud.discoveryengine.v1.ListUserLicensesRequest
 (*ListUserLicensesResponse)(nil), // 1: google.cloud.discoveryengine.v1.ListUserLicensesResponse
 (*BatchUpdateUserLicensesRequest)(nil), // 2:
 google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest
 (*BatchUpdateUserLicensesMetadata)(nil), // 3: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesMetadata
 (*BatchUpdateUserLicensesResponse)(nil), // 4:
 google.cloud.discoveryengine.v1.BatchUpdateUserLicensesResponse
 (*BatchUpdateUserLicensesRequest_InlineSource)(nil), // 5:
 google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource
 (*UserLicense)(nil), // 6: google.cloud.discoveryengine.v1.UserLicense
 (*timestamppb.Timestamp)(nil), // 7: google.protobuf.Timestamp
 (*status.Status)(nil), // 8: google.rpc.Status
 (*fieldmaskpb.FieldMask)(nil), // 9: google.protobuf.FieldMask
 (*longrunningpb.Operation)(nil), // 10: google.longrunning.Operation
}
var file_google_cloud_discoveryengine_v1_user_license_service_proto_depIdxs = []int32{
 6, // 0: google.cloud.discoveryengine.v1.ListUserLicensesResponse.user_licenses:type_name

```

```

-> google.cloud.discoveryengine.v1.UserLicense
5, // 1: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.inline_source:type_name ->
google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource
7, // 2: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesMetadata.create_time:type_name ->
google.protobuf.Timestamp
7, // 3: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesMetadata.update_time:type_name ->
google.protobuf.Timestamp
6, // 4: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesResponse.user_licenses:type_name ->
google.cloud.discoveryengine.v1.UserLicense
8, // 5: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesResponse.error_samples:type_name ->
google.rpc.Status
6, // 6: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource.user_licenses:type_name -
> google.cloud.discoveryengine.v1.UserLicense
9, // 7: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource.update_mask:type_name
-> google.protobuf.FieldMask
0, // 8: google.cloud.discoveryengine.v1.UserLicenseService.ListUserLicenses:input_type ->
google.cloud.discoveryengine.v1.ListUserLicensesRequest
2, // 9: google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdateUserLicenses:input_type ->
google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest
1, // 10: google.cloud.discoveryengine.v1.UserLicenseService.ListUserLicenses:output_type ->
google.cloud.discoveryengine.v1.ListUserLicensesResponse
10, // 11: google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdateUserLicenses:output_type ->
google.longrunning.Operation
10, // [10:12] is the sub-list for method output_type
8, // [8:10] is the sub-list for method input_type
8, // [8:8] is the sub-list for extension type_name
8, // [8:8] is the sub-list for extension extendee
0, // [0:8] is the sub-list for field type_name
}

```

```

func init() { file_google_cloud_discoveryengine_v1_user_license_service_proto_init()
}
func file_google_cloud_discoveryengine_v1_user_license_service_proto_init() {
if File_google_cloud_discoveryengine_v1_user_license_service_proto != nil {
return
}
file_google_cloud_discoveryengine_v1_user_license_proto_init()
file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[2].OneofWrappers = []any{
(*BatchUpdateUserLicensesRequest_InlineSource)(nil),
}
type x struct{}
out := protoimpl.TypeBuilder{
File: protoimpl.DescBuilder{
GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
RawDescriptor: file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc,
NumEnums: 0,
NumMessages: 6,
NumExtensions: 0,

```

```

 NumServices: 1,
 },
 GoTypes: file_google_cloud_discoveryengine_v1_user_license_service_proto_goTypes,
 DependencyIndexes: file_google_cloud_discoveryengine_v1_user_license_service_proto_depIdxs,
 MessageInfos: file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes,
}.Build()
File_google_cloud_discoveryengine_v1_user_license_service_proto
= out.File
file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc = nil
file_google_cloud_discoveryengine_v1_user_license_service_proto_goTypes = nil
file_google_cloud_discoveryengine_v1_user_license_service_proto_depIdxs = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// UserLicenseServiceClient is the client API for UserLicenseService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type UserLicenseServiceClient interface {
 // Lists the User Licenses.
 ListUserLicenses(ctx context.Context, in *ListUserLicensesRequest,
 opts ...grpc.CallOption) (*ListUserLicensesResponse, error)
 // Updates the User License.
 // This method is used for batch assign/unassign licenses to users.
 BatchUpdateUserLicenses(ctx context.Context, in *BatchUpdateUserLicensesRequest, opts ...grpc.CallOption)
 (*longrunningpb.Operation, error)
}

type userLicenseServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewUserLicenseServiceClient(cc grpc.ClientConnInterface) UserLicenseServiceClient {
 return &userLicenseServiceClient{cc}
}

func (c *userLicenseServiceClient) ListUserLicenses(ctx context.Context, in *ListUserLicensesRequest, opts
 ...grpc.CallOption) (*ListUserLicensesResponse, error) {
 out := new(ListUserLicensesResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.discoveryengine.v1.UserLicenseService/ListUserLicenses", in, out, opts...)
 if err != nil {

```

```

 return nil, err
}
return out, nil
}

func (c *userLicenseServiceClient) BatchUpdateUserLicenses(ctx context.Context, in
*BatchUpdateUserLicensesRequest,
opts ...grpc.CallOption) (*longrunningpb.Operation, error) {
 out := new(longrunningpb.Operation)
 err := c.cc.Invoke(ctx, "/google.cloud.discoveryengine.v1.UserLicenseService/BatchUpdateUserLicenses", in, out,
 opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

// UserLicenseServiceServer is the server API for UserLicenseService service.
type UserLicenseServiceServer interface {
 // Lists the User Licenses.
 ListUserLicenses(context.Context, *ListUserLicensesRequest) (*ListUserLicensesResponse, error)
 // Updates the User License.
 // This method is used for batch assign/unassign licenses to users.
 BatchUpdateUserLicenses(context.Context, *BatchUpdateUserLicensesRequest) (*longrunningpb.Operation, error)
}

// UnimplementedUserLicenseServiceServer can be embedded to have forward compatible implementations.
type UnimplementedUserLicenseServiceServer struct {
}

func (*UnimplementedUserLicenseServiceServer) ListUserLicenses(context.Context, *ListUserLicensesRequest)
(*ListUserLicensesResponse, error) {
 return nil, status1.Errorf(codes.Unimplemented, "method ListUserLicenses not implemented")
}
func (*UnimplementedUserLicenseServiceServer) BatchUpdateUserLicenses(context.Context,
*BatchUpdateUserLicensesRequest) (*longrunningpb.Operation, error) {
 return nil, status1.Errorf(codes.Unimplemented, "method BatchUpdateUserLicenses not implemented")
}

func RegisterUserLicenseServiceServer(s *grpc.Server, srv UserLicenseServiceServer) {
 s.RegisterService(&_UserLicenseService_serviceDesc, srv)
}

func _UserLicenseService_ListUserLicenses_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(ListUserLicensesRequest)
 if err := dec(in); err != nil {
 return nil, err
 }

```

```

}
if interceptor == nil {
 return srv.(UserLicenseServiceServer).ListUserLicenses(ctx, in)
}
info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: "/google.cloud.discoveryengine.v1.UserLicenseService/ListUserLicenses",
}
handler
:= func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(UserLicenseServiceServer).ListUserLicenses(ctx, req.(*ListUserLicensesRequest))
}
return interceptor(ctx, in, info, handler)
}

func _UserLicenseService_BatchUpdateUserLicenses_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(BatchUpdateUserLicensesRequest)
 if err := dec(in); err != nil {
 return nil, err
 }
 if interceptor == nil {
 return srv.(UserLicenseServiceServer).BatchUpdateUserLicenses(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: "/google.cloud.discoveryengine.v1.UserLicenseService/BatchUpdateUserLicenses",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(UserLicenseServiceServer).BatchUpdateUserLicenses(ctx, req.(*BatchUpdateUserLicensesRequest))
 }
 return interceptor(ctx,
 in, info, handler)
}

var _UserLicenseService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.discoveryengine.v1.UserLicenseService",
 HandlerType: (*UserLicenseServiceServer)(nil),
 Methods: []grpc.MethodDesc{
 {
 MethodName: "ListUserLicenses",
 Handler: _UserLicenseService_ListUserLicenses_Handler,
 },
 {
 MethodName: "BatchUpdateUserLicenses",
 Handler: _UserLicenseService_BatchUpdateUserLicenses_Handler,
 },
 },
}

```

```

Streams: []grpc.StreamDesc{},
Metadata: "google/cloud/discoveryengine/v1/user_license_service.proto",
}

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1beta"
 computepb "cloud.google.com/go/compute/apiv1beta/compute_pb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.

```

```

// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicenseCodesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

// TODO: Use client.
_ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
 // TODO:
 // Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }

```

```

}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseCodeRequest{
 // TODO: Fill request struct fields.
 // See
 https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#TestIamPermissionsLicenseCodeRequest.
}
resp,
err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

```



```

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
 if err != nil {
 // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
 }
}
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// limitations under the License.

```

```

// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
// protoc-gen-go v1.35.2
// protoc v4.25.7
// source: google/cloud/discoveryengine/v1/user_license.proto

package discoveryenginepb

import (
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
 reflect
 "reflect"
 sync "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// License assignment state enumeration.
type UserLicense_LicenseAssignmentState int32

const (
 // Default value.
 UserLicense_LICENSE_ASSIGNMENT_STATE_UNSPECIFIED UserLicense_LicenseAssignmentState = 0
 // License assigned to the user.
 UserLicense_ASSIGNED UserLicense_LicenseAssignmentState = 1
 // No license assigned to the user.
 // Deprecated, translated to NO_LICENSE.
 UserLicense_UNASSIGNED UserLicense_LicenseAssignmentState = 2
 // No license assigned to the user.
 UserLicense_NO_LICENSE UserLicense_LicenseAssignmentState = 3
 // User attempted to login but no license assigned to the user.
 // This state is only used for no user first time login attempt
 // but cannot
 // get license assigned.
 // Users already logged in but cannot get license assigned will be assigned
 // NO_LICENSE state(License could be unassigned by admin).
 UserLicense_NO_LICENSE_ATTEMPTED_LOGIN UserLicense_LicenseAssignmentState = 4
)

// Enum value maps for UserLicense_LicenseAssignmentState.

```

```

var (
 UserLicense_LicenseAssignmentState_name = map[int32]string{
 0: "LICENSE_ASSIGNMENT_STATE_UNSPECIFIED",
 1: "ASSIGNED",
 2: "UNASSIGNED",
 3: "NO_LICENSE",
 4: "NO_LICENSE_ATTEMPTED_LOGIN",
 }
 UserLicense_LicenseAssignmentState_value = map[string]int32{
 "LICENSE_ASSIGNMENT_STATE_UNSPECIFIED": 0,
 "ASSIGNED": 1,
 "UNASSIGNED": 2,
 "NO_LICENSE": 3,
 "NO_LICENSE_ATTEMPTED_LOGIN": 4,
 }
)

func (x UserLicense_LicenseAssignmentState) Enum() *UserLicense_LicenseAssignmentState {
 p := new(UserLicense_LicenseAssignmentState)
 *p = x
 return p
}

func (x UserLicense_LicenseAssignmentState)
String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (UserLicense_LicenseAssignmentState) Descriptor() protoreflect.EnumDescriptor {
 return file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes[0].Descriptor()
}

func (UserLicense_LicenseAssignmentState) Type() protoreflect.EnumType {
 return &file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes[0]
}

func (x UserLicense_LicenseAssignmentState) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use UserLicense_LicenseAssignmentState.Descriptor instead.
func (UserLicense_LicenseAssignmentState) EnumDescriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_proto_rawDescGZIP(), []int{0, 0}
}

// User License information assigned by the admin.
type UserLicense struct {
 state protoimpl.MessageState

```

```

sizeCache protoimpl.SizeCache
unknownFields protoimpl.UnknownFields

//
Required. Immutable. The user principal of the User, could be email address
// or other principal identifier. This field is immutable. Admin assign
// licenses based on the user principal.
UserPrincipal string `protobuf:"bytes,1,opt,name=user_principal,json=userPrincipal,proto3"
json:"user_principal,omitempty"`
// Optional. The user profile.
// We use user full name(First name + Last name) as user profile.
UserProfile string `protobuf:"bytes,3,opt,name=user_profile,json=userProfile,proto3"
json:"user_profile,omitempty"`
// Output only. License assignment state of the user.
// If the user is assigned with a license config, the user login will be
// assigned with the license;
// If the user's license assignment state is unassigned or unspecified, no
// license config will be associated to the user;
LicenseAssignmentState UserLicense_LicenseAssignmentState
`protobuf:"varint,4,opt,name=license_assignment_state,json=licenseAssignmentState,proto3,enum=google.cloud.dis
coveryengine.v1.UserLicense_LicenseAssignmentState"
json:"license_assignment_state,omitempty"`
// Optional. The full resource name of the Subscription(LicenseConfig)
// assigned to the user.
LicenseConfig string `protobuf:"bytes,5,opt,name=license_config,json=licenseConfig,proto3"
json:"license_config,omitempty"`
// Output only. User created timestamp.
CreateTime *timestamppb.Timestamp `protobuf:"bytes,6,opt,name=create_time,json=createTime,proto3"
json:"create_time,omitempty"`
// Output only. User update timestamp.
UpdateTime *timestamppb.Timestamp `protobuf:"bytes,7,opt,name=update_time,json=updateTime,proto3"
json:"update_time,omitempty"`
// Output only. User last logged in time.
// If the user has not logged in yet, this field will be empty.
LastLoginTime *timestamppb.Timestamp
`protobuf:"bytes,8,opt,name=last_login_time,json=lastLoginTime,proto3" json:"last_login_time,omitempty"`
}

func (x *UserLicense) Reset() {
 *x = UserLicense{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes[0]
 ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UserLicense) String() string {
 return protoimpl.X.MessageStringOf(x)
}

```

```

}

func (*UserLicense) ProtoMessage() {}

func (x *UserLicense) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes[0]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UserLicense.ProtoReflect.Descriptor instead.
func (*UserLicense) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_proto_rawDescGZIP(), []int{0}
}

func (x *UserLicense) GetUserPrincipal() string {
 if x != nil {
 return x.UserPrincipal
 }
 return ""
}

func (x *UserLicense) GetUserProfile() string {
 if x != nil {
 return x.UserProfile
 }
 return ""
}

func (x *UserLicense) GetLicenseAssignmentState()
 UserLicense_LicenseAssignmentState {
 if x != nil {
 return x.LicenseAssignmentState
 }
 return UserLicense_LICENSE_ASSIGNMENT_STATE_UNSPECIFIED
}

func (x *UserLicense) GetLicenseConfig() string {
 if x != nil {
 return x.LicenseConfig
 }
 return ""
}

```

```
}
```

```
func (x *UserLicense) GetCreateTime() *timestamppb.Timestamp {
 if x != nil {
 return x.CreateTime
 }
 return nil
}
```

```
func (x *UserLicense) GetUpdateTime() *timestamppb.Timestamp {
 if x != nil {
 return x.UpdateTime
 }
 return nil
}
```

```
func (x *UserLicense) GetLastLoginTime() *timestamppb.Timestamp {
 if x != nil {
 return x.LastLoginTime
 }
 return nil
}
```

```
var File_google_cloud_discoveryengine_v1_user_license_proto protoreflect.FileDescriptor
```

```
var file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc = []byte{
 0x0a, 0x32, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x64,
 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x76,
 0x31,
 0x2f, 0x75, 0x73, 0x65, 0x72, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x2e, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f,
 0x75, 0x64, 0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69,
 0x6e, 0x65, 0x2e, 0x76, 0x31, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70,
 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74,
 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62,
 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x22, 0xa6, 0x05, 0x0a, 0x0b, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e,
 0x73, 0x65, 0x12, 0x2d, 0x0a, 0x0e,
 0x75, 0x73, 0x65, 0x72, 0x5f, 0x70, 0x72, 0x69, 0x6e, 0x63,
 0x69, 0x70, 0x61, 0x6c, 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x05, 0xe0,
 0x41, 0x02, 0x52, 0x0d, 0x75, 0x73, 0x65, 0x72, 0x50, 0x72, 0x69, 0x6e, 0x63, 0x69, 0x70, 0x61,
 0x6c, 0x12, 0x26, 0x0a, 0x0c, 0x75, 0x73, 0x65, 0x72, 0x5f, 0x70, 0x72, 0x6f, 0x66, 0x69, 0x6c,
 0x65, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x03, 0xe0, 0x41, 0x01, 0x52, 0x0b, 0x75, 0x73,
 0x65, 0x72, 0x50, 0x72, 0x6f, 0x66, 0x69, 0x6c, 0x65, 0x12, 0x82, 0x01, 0x0a, 0x18, 0x6c, 0x69,
 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74,
 0x5f, 0x73, 0x74, 0x61, 0x74, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x43, 0x2e, 0x67,
}
```

0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x64, 0x69, 0x73, 0x63,  
0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x76, 0x31, 0x2e, 0x55,  
0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x2e,  
0x4c, 0x69, 0x63, 0x65, 0x6e,  
0x73, 0x65, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x74, 0x61, 0x74,  
0x65, 0x42, 0x03, 0xe0, 0x41, 0x03, 0x52, 0x16, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x41,  
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0x0a, 0x0e, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x63, 0x6f, 0x6e, 0x66, 0x69, 0x67,  
0x18, 0x05, 0x20, 0x01, 0x28, 0x09, 0x42, 0x34, 0xe0, 0x41, 0x01, 0xfa, 0x41, 0x2e, 0x0a, 0x2c,  
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0x32,  
0x1a, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62,  
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0x03, 0x52, 0x0a, 0x63, 0x72, 0x65, 0x61, 0x74, 0x65, 0x54, 0x69, 0x6d, 0x65, 0x12, 0x40, 0x0a,  
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0x03, 0xe0, 0x41, 0x03, 0x52, 0x0d, 0x6c, 0x61, 0x73, 0x74, 0x4c,  
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0x53, 0x53, 0x49, 0x47, 0x4e, 0x4d, 0x45, 0x4e, 0x54, 0x5f, 0x53, 0x54, 0x41, 0x54, 0x45, 0x5f,  
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0x08, 0x41, 0x53, 0x53, 0x49, 0x47, 0x4e, 0x45, 0x44, 0x10, 0x01, 0x12, 0x0e, 0x0a, 0x0a, 0x55,  
0x4e, 0x41, 0x53, 0x53, 0x49, 0x47, 0x4e, 0x45, 0x44, 0x10, 0x02, 0x12, 0x0e, 0x0a, 0x0a, 0x4e,  
0x4f, 0x5f, 0x4c, 0x49, 0x43, 0x45, 0x4e, 0x53, 0x45, 0x10, 0x03, 0x12, 0x1e, 0x0a, 0x1a, 0x4e,  
0x4f, 0x5f, 0x4c, 0x49, 0x43, 0x45, 0x4e, 0x53, 0x45, 0x5f, 0x41, 0x54, 0x54, 0x45, 0x4d, 0x50,  
0x54, 0x45, 0x44, 0x5f, 0x4c, 0x4f, 0x47, 0x49, 0x4e, 0x10,  
0x04, 0x42, 0x83, 0x02, 0x0a, 0x23,  
0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64,  
0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65,  
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0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x64, 0x69, 0x73,  
0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x61, 0x70, 0x69,  
0x76, 0x31, 0x2f, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69,  
0x6e, 0x65, 0x70, 0x62, 0x3b, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e,  
0x67, 0x69, 0x6e, 0x65, 0x70, 0x62, 0xa2, 0x02, 0x0f, 0x44, 0x49, 0x53, 0x43, 0x4f, 0x56, 0x45,  
0x52, 0x59, 0x45, 0x4e, 0x47, 0x49, 0x4e, 0x45, 0xaa, 0x02, 0x1f, 0x47, 0x6f, 0x6f, 0x67,

```

0x6c,
0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x44, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72,
0x79, 0x45, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x56, 0x31, 0xca, 0x02, 0x1f, 0x47, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x44, 0x69, 0x73, 0x63, 0x6f, 0x76,
0x65, 0x72, 0x79, 0x45, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x5c, 0x56, 0x31, 0xea, 0x02, 0x22, 0x47,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a, 0x3a, 0x44, 0x69,
0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x45, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x3a, 0x3a, 0x56,
0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDescOnce sync.Once
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData =
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc
)

func file_google_cloud_discoveryengine_v1_user_license_proto_rawDescGZIP() []byte {
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDescOnce.Do(func()
 {
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData =
 protoimpl.X.CompressGZIP(file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData)
 })
 return file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData
}

var file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes = make([]protoimpl.EnumInfo, 1)
var file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_cloud_discoveryengine_v1_user_license_proto_goTypes = []any{
 (UserLicense_LicenseAssignmentState)(0), // 0:
 google.cloud.discoveryengine.v1.UserLicense.LicenseAssignmentState
 (*UserLicense)(nil), // 1: google.cloud.discoveryengine.v1.UserLicense
 (*timestamppb.Timestamp)(nil), // 2: google.protobuf.Timestamp
}
var file_google_cloud_discoveryengine_v1_user_license_proto_depIdxs = []int32{
 0, // 0: google.cloud.discoveryengine.v1.UserLicense.license_assignment_state:type_name
 -> google.cloud.discoveryengine.v1.UserLicense.LicenseAssignmentState
 2, // 1: google.cloud.discoveryengine.v1.UserLicense.create_time:type_name -> google.protobuf.Timestamp
 2, // 2: google.cloud.discoveryengine.v1.UserLicense.update_time:type_name -> google.protobuf.Timestamp
 2, // 3: google.cloud.discoveryengine.v1.UserLicense.last_login_time:type_name -> google.protobuf.Timestamp
 4, // [4:4] is the sub-list for method output_type
 4, // [4:4] is the sub-list for method input_type
 4, // [4:4] is the sub-list for extension type_name
 4, // [4:4] is the sub-list for extension extendee
 0, // [0:4] is the sub-list for field type_name
}

func init() { file_google_cloud_discoveryengine_v1_user_license_proto_init() }
func file_google_cloud_discoveryengine_v1_user_license_proto_init() {

```



```

if File_google_cloud_discoveryengine_v1_user_license_proto != nil {
 return
}
type x struct{}
out := protoimpl.TypeBuilder{
 File: protoimpl.DescBuilder{
 GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
 RawDescriptor:
file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc,
 NumEnums: 1,
 NumMessages: 1,
 NumExtensions: 0,
 NumServices: 0,
 },
 GoTypes: file_google_cloud_discoveryengine_v1_user_license_proto_goTypes,
 DependencyIndexes: file_google_cloud_discoveryengine_v1_user_license_proto_depIdxs,
 EnumInfos: file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes,
 MessageInfos: file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes,
}.Build()
File_google_cloud_discoveryengine_v1_user_license_proto = out.File
file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc = nil
file_google_cloud_discoveryengine_v1_user_license_proto_goTypes = nil
file_google_cloud_discoveryengine_v1_user_license_proto_depIdxs = nil
}
// Copyright 2025 Google LLC
//
// Licensed under the Apache License, Version 2.0 (the "License");
// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
// https://www.apache.org/licenses/LICENSE-2.0
//
// Unless required by applicable law or agreed to in writing, software
// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"

```

```
"google.golang.org/api/iterator"
)
```

```
func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}
```

```
func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}
```

```
func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
```

```

// TODO: Handle error.
}
defer c.Close()

req := &procurementpb.AssignRequest{
// TODO: Fill request struct fields.
// See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
}
resp, err := c.Assign(ctx, req)
if err != nil {
// TODO: Handle error.
}
//
TODO: Use resp.
_ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := procurement.NewLicenseManagementClient(ctx)
if err != nil {
// TODO: Handle error.
}
defer c.Close()

req := &procurementpb.EnumerateLicensedUsersRequest{
// TODO: Fill request struct fields.
// See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicensedUsersRequest.
}
it := c.EnumerateLicensedUsers(ctx, req)
for {
resp, err := it.Next()
if err == iterator.Done {
break
}
if err != nil {
// TODO: Handle error.
}
}
//

```

TODO: Use resp.

```
_ = resp

// If you need to access the underlying RPC response,
// you can do so by casting the `Response` as below.
// Otherwise, remove this line. Only populated after
// first call to Next(). Not safe for concurrent access.
_ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
}
}
```

```
func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
 // TODO: Fill request struct fields.
 //
 // See
 // https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRequest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

```
func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
```

```

// TODO: Handle error.
}
defer c.Close()

req := &procurementpb.UnassignRequest{
// TODO: Fill request struct fields.
// See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
}
resp,
err := c.Unassign(ctx, req)
if err != nil {
// TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := procurement.NewLicenseManagementClient(ctx)
if err != nil {
// TODO: Handle error.
}
defer c.Close()

req := &procurementpb.UpdateLicensePoolRequest{
// TODO: Fill request struct fields.
// See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoolRequest.
}
resp, err := c.UpdateLicensePool(ctx, req)
if err != nil {
// TODO: Handle error.
}
//
// TODO: Use resp.
_ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
ctx := context.Background()

```

```
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := procurement.NewLicenseManagementClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &longrunningpb.GetOperationRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
}
resp, err := c.GetOperation(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
```

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//go:build go1.23

package compute\_test

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// Code generated by protoc-gen-go\_gapic. DO NOT EDIT.

package compute\_test

import (

    "context"

    compute "cloud.google.com/go/compute/apiv1beta"

    computepb "cloud.google.com/go/compute/apiv1beta/computepb"

    "google.golang.org/api/iterator"

)

func ExampleNewLicensesRESTClient() {

```

ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
//
It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

// TODO: Use client.
_ = c
}

func ExampleLicensesClient_Delete() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.DeleteLicenseRequest{
 //
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#DeleteLicenseRequest.
}
op, err := c.Delete(ctx, req)
if err != nil {
 // TODO: Handle error.
}

err = op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
}

func ExampleLicensesClient_Get() {
ctx := context.Background()

```



```

// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.GetLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#GetLicenseRequest.
}
resp,
err := c.Get(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

```

```

func ExampleLicensesClient_Insert()
{
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
 // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded
 // as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#ListLicensesRequest.
 }

```

```

it := c.List(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
 break
 }
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _
 = it.Response.(*compute.LicensesListResponse)
}
}

func ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &compute.SetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute.LicensesClient#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()

```

```
//
This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#TestIamPermissionsLicenseRequest.
}
resp, err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_Update() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require
 modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.UpdateLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#UpdateLicenseRequest.
 }
 op, err := c.Update(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }

 err = op.Wait(ctx)
}
```

```

if err != nil {
 // TODO: Handle error.
}
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {

```

```

ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicenseCodesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.GetLicenseCodeRequest{
 // TODO: Fill request
 struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
}
resp, err := c.Get(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.

```

```

_ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
 // TODO: Fill request struct fields.
 // See
 https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
 dUsersRequest.

```

```

}
for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
 if err != nil {
 // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
}
}
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package discoveryengine

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 "cloud.google.com/go/longrunning"
 lroauto "cloud.google.com/go/longrunning/autogen"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax
 "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"

```



```

"google.golang.org/grpc"
"google.golang.org/grpc/codes"
"google.golang.org/protobuf/encoding/protojson"
"google.golang.org/protobuf/proto"
)

```

```

var newUserLicenseClientHook clientHook

```

```

// UserLicenseCallOptions contains the retry settings for each method of UserLicenseClient.

```

```

type UserLicenseCallOptions struct {
 ListUserLicenses []gax.CallOption
 BatchUpdateUserLicenses []gax.CallOption
 CancelOperation []gax.CallOption
 GetOperation []gax.CallOption
 ListOperations []gax.CallOption
}

```

```

func defaultUserLicenseGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("discoveryengine.googleapis.com:443"),
 internaloption.WithDefaultEndpointTemplate("discoveryengine.UNIVERSE_DOMAIN:443"),
 internaloption.WithDefaultMTLS Endpoint("discoveryengine.mtls.googleapis.com:443"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://discoveryengine.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()),
 internaloption.EnableJwtWithScope(),
 internaloption.EnableNewAuthLibrary(),
 option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
 grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

```

```

func
defaultUserLicenseCallOptions() *UserLicenseCallOptions {
 return &UserLicenseCallOptions{
 ListUserLicenses: []gax.CallOption{},
 BatchUpdateUserLicenses: []gax.CallOption{},
 CancelOperation: []gax.CallOption{
 gax.WithTimeout(30000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnCodes([]codes.Code{
 codes.Unavailable,
 }, gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 10000 * time.Millisecond,
 Multiplier:
1.30,
 })
 })
 }
 }
}

```

```

 }),
 },
 GetOperation: []gax.CallOption{
 gax.WithTimeout(30000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnCodes([]codes.Code{
 codes.Unavailable,
 }, gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 10000 * time.Millisecond,
 Multiplier: 1.30,
 })
 }),
 },
 },
 ListOperations: []gax.CallOption{
 gax.WithTimeout(300000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnCodes([]codes.Code{
 codes.Unavailable,
 }, gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 30000 * time.Millisecond,
 Multiplier: 1.30,
 })
 }),
 },
 },
}
}

func defaultUserLicenseRESTCallOptions() *UserLicenseCallOptions {
 return &UserLicenseCallOptions{
 ListUserLicenses: []gax.CallOption{},
 BatchUpdateUserLicenses: []gax.CallOption{},
 CancelOperation: []gax.CallOption{
 gax.WithTimeout(30000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer
 {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 10000 * time.Millisecond,
 Multiplier: 1.30,
 },
 http.StatusServiceUnavailable)
 }),
 },
 GetOperation: []gax.CallOption{
 gax.WithTimeout(30000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {

```

```

 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 10000 * time.Millisecond,
 Multiplier: 1.30,
 },
 http.StatusServiceUnavailable)
 }),
},
ListOperations: []gax.CallOption{
 gax.WithTimeout(300000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 30000 * time.Millisecond,
 Multiplier: 1.30,
 },
 http.StatusServiceUnavailable)
 }),
 },
}
}

// internalUserLicenseClient is an interface that defines the methods available from Discovery Engine API.
type internalUserLicenseClient
interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 ListUserLicenses(context.Context, *discoveryenginepb.ListUserLicensesRequest, ...gax.CallOption)
 *UserLicenseIterator
 BatchUpdateUserLicenses(context.Context, *discoveryenginepb.BatchUpdateUserLicensesRequest,
 ...gax.CallOption) (*BatchUpdateUserLicensesOperation, error)
 BatchUpdateUserLicensesOperation(name string) *BatchUpdateUserLicensesOperation
 CancelOperation(context.Context, *longrunningpb.CancelOperationRequest, ...gax.CallOption) error
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
 (*longrunningpb.Operation, error)
 ListOperations(context.Context, *longrunningpb.ListOperationsRequest, ...gax.CallOption) *OperationIterator
}

// UserLicenseClient is a client for interacting with Discovery Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
//
// Service for managing
// User Licenses.
type UserLicenseClient struct {
 // The internal transport-dependent client.
 internalClient internalUserLicenseClient

```

```

// The call options for this service.
CallOptions *UserLicenseCallOptions

// LROClient is used internally to handle long-running operations.
// It is exposed so that its CallOptions can be modified if required.
// Users should not Close this client.
LROClient *lroauto.OperationsClient
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *UserLicenseClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *UserLicenseClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns
// a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *UserLicenseClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// ListUserLicenses lists the User Licenses.
func (c *UserLicenseClient) ListUserLicenses(ctx context.Context, req
*discoveryenginepb.ListUserLicensesRequest, opts ...gax.CallOption) *UserLicenseIterator {
 return c.internalClient.ListUserLicenses(ctx, req, opts...)
}

// BatchUpdateUserLicenses updates the User License.
// This method is used for batch assign/unassign licenses to users.
func (c *UserLicenseClient) BatchUpdateUserLicenses(ctx context.Context, req
*discoveryenginepb.BatchUpdateUserLicensesRequest, opts ...gax.CallOption)
(*BatchUpdateUserLicensesOperation, error) {
 return c.internalClient.BatchUpdateUserLicenses(ctx, req, opts...)
}

```

```

// BatchUpdateUserLicensesOperation returns a new BatchUpdateUserLicensesOperation from a given name.
//
The name must be that of a previously created BatchUpdateUserLicensesOperation, possibly from a different
process.
func (c *UserLicenseClient) BatchUpdateUserLicensesOperation(name string)
*BatchUpdateUserLicensesOperation {
 return c.internalClient.BatchUpdateUserLicensesOperation(name)
}

// CancelOperation is a utility method from google.longrunning.Operations.
func (c *UserLicenseClient) CancelOperation(ctx context.Context, req *longrunningpb.CancelOperationRequest,
opts ...gax.CallOption) error {
 return c.internalClient.CancelOperation(ctx, req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *UserLicenseClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest, opts
...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// ListOperations is a utility method from google.longrunning.Operations.
func (c *UserLicenseClient) ListOperations(ctx context.Context,
req *longrunningpb.ListOperationsRequest, opts ...gax.CallOption) *OperationIterator {
 return c.internalClient.ListOperations(ctx, req, opts...)
}

// userLicenseGRPCClient is a client for interacting with Discovery Engine API over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type userLicenseGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing UserLicenseClient
 CallOptions **UserLicenseCallOptions

 // The gRPC API client.
 userLicenseClient discoveryenginepb.UserLicenseServiceClient

 // LROClient is used internally to handle long-running operations.
 // It is exposed so that its CallOptions can be modified if required.
 // Users should not Close this client.
 LROClient **lroauto.OperationsClient

 operationsClient longrunningpb.OperationsClient

```

```

// The x-goog-* metadata
to be sent with each request.
xGoogHeaders []string

logger *slog.Logger
}

// NewUserLicenseClient creates a new user license service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing User Licenses.
func NewUserLicenseClient(ctx context.Context, opts ...option.ClientOption) (*UserLicenseClient, error) {
 clientOpts := defaultUserLicenseGRPCClientOptions()
 if newUserLicenseClientHook != nil {
 hookOpts, err := newUserLicenseClientHook(ctx, clientHookParams{})
 if err != nil {
 return nil, err
 }
 clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
 return nil, err
 }
 client := UserLicenseClient{CallOptions: defaultUserLicenseCallOptions()}

 c := &userLicenseGRPCClient{
 connPool: connPool,
 userLicenseClient: discoveryenginepb.NewUserLicenseServiceClient(connPool),
 CallOptions:
 &client.CallOptions,
 logger: internaloption.GetLogger(opts),
 operationsClient: longrunningpb.NewOperationsClient(connPool),
 }
 c.setGoogleClientInfo()

 client.internalClient = c

 client.LROClient, err = lroauto.NewOperationsClient(ctx, gtransport.WithConnPool(connPool))
 if err != nil {
 // This error "should not happen", since we are just reusing old connection pool
 // and never actually need to dial.
 // If this does happen, we could leak connp. However, we cannot close conn:
 // If the user invoked the constructor with option.WithGRPCConn,
 // we would close a connection that's still in use.
 // TODO: investigate error conditions.
 return nil, err
 }

```

```

}
c.LROClient = &client.LROClient
return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *userLicenseGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

//
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *userLicenseGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc", grpc.Version, "pb", protoVersion)
 c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *userLicenseGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
type userLicenseRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // LROClient is used internally
 // to handle long-running operations.
 // It is exposed so that its CallOptions can be modified if required.
 // Users should not Close this client.
 LROClient **lroauto.OperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

```

```

// Points back to the CallOptions field of the containing UserLicenseClient
CallOptions **UserLicenseCallOptions

logger *slog.Logger
}

// NewUserLicenseRESTClient creates a new user license service rest client.
//
// Service for managing User Licenses.
func NewUserLicenseRESTClient(ctx context.Context, opts ...option.ClientOption) (*UserLicenseClient, error) {
 clientOpts := append(defaultUserLicenseRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
 return nil, err
 }

 callOpts := defaultUserLicenseRESTCallOptions()
 c := &userLicenseRESTClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,
 logger: internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 lroOpts
 := []option.ClientOption{
 option.WithHTTPClient(httpClient),
 option.WithEndpoint(endpoint),
 }
 opClient, err := lroauto.NewOperationsRESTClient(ctx, lroOpts...)
 if err != nil {
 return nil, err
 }
 c.LROClient = &opClient

 return &UserLicenseClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultUserLicenseRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://discoveryengine.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://discoveryengine.UNIVERSE_DOMAIN"),
 internaloption.WithDefaultMTLSEndpoint("https://discoveryengine.mtls.googleapis.com"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://discoveryengine.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()...),
 }
}

```



```

 internaloption.EnableNewAuthLibrary(),
}
}

// setGoogleClientInfo
// sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *userLicenseRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *userLicenseRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *userLicenseRESTClient) Connection() *grpc.ClientConn {
 return nil
}

func (c *userLicenseGRPCClient) ListUserLicenses(ctx context.Context, req
*discoveryenginepb.ListUserLicensesRequest,
opts ...gax.CallOption) *UserLicenseIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).ListUserLicenses[0:len((*c.CallOptions).ListUserLicenses):len((*c.CallOptions).ListUser
Licenses)], opts...)
 it := &UserLicenseIterator{}
 req = proto.Clone(req).(*discoveryenginepb.ListUserLicensesRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*discoveryenginepb.UserLicense, string, error) {
 resp := &discoveryenginepb.ListUserLicensesResponse{}
 if pageToken != "" {
 req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {

```

```

 req.PageSize = math.MaxInt32
} else if pageSize != 0 {
 req.PageSize = int32(pageSize)
}
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx,
c.userLicenseClient.ListUserLicenses, req, settings.GRPC, c.logger, "ListUserLicenses")
 return err
}, opts...)
if err != nil {
 return nil, "", err
}

it.Response = resp
return resp.GetUserLicenses(), resp.GetNextPageToken(), nil
}
fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

func (c *userLicenseGRPCClient) BatchUpdateUserLicenses(ctx context.Context, req
*discoveryenginepb.BatchUpdateUserLicensesRequest, opts ...gax.CallOption)
(*BatchUpdateUserLicensesOperation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders,
hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).BatchUpdateUserLicenses[0:len((*c.CallOptions).BatchUpdateUserLicenses):len((*c.Call
Options).BatchUpdateUserLicenses)], opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.userLicenseClient.BatchUpdateUserLicenses, req, settings.GRPC, c.logger,

```

```

"BatchUpdateUserLicenses")
 return err
}, opts...)
if err != nil {
 return nil, err
}
return &BatchUpdateUserLicensesOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, resp),
}, nil
}

func (c *userLicenseGRPCClient) CancelOperation(ctx context.Context, req
*longrunningpb.CancelOperationRequest, opts ...gax.CallOption) error {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx,
 hds...)
 opts =
 append((*c.CallOptions).CancelOperation[0:len((*c.CallOptions).CancelOperation):len((*c.CallOptions).CancelOp
 eration)], opts...)
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 _, err = executeRPC(ctx, c.operationsClient.CancelOperation, req, settings.GRPC, c.logger, "CancelOperation")
 return err
 }, opts...)
 return err
}

func (c *userLicenseGRPCClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
 append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
 opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context,
 settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
 return err
 }, opts...)
 if err != nil {
 return nil, err
 }
}

```

```

return resp, nil
}

func (c *userLicenseGRPCClient) ListOperations(ctx context.Context, req *longrunningpb.ListOperationsRequest,
opts ...gax.CallOption) *OperationIterator {
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

hds = append(c.xGoogHeaders, hds...)
ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
opts =
append((*c.CallOptions).ListOperations[0:len((*c.CallOptions).ListOperations):len((*c.CallOptions).ListOperations
)], opts...)
it := &OperationIterator{ }
req = proto.Clone(req).(*longrunningpb.ListOperationsRequest)
it.InternalFetch = func(pageSize int, pageToken string) ([]*longrunningpb.Operation, string, error) {
resp := &longrunningpb.ListOperationsResponse{ }
if pageToken !=
"" {
req.PageToken = pageToken
}
if pageSize > math.MaxInt32 {
req.PageSize = math.MaxInt32
} else if pageSize != 0 {
req.PageSize = int32(pageSize)
}
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
var err error
resp, err = executeRPC(ctx, c.operationsClient.ListOperations, req, settings.GRPC, c.logger, "ListOperations")
return err
}, opts...)
if err != nil {
return nil, "", err
}

it.Response = resp
return resp.GetOperations(), resp.GetNextPageToken(), nil
}
fetch := func(pageSize int, pageToken string) (string, error) {
items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
if err != nil {
return "", err
}
}
it.items = append(it.items, items...)
return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())

```

```

it.pageInfo.Token = req.GetPageToken()

return it
}

// ListUserLicenses lists the
// User Licenses.
func (c *userLicenseRESTClient) ListUserLicenses(ctx context.Context, req
*discoveryenginepb.ListUserLicensesRequest, opts ...gax.CallOption) *UserLicenseIterator {
it := &UserLicenseIterator{}
req = proto.Clone(req).(*discoveryenginepb.ListUserLicensesRequest)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
it.InternalFetch = func(pageSize int, pageToken string) ([]*discoveryenginepb.UserLicense, string, error) {
resp := &discoveryenginepb.ListUserLicensesResponse{}
if pageToken != "" {
req.PageToken = pageToken
}
if pageSize > math.MaxInt32 {
req.PageSize = math.MaxInt32
} else if pageSize != 0 {
req.PageSize = int32(pageSize)
}
baseUrl, err := url.Parse(c.endpoint)
if err != nil {
return nil, "", err
}
baseUrl.Path += fmt.Sprintf("/v1/%v/userLicenses", req.GetParent())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")
if req.GetFilter() != "" {
params.Add("filter", fmt.Sprintf("%v",
req.GetFilter()))
}
if req.GetPageSize() != 0 {
params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
}
if req.GetPageToken() != "" {
params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := append(c.xGoogHeaders, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
if settings.Path != "" {

```

```

 baseUrl.Path = settings.Path
}
httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
if err != nil {
 return err
}
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "ListUserLicenses")
if err != nil {
 return err
}
if err := unm.Unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, "", e
}
it.Response
= resp
return resp.GetUserLicenses(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// BatchUpdateUserLicenses updates the User License.
// This method is used for batch assign/unassign licenses to users.
func (c *userLicenseRESTClient) BatchUpdateUserLicenses(ctx context.Context, req
*discoveryenginepb.BatchUpdateUserLicensesRequest, opts ...gax.CallOption)
(*BatchUpdateUserLicensesOperation, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}

```

```

jsonReq, err := m.Marshal(req)
if err != nil {
 return nil, err
}

baseUrl, err := url.Parse(c.endpoint)
if
err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/v1/%v:batchUpdateUserLicenses", req.GetParent())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &longrunningpb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err
:= executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "BatchUpdateUserLicenses")
 if err != nil {
 return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {

```

```

return nil, e
}

override := fmt.Sprintf("/v1/%s", resp.GetName())
return &BatchUpdateUserLicensesOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, resp),
 pollPath: override,
}, nil
}

// CancelOperation is a utility method from google.longrunning.Operations.
func (c *userLicenseRESTClient) CancelOperation(ctx context.Context, req
*longrunningpb.CancelOperationRequest, opts ...gax.CallOption) error {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
 return err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:cancel", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery
 = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 return gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

```



```

_, err = executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "CancelOperation")
return err
}, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *userLicenseRESTClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption)
(*longrunningpb.Operation, error) {
baseUrl, err := url.Parse(c.endpoint)
if err != nil {
return nil, err
}
baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &longrunningpb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
if settings.Path != "" {
baseUrl.Path = settings.Path
}
httpReq, err := http.NewRequest("GET",
baseUrl.String(), nil)
if err != nil {
return err
}
httpReq = httpReq.WithContext(ctx)
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
if err != nil {
return err
}
}

```

```

if err := unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// ListOperations is a utility method from google.longrunning.Operations.
func (c *userLicenseRESTClient) ListOperations(ctx context.Context, req *longrunningpb.ListOperationsRequest,
opts ...gax.CallOption) *OperationIterator {
 it := &OperationIterator{}
 req = proto.Clone(req).(*longrunningpb.ListOperationsRequest)
 unmarshalOptions := &protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*longrunningpb.Operation, string, error) {
 resp := &longrunningpb.ListOperationsResponse{}
 if pageToken != "" {
 req.PageToken =
 pageToken
 }
 if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
 req.PageSize = int32(pageSize)
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v/operations", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetFilter() != "" {
 params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req.GetPageSize() != 0 {
 params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()
 }
}

```

```

// Build HTTP headers from client and context metadata.
hds := append(c.xGoogHeaders, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path
= settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "ListOperations")
 if err != nil {
 return err
 }
 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, "", e
}
it.Response = resp
return resp.GetOperations(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

```

```
// BatchUpdateUserLicensesOperation returns a new
// BatchUpdateUserLicensesOperation from a given name.
// The name must be that of a previously created BatchUpdateUserLicensesOperation, possibly from a different
// process.
func (c *userLicenseGRPCClient) BatchUpdateUserLicensesOperation(name string)
*BatchUpdateUserLicensesOperation {
 return &BatchUpdateUserLicensesOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
 }
}
```

```
// BatchUpdateUserLicensesOperation returns a new BatchUpdateUserLicensesOperation from a given name.
// The name must be that of a previously created BatchUpdateUserLicensesOperation, possibly from a different
// process.
func (c *userLicenseRESTClient) BatchUpdateUserLicensesOperation(name string)
*BatchUpdateUserLicensesOperation {
 override := fmt.Sprintf("/v1/%s", name)
 return &BatchUpdateUserLicensesOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
 pollPath: override,
 }
}
```

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// Code generated by protoc-gen-go\_gapic. DO NOT EDIT.

package compute

```
import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
```

```

"time"

computepb "cloud.google.com/go/compute/apiv1beta/computepb"
gax "github.com/googleapis/gax-go/v2"
"google.golang.org/api/iterator"
"google.golang.org/api/option"
"google.golang.org/api/option/internaloption"
httptransport "google.golang.org/api/transport/http"
"google.golang.org/grpc"
"google.golang.org/protobuf/encoding/protojson"
"google.golang.org/protobuf/proto"
)

var
newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
Delete []gax.CallOption
Get []gax.CallOption
GetIamPolicy []gax.CallOption
Insert []gax.CallOption
List []gax.CallOption
SetIamPolicy []gax.CallOption
TestIamPermissions []gax.CallOption
Update []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
return &LicensesCallOptions{
Delete: []gax.CallOption{
gax.WithTimeout(600000 * time.Millisecond),
},
Get: []gax.CallOption{
gax.WithTimeout(600000 * time.Millisecond),
gax.WithRetry(func() gax.Retryer {
return gax.OnHTTPCodes(gax.Backoff{
Initial: 100 * time.Millisecond,
Max: 60000 * time.Millisecond,
Multiplier:
1.30,
},
http.StatusGatewayTimeout,
http.StatusServiceUnavailable)
}),
},
GetIamPolicy: []gax.CallOption{
gax.WithTimeout(600000 * time.Millisecond),

```

```

gax.WithRetry(func() gax.Retryer {
return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier: 1.30,
}),
http.StatusGatewayTimeout,
http.StatusServiceUnavailable)
}),
},
Insert: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
},
List: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier: 1.30,
}),
http.StatusGatewayTimeout,
http.StatusServiceUnavailable)
}),
},
SetIamPolicy: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
},
TestIamPermissions: []gax.CallOption{
 gax.WithTimeout(600000
* time.Millisecond),
},
Update: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
},
}
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)

```

```

List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
TestIamPermissions(context.Context,
*computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption) (*computepb.TestPermissionsResponse, error)
Update(context.Context, *computepb.UpdateLicenseRequest, ...gax.CallOption) (*Operation, error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
// The internal transport-dependent client.
internalClient internalLicensesClient

// The call options for this service.
CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header
// passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
// creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)

```

```

(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context,
 req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
 ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available
in the specified project. This method does not get any licenses that belong to other projects, including licenses
attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this
method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
 ...gax.CallOption) (*computepb.Policy, error) {
 return
 c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
 *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
 error) {

```



```

return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
return c.internalClient.Update(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type
licensesRESTClient struct {
// The http endpoint to connect to.
endpoint string

// The http client.
httpClient *http.Client

// operationClient is used to call the operation-specific management service.
operationClient *GlobalOperationsClient

// The x-goog-* headers to be sent with each request.
xGoogHeaders []string

// Points back to the CallOptions field of the containing LicensesClient
CallOptions **LicensesCallOptions

logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
if err != nil {
return nil, err
}

callOpts := defaultLicensesRESTCallOptions()
c := &licensesRESTClient{
endpoint: endpoint,
httpClient: httpClient,
CallOptions: &callOpts,
logger:

```

```

 internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
 option.WithHTTPClient(httpClient),
 option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
 return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
 internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()),
 internaloption.EnableNewAuthLibrary(),
 }
}

// setGoogleClientInfo sets the name and version of the application
// in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
 return err
 }
}

```

```

}
return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for
// use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)],
 opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)

```

```

httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
if err != nil {
 return err
}

if err := unm.Unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
}
op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project: req.GetProject(),
 },
}
return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
// who are creating
// Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
 url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)

```

```

error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
 if err != nil {
 return err
 }

 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
// Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
 opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/getIamPolicy",
 req.GetProject(), req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
 params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",

```

```

url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Policy{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error
{
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

```

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```

func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }
}

```

```

}

baseUrl, err
:= url.Parse(c.endpoint)
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses", req.GetProject())

params := url.Values{ }
if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &compute.Operation{ }
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq,
err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)

```

```

if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project: req.GetProject(),
 },
}
return op, nil
}

```

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended

for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
```

```
...gax.CallOption) *LicenseIterator {
```

```
 it := &LicenseIterator{}
```

```
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
```

```
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
```

```
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
```

```
 resp := &computepb.LicensesListResponse{}
```

```
 if pageToken != "" {
```

```
 req.PageToken = proto.String(pageToken)
```

```
 }
```

```
 if pageSize > math.MaxInt32 {
```

```
 req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
```

```
 } else if pageSize != 0 {
```

```
 req.MaxResults = proto.Uint32(uint32(pageSize))
```

```
 }
```

```
 baseUrl, err := url.Parse(c.endpoint)
```

```
 if err != nil {
```

```
 return nil, "", err
```

```
 }
```

```
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses", req.GetProject())
```

```
 params := url.Values{}
```

```
 if req != nil && req.Filter !=
```

```
 nil {
```

```
 params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
```

```
 }
```

```
 if req != nil && req.MaxResults != nil {
```

```
 params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
```

```
 }
```

```
 if req != nil && req.OrderBy != nil {
```



```

params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
}
if req != nil && req.PageToken != nil {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
}
if req != nil && req.ReturnPartialSuccess != nil {
 params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := append(c.xGoogHeaders, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return
 }
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
 if err != nil {
 return err
 }
 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, "", e
}
it.Response = resp
return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
}

```

```

 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating
Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err

```

```

 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
 if err != nil {
 return err
 }

 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
// intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient)
TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts
...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
 req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
 url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =

```

```

append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).TestIamPermissions)],
opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.TestPermissionsResponse{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

```

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```

func (c *licensesRESTClient)
Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
}

```

```

baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

params := url.Values{}
if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}
if req != nil && req.UpdateMask != nil {
 params.Add("updateMask", fmt.Sprintf("%v", req.GetUpdateMask()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

hds = append(c.xGoogHeaders, hds...)
hds
= append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Update[0:len((*c.CallOptions).Update):len((*c.CallOptions).Update)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Update")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}

```

```

op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project:
 req.GetProject(),
 },
}
return op, nil
}
// Copyright 2025 Google LLC
//
// Licensed under the Apache License, Version 2.0 (the "License");
// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
// http://www.apache.org/licenses/LICENSE-2.0
//
// Unless required by applicable law or agreed to in writing, software
// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
// protoc-gen-go v1.35.2
// protoc v4.25.7
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 reflect "reflect"
 sync
 "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

```

```

// Defines types of the grantee of this permission.
type Permission_GrantType int32

const (
 // The default value. This value is unused.
 Permission_GRANT_TYPE_UNSPECIFIED Permission_GrantType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GrantType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GrantType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GrantType = 3
)

// Enum value maps for Permission_GrantType.
var (
 Permission_GrantType_name = map[int32]string{
 0: "GRANT_TYPE_UNSPECIFIED",
 1: "USER",
 2:
 "GROUP",
 3: "EVERYONE",
 }
 Permission_GrantType_value = map[string]int32{
 "GRANT_TYPE_UNSPECIFIED": 0,
 "USER": 1,
 "GROUP": 2,
 "EVERYONE": 3,
 }
)

func (x Permission_GrantType) Enum() *Permission_GrantType {
 p := new(Permission_GrantType)
 *p = x
 return p
}

func (x Permission_GrantType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GrantType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GrantType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

```

```

}

func (x Permission_GrantType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GrantType.Descriptor instead.
func (Permission_GrantType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
 0: "ROLE_UNSPECIFIED",
 1: "OWNER",
 2: "WRITER",
 3: "READER",
 }
 Permission_Role_value = map[string]int32{
 "ROLE_UNSPECIFIED": 0,
 "OWNER": 1,
 "WRITER": 2,
 "READER": 3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

```



```

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
// you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //

```

```

// Output only.
Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
// Optional. Immutable. The type of the grantee.
GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Permission_GranteeType,oneof"
json:"grantee_type,omitempty"`
// Optional. Immutable. The email address of the user of group which this
// permission refers. Field is not set when permission's grantee type is
// EVERYONE.
EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
// Required. The role granted by this permission.
Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
*x = Permission{}
mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
{
mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
if x != nil {
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
if ms.LoadMessageInfo() == nil {
ms.StoreMessageInfo(mi)
}
return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

```

```

func (x *Permission) GetName() string {
 if x != nil {
 return x.Name
 }
 return ""
}

```

```

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
 return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

```

```

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
 return *x.EmailAddress
 }
 return ""
}

```

```

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
 return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

```

```

var

```

```

File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

```

```

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
}

```

0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,  
0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,  
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,  
0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,  
0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,  
0x01, 0x01, 0x12,  
0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,  
0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,  
0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,  
0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,  
0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,  
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,  
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,  
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,  
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,  
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,  
0x54, 0x59,  
0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,  
0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,  
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,  
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,  
0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,  
0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,  
0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,  
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,  
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,  
0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,  
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,  
0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,  
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,  
0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,  
0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,  
0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,  
0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,  
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,  
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,  
0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,  
0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,  
0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,  
0x6f, 0x6c, 0x65, 0x42,  
0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,  
0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,  
0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,  
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,  
0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,  
0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,  
0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,  
0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,

```

0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
0x72,
0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
 protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GrantType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GrantType
 (Permission_Role)(0), // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil), // 2: google.ai.generativelanguage.v1beta.Permission
}

var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
 google.ai.generativelanguage.v1beta.Permission.GrantType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
 google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
{
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
 return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}

```

```

out := protoimpl.TypeBuilder{
 File: protoimpl.DescBuilder{
 GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
 RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
 NumEnums: 2,
 NumMessages: 1,
 NumExtensions: 0,
 NumServices: 0,
 },
 GoTypes: file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
 DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
 EnumInfos: file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
 MessageInfos: file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1beta_permission_proto = out.File
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
= nil
file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package discoveryengine_test

import (
 "context"

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
)

```

```

func ExampleUserLicenseClient_ListUserLicenses_all() {
 ctx := context.Background()
 //
 This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &discoveryenginepb.ListUserLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#ListUserLicensesRequest.
 }
 for resp, err := range c.ListUserLicenses(ctx, req).All() {
 if err != nil {
 // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
 }
}

func ExampleUserLicenseClient_ListOperations_all() {
 ctx := context.Background()
 //
 This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.ListOperationsRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#ListOperationsRequest.
 }
 for resp, err := range c.ListOperations(ctx, req).All() {
 if err != nil {
 // TODO: Handle error and break/return/continue. Iteration will stop after any error.

```

```
}
// TODO: Use resp.
_ = resp
}
}
```

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// Code generated by protoc-gen-go. DO NOT EDIT.

// versions:

// protoc-gen-go v1.35.2

// protoc v4.25.7

// source: google/cloud/commerce/consumer/procurement/v1/license\_management\_service.proto

package procurementpb

import (

context "context"

\_ "google.golang.org/genproto/googleapis/api/annotations"

```

grpc "google.golang.org/grpc"
codes "google.golang.org/grpc/codes"
status "google.golang.org/grpc/status"
protorelect
"google.golang.org/protobuf/reflect/protorelect"
protoimpl "google.golang.org/protobuf/runtime/protoimpl"
durationpb "google.golang.org/protobuf/types/known/durationpb"
fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
timestamppb "google.golang.org/protobuf/types/known/timestamppb"
reflect "reflect"
sync "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

```

```

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
 return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
 return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
 return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {

```

```

// Allow manual assignments triggered by administrative operations only.
ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
AssignmentProtocol_AutoAssignmentType_ struct {
// Allow automatic assignments triggered by data plane operations.
AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
state protoimpl.MessageState
sizeCache protoimpl.SizeCache
unknownFields protoimpl.UnknownFields

// Identifier. Format:
// `billingAccounts/{billing_account}/orders/{order}/licensePool`
Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
// Required. Assignment protocol for the license pool.
LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
json:"license_assignment_protocol,omitempty"`
// Output only. Licenses count that are available to be assigned.
AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
// Output only. Total number of licenses in the pool.
TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
*x = LicensePool{}
mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
return protoimpl.X.MessageStringOf(x)
}

```

```

}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
 return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
 return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
 return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {

```



```

 return x.TotalLicenseCount
}
return 0
}

// Request message for getting a
// license pool.
type GetLicensePoolRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if
 ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return

```

```

file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
 return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
 json:"license_pool,omitempty"`
 //
 // Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
 json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {

```

```

ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
}
return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
 return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
 return x.UpdateMask
 }
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign].
type AssignRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func

```

```

(x *AssignRequest) Reset() {
*x = AssignRequest{}
mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
if x != nil {
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
if ms.LoadMessageInfo() == nil {
ms.StoreMessageInfo(mi)
}
return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
string {
if x != nil {
return x.Parent
}
return ""
}

func (x *AssignRequest) GetUsernames() []string {
if x != nil {
return x.Usernames
}
return nil
}

```

```

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign].
type AssignResponse struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{5}
}

// Request message for
//

```

```

[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign].
type UnassignRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
{
 *x = UnassignRequest{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{6}
}

```

```

func (x *UnassignRequest) GetParent() string {
 if x != nil {
 return
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
 return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign].
type UnassignResponse struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
 ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)

```

```

 }
 return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {

```



```

mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo()
 == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
 return x.Parent
 }
 return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
 return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
 return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.

```

```

// Format: `name@domain.com`.
Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
//
Output only. Timestamp when the license was assigned.
AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
// Output only. Timestamp when the license was recently used. This may not be
// the most recent usage time, and will be updated regularly (within 24
// hours).
RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
*x = LicensedUser{}
mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
if
x != nil {
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
if ms.LoadMessageInfo() == nil {
ms.StoreMessageInfo(mi)
}
return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

```

```

func (x *LicensedUser) GetUsername() string {
 if x != nil {
 return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
 return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
 return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.prourement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
 json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
 json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
 &file_google_cloud_commerce_consumer_prourement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

```

```

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
(x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
 return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
 return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

```

```

}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated:
// Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
 `protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"

```

```

json:"inactive_license_ttl,omitempty"
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
 return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
 protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =

```

```

[]byte{
0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
0x6f,
0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f,
0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f,
0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x1a, 0x1e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x62, 0x75, 0x66, 0x2f, 0x64,
0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x2e, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70,
0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e,
0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc3, 0x03, 0x0a, 0x12, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,
0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x8e, 0x01, 0x0a,
0x16, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,
0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x56, 0x2e,
0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d,
0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73,
0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70,
0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,
0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c,
0x2e, 0x4d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,
0x74, 0x54, 0x79, 0x70, 0x65, 0x48, 0x00, 0x52, 0x14, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41,
0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x88, 0x01,
0x0a, 0x14, 0x61, 0x75, 0x74, 0x6f, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,
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0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,  
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0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x3a, 0x3a,
0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

```

```

var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
= file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

```

```

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
(*AssignmentProtocol)(nil),
 // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
(*LicensePool)(nil), // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
(*GetLicensePoolRequest)(nil), // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
(*UpdateLicensePoolRequest)(nil), // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
(*AssignRequest)(nil), // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
(*AssignResponse)(nil), // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
(*UnassignRequest)(nil), // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
(*UnassignResponse)(nil), // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
(*EnumerateLicensedUsersRequest)(nil), // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
(*LicensedUser)(nil),
 // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
(*EnumerateLicensedUsersResponse)(nil), // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
(*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
(*AssignmentProtocol_AutoAssignmentType)(nil), // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
(*fieldmaskpb.FieldMask)(nil), // 13: google.protobuf.FieldMask
(*timestamppb.Timestamp)(nil), // 14: google.protobuf.Timestamp
(*durationpb.Duration)(nil), // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
-> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0, // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1, // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
-> google.protobuf.Timestamp
 9, // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->

```

```

google.cloud.commerce.consumer.procurement.v1.LicensedUser
15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:
type_name -> google.protobuf.Duration
2, // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
-> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
3, // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
4, // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
6, // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
-> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
8, // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_type
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
1, // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
1, // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
5, // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
7, // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_type
pe
-> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
14, // [14:19] is the sub-list for method output_type
9, // [9:14] is the sub-list for method input_type
9, // [9:9] is the sub-list for extension type_name
9, // [9:9] is the sub-list for extension extendee
0, // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
 return
 }
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
 Wrappers = []any{
 (*AssignmentProtocol_ManualAssignmentType_)(nil),
 (*AssignmentProtocol_AutoAssignmentType_)(nil),

```

```

}
type x struct{}
out := protoimpl.TypeBuilder{
 File:
 protoimpl.DescBuilder{
 GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
 RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
 NumEnums: 0,
 NumMessages: 13,
 NumExtensions: 0,
 NumServices: 1,
 },
 GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
 DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
 MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
}.Build()
File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
= nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(ctx context.Context,

```

```

in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
// Unassigns a license from a user.
Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
// Enumerates all users assigned a license.
EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

func
(c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest,
opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
 return nil, err
 }
}

```



```

 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest) (*AssignResponse,
 error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,

```

```

*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}

func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}

func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
(*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}

func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}

func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in); err != nil
 {
 return nil, err
 }
 if interceptor == nil {
 return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: "/google.cloud.commerce.consumer.prourement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {

```

```

 return nil, err
}
if interceptor == nil {
 return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
}
info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
}
handler
:= func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
}
return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
 return nil, err
 }
 if interceptor == nil {
 return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
 return nil, err
 }
 if interceptor == nil {
 return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",

```

```

}
handler := func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
}
return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
 return nil, err
 }
 if interceptor == nil {
 return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
 {
 MethodName: "GetLicensePool",
 Handler: _LicenseManagementService_GetLicensePool_Handler,
 },
 {
 MethodName: "UpdateLicensePool",
 Handler: _LicenseManagementService_UpdateLicensePool_Handler,
 },
 {
 MethodName: "Assign",
 Handler: _LicenseManagementService_Assign_Handler,
 },
 {
 MethodName:

```

```

"Unassign",
 Handler: _LicenseManagementService_Unassign_Handler,
},
{
 MethodName: "EnumerateLicensedUsers",
 Handler: _LicenseManagementService_EnumerateLicensedUsers_Handler,
},
},
Streams: []grpc.StreamDesc{},
Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

// [START discoveryengine_v1_generated_UserLicenseService_BatchUpdateUserLicenses_sync]

package main

import (
 "context"

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
)

func main() {
 ctx := context.Background()
 // This snippet has been automatically generated
 and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {

```

```

// TODO: Handle error.
}
defer c.Close()

req := &discoveryenginepb.BatchUpdateUserLicensesRequest{
// TODO: Fill request struct fields.
// See
https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#BatchUpdateUserLicensesRequest.
}
op, err := c.BatchUpdateUserLicenses(ctx, req)
if err != nil {
// TODO: Handle error.
}

resp, err := op.Wait(ctx)
if err != nil {
// TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

// [END discoveryengine_v1_generated_UserLicenseService_BatchUpdateUserLicenses_sync]
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"

```

)

```
func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
 //
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
 // TODO: Handle error.
 }
}
```

```

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
}

```



```

// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_Insert()
{
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
 // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 // only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{

```

```

// TODO: Fill request struct fields.
// See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
}
it := c.List(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
 break
 }
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*computepb.LicensesListResponse)
}
}

func
ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

```

```

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &compute.TestIamPermissionsLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Update() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may
 require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &compute.UpdateLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#UpdateLicenseRequest.
 }
 op, err := c.Update(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
}

```

```

}

err = op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
}

```

# 1.94 grpc-go 1.72.2

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# 1.95 google-golang-org-grpc 1.72.2

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# 1.98 google-api-go-client 0.236.0

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//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/compute_pb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute_pb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
 if err != nil {

```

```

// TODO: Handle error and break/return/continue. Iteration will stop after any error.
}
// TODO: Use resp.
_ = resp
}
}
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```

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```

```

package procurement

```

```

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"

```

```

 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport
 "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

```

```

var newLicenseManagementClientHook clientHook

```

```

// LicenseManagementCallOptions contains the retry settings for each method of LicenseManagementClient.
type LicenseManagementCallOptions struct {
 GetLicensePool []gax.CallOption
 UpdateLicensePool []gax.CallOption
 Assign []gax.CallOption
 Unassign []gax.CallOption
 EnumerateLicensedUsers []gax.CallOption
 GetOperation []gax.CallOption
}

func defaultLicenseManagementGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("cloudcommerceconsumerprocurement.googleapis.com:443"),
 internaloption.WithDefaultEndpointTemplate("cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN:443"),
 ,
 internaloption.WithDefaultMTLSEndpoint("cloudcommerceconsumerprocurement.mtls.googleapis.com:443"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()),
 internaloption.EnableJwtWithScope(),
 internaloption.EnableNewAuthLibrary(),
 option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
 grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
defaultLicenseManagementCallOptions() *LicenseManagementCallOptions {
 return &LicenseManagementCallOptions{
 GetLicensePool: []gax.CallOption{},
 UpdateLicensePool: []gax.CallOption{},
 Assign: []gax.CallOption{},
 Unassign: []gax.CallOption{},
 EnumerateLicensedUsers: []gax.CallOption{},
 GetOperation: []gax.CallOption{},
 }
}

func defaultLicenseManagementRESTCallOptions() *LicenseManagementCallOptions {
 return
 &LicenseManagementCallOptions{
 GetLicensePool: []gax.CallOption{},
 UpdateLicensePool: []gax.CallOption{},
 Assign: []gax.CallOption{},
 Unassign: []gax.CallOption{},
 EnumerateLicensedUsers: []gax.CallOption{},
 GetOperation: []gax.CallOption{},
 }
}

```



```

}
}

// internalLicenseManagementClient is an interface that defines the methods available from Cloud Commerce
Consumer Procurement API.
type internalLicenseManagementClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 GetLicensePool(context.Context, *procurementpb.GetLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 UpdateLicensePool(context.Context, *procurementpb.UpdateLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 Assign(context.Context, *procurementpb.AssignRequest, ...gax.CallOption) (*procurementpb.AssignResponse,
error)
 Unassign(context.Context, *procurementpb.UnassignRequest,
...gax.CallOption) (*procurementpb.UnassignResponse, error)
 EnumerateLicensedUsers(context.Context, *procurementpb.EnumerateLicensedUsersRequest, ...gax.CallOption)
*LicensedUserIterator
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
}

// LicenseManagementClient is a client for interacting with Cloud Commerce Consumer Procurement API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// Service for managing licenses.
type LicenseManagementClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseManagementClient

 // The call options for this service.
 CallOptions *LicenseManagementCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseManagementClient)
 Close() error {
 return c.internalClient.Close()
 }

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.

```

```

func (c *LicenseManagementClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseManagementClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// GetLicensePool gets the license pool.
func (c *LicenseManagementClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 return c.internalClient.GetLicensePool(ctx, req, opts...)
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *LicenseManagementClient)
 UpdateLicensePool(ctx context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 return c.internalClient.UpdateLicensePool(ctx, req, opts...)
}

// Assign assigns a license to a user.
func (c *LicenseManagementClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 return c.internalClient.Assign(ctx, req, opts...)
}

// Unassign unassigns a license from a user.
func (c *LicenseManagementClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest, opts
...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 return c.internalClient.Unassign(ctx, req, opts...)
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *LicenseManagementClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 return c.internalClient.EnumerateLicensedUsers(ctx,
 req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *LicenseManagementClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

```

```

}

// licenseManagementGRPCClient is a client for interacting with Cloud Commerce Consumer Procurement API
// over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
type licenseManagementGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 // The gRPC API client.
 licenseManagementClient procurementpb.LicenseManagementServiceClient

 operationsClient longrunningpb.OperationsClient

 //
 // The x-goog-* metadata to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

// NewLicenseManagementClient creates a new license management service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing licenses.
func NewLicenseManagementClient(ctx context.Context, opts ...option.ClientOption) (*LicenseManagementClient,
error) {
 clientOpts := defaultLicenseManagementGRPCClientOptions()
 if newLicenseManagementClientHook != nil {
 hookOpts, err := newLicenseManagementClientHook(ctx, clientHookParams{})
 if err != nil {
 return nil, err
 }
 clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
 return nil, err
 }
 client := LicenseManagementClient{CallOptions: defaultLicenseManagementCallOptions()}

 c := &licenseManagementGRPCClient{

```

```

connPool:
 connPool,
licenseManagementClient: procurementpb.NewLicenseManagementServiceClient(connPool),
CallOptions: &client.CallOptions,
logger: internaloption.GetLogger(opts),
operationsClient: longrunningpb.NewOperationsClient(connPool),
}
c.setGoogleClientInfo()

client.internalClient = c

return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *licenseManagementGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc",
 grpc.Version, "pb", protoVersion)
 c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
type licenseManagementRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

```

```

// The x-goog-* headers to be sent with each request.
xGoogHeaders []string

// Points back to the CallOptions field of the containing LicenseManagementClient
CallOptions **LicenseManagementCallOptions

logger *slog.Logger
}

// NewLicenseManagementRESTClient creates a new license management service rest client.
//
// Service for managing licenses.
func NewLicenseManagementRESTClient(ctx context.Context,
 opts ...option.ClientOption) (*LicenseManagementClient, error) {
 clientOpts := append(defaultLicenseManagementRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
 return nil, err
 }

 callOpts := defaultLicenseManagementRESTCallOptions()
 c := &licenseManagementRESTClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,
 logger: internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseManagementClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseManagementRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://cloudcommerceconsumerprocurement.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN"),
 internaloption.WithDefaultMTLSEndpoint("https://cloudcommerceconsumerprocurement.mtls.googleapis.com"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()),
 internaloption.EnableNewAuthLibrary(),
 }
}

//

```

```

setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient
 = nil
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseManagementRESTClient) Connection() *grpc.ClientConn {
 return nil
}

func (c *licenseManagementGRPCClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
 append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.licenseManagementClient.GetLicensePool, req, settings.GRPC, c.logger,
"GetLicensePool")
 return err
 },
 opts...)
 if err != nil {
 return nil, err
 }
 return resp, nil
}

```

```

func (c *licenseManagementGRPCClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.licenseManagementClient.UpdateLicensePool, req, settings.GRPC, c.logger,
"UpdateLicensePool")
 return err
 }, opts...)
 if err != nil {
 return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient)
Assign(ctx context.Context, req *procurementpb.AssignRequest, opts ...gax.CallOption)
(*procurementpb.AssignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 var resp *procurementpb.AssignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.licenseManagementClient.Assign, req, settings.GRPC, c.logger, "Assign")
 return err
 }, opts...)
 if err != nil {
 return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 hds := []string{"x-goog-request-params",

```

```

fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders, hds...)
ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
var resp *procurementpb.UnassignResponse
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.licenseManagementClient.Unassign, req, settings.GRPC, c.logger, "Unassign")
 return err
}, opts...)
if err != nil {
 return nil, err
}
return resp, nil
}

func (c *licenseManagementGRPCClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders, hds...)
ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
opts
=
append((*c.CallOptions).EnumerateLicensedUsers[0:len((*c.CallOptions).EnumerateLicensedUsers):len((*c.CallOp
tions).EnumerateLicensedUsers)], opts...)
it := &LicensedUserIterator{}
req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
 resp := &procurementpb.EnumerateLicensedUsersResponse{}
 if pageToken != "" {
 req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
 req.PageSize = int32(pageSize)
 }
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.licenseManagementClient.EnumerateLicensedUsers, req, settings.GRPC, c.logger,
"EnumerateLicensedUsers")
 return err
 }, opts...)
 if err != nil {
 return nil, "", err
 }
}

```



```

it.Response = resp
return resp.GetLicensedUsers(), resp.GetNextPageToken(),
nil
}
fetch := func(pageSize int, pageToken string) (string, error) {
items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
if err != nil {
return "", err
}
it.items = append(it.items, items...)
return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

func (c *licenseManagementGRPCClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

hds = append(c.xGoogHeaders, hds...)
ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
var resp *longrunningpb.Operation
err := gax.Invoke(ctx,
func(ctx context.Context, settings gax.CallSettings) error {
var err error
resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
return err
}, opts...)
if err != nil {
return nil, err
}
return resp, nil
}

// GetLicensePool gets the license pool.
func (c *licenseManagementRESTClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
baseUrl, err := url.Parse(c.endpoint)
if err != nil {

```

```

return nil, err
}
baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx,
hds...)
opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &procurementpb.LicensePool{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
if settings.Path != "" {
baseUrl.Path = settings.Path
}
httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
if err != nil {
return err
}
httpReq = httpReq.WithContext(ctx)
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLicensePool")
if err != nil {
return err
}

if err := unm.Unmarshal(buf, resp); err != nil {
return err
}

return nil
}, opts...)
if e != nil {
return nil, e
}
return resp, nil
}

```

```

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *licenseManagementRESTClient) UpdateLicensePool(ctx
context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetLicensePool()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetLicensePool().GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetUpdateMask() != nil {
 field, err := protojson.Marshal(req.GetUpdateMask())
 if err != nil {
 return nil, err
 }
 params.Add("updateMask", string(field[1:len(field)-1]))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
"Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))

```

```

if err != nil {
 return err
}
httpReq = httpReq.WithContext(ctx)
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateLicensePool")
if err != nil {
 return err
}

if err := unm.Unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Assign assigns a license to a user.
func
(c *licenseManagementRESTClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:assign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)

```

```

hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial:
true, DiscardUnknown: true}
resp := &procurementpb.AssignResponse{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Assign")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Unassign unassigns a license from a user.
func (c *licenseManagementRESTClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err :=
 m.Marshal(req)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }

```

```

baseUrl.Path += fmt.Sprintf("/v1/%v:unassign", req.GetParent())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &procurementpb.UnassignResponse{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq,
err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Unassign")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *licenseManagementRESTClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {

```

```

it := &LicensedUserIterator{}
req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
 resp := &procurementpb.EnumerateLicensedUsersResponse{}
 if
 pageToken != "" {
 req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
 req.PageSize = int32(pageSize)
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:enumerateLicensedUsers", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetPageSize() != 0 {
 params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path
= settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "EnumerateLicensedUsers")
 if err != nil {
 return err

```

```

 }
 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, "", e
}
it.Response = resp
return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// GetOperation is a utility method from
// google.longrunning.Operations.
func (c *licenseManagementRESTClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

```



```

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &longrunningpb.Operation{}
e := gax.Invoke(ctx,
func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}
// Copyright 2025 Google LLC
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```

```

// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/compute_pb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete []gax.CallOption
 Get []gax.CallOption
 GetIamPolicy []gax.CallOption
 Insert []gax.CallOption
 List []gax.CallOption
 SetIamPolicy []gax.CallOption
 TestIamPermissions []gax.CallOption
 Update []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
 Delete: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 },
 Get: []gax.CallOption{

```

```

gax.WithTimeout(600000 * time.Millisecond),
gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier:
1.30,
 },
 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
 }),
},
GetIamPolicy: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier: 1.30,
 },
 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
 }),
 },
Insert: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 },
List: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier: 1.30,
 },
 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
 }),
 },
SetIamPolicy: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 },
TestIamPermissions: []gax.CallOption{
 gax.WithTimeout(600000
* time.Millisecond),
 },
Update: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),

```

```

 },
}
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
 error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
 error)
 TestIamPermissions(context.Context,
 *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption) (*computepb.TestPermissionsResponse, error)
 Update(context.Context, *computepb.UpdateLicenseRequest, ...gax.CallOption) (*Operation, error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed
// on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {

```

```

c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
// creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
// who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req
*computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
// Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
// party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the
// specified project. This method does not get any licenses that belong to other projects, including licenses attached to
// publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to
// make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is
// intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

```

```

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return
 c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 return c.internalClient.Update(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type
licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//

```

```

// The Licenses API.
func NewLicensesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
 return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,
 logger:
 internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
 option.WithHTTPClient(httpClient),
 option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
 return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
 internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()),
 internaloption.EnableNewAuthLibrary(),
 }
}

// setGoogleClientInfo sets the name and version of the application in
//
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {

```

```

kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
kv = append(kv, "gapi", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
}
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
 return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use
// only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")

```



```

headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)],
opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project: req.GetProject(),
 },
}
return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
// who are creating
// Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }

```

```

}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.License{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error
{
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {

```

```

return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy",
req.GetProject(), req.GetResource())

params := url.Values{}
if req != nil && req.OptionsRequestedPolicyVersion != nil {
 params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Policy{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if
 settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {

```

```

 return nil, e
}
return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if
 err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err
 := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }

```

```

httpReq = httpReq.WithContext(ctx)
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
if err != nil {
 return err
}

if err := unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
}
op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project: req.GetProject(),
 },
}
return op, nil
}

```

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```

func (c *licensesRESTClient) List(ctx context.Context, req *compute.LicenseListRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*compute.LicenseListRequest)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*compute.License, string, error) {
 resp := &compute.LicenseListResponse{}
 if pageToken != "" {
 req.PageToken = proto.String(pageToken)
 }
 if pageSize > math.MaxInt32 {
 req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
 } else if pageSize != 0 {
 req.MaxResults = proto.Uint32(uint32(pageSize))
 }
 baseUrl, err := url.Parse(c.endpoint)

```

```

if err != nil {
 return nil, "", err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

params := url.Values{}
if req != nil && req.Filter != nil {
 params.Add("filter",
fmt.Sprintf("%v", req.GetFilter()))
}
if req != nil && req.MaxResults != nil {
 params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
}
if req != nil && req.OrderBy != nil {
 params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
}
if req != nil && req.PageToken != nil {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
}
if req != nil && req.ReturnPartialSuccess != nil {
 params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := append(c.xGoogHeaders, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq.Header
= headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
 if err != nil {
 return err
 }
 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}

```

```

 }, opts...)
 if e != nil {
 return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
// resource is intended for use only by third-party partners who are creating Cloud Marketplace
// images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
 opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
 req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
 url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)

```

```

hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Policy{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

```

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```

func (c *licensesRESTClient) TestIamPermissions(ctx
context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

```

```

baseUrl, err := url.Parse(c.endpoint)

```



```

if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)],
opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.TestPermissionsResponse{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

```

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-

```

party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Update(ctx context.Context,
req *computepb.UpdateLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }
 if req != nil && req.UpdateMask != nil {
 params.Add("updateMask", fmt.Sprintf("%v", req.GetUpdateMask()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
"Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Update[0:len((*c.CallOptions).Update):len((*c.CallOptions).Update)], opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

```

```

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Update")
if err != nil {
 return err
}

if err := unm.Unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
}
op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project: req.GetProject(),
 },
}
return
op, nil
}
// Copyright 2025 Google LLC
//
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// you may not use this file except in compliance with the License.
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package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"

```

```
"google.golang.org/api/iterator"
```

```
)
```

```
func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}
```

```
func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}
```

```
func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
```

```

// TODO: Handle error.
}
defer c.Close()

req := &procurementpb.AssignRequest{
// TODO: Fill request struct fields.
// See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
}
resp, err := c.Assign(ctx, req)
if err != nil {
// TODO: Handle error.
}
//
TODO: Use resp.
_ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := procurement.NewLicenseManagementClient(ctx)
if err != nil {
// TODO: Handle error.
}
defer c.Close()

req := &procurementpb.EnumerateLicensedUsersRequest{
// TODO: Fill request struct fields.
// See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicensedUsersRequest.
}
it := c.EnumerateLicensedUsers(ctx, req)
for {
resp, err := it.Next()
if err == iterator.Done {
break
}
if err != nil {
// TODO: Handle error.
}
}
//

```

TODO: Use resp.

```
_ = resp
```

```
// If you need to access the underlying RPC response,
// you can do so by casting the `Response` as below.
// Otherwise, remove this line. Only populated after
// first call to Next(). Not safe for concurrent access.
_ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
}
}
```

```
func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
 // TODO: Fill request struct fields.
 //
 See
 https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
 quest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

```
func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
```

```

// TODO: Handle error.
}
defer c.Close()

req := &procurementpb.UnassignRequest{
// TODO: Fill request struct fields.
// See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
}
resp,
err := c.Unassign(ctx, req)
if err != nil {
// TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := procurement.NewLicenseManagementClient(ctx)
if err != nil {
// TODO: Handle error.
}
defer c.Close()

req := &procurementpb.UpdateLicensePoolRequest{
// TODO: Fill request struct fields.
// See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoolRequest.
}
resp, err := c.UpdateLicensePool(ctx, req)
if err != nil {
// TODO: Handle error.
}
//
// TODO: Use resp.
_ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
ctx := context.Background()

```

```
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := procurement.NewLicenseManagementClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &longrunningpb.GetOperationRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
}
resp, err := c.GetOperation(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
```

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//go:build go1.23

package compute\_test

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```

```
// Code generated by protoc-gen-go_gapic. DO NOT EDIT.
```

```
package compute
```

```
import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)
```

```
var
 newLicenseCodesClientHook clientHook
```

```
// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get []gax.CallOption
 TestIamPermissions []gax.CallOption
}
```

```
func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
 Get: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier: 1.30,
 },
 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
 }),
 },
 }
```

```

 },
 TestIamPermissions: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 },
}
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
 Close()
 error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
 (*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return c.internalClient.Close()
}

//
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.

```

```

//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
// License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
// Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
// intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger
}

// NewLicenseCodesRESTClient
// creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)

```



```

httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
if err != nil {
 return nil, err
}

callOpts := defaultLicenseCodesRESTCallOptions()
c := &licenseCodesRESTClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,
 logger: internaloption.GetLogger(opts),
}
c.setGoogleClientInfo()

return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
 internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()),
 internaloption.EnableNewAuthLibrary(),
 }
}

//
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return

```

```

nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
// License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
// Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unmarshal := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
 if err != nil {
 return err
 }
 })

```

```

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// TestIamPermissions returns permissions that a
// caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are
// creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
 req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
 url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds =
 append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
 append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
 tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {

```

```

 baseUrl.Path = settings.Path
}
httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
if err != nil {
 return err
}
httpReq = httpReq.WithContext(ctx)
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
if err != nil {
 return err
}

if err := unm.Unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"

```

```

"net/http"
"net/url"
"time"

computepb "cloud.google.com/go/compute/apiv1beta/compute_pb"
gax "github.com/googleapis/gax-go/v2"
"google.golang.org/api/option"
"google.golang.org/api/option/internaloption"
httptransport "google.golang.org/api/transport/http"
"google.golang.org/grpc"
"google.golang.org/protobuf/encoding/protojson"
)

var
newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
 Get: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier: 1.30,
 },
 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
 }),
 },
 TestIamPermissions: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
 {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 }
}

```

```

 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return
 c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,

```

```

 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
// intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger
}

// NewLicenseCodesRESTClient
// creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
 return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,
 logger: internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

```

```

return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
 internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()...),
 internaloption.EnableNewAuthLibrary(),
}
}

//
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
kv = append(kv, "gpic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
}
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
// Replace httpClient with nil to force cleanup.
c.httpClient = nil
return
nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
// License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
// Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts

```



```

...gax.CallOption)(*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenseCodes/%v", req.GetProject(),
 req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
 url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
 if err != nil {
 return err
 }

 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
 }, opts...)
 if e != nil {
 return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that

```

a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds
 = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
 if err != nil {
 return err
 }
 })
}
```

```

 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
// protoc-gen-go v1.35.2
// protoc v4.25.7
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 reflect "reflect"
 sync
 "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

```

```

// Defines types of the grantee of this permission.
type Permission_GrantType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GrantType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GrantType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GrantType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GrantType = 3
)

// Enum value maps for Permission_GrantType.
var (
 Permission_GrantType_name = map[int32]string{
 0: "GRANTEE_TYPE_UNSPECIFIED",
 1: "USER",
 2:
 "GROUP",
 3: "EVERYONE",
 }
 Permission_GrantType_value = map[string]int32{
 "GRANTEE_TYPE_UNSPECIFIED": 0,
 "USER": 1,
 "GROUP": 2,
 "EVERYONE": 3,
 }
)

func (x Permission_GrantType) Enum() *Permission_GrantType {
 p := new(Permission_GrantType)
 *p = x
 return p
}

func (x Permission_GrantType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GrantType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GrantType) Type() protoreflect.EnumType {

```

```

return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GrantType) Number() protoreflect.EnumNumber {
return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GrantType.Descriptor instead.
func (Permission_GrantType) EnumDescriptor() ([]byte,
[int]) {
return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
// The default value. This value is unused.
Permission_ROLE_UNSPECIFIED Permission_Role = 0
// Owner can use, update, share and delete the resource.
Permission_OWNER Permission_Role = 1
// Writer can use, update and share the resource.
Permission_WRITER Permission_Role = 2
// Reader can use the resource.
Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
Permission_Role_name = map[int32]string{
0: "ROLE_UNSPECIFIED",
1: "OWNER",
2: "WRITER",
3: "READER",
}
Permission_Role_value = map[string]int32{
"ROLE_UNSPECIFIED": 0,
"OWNER": 1,
"WRITER": 2,
"READER": 3,
}
)

func (x Permission_Role) Enum() *Permission_Role {
p := new(Permission_Role)
*p = x
return p
}

```

```

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
// accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}

```

```

//
// Output only.
Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
// Optional. Immutable. The type of the grantee.
GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_GranteeType,oneof"
json:"grantee_type,omitempty"`
// Optional. Immutable. The email address of the user of group which this
// permission refers. Field is not set when permission's grantee type is
// EVERYONE.
EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
// Required. The role granted by this permission.
Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
*x = Permission{}
mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
{
mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
if x != nil {
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
if ms.LoadMessageInfo() == nil {
ms.StoreMessageInfo(mi)
}
return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

```

```

}

func (x *Permission) GetName() string {
 if x != nil {
 return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
 return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
 return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
 return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
 0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,

```



0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,  
0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,  
0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,  
0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,  
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,  
0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,  
0x65, 0x54, 0x79, 0x70, 0x65, 0x88,  
0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,  
0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,  
0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,  
0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,  
0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,  
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,  
0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,  
0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,  
0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,  
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,  
0x4e,  
0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,  
0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,  
0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,  
0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,  
0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,  
0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,  
0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,  
0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,  
0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,  
0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,  
0x2e, 0x63, 0x6f, 0x6d,  
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,  
0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,  
0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,  
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,  
0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,  
0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,  
0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,  
0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,  
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,  
0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,  
0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,  
0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,  
0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,  
0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,  
0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,  
0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,  
0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,  
0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,  
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,

```

0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
0x61, 0x67,
0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
 protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
= []any{
 (Permission_GrantType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GrantType
 (Permission_Role)(0), // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil), // 2: google.ai.generativelanguage.v1alpha.Permission
}
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
 google.ai.generativelanguage.v1alpha.Permission.GrantType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
 google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
}
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
 return
 }
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
}

```

```

type x struct{}
out := protoimpl.TypeBuilder{
 File: protoimpl.DescBuilder{
 GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
 RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
 NumEnums: 2,
 NumMessages: 1,
 NumExtensions: 0,
 NumServices: 0,
 },
 GoTypes: file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
 DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
 EnumInfos: file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
 MessageInfos: file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
= nil
file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1beta"
 computepb "cloud.google.com/go/compute/apiv1beta/compute_pb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {

```

```

ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
//
It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

// TODO: Use client.
_ = c
}

func ExampleLicensesClient_Delete() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.DeleteLicenseRequest{
 //
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#DeleteLicenseRequest.
}
op, err := c.Delete(ctx, req)
if err != nil {
 // TODO: Handle error.
}

err = op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
}

func ExampleLicensesClient_Get() {
ctx := context.Background()

```

```

// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.GetLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#GetLicenseRequest.
}
resp,
err := c.Get(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

```

```

func ExampleLicensesClient_Insert()
{
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
 // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded
 // as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#ListLicensesRequest.
 }

```

```

it := c.List(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
 break
 }
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _
 = it.Response.(*compute.LicensesListResponse)
}
}

func ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &compute.SetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute.LicensesClient#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()

```

```
//
This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#TestIamPermissionsLicenseRequest.
}
resp, err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_Update() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require
 modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.UpdateLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#UpdateLicenseRequest.
 }
 op, err := c.Update(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }

 err = op.Wait(ctx)
}
```



```

if err != nil {
 // TODO: Handle error.
}
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1beta"
 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require
 modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#ListLicensesRequest.
 }

```

```

}
for resp, err := range c.List(ctx, req).All() {
 if err != nil {
 // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
}
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

```

```

// TODO: Use client.
_ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
 // TODO: Fill request
 struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#TestIamPermissionsLicenseCodeRequest.
 }
 resp,

```

```

err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 // generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

```

```

req := &procurementpb.EnumerateLicensedUsersRequest{
 // TODO: Fill request struct fields.
 // See
 https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
 dUsersRequest.
}
for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
 if err != nil {
 // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
}
}

```

```

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```

```

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

```

```

package compute

```

```

import (
 "bytes"

```

```

"context"
"fmt"
"log/slog"
"math"
"net/http"
"net/url"
"time"

computepb "cloud.google.com/go/compute/apiv1beta/compute_pb"
gax "github.com/googleapis/gax-go/v2"
"google.golang.org/api/iterator"
"google.golang.org/api/option"
"google.golang.org/api/option/internaloption"
httptransport "google.golang.org/api/transport/http"
"google.golang.org/grpc"
"google.golang.org/protobuf/encoding/protojson"
"google.golang.org/protobuf/proto"
)

var
newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
Delete []gax.CallOption
Get []gax.CallOption
GetIamPolicy []gax.CallOption
Insert []gax.CallOption
List []gax.CallOption
SetIamPolicy []gax.CallOption
TestIamPermissions []gax.CallOption
Update []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
return &LicensesCallOptions{
Delete: []gax.CallOption{
gax.WithTimeout(600000 * time.Millisecond),
},
Get: []gax.CallOption{
gax.WithTimeout(600000 * time.Millisecond),
gax.WithRetry(func() gax.Retryer {
return gax.OnHTTPCodes(gax.Backoff{
Initial: 100 * time.Millisecond,
Max: 60000 * time.Millisecond,
Multiplier:
1.30,
},

```

```

 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
 }),
},
GetIamPolicy: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier: 1.30,
 }),
 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
 }),
},
Insert: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
},
List: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier: 1.30,
 }),
 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
 }),
},
SetIamPolicy: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
},
TestIamPermissions: []gax.CallOption{
 gax.WithTimeout(600000
* time.Millisecond),
},
Update: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
},
}
}

```

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.

```
type internalLicensesClient interface {
```

```
 Close() error
```

```
 setGoogleClientInfo(...string)
```

```

Connection() *grpc.ClientConn
Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
TestIamPermissions(context.Context,
*computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption) (*computepb.TestPermissionsResponse, error)
Update(context.Context, *computepb.UpdateLicenseRequest, ...gax.CallOption) (*Operation, error)
}

```

// LicensesClient is a client for interacting with Google Compute Engine API.

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.

//

// The Licenses API.

```
type LicensesClient struct {
```

// The internal transport-dependent client.

```
internalClient internalLicensesClient
```

// The call options for this service.

```
CallOptions *LicensesCallOptions
```

```
}
```

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when

// the client is no longer required.

```
func (c *LicensesClient) Close() error {
```

```
 return c.internalClient.Close()
```

```
}
```

// setGoogleClientInfo sets the name and version of the application in

// the `x-goog-api-client` header

passed on each request. Intended for

// use by Google-written clients.

```
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
```

```
 c.internalClient.setGoogleClientInfo(keyval...)
}
```

// Connection returns a connection to the API service.

//

// Deprecated: Connections are now pooled so this method does not always

// return the same resource.

```
func (c *LicensesClient) Connection() *grpc.ClientConn {
```



```

return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
// creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
// who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context,
 req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
// Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
// party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available
// in the specified project. This method does not get any licenses that belong to other projects, including licenses
// attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this
// method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This
// resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
// resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return
 c.internalClient.SetIamPolicy(ctx, req, opts...)
}

```

```

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 return c.internalClient.Update(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type
licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
 return nil, err
 }

```

```

callOpts := defaultLicensesRESTCallOptions()
c := &licensesRESTClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,
 logger:
 internaloption.GetLogger(opts),
}
c.setGoogleClientInfo()

o := []option.ClientOption{
 option.WithHTTPClient(httpClient),
 option.WithEndpoint(endpoint),
}
opC, err := NewGlobalOperationsRESTClient(ctx, o...)
if err != nil {
 return nil, err
}
c.operationClient = opC

return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
 internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()),
 internaloption.EnableNewAuthLibrary(),
 }
}

// setGoogleClientInfo sets the name and version of the application
// in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when

```

```

// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
 return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for
// use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path

```

```

 }
 httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
}
op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project: req.GetProject(),
 },
}
return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
// who are creating
// Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
 url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)

```

```

hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.License{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

```

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.  
 Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```

func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/getIamPolicy",
 req.GetProject(), req.GetResource())

```

```

params := url.Values{}
if req != nil && req.OptionsRequestedPolicyVersion != nil {
 params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
}

```

```

}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Policy{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error
{
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

```

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

func (c \*licensesRESTClient) Insert(ctx context.Context, req \*computepb.InsertLicenseRequest, opts

```

...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err
 := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
 unmarshal := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq,
 err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
 return err
 }
 })
}

```



```

if err := unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project: req.GetProject(),
 },
}
return op, nil
}

```

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended

for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *licensesRESTClient) List(ctx context.Context, req *compute.LicenseListRequest, opts
```

```
...gax.CallOption) *LicenseIterator {
```

```
 it := &LicenseIterator{}
```

```
 req = proto.Clone(req).(*compute.LicenseListRequest)
```

```
 unmarshalOptions := proto.Clone(unmarshalOptions).(*compute.LicenseListRequest_UnmarshalOptions){
```

```
 AllowPartial: true, DiscardUnknown: true
 }
 it.InternalFetch = func(pageSize int, pageToken string) ([]*compute.License, string, error) {
```

```
 resp := &compute.LicenseListResponse{}
```

```
 if pageToken != "" {
```

```
 req.PageToken = proto.String(pageToken)
```

```
 }
```

```
 if pageSize > math.MaxInt32 {
```

```
 req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
```

```
 } else if pageSize != 0 {
```

```
 req.MaxResults = proto.Uint32(uint32(pageSize))
```

```
 }
```

```
 baseUrl, err := url.Parse(c.endpoint)
```

```
 if err != nil {
```

```
 return nil, "", err
```

```
 }
```

```
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses", req.GetProject())
```

```
 params := url.Values{}
```

```
 if req != nil && req.Filter !=
```

```

nil {
 params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
}
if req != nil && req.MaxResults != nil {
 params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
}
if req != nil && req.OrderBy != nil {
 params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
}
if req != nil && req.PageToken != nil {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
}
if req != nil && req.ReturnPartialSuccess != nil {
 params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := append(c.xGoogHeaders, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return
 }
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
 if err != nil {
 return err
 }
 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, "", e
}
it.Response = resp
return resp.GetItems(), resp.GetNextPageToken(), nil
}

```

```

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating
Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unmarshal := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}

```

```

e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
 if err != nil {
 return err
 }

 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
// intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient)
TestIamPermissions(ctx context.Context, req *compute.TestIamPermissionsLicenseRequest, opts
...gax.CallOption) (*compute.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
 req.GetResource())

 // Build HTTP headers from client and context metadata.

```

```

hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)],
opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.TestPermissionsResponse{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
if settings.Path != "" {
baseUrl.Path = settings.Path
}
httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
if err != nil {
return err
}
httpReq = httpReq.WithContext(ctx)
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
if err != nil {
return err
}

if err := unm.Unmarshal(buf, resp); err != nil {
return err
}

return nil
}, opts...)
if e != nil {
return nil, e
}
return resp, nil
}

```

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```

func (c *licensesRESTClient)
Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
m := protojson.MarshalOptions{AllowPartial: true}
body := req.GetLicenseResource()
jsonReq, err := m.Marshal(body)
if err != nil {

```

```

return nil, err
}

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

params := url.Values{}
if req != nil && req.RequestId != nil {
params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}
if req != nil && req.UpdateMask != nil {
params.Add("updateMask", fmt.Sprintf("%v", req.GetUpdateMask()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

hds = append(c.xGoogHeaders, hds...)
hds
= append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Update[0:len((*c.CallOptions).Update):len((*c.CallOptions).Update)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &compute.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
if settings.Path != "" {
baseUrl.Path = settings.Path
}
httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
if err != nil {
return err
}
httpReq = httpReq.WithContext(ctx)
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Update")
if err != nil {
return err
}

if err := unm.Unmarshal(buf, resp); err != nil {
return err
}

```

```

 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project:
 req.GetProject(),
 },
}
return op, nil
}

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// limitations under the License.

// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
// protoc-gen-go v1.35.2
// protoc v4.25.7
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 reflect "reflect"
 sync
 "sync"
)

```

```

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GrantType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GrantType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GrantType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GrantType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GrantType = 3
)

// Enum value maps for Permission_GrantType.
var (
 Permission_GrantType_name = map[int32]string{
 0: "GRANTEE_TYPE_UNSPECIFIED",
 1: "USER",
 2:
 "GROUP",
 3: "EVERYONE",
 }
 Permission_GrantType_value = map[string]int32{
 "GRANTEE_TYPE_UNSPECIFIED": 0,
 "USER": 1,
 "GROUP": 2,
 "EVERYONE": 3,
 }
)

func (x Permission_GrantType) Enum() *Permission_GrantType {
 p := new(Permission_GrantType)
 *p = x
 return p
}

func (x Permission_GrantType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protorelect.EnumNumber(x))
}

```



```

func (Permission_GrantType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GrantType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GrantType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GrantType.Descriptor instead.
func (Permission_GrantType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
 0: "ROLE_UNSPECIFIED",
 1: "OWNER",
 2: "WRITER",
 3: "READER",
 }
 Permission_Role_value = map[string]int32{
 "ROLE_UNSPECIFIED": 0,
 "OWNER": 1,
 "WRITER": 2,
 "READER": 3,
 }
)

```

```

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
// you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

```

```

// Output only. Identifier. The permission name. A unique name will be
// generated on create. Examples:
//
// tunedModels/{tuned_model}/permissions/{permission}
// corpora/{corpus}/permissions/{permission}
//
// Output only.
Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
// Optional. Immutable. The type of the grantee.
GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Permission_GranteeType,oneof"
json:"grantee_type,omitempty"`
// Optional. Immutable. The email address of the user of group which this
// permission refers. Field is not set when permission's grantee type is
// EVERYONE.
EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
// Required. The role granted by this permission.
Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
*x = Permission{}
mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
{
mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
if x != nil {
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
if ms.LoadMessageInfo() == nil {
ms.StoreMessageInfo(mi)
}
}
return ms
}

```

```

return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
 return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
 return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
 return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
 return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,

```

0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,  
0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,  
0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,  
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,  
0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,  
0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,  
0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,  
0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,  
0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,  
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,  
0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,  
0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,  
0x01, 0x01, 0x12,  
0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,  
0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,  
0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,  
0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,  
0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,  
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,  
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,  
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,  
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,  
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,  
0x54, 0x59,  
0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,  
0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,  
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,  
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,  
0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,  
0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,  
0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,  
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,  
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,  
0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,  
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,  
0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,  
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,  
0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,  
0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,  
0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,  
0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,  
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,  
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,  
0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,  
0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,  
0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,  
0x6f, 0x6c, 0x65, 0x42,  
0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,

```

0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
0x72,
0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
 protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GrantType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GrantType
 (Permission_Role)(0), // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil), // 2: google.ai.generativelanguage.v1beta.Permission
}

var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
 google.ai.generativelanguage.v1beta.Permission.GrantType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
 google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }

```

```

func file_google_ai_generativelanguage_v1beta_permission_proto_init()
{
if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
return
}
file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
type x struct{}
out := protoimpl.TypeBuilder{
File: protoimpl.DescBuilder{
GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
NumEnums: 2,
NumMessages: 1,
NumExtensions: 0,
NumServices: 0,
},
GoTypes: file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
EnumInfos: file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
MessageInfos: file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1beta_permission_proto = out.File
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
= nil
file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}

```

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
// protoc-gen-go v1.35.2
// protoc v4.25.7
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status "google.golang.org/grpc/status"
 protoreflect
 "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
 reflect "reflect"
 sync "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

```

```

// The type of assignment protocol.
//
// Types that are assignable to AssignmentType:
//
// *AssignmentProtocol_ManualAssignmentType_
// *AssignmentProtocol_AutoAssignmentType_
AssignmentType
isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
 return m.AssignmentType
 }
}

```

```

return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
return x.ManualAssignmentType
}
return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
return x.AutoAssignmentType
}
return nil
}

type isAssignmentProtocol_AssignmentType interface {
isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
// Allow manual assignments triggered by administrative operations only.
ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
AssignmentProtocol_AutoAssignmentType_ struct {
// Allow automatic assignments triggered by data plane operations.
AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
state protoimpl.MessageState
sizeCache protoimpl.SizeCache
unknownFields protoimpl.UnknownFields

// Identifier. Format:
// `billingAccounts/{billing_account}/orders/{order}/licensePool`
Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
// Required. Assignment protocol for the license pool.

```

```

LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
json:"license_assignment_protocol,omitempty"`
// Output only. Licenses count that are available to be assigned.
AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
// Output only. Total number of licenses in the pool.
TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{1}
}

func (x *LicensePool) GetName() string {

```

```

if x != nil {
 return x.Name
}
return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
 return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
 return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
 return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
// license pool.
type GetLicensePoolRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {

```



```

return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if
 ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
 return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
 json:"license_pool,omitempty"`
}

```

Required. The list of fields to update.

```
UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}
```

```
func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}
```

```
func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}
```

```
func (*UpdateLicensePoolRequest) ProtoMessage() {}
```

```
func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}
```

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor  
instead.

```
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{3}
}
```

```
func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
 return x.LicensePool
 }
 return nil
}
```

```
func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
```

```

if x != nil {
 return x.UpdateMask
}
return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign].
type AssignRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
(x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

```

```

}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{4}
}

func (x *AssignRequest) GetParent()
string {
 if x != nil {
 return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
 return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign].
type AssignResponse struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

```

```

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign].
type UnassignRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
{
 *x = UnassignRequest{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

```

```

}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
 return
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsername() []string {
 if x != nil {
 return x.Username
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign].
type UnassignResponse struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

```

```

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
 ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{7}
}

// Request message for
//
// [LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
// ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return

```

```

// fewer than this value.
PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
json:"page_size,omitempty"`
// Optional. A page token, received from a previous `EnumerateLicensedUsers`
// call. Provide this to retrieve the subsequent page.
PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
*x = EnumerateLicensedUsersRequest{}
mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
if x != nil {
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
if ms.LoadMessageInfo()
== nil {
ms.StoreMessageInfo(mi)
}
return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
if x != nil {
return x.Parent
}
return ""
}

```



```

}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
 return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
 return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 // Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3" json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
 `protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3" json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

```

```

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
 return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
 return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
 return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License

```

```

ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
 json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
 json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
(x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),

```

```

[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
 return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
 return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 }
 return ms
}

```

```

}
return mi.MessageOf(x)
}

// Deprecated:
// Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
 `protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
 json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 }
}

```

```

 return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
 return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protorelect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
 0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
 0x6f,
 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
 0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
 0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f,
 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f,
 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x1a, 0x1e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x62, 0x75, 0x66, 0x2f, 0x64,
 0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x2e, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e,
 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc3, 0x03, 0x0a, 0x12, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,

```

0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x8e, 0x01, 0x0a,  
0x16, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,  
0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x56, 0x2e,  
0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d,  
0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73,  
0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70,  
0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,  
0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c,  
0x2e, 0x4d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,  
0x74, 0x54, 0x79, 0x70, 0x65, 0x48, 0x00, 0x52, 0x14, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41,  
0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x88, 0x01,  
0x0a, 0x14, 0x61, 0x75, 0x74, 0x6f, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,  
0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x03, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x54, 0x2e, 0x67,  
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,  
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,  
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,  
0x73,  
0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x2e,  
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0x70, 0x65, 0x48, 0x00, 0x52, 0x12, 0x61, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,  
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0x2e, 0x76, 0x31, 0x2e, 0x4c,  
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```

0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
= file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
 // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil), // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil), // 2:
 google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil), // 3:
 google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil), // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil), // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil), // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil), // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil), // 8:
 google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
 // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil), // 10:
 google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
 google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil), // 12:
 google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil), // 13: google.protobuf.FieldMask

```

```

(*timestamppb.Timestamp)(nil), // 14: google.protobuf.Timestamp
(*durationpb.Duration)(nil), // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
-> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0, // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1, // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
-> google.protobuf.Timestamp
 9, // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
 2, // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3, // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4, // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6, // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
-> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8, // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1, // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1, // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5, // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7, // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse

```

```

10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_type
pe
-> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
14, // [14:19] is the sub-list for method output_type
9, // [9:14] is the sub-list for method input_type
9, // [9:9] is the sub-list for extension type_name
9, // [9:9] is the sub-list for extension extendee
0, // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
 return
 }
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
 Wrappers = []any{
 (*AssignmentProtocol_ManualAssignmentType_)(nil),
 (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
 File:
 protoimpl.DescBuilder{
 GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
 RawDescriptor:
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
 NumEnums: 0,
 NumMessages: 13,
 NumExtensions: 0,
 NumServices: 1,
 },
 GoTypes:
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
 DependencyIndexes:
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
 MessageInfos:
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

```

```

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
 "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

```

```

func
(c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest,
opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.prourement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.prourement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.prourement.v1.LicenseManagementService/Unassign",
in, out, opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.prourement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

```

// LicenseManagementServiceServer is the server API for LicenseManagementService service.



```

type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest) (*AssignResponse,
 error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
 (*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
(*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)

```

```

if err := dec(in); err != nil
{
 return nil, err
}
if interceptor == nil {
 return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
}
info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
}
handler := func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
}
return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
 return nil, err
 }
 if interceptor == nil {
 return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
:= func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
}
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
 return nil, err
 }
 if interceptor == nil {
 return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
 Server: srv,

```

```

FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
}
handler := func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
}
return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
 return nil, err
 }
 if interceptor == nil {
 return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
 return nil, err
 }
 if interceptor
 == nil {
 return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

```

```

}

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
 {
 MethodName: "GetLicensePool",
 Handler: _LicenseManagementService_GetLicensePool_Handler,
 },
 {
 MethodName: "UpdateLicensePool",
 Handler: _LicenseManagementService_UpdateLicensePool_Handler,
 },
 {
 MethodName: "Assign",
 Handler: _LicenseManagementService_Assign_Handler,
 },
 {
 MethodName: "Unassign",
 Handler: _LicenseManagementService_Unassign_Handler,
 },
 {
 MethodName: "EnumerateLicensedUsers",
 Handler: _LicenseManagementService_EnumerateLicensedUsers_Handler,
 },
 },
 Streams: []grpc.StreamDesc{},
 Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

```

```

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1beta"
 computepb "cloud.google.com/go/compute/apiv1beta/compute_pb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
 // TODO:
 // Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute_pb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
}

```

```

// TODO: Use resp.
_ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
 // TODO: Fill request struct fields.
 // See
 https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

```

```

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
 //
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
}

```

```

err = op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.

```



```

// See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#GetIamPolicyLicenseRequest.
}
resp, err := c.GetIamPolicy(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

```

```

func ExampleLicensesClient_Insert()
{
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

```

```

 req := &compute.InsertLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }

```

```

 err = op.Wait(ctx)
 if err != nil {
 // TODO: Handle error.
 }
}

```

```

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)

```

```

if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#ListLicensesRequest.
}
it := c.List(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
 break
 }
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*computepb.LicensesListResponse)
}
}

func
ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)

```

```

if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &compute.TestIamPermissionsLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Update() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may
 require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &compute.UpdateLicenseRequest{

```

```

// TODO: Fill request struct fields.
// See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#UpdateLicenseRequest.
}
op, err := c.Update(ctx, req)
if err != nil {
// TODO: Handle error.
}

err = op.Wait(ctx)
if err != nil {
// TODO: Handle error.
}
}

```

# 1.101 google-golang-org-api 0.236.0

## 1.101.1 Available under license :

```

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#
An entry with two email addresses specifies that the

```

# first address should be used in the submit logs and  
# that the second address should be recognized as the  
# same person when interacting with Rietveld.

# Please keep the list sorted.

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## 1.102

[google.golang.org/genproto/googleapis/rpc](https://google.golang.org/genproto/googleapis/rpc)  
**0.0.0-20250603155806-513f23925822**

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# 1.103 go.opentelemetry.io/otel/trace 1.36.0

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# 1.104 google-cloud-go-auth 0.16.2

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

// [START discoveryengine_v1_generated_UserLicenseService_ListUserLicenses_sync]

package main

import (
 "context"

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 "google.golang.org/api/iterator"
)

func main() {
 ctx := context.Background()
 // This snippet
 has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &discoveryenginepb.ListUserLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#ListUserLicensesRequest.
 }
 it := c.ListUserLicenses(ctx, req)
```



```

for {
 resp, err := it.Next()
 if err == iterator.Done {
 break
 }
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove
 this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*discoveryenginepb.ListUserLicensesResponse)
}
}

// [END discoveryengine_v1_generated_UserLicenseService_ListUserLicenses_sync]
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package procurement

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"

```

```

procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
gax "github.com/googleapis/gax-go/v2"
"google.golang.org/api/iterator"
"google.golang.org/api/option"
"google.golang.org/api/option/internaloption"
gtransport
"google.golang.org/api/transport/grpc"
httptransport "google.golang.org/api/transport/http"
"google.golang.org/grpc"
"google.golang.org/protobuf/encoding/protojson"
"google.golang.org/protobuf/proto"
)

var newLicenseManagementClientHook clientHook

// LicenseManagementCallOptions contains the retry settings for each method of LicenseManagementClient.
type LicenseManagementCallOptions struct {
 GetLicensePool []gax.CallOption
 UpdateLicensePool []gax.CallOption
 Assign []gax.CallOption
 Unassign []gax.CallOption
 EnumerateLicensedUsers []gax.CallOption
 GetOperation []gax.CallOption
}

func defaultLicenseManagementGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("cloudcommerceconsumerprocurement.googleapis.com:443"),
 internaloption.WithDefaultEndpointTemplate("cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN:443"),
 ,
 internaloption.WithDefaultMTLSEndpoint("cloudcommerceconsumerprocurement.mtls.googleapis.com:443"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()),
 internaloption.EnableJwtWithScope(),
 internaloption.EnableNewAuthLibrary(),
 option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
 grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
defaultLicenseManagementCallOptions() *LicenseManagementCallOptions {
 return &LicenseManagementCallOptions{
 GetLicensePool: []gax.CallOption{},
 UpdateLicensePool: []gax.CallOption{},
 Assign: []gax.CallOption{},
 }
}

```

```

Unassign: []gax.CallOption{},
EnumerateLicensedUsers: []gax.CallOption{},
GetOperation: []gax.CallOption{},
}
}

```

```

func defaultLicenseManagementRESTCallOptions() *LicenseManagementCallOptions {
 return
 &LicenseManagementCallOptions{
 GetLicensePool: []gax.CallOption{},
 UpdateLicensePool: []gax.CallOption{},
 Assign: []gax.CallOption{},
 Unassign: []gax.CallOption{},
 EnumerateLicensedUsers: []gax.CallOption{},
 GetOperation: []gax.CallOption{},
 }
}

```

// internalLicenseManagementClient is an interface that defines the methods available from Cloud Commerce Consumer Procurement API.

```

type internalLicenseManagementClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 GetLicensePool(context.Context, *procurementpb.GetLicensePoolRequest, ...gax.CallOption)
 (*procurementpb.LicensePool, error)
 UpdateLicensePool(context.Context, *procurementpb.UpdateLicensePoolRequest, ...gax.CallOption)
 (*procurementpb.LicensePool, error)
 Assign(context.Context, *procurementpb.AssignRequest, ...gax.CallOption) (*procurementpb.AssignResponse,
 error)
 Unassign(context.Context, *procurementpb.UnassignRequest,
 ...gax.CallOption) (*procurementpb.UnassignResponse, error)
 EnumerateLicensedUsers(context.Context, *procurementpb.EnumerateLicensedUsersRequest, ...gax.CallOption)
 *LicensedUserIterator
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
 (*longrunningpb.Operation, error)
}

```

// LicenseManagementClient is a client for interacting with Cloud Commerce Consumer Procurement API.

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.

//

// Service for managing licenses.

```

type LicenseManagementClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseManagementClient
}

```

// The call options for this service.

```

CallOptions *LicenseManagementCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseManagementClient)
Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseManagementClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseManagementClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// GetLicensePool gets the license pool.
func (c *LicenseManagementClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 return c.internalClient.GetLicensePool(ctx, req, opts...)
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *LicenseManagementClient)
UpdateLicensePool(ctx context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 return c.internalClient.UpdateLicensePool(ctx, req, opts...)
}

// Assign assigns a license to a user.
func (c *LicenseManagementClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 return c.internalClient.Assign(ctx, req, opts...)
}

// Unassign unassigns a license from a user.
func (c *LicenseManagementClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest, opts

```

```

...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 return c.internalClient.Unassign(ctx, req, opts...)
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *LicenseManagementClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 return c.internalClient.EnumerateLicensedUsers(ctx,
 req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *LicenseManagementClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
 opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// licenseManagementGRPCClient is a client for interacting with Cloud Commerce Consumer Procurement API
// over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
type licenseManagementGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 // The gRPC API client.
 licenseManagementClient procurementpb.LicenseManagementServiceClient

 operationsClient longrunningpb.OperationsClient

 //
 // The x-goog-* metadata to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

// NewLicenseManagementClient creates a new license management service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing licenses.
func NewLicenseManagementClient(ctx context.Context, opts ...option.ClientOption) (*LicenseManagementClient,
 error) {
 clientOpts := defaultLicenseManagementGRPCClientOptions()

```

```

if newLicenseManagementClientHook != nil {
 hookOpts, err := newLicenseManagementClientHook(ctx, clientHookParams{})
 if err != nil {
 return nil, err
 }
 clientOpts = append(clientOpts, hookOpts...)
}

connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
if err != nil {
 return nil, err
}
client := LicenseManagementClient{CallOptions: defaultLicenseManagementCallOptions()}

c := &licenseManagementGRPCClient{
 connPool:
 connPool,
 licenseManagementClient: procurementpb.NewLicenseManagementServiceClient(connPool),
 CallOptions: &client.CallOptions,
 logger: internaloption.GetLogger(opts),
 operationsClient: longrunningpb.NewOperationsClient(connPool),
}
c.setGoogleClientInfo()

client.internalClient = c

return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *licenseManagementGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc",
 grpc.Version, "pb", protoVersion)
 c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

```

```

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
type licenseManagementRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 logger *slog.Logger
}

// NewLicenseManagementRESTClient creates a new license management service rest client.
//
// Service for managing licenses.
func NewLicenseManagementRESTClient(ctx context.Context,
 opts ...option.ClientOption) (*LicenseManagementClient, error) {
 clientOpts := append(defaultLicenseManagementRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
 return nil, err
 }

 callOpts := defaultLicenseManagementRESTCallOptions()
 c := &licenseManagementRESTClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,
 logger: internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseManagementClient{internalClient: c, CallOptions: callOpts}, nil
}

```

```

func defaultLicenseManagementRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://cloudcommerceconsumerprocurement.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN"),
 internaloption.WithDefaultMTLSEndpoint("https://cloudcommerceconsumerprocurement.mtls.googleapis.com"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()),
 internaloption.EnableNewAuthLibrary(),
 }
}

//
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient
 = nil
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseManagementRESTClient) Connection() *grpc.ClientConn {
 return nil
}

func (c *licenseManagementGRPCClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
 append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP

```



```

ool)], opts...)
var resp *procurementpb.LicensePool
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.licenseManagementClient.GetLicensePool, req, settings.GRPC, c.logger,
"GetLicensePool")
 return err
},
opts...)
if err != nil {
 return nil, err
}
return resp, nil
}

func (c *licenseManagementGRPCClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.licenseManagementClient.UpdateLicensePool, req, settings.GRPC, c.logger,
"UpdateLicensePool")
 return err
 }, opts...)
 if err != nil {
 return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient)
Assign(ctx context.Context, req *procurementpb.AssignRequest, opts ...gax.CallOption)
(*procurementpb.AssignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 var resp *procurementpb.AssignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {

```

```

var err error
resp, err = executeRPC(ctx, c.licenseManagementClient.Assign, req, settings.GRPC, c.logger, "Assign")
return err
}, opts...)
if err != nil {
return nil, err
}
return resp, nil
}

func (c *licenseManagementGRPCClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
hds := []string{"x-goog-request-params",
fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders, hds...)
ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
var resp *procurementpb.UnassignResponse
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
var err error
resp, err = executeRPC(ctx, c.licenseManagementClient.Unassign, req, settings.GRPC, c.logger, "Unassign")
return err
}, opts...)
if err != nil {
return nil, err
}
return resp, nil
}

func (c *licenseManagementGRPCClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders, hds...)
ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
opts
=
append((*c.CallOptions).EnumerateLicensedUsers[0:len((*c.CallOptions).EnumerateLicensedUsers):len((*c.CallOp
tions).EnumerateLicensedUsers)], opts...)
it := &LicensedUserIterator{}
req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
resp := &procurementpb.EnumerateLicensedUsersResponse{}
if pageToken != "" {
req.PageToken = pageToken
}
if pageSize > math.MaxInt32 {

```

```

 req.PageSize = math.MaxInt32
} else if pageSize != 0 {
 req.PageSize = int32(pageSize)
}
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.licenseManagementClient.EnumerateLicensedUsers, req, settings.GRPC, c.logger,
"EnumerateLicensedUsers")
 return err
}, opts...)
if err != nil {
 return nil, "", err
}

it.Response = resp
return resp.GetLicensedUsers(), resp.GetNextPageToken(),
nil
}
fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

func (c *licenseManagementGRPCClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx,
func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")

```

```

 return err
}, opts...)
if err != nil {
 return nil, err
}
return resp, nil
}

// GetLicensePool gets the license pool.
func (c *licenseManagementRESTClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx,
 hds...)
 opts =
 append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLicensePool")
 if err != nil {
 return err
 }
 })
 if e != nil {
 return nil, e
 }
 return resp, nil
}

```

```

 }

 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *licenseManagementRESTClient) UpdateLicensePool(ctx
context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetLicensePool()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetLicensePool().GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetUpdateMask() != nil {
 field, err := protojson.Marshal(req.GetUpdateMask())
 if err != nil {
 return nil, err
 }
 params.Add("updateMask", string(field[1:len(field)-1]))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)

```

```

hds = append(hds,
"Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).UpdateLicensePool)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &procurementpb.LicensePool{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateLicensePool")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

```

// Assign assigns a license to a user.

```

func
(c *licenseManagementRESTClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
 return nil, err
 }

```

```

baseUrl, err := url.Parse(c.endpoint)

```

```

if err != nil {

```

```

return nil, err
}
baseUrl.Path += fmt.Sprintf("/v1/%v:assign", req.GetParent())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial:
true, DiscardUnknown: true}
resp := &procurementpb.AssignResponse{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
if settings.Path != "" {
baseUrl.Path = settings.Path
}
httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
if err != nil {
return err
}
httpReq = httpReq.WithContext(ctx)
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Assign")
if err != nil {
return err
}

if err := unm.Unmarshal(buf, resp); err != nil {
return err
}

return nil
}, opts...)
if e != nil {
return nil, e
}
return resp, nil
}

// Unassign unassigns a license from a user.

```

```

func (c *licenseManagementRESTClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err :=
 m.Marshal(req)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:unassign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.UnassignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq,
 err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Unassign")
 if err != nil {
 return err
 }

 if err := unmarshalOptions.Unmarshal(buf, resp); err != nil {
 return err
 }
 })
 if err != nil {
 return nil, err
 }
 return resp, nil
}

```



```

 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *licenseManagementRESTClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
 resp := &procurementpb.EnumerateLicensedUsersResponse{}
 if
 pageToken != "" {
 req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
 req.PageSize = int32(pageSize)
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:enumerateLicensedUsers", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetPageSize() != 0 {
 params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {

```

```

 if settings.Path != "" {
 baseUrl.Path
 }
 = settings.Path
}
httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
if err != nil {
 return err
}
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "EnumerateLicensedUsers")
if err != nil {
 return err
}
if err := unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, "", e
}
it.Response = resp
return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// GetOperation is a utility method from
google.longrunning.Operations.
func (c *licenseManagementRESTClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)

```

```

if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &longrunningpb.Operation{}
e := gax.Invoke(ctx,
func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil

```

```

}
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//
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete []gax.CallOption
 Get []gax.CallOption
 GetIamPolicy []gax.CallOption

```

```

Insert []gax.CallOption
List []gax.CallOption
SetIamPolicy []gax.CallOption
TestIamPermissions []gax.CallOption
Update []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
return &LicensesCallOptions{
Delete: []gax.CallOption{
gax.WithTimeout(600000 * time.Millisecond),
},
Get: []gax.CallOption{
gax.WithTimeout(600000 * time.Millisecond),
gax.WithRetry(func() gax.Retryer {
return gax.OnHTTPCodes(gax.Backoff{
Initial: 100 * time.Millisecond,
Max: 60000 * time.Millisecond,
Multiplier:
1.30,
},
http.StatusGatewayTimeout,
http.StatusServiceUnavailable)
}),
},
GetIamPolicy: []gax.CallOption{
gax.WithTimeout(600000 * time.Millisecond),
gax.WithRetry(func() gax.Retryer {
return gax.OnHTTPCodes(gax.Backoff{
Initial: 100 * time.Millisecond,
Max: 60000 * time.Millisecond,
Multiplier: 1.30,
},
http.StatusGatewayTimeout,
http.StatusServiceUnavailable)
}),
},
Insert: []gax.CallOption{
gax.WithTimeout(600000 * time.Millisecond),
},
List: []gax.CallOption{
gax.WithTimeout(600000 * time.Millisecond),
gax.WithRetry(func() gax.Retryer {
return gax.OnHTTPCodes(gax.Backoff{
Initial: 100 * time.Millisecond,
Max: 60000 * time.Millisecond,
Multiplier: 1.30,
},

```

```

 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
 }),
 },
 SetIamPolicy: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 },
 TestIamPermissions: []gax.CallOption{
 gax.WithTimeout(600000
* time.Millisecond),
 },
 Update: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 },
 }
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context,
*computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption) (*computepb.TestPermissionsResponse, error)
 Update(context.Context, *computepb.UpdateLicenseRequest, ...gax.CallOption) (*Operation, error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

```

```

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed
// on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
// creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
// who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req
 *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
// Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
 ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
// party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)

```

```

(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the
// specified project. This method does not get any licenses that belong to other projects, including licenses attached to
// publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to
// make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is
// intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
(*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
// resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return
 c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
// intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
// party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 return c.internalClient.Update(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
type
licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.

```



```

operationClient *GlobalOperationsClient

// The x-goog-* headers to be sent with each request.
xGoogHeaders []string

// Points back to the CallOptions field of the containing LicensesClient
CallOptions **LicensesCallOptions

logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
 return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,
 logger:
 internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
 option.WithHTTPClient(httpClient),
 option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
 return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
 }
}

```

```

internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
internaloption.WithDefaultUniverseDomain("googleapis.com"),
internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
internaloption.WithDefaultScopes(DefaultAuthScopes()...),
internaloption.EnableNewAuthLibrary(),
}
}

// setGoogleClientInfo sets the name and version of the application in
//
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
c.xGoogHeaders = []string{
"x-goog-api-client", gax.XGoogHeader(kv...),
}
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
// Replace httpClient with nil to force cleanup.
c.httpClient = nil
if err := c.operationClient.Close(); err != nil {
return err
}
return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
return nil
}

// Delete deletes the specified license. Caution This resource is intended for use
// only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
baseUrl, err := url.Parse(c.endpoint)
if err != nil {
return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

```

```

params := url.Values{}
if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)],
opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project: req.GetProject(),
 },
}

```

```

 },
}
return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
// who are creating
// Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error
 {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
 if err != nil {
 return err
 }

 if err := unmarshalOptions.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
 })
}

```

```

 }, opts...)
 if e != nil {
 return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
 opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy",
 req.GetProject(), req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
 params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
 url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
 append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
 opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if
 settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

```

```

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
if err != nil {
 return err
}

if err := unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if
 err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")

```

```

headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err
:= http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project: req.GetProject(),
 },
}
return op, nil
}

```

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```

func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}

```

```

req = proto.Clone(req).(*computepb.ListLicensesRequest)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
 resp := &computepb.LicensesListResponse{}
 if pageToken != "" {
 req.PageToken = proto.String(pageToken)
 }
 if pageSize > math.MaxInt32 {
 req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
 } else if pageSize != 0 {
 req.MaxResults = proto.Uint32(uint32(pageSize))
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.Filter != nil {
 params.Add("filter",
 fmt.Sprintf("%v", req.GetFilter()))
 }
 if req != nil && req.MaxResults != nil {
 params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
 params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
 params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err

```



```

 }
 httpReq.Header
= headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
 if err != nil {
 return err
 }
 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, "", e
}
it.Response = resp
return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }
}

```

```

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Policy{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

```

```

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx
context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)],
 opts...)
 unmarshal := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
 if err != nil {
 return err
 }
 })
}

```

```

 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Update(ctx context.Context,
 req *compute.UpdateLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }
 if req != nil && req.UpdateMask != nil {
 params.Add("updateMask", fmt.Sprintf("%v", req.GetUpdateMask()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
 url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Update[0:len((*c.CallOptions).Update):len((*c.CallOptions).Update)], opts...)

```

```

unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Update")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project: req.GetProject(),
 },
}
return
op, nil
}
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```

```
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// Code generated by protoc-gen-go-grpc. DO NOT EDIT.
// versions:
// - protoc-gen-go-grpc v1.3.0
// - protoc v4.25.7
// source: google/cloud/discoveryengine/v1/user_license_service.proto

package discoveryenginepb

import (
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 context "context"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status "google.golang.org/grpc/status"
)

//
// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
// Requires gRPC-Go v1.32.0 or later.
const _ = grpc.SupportPackageIsVersion7

const (
 UserLicenseService_ListUserLicenses_FullMethodName =
 "/google.cloud.discoveryengine.v1.UserLicenseService/ListUserLicenses"
 UserLicenseService_BatchUpdateUserLicenses_FullMethodName =
 "/google.cloud.discoveryengine.v1.UserLicenseService/BatchUpdateUserLicenses"
)

// UserLicenseServiceClient is the client API for UserLicenseService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
// https://pkg.go.dev/google.golang.org/grpc/?tab=doc#ClientConn.NewStream.
type UserLicenseServiceClient interface {
 // Lists the User Licenses.
 ListUserLicenses(ctx context.Context, in *ListUserLicensesRequest, opts ...grpc.CallOption)
 (*ListUserLicensesResponse, error)
 // Updates the User License.
 // This
 // method is used for batch assign/unassign licenses to users.
 BatchUpdateUserLicenses(ctx context.Context, in *BatchUpdateUserLicensesRequest, opts ...grpc.CallOption)
 (*longrunningpb.Operation, error)
}

type userLicenseServiceClient struct {

```

```

cc grpc.ClientConnInterface
}

func NewUserLicenseServiceClient(cc grpc.ClientConnInterface) UserLicenseServiceClient {
 return &userLicenseServiceClient{cc}
}

func (c *userLicenseServiceClient) ListUserLicenses(ctx context.Context, in *ListUserLicensesRequest, opts
...grpc.CallOption) (*ListUserLicensesResponse, error) {
 out := new(ListUserLicensesResponse)
 err := c.cc.Invoke(ctx, UserLicenseService_ListUserLicenses_FullMethodName, in, out, opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

func (c *userLicenseServiceClient) BatchUpdateUserLicenses(ctx context.Context, in
*BatchUpdateUserLicensesRequest, opts ...grpc.CallOption) (*longrunningpb.Operation, error) {
 out := new(longrunningpb.Operation)
 err := c.cc.Invoke(ctx,
UserLicenseService_BatchUpdateUserLicenses_FullMethodName, in, out, opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

// UserLicenseServiceServer is the server API for UserLicenseService service.
// All implementations should embed UnimplementedUserLicenseServiceServer
// for forward compatibility
type UserLicenseServiceServer interface {
 // Lists the User Licenses.
 ListUserLicenses(context.Context, *ListUserLicensesRequest) (*ListUserLicensesResponse, error)
 // Updates the User License.
 // This method is used for batch assign/unassign licenses to users.
 BatchUpdateUserLicenses(context.Context, *BatchUpdateUserLicensesRequest) (*longrunningpb.Operation, error)
}

// UnimplementedUserLicenseServiceServer should be embedded to have forward compatible implementations.
type UnimplementedUserLicenseServiceServer struct {
}

func (UnimplementedUserLicenseServiceServer) ListUserLicenses(context.Context, *ListUserLicensesRequest)
(*ListUserLicensesResponse, error) {
 return
 nil, status.Errorf(codes.Unimplemented, "method ListUserLicenses not implemented")
}

```

```

func (UnimplementedUserLicenseServiceServer) BatchUpdateUserLicenses(context.Context,
*BatchUpdateUserLicensesRequest) (*longrunningpb.Operation, error) {
 return nil, status.Errorf(codes.Unimplemented, "method BatchUpdateUserLicenses not implemented")
}

// UnsafeUserLicenseServiceServer may be embedded to opt out of forward compatibility for this service.
// Use of this interface is not recommended, as added methods to UserLicenseServiceServer will
// result in compilation errors.
type UnsafeUserLicenseServiceServer interface {
 mustEmbedUnimplementedUserLicenseServiceServer()
}

func RegisterUserLicenseServiceServer(s grpc.ServiceRegistrar, srv UserLicenseServiceServer) {
 s.RegisterService(&UserLicenseService_ServiceDesc, srv)
}

func _UserLicenseService_ListUserLicenses_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(ListUserLicensesRequest)
 if err := dec(in); err != nil {
 return nil, err
 }
 if interceptor == nil {
 return srv.(UserLicenseServiceServer).ListUserLicenses(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: UserLicenseService_ListUserLicenses_FullMethodName,
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(UserLicenseServiceServer).ListUserLicenses(ctx, req.(*ListUserLicensesRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _UserLicenseService_BatchUpdateUserLicenses_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(BatchUpdateUserLicensesRequest)
 if err := dec(in); err != nil {
 return nil, err
 }
 if interceptor == nil {
 return srv.(UserLicenseServiceServer).BatchUpdateUserLicenses(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: UserLicenseService_BatchUpdateUserLicenses_FullMethodName,

```



```

}
handler
:= func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(UserLicenseServiceServer).BatchUpdateUserLicenses(ctx, req.(*BatchUpdateUserLicensesRequest))
}
return interceptor(ctx, in, info, handler)
}

// UserLicenseService_ServiceDesc is the grpc.ServiceDesc for UserLicenseService service.
// It's only intended for direct use with grpc.RegisterService,
// and not to be introspected or modified (even as a copy)
var UserLicenseService_ServiceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.discoveryengine.v1.UserLicenseService",
 HandlerType: (*UserLicenseServiceServer)(nil),
 Methods: []grpc.MethodDesc{
 {
 MethodName: "ListUserLicenses",
 Handler: _UserLicenseService_ListUserLicenses_Handler,
 },
 {
 MethodName: "BatchUpdateUserLicenses",
 Handler: _UserLicenseService_BatchUpdateUserLicenses_Handler,
 },
 },
 Streams: []grpc.StreamDesc{},
 Metadata: "google/cloud/discoveryengine/v1/user_license_service.proto",
}

```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
 Get: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{

```

```

 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier: 1.30,
},
http.StatusGatewayTimeout,
http.StatusServiceUnavailable)
}),
},
TestIamPermissions: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
},
}
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
 Close()
 error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
 (*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return c.internalClient.Close()
}

//

```

```

setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
// License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
// Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
// intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger

```



```

}

// NewLicenseCodesRESTClient
creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
 return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,
 logger: internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
 internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()),
 internaloption.EnableNewAuthLibrary(),
 }
}

//
setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

```

```

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return
 nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
// License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
// Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }

```

```

httpReq = httpReq.WithContext(ctx)
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
if err != nil {
 return err
}

if err := unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// TestIamPermissions returns permissions that a
// caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are
// creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
 req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
 url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds =
 append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)

```

```

 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).TestIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
 }, opts...)
 if e != nil {
 return nil, e
 }
 return resp, nil
}

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

```

package compute

```
import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

 // LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
 type LicenseCodesCallOptions struct {
 Get []gax.CallOption
 TestIamPermissions []gax.CallOption
 }

 func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
 Get: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier: 1.30,
 },
 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
 }),
 },
 TestIamPermissions: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 },
 }
 }
```

```

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface
{
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
 (*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return
 c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

```

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}
```

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}
```

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.

```
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string
```

```
 // The http client.
 httpClient *http.Client
```

```
 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string
```

```
 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions
```

```
 logger *slog.Logger
}
```

```
// NewLicenseCodesRESTClient
creates a new license codes rest client.
//
```

```
// The LicenseCodes API.
```

```
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
 return nil, err
 }
}
```

```
callOpts := defaultLicenseCodesRESTCallOptions()
```

```

c := &licenseCodesRESTClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,
 logger: internaloption.GetLogger(opts),
}
c.setGoogleClientInfo()

return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
 internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()),
 internaloption.EnableNewAuthLibrary(),
}
}

//
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
}
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
// Replace httpClient with nil to force cleanup.
c.httpClient = nil
return
nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {

```



```

return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
// License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
// Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
 if err != nil {
 return err
 }

 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
 }, opts...)
}

```

```

if e != nil {
 return nil, e
}
return resp, nil
}

// TestIamPermissions returns permissions that
// a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are
// creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenseCodes/%v/testIamPermissions",
 req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
 url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds
 = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
 append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
 tIamPermissions)], opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)

```

```

httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
if err != nil {
 return err
}

if err := unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
// protoc-gen-go v1.35.2
// protoc v4.25.7
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 reflect "reflect"
 sync
 "sync"
)

```

```

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GrantType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GrantType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GrantType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GrantType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GrantType = 3
)

// Enum value maps for Permission_GrantType.
var (
 Permission_GrantType_name = map[int32]string{
 0: "GRANTEE_TYPE_UNSPECIFIED",
 1: "USER",
 2: "GROUP",
 3: "EVERYONE",
 }
 Permission_GrantType_value = map[string]int32{
 "GRANTEE_TYPE_UNSPECIFIED": 0,
 "USER": 1,
 "GROUP": 2,
 "EVERYONE": 3,
 }
)

func (x Permission_GrantType) Enum() *Permission_GrantType {
 p := new(Permission_GrantType)
 *p = x
 return p
}

func (x Permission_GrantType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

```

```

}

func (Permission_GrantType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GrantType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GrantType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GrantType.Descriptor instead.
func (Permission_GrantType) EnumDescriptor() ([]byte,
[]int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
 0: "ROLE_UNSPECIFIED",
 1: "OWNER",
 2: "WRITER",
 3: "READER",
 }
 Permission_Role_value = map[string]int32{
 "ROLE_UNSPECIFIED": 0,
 "OWNER": 1,
 "WRITER": 2,
 "READER": 3,
 }
)

```

```

)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
// accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache

```

unknownFields protoimpl.UnknownFields

```
// Output only. Identifier. The permission name. A unique name will be
// generated on create. Examples:
//
// tunedModels/{tuned_model}/permissions/{permission}
// corpora/{corpus}/permissions/{permission}
//
// Output only.
Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
// Optional. Immutable. The type of the grantee.
GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_GranteeType,oneof"
json:"grantee_type,omitempty"`
// Optional. Immutable. The email address of the user of group which this
// permission refers. Field is not set when permission's grantee type is
// EVERYONE.
EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
// Required. The role granted by this permission.
Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}
```

```
func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}
```

```
func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}
```

```
func (*Permission) ProtoMessage() {}
```

```
func (x *Permission) ProtoReflect() protoreflect.Message
{
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 }
 return ms
}
```

```

}
return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
 return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
 return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
 return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
 return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,

```



0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,  
0x67, 0x6f, 0x6f, 0x67, 0x6c,  
0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,  
0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,  
0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,  
0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,  
0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,  
0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,  
0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,  
0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,  
0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,  
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,  
0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,  
0x65, 0x54, 0x79, 0x70, 0x65, 0x88,  
0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,  
0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,  
0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,  
0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,  
0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,  
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,  
0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,  
0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,  
0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,  
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,  
0x4e,  
0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,  
0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,  
0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,  
0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,  
0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,  
0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,  
0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,  
0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,  
0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,  
0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,  
0x2e, 0x63, 0x6f, 0x6d,  
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,  
0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,  
0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,  
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,  
0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,  
0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,  
0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,  
0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,  
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,  
0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,  
0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,

```

0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,
0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,
0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,
0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
0x61, 0x67,
0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

```

```

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)

```

```

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
 protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

```

```

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
= []any{
 (Permission_GrantType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GrantType
 (Permission_Role)(0), // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil), // 2: google.ai.generativelanguage.v1alpha.Permission
}
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
 google.ai.generativelanguage.v1alpha.Permission.GrantType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
 google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

```

```

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
}
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
return
}
file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
type x struct{}
out := protoimpl.TypeBuilder{
File: protoimpl.DescBuilder{
GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
NumEnums: 2,
NumMessages: 1,
NumExtensions: 0,
NumServices: 0,
},
GoTypes: file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
EnumInfos: file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
MessageInfos: file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
= nil
file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}
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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.
//
// Code generated by protoc-gen-go-grpc. DO NOT EDIT.
// versions:
// - protoc-gen-go-grpc v1.3.0
// - protoc v4.25.7
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

```

package procurementpb

```
import (
 context "context"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status "google.golang.org/grpc/status"
)
```

```
// This is a compile-time assertion
// to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
// Requires gRPC-Go v1.32.0 or later.
const _ = grpc.SupportPackageIsVersion7
```

```
const (
 LicenseManagementService_GetLicensePool_FullMethodName =
 "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool"
 LicenseManagementService_UpdateLicensePool_FullMethodName =
 "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool"
 LicenseManagementService_Assign_FullMethodName =
 "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign"
 LicenseManagementService_Unassign_FullMethodName =
 "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign"
 LicenseManagementService_EnumerateLicensedUsers_FullMethodName =
 "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers"
)
```

```
// LicenseManagementServiceClient
// is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
// https://pkg.go.dev/google.golang.org/grpc/?tab=doc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error)
}
```

```

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx, LicenseManagementService_GetLicensePool_FullMethodName, in, out, opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in
*UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx, LicenseManagementService_UpdateLicensePool_FullMethodName, in, out, opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx
context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, LicenseManagementService_Assign_FullMethodName, in, out, opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, LicenseManagementService_Unassign_FullMethodName, in, out, opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

```

```

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx, LicenseManagementService_EnumerateLicensedUsers_FullMethodName, in, out, opts...)
 if err != nil {
 return nil, err
 }
 return out, nil
}

```

```

// LicenseManagementServiceServer
// is the server API for LicenseManagementService service.
// All implementations should embed UnimplementedLicenseManagementServiceServer
// for forward compatibility
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

```

```

// UnimplementedLicenseManagementServiceServer should be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer
struct {
}

```

```

func (UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
(*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)

```

```

(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}

func (UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

// UnsafeLicenseManagementServiceServer may be embedded to opt out of forward compatibility for this service.
// Use of this interface is not recommended, as added methods to LicenseManagementServiceServer will
// result in compilation errors.
type UnsafeLicenseManagementServiceServer interface {
 mustEmbedUnimplementedLicenseManagementServiceServer()
}

func RegisterLicenseManagementServiceServer(s grpc.ServiceRegistrar, srv LicenseManagementServiceServer) {
 s.RegisterService(&LicenseManagementService_ServiceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in); err != nil {
 return nil, err
 }
 if interceptor == nil {
 return srv.(LicenseManagementServiceServer).GetLicensePool(ctx,
in)
 }
 info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: LicenseManagementService_GetLicensePool_FullMethodName,
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
 return nil, err
 }
 if interceptor == nil {
 return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
}

```

```

}
info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: LicenseManagementService_UpdateLicensePool_FullMethodName,
}
handler := func(ctx context.Context, req interface{}) (interface{}, error) {
 return
 srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
}
return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
 return nil, err
 }
 if interceptor == nil {
 return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: LicenseManagementService_Assign_FullMethodName,
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in
 := new(UnassignRequest)
 if err := dec(in); err != nil {
 return nil, err
 }
 if interceptor == nil {
 return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
 Server: srv,
 FullMethod: LicenseManagementService_Unassign_FullMethodName,
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
 return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
}

```



```

return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
in := new(EnumerateLicensedUsersRequest)
if err := dec(in); err != nil {
return nil, err
}
if interceptor == nil {
return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
}
info := &grpc.UnaryServerInfo{
Server: srv,
FullMethod: LicenseManagementService_EnumerateLicensedUsers_FullMethodName,
}
handler
:= func(ctx context.Context, req interface{}) (interface{}, error) {
return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
}
return interceptor(ctx, in, info, handler)
}

// LicenseManagementService_ServiceDesc is the grpc.ServiceDesc for LicenseManagementService service.
// It's only intended for direct use with grpc.RegisterService,
// and not to be introspected or modified (even as a copy)
var LicenseManagementService_ServiceDesc = grpc.ServiceDesc{
ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
HandlerType: (*LicenseManagementServiceServer)(nil),
Methods: []grpc.MethodDesc{
{
MethodName: "GetLicensePool",
Handler: _LicenseManagementService_GetLicensePool_Handler,
},
{
MethodName: "UpdateLicensePool",
Handler: _LicenseManagementService_UpdateLicensePool_Handler,
},
{
MethodName: "Assign",
Handler: _LicenseManagementService_Assign_Handler,
},
{
MethodName:
"Unassign",
Handler: _LicenseManagementService_Unassign_Handler,
},
},
}

```

```

{
 MethodName: "EnumerateLicensedUsers",
 Handler: _LicenseManagementService_EnumerateLicensedUsers_Handler,
},
},
Streams: []grpc.StreamDesc{},
Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1beta"
 computepb "cloud.google.com/go/compute/apiv1beta/compute_pb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require
 modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

```

```

req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#ListLicensesRequest.
}
for resp, err := range c.List(ctx, req).All() {
 if err != nil {
 // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
}
}
// +build ignore

```

```

package ignore
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```

```

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

```

```

package discoveryengine_test

```

```

import (
 "context"

```

```

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

```

```

func ExampleNewUserLicenseClient() {
 ctx := context.Background()
 //

```

This snippet has been automatically generated and should be regarded as a code template only.

// It will require modifications to work:

```

// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := discoveryengine.NewUserLicenseClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

// TODO: Use client.
_ = c
}

func ExampleNewUserLicenseRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseRESTClient(ctx)
 if
 err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleUserLicenseClient_BatchUpdateUserLicenses() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &discoveryenginepb.BatchUpdateUserLicensesRequest{
 // TODO: Fill request struct fields.
 // See
 https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#BatchUpdateUserLicensesReque

```

```

st.
}
op, err := c.BatchUpdateUserLicenses(ctx, req)
if err != nil {
 //
 TODO: Handle error.
}

resp, err := op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleUserLicenseClient_ListUserLicenses() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &discoveryenginepb.ListUserLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#ListUserLicensesRequest.
 }
 it := c.ListUserLicenses(ctx, req)
 for {
 resp, err := it.Next()
 if err == iterator.Done {
 break
 }
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.

```

```

// Otherwise, remove this line. Only populated after
// first call to Next(). Not safe for concurrent access.
_ = it.Response.(*discoveryenginepb.ListUserLicensesResponse)
}
}

func ExampleUserLicenseClient_CancelOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.CancelOperationRequest{
 //
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#CancelOperationRequest.
 }
 err = c.CancelOperation(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
}

func ExampleUserLicenseClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp,

```

```

err := c.GetOperation(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleUserLicenseClient_ListOperations() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.ListOperationsRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#ListOperationsRequest.
 }
 it := c.ListOperations(ctx, req)
 for {
 resp, err := it.Next()
 if err == iterator.Done {
 break
 }
 if err != nil {
 //
 TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*longrunningpb.ListOperationsResponse)
 }
}
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```

```

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
// protoc-gen-go v1.35.2
// protoc v4.25.7
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb
 "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
 reflect "reflect"
 sync "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //

```



```

// *AssignmentProtocol_ManualAssignmentType_
// *AssignmentProtocol_AutoAssignmentType_
AssignmentType isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType
{
 if m != nil {
 return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {

```

```

if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
 return x.ManualAssignmentType
}
return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
 return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
 `protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments
 // triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
 `protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
 `protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
 json:"license_assignment_protocol,omitempty"`
 //

```

Output only. Licenses count that are available to be assigned.

AvailableLicenseCount int32

`protobuf:"varint,3,opt,name=available\_license\_count,json=availableLicenseCount,proto3"

json:"available\_license\_count,omitempty"``

// Output only. Total number of licenses in the pool.

TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total\_license\_count,json=totalLicenseCount,proto3"

json:"total\_license\_count,omitempty"``

}

func (x \*LicensePool) Reset() {

\*x = LicensePool{}

mi :=

&file\_google\_cloud\_commerce\_consumer\_procurement\_v1\_license\_management\_service\_proto\_msgTypes[1]

ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))

ms.StoreMessageInfo(mi)

}

func (x \*LicensePool) String() string {

return protoimpl.X.MessageStringOf(x)

}

func (\*LicensePool) ProtoMessage() {}

func (x \*LicensePool) ProtoReflect() protoreflect.Message {

mi :=

&file\_google\_cloud\_commerce\_consumer\_procurement\_v1\_license\_management\_service\_proto\_msgTypes[1]

if x != nil {

ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))

if

ms.LoadMessageInfo() == nil {

ms.StoreMessageInfo(mi)

}

return ms

}

return mi.MessageOf(x)

}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.

func (\*LicensePool) Descriptor() ([]byte, []int) {

return

file\_google\_cloud\_commerce\_consumer\_procurement\_v1\_license\_management\_service\_proto\_rawDescGZIP(),

[]int{1}

}

func (x \*LicensePool) GetName() string {

if x != nil {

return x.Name

}

```

return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
 return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
 return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
 return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a license pool.
type GetLicensePoolRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields
 protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

```

```

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated:
// Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
 return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
 json:"license_pool,omitempty"`
 // Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
 json:"update_mask,omitempty"`
}

```

```

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
 return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
 return x.UpdateMask
 }
 return nil
}

```

```

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.prourement.v1.LicenseManagementService.Assign].
type AssignRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
 &file_google_cloud_commerce_consumer_prourement_v1_license_management_service_proto_msgTypes[4]
 ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_prourement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_prourement_v1_license_management_service_proto_rawDescGZIP(),

```

```

[]int{4}
}

func (x *AssignRequest) GetParent() string {
 if x != nil {
 return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
 {
 return x.Usernames
 }
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign].
type AssignResponse struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {

```



```

 ms.StoreMessageInfo(mi)
}
return
ms
}
return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset() {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=

```

```

&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
 return x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
 return x.Usernames
 }
 return
 nil
}

// Response message for
//
// [LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign].
type UnassignResponse struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))

```

```

ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return
 mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{7}
}

// Request message for
//
// [LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
// ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3" json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 //
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

```

```

}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor
// instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
 return x.Parent
 }
 return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
 return x.PageSize
 }
}

```

```

return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
 return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 // Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
 json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
 `protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
 json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if x != nil {

```

```

ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
if ms.LoadMessageInfo()
== nil {
 ms.StoreMessageInfo(mi)
}
return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
 return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
 return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
 return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 //

```

The list of licensed users.

```
LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
// A token that can be sent as `page_token` to retrieve the next page.
// If this field is omitted, there are no subsequent pages.
NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}
```

```
func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}
```

```
func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}
```

```
func (*EnumerateLicensedUsersResponse) ProtoMessage() {}
```

```
func (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if
 x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}
```

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.

```
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{10}
}
```

```
func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
 return x.LicensedUsers
 }
}
```

```

return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
 return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func
(x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor()

```



```

([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
 `protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
 json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func
(x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
 &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

```

```
// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration
{
 if x != nil {
 return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protorelect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
 0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x70, 0x72, 0x6f, 0x63,
 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
 0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
 0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
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 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f,
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 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc3, 0x03, 0x0a, 0x12, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,
 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x8e, 0x01, 0x0a,
 0x16, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,
 0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x56, 0x2e,
 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d,

```

0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70,  
0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41,  
0x73,  
0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c,  
0x2e, 0x4d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,  
0x74, 0x54, 0x79, 0x70, 0x65, 0x48, 0x00, 0x52, 0x14, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41,  
0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x88, 0x01,  
0x0a, 0x14, 0x61, 0x75, 0x74, 0x6f, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,  
0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x03, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x54, 0x2e, 0x67,  
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,  
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,  
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73, 0x73,  
0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x2e,  
0x41, 0x75, 0x74, 0x6f,  
0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79,  
0x70, 0x65, 0x48, 0x00, 0x52, 0x12, 0x61, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,  
0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x1a, 0x16, 0x0a, 0x14, 0x4d, 0x61, 0x6e, 0x75,  
0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65,  
0x1a, 0x66, 0x0a, 0x12, 0x41, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,  
0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x50, 0x0a, 0x14, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69,  
0x76, 0x65, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x74, 0x74, 0x6c, 0x18, 0x01,  
0x20, 0x01, 0x28, 0x0b, 0x32, 0x19, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x70, 0x72,  
0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2e, 0x44, 0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x42,  
0x03, 0xe0, 0x41, 0x01, 0x52, 0x12, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69, 0x76, 0x65, 0x4c, 0x69,  
0x63, 0x65, 0x6e, 0x73, 0x65, 0x54, 0x74, 0x6c, 0x42,  
0x11, 0x0a, 0x0f, 0x61, 0x73, 0x73, 0x69,  
0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x22, 0xbe, 0x03, 0x0a, 0x0b,  
0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x12, 0x17, 0x0a, 0x04, 0x6e,  
0x61, 0x6d, 0x65, 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,  
0x6e, 0x61, 0x6d, 0x65, 0x12, 0x86, 0x01, 0x0a, 0x1b, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,  
0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x70, 0x72, 0x6f, 0x74,  
0x6f, 0x63, 0x6f, 0x6c, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x41, 0x2e, 0x67, 0x6f, 0x6f,  
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0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63,  
0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73, 0x73, 0x69, 0x67,  
0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x42,  
0x03, 0xe0,  
0x41, 0x02, 0x52, 0x19, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x41, 0x73, 0x73, 0x69, 0x67,  
0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x3b, 0x0a,  
0x17, 0x61, 0x76, 0x61, 0x69, 0x6c, 0x61, 0x62, 0x6c, 0x65, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e,  
0x73, 0x65, 0x5f, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x18, 0x03, 0x20, 0x01, 0x28, 0x05, 0x42, 0x03,  
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0x69, 0x67, 0x6e, 0x12, 0xe7, 0x01,  
0x0a, 0x08, 0x55, 0x6e, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0x3e, 0x2e, 0x67, 0x6f, 0x6f,  
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0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63,  
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0x73,  
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0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x75,  
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```

0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e,
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0x6f, 0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,
0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x65, 0x6e,
0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c,
0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x1a, 0x63, 0xca, 0x41,
0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x63, 0x6f,
0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e,
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0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x3a, 0x3a,
0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

```

```

var (

```

```

file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
})
return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
(*AssignmentProtocol)(nil), // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
(*LicensePool)(nil),
// 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
(*GetLicensePoolRequest)(nil), // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
(*UpdateLicensePoolRequest)(nil), // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
(*AssignRequest)(nil), // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
(*AssignResponse)(nil), // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
(*UnassignRequest)(nil), // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
(*UnassignResponse)(nil), // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
(*EnumerateLicensedUsersRequest)(nil), // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
(*LicensedUser)(nil), // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
(*EnumerateLicensedUsersResponse)(nil),
// 10: google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
(*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
(*AssignmentProtocol_AutoAssignmentType)(nil), // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
(*fieldmaskpb.FieldMask)(nil), // 13: google.protobuf.FieldMask
(*timestamppb.Timestamp)(nil), // 14: google.protobuf.Timestamp
(*durationpb.Duration)(nil), // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =

```



```

[]int32{
 11, // 0:
 google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name ->
 google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12,
 // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name ->
 google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0, // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
 google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1, // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
 google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
 google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
 google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name ->
 google.protobuf.Timestamp
 9, // 7:
 google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name
 -> google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
 google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
 ype_name -> google.protobuf.Duration
 2, // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
 > google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3, // 10:
 google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
 google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4, // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
 google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6, // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type ->
 google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8, // 13:
 google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_ty
 p
 e
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1, // 14:
 google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
 google.cloud.commerce.consumer.procurement.v1.LicensePool
 1, // 15:
 google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
 google.cloud.commerce.consumer.procurement.v1.LicensePool
 5, // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
 google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7, // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
 google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
 google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty

```

```

pe -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
14,
// [14:19] is the sub-list for method output_type
9, // [9:14] is the sub-list for method input_type
9, // [9:9] is the sub-list for extension type_name
9, // [9:9] is the sub-list for extension extendee
0, // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
 return
 }
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
 Wrappers = []any{
 (*AssignmentProtocol_ManualAssignmentType_)(nil),
 (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
 File: protoimpl.DescBuilder{
 GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
 RawDescriptor:
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
 NumEnums:
 0,
 NumMessages: 13,
 NumExtensions: 0,
 NumServices: 1,
 },
 GoTypes:
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
 DependencyIndexes:
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
 MessageInfos:
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs = nil
}

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//

```

```

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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package licensemanager_test

import (
 "context"

 licensemanager "cloud.google.com/go/licensemanager/apiv1"
 licensemanagerpb "cloud.google.com/go/licensemanager/apiv1/licensemanagerpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
 locationpb "google.golang.org/genproto/googleapis/cloud/location"
)

func
ExampleNewClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)

```

```

if err != nil {
 // TODO: Handle error.
}
defer c.Close()

// TODO: Use client.
_ = c
}

func ExampleNewRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := licensemanager.NewRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleClient_AggregateUsage() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &licensemanagerpb.AggregateUsageRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#AggregateUsageRequest.
 }
 it := c.AggregateUsage(ctx, req)
 for {
 resp, err := it.Next()
 if err == iterator.Done {

```

```

 break
}
if
err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp

// If you need to access the underlying RPC response,
// you can do so by casting the `Response` as below.
// Otherwise, remove this line. Only populated after
// first call to Next(). Not safe for concurrent access.
_ = it.Response.(*licensemanagerpb.AggregateUsageResponse)
}
}

func ExampleClient_CreateConfiguration() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &licensemanagerpb.CreateConfigurationRequest{
 // TODO: Fill request
 struct fields.
 // See
https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#CreateConfigurationRequest.
 }
 op, err := c.CreateConfiguration(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }

 resp, err := op.Wait(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

```

```

func ExampleClient_DeactivateConfiguration() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &licensemanagerpb.DeactivateConfigurationRequest{
 // TODO: Fill request struct fields.
 // See
 https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#DeactivateConfigurationRequest.
 }
 op,
 err := c.DeactivateConfiguration(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }

 resp, err := op.Wait(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

```

```

func ExampleClient_DeleteConfiguration() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &licensemanagerpb.DeleteConfigurationRequest{
 // TODO: Fill request struct fields.
 }
}

```

```

// See
https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#DeleteConfigurationRequest.
}
op,
err := c.DeleteConfiguration(ctx, req)
if err != nil {
 // TODO: Handle error.
}

err = op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
}

func ExampleClient_GetConfiguration() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &licensemanagerpb.GetConfigurationRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#GetConfigurationRequest.
 }
 resp, err := c.GetConfiguration(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleClient_GetInstance() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options

```

```

c, err := licensemanager.NewClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &licensemanagerpb.GetInstanceRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#GetInstanceRequest.
}
resp, err := c.GetInstance(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

```

```

func ExampleClient_GetProduct() {
 ctx := context.Background()
 //
 This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

```

```

req := &licensemanagerpb.GetProductRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#GetProductRequest.
}
resp, err := c.GetProduct(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

```

```

func ExampleClient_ListConfigurations() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to

```



```

work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := licensemanager.NewClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &licensemanagerpb.ListConfigurationsRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#ListConfigurationsRequest.
}
it := c.ListConfigurations(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
 break
 }
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*licensemanagerpb.ListConfigurationsResponse)
}
}

func
ExampleClient_ListInstances() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

```

```

req := &licensemanagerpb.ListInstancesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#ListInstancesRequest.
}
it := c.ListInstances(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
 break
 }
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the
 // underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*licensemanagerpb.ListInstancesResponse)
}
}

```

```

func ExampleClient_ListProducts() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

```

```

req := &licensemanagerpb.ListProductsRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#ListProductsRequest.
}
it
:= c.ListProducts(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
 break
 }
}

```

```

 }
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*licenseanagerpb.ListProductsResponse)
}
}

func ExampleClient_QueryConfigurationLicenseUsage() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licenseanager.NewClient(ctx)
 if err != nil {
 // TODO:
 Handle error.
 }
 defer c.Close()

 req := &licenseanagerpb.QueryConfigurationLicenseUsageRequest{
 // TODO: Fill request struct fields.
 // See
 https://pkg.go.dev/cloud.google.com/go/licenseanager/apiv1/licenseanagerpb#QueryConfigurationLicenseUsageRequest.
 }
 resp, err := c.QueryConfigurationLicenseUsage(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleClient_ReactivateConfiguration() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.

```

```

// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := licensemanager.NewClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &licensemanagerpb.ReactivateConfigurationRequest{
 //
 // TODO: Fill request struct fields.
 // See
 https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#ReactivateConfigurationRequest.
}
op, err := c.ReactivateConfiguration(ctx, req)
if err != nil {
 // TODO: Handle error.
}

resp, err := op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleClient_UpdateConfiguration() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &licensemanagerpb.UpdateConfigurationRequest{
 // TODO: Fill request
 struct fields.
 // See
 https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#UpdateConfigurationRequest.
 }
 op, err := c.UpdateConfiguration(ctx, req)
 if err != nil {

```

```

// TODO: Handle error.
}

resp, err := op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleClient_GetLocation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &locationpb.GetLocationRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/location#GetLocationRequest.
 }
 resp,
 err := c.GetLocation(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleClient_ListLocations() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
}

```

```

defer c.Close()

req := &locationpb.ListLocationsRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/location#ListLocationsRequest.
}
it := c.ListLocations(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
 break
 }
 if
err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*locationpb.ListLocationsResponse)
}
}

func ExampleClient_CancelOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.CancelOperationRequest{
 // TODO: Fill request struct
 fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#CancelOperationRequest.
 }
 err = c.CancelOperation(ctx, req)
 if err != nil {
 // TODO: Handle error.

```

```

}
}

func ExampleClient_DeleteOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.DeleteOperationRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#DeleteOperationRequest.
 }
 err = c.DeleteOperation(ctx, req)
 if err != nil {
 //
 // TODO: Handle error.
 }
}

func ExampleClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp, err := c.GetOperation(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
}

```

```

// TODO: Use resp.
_ = resp
}

func ExampleClient_ListOperations() {
 ctx := context.Background()
 // This snippet has been automatically generated and
 // should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.ListOperationsRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#ListOperationsRequest.
 }
 it := c.ListOperations(ctx, req)
 for {
 resp, err := it.Next()
 if err == iterator.Done {
 break
 }
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next().
 Not safe for concurrent access.
 _ = it.Response.(*longrunningpb.ListOperationsResponse)
 }
}

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//

```



```

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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1beta"
 computepb "cloud.google.com/go/compute/apiv1beta/compute_pb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
}

```

```

defer c.Close()

req := &computepb.GetLicenseCodeRequest{
 // TODO:
 Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#GetLicenseCodeRequest.
}
resp, err := c.Get(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
 // TODO: Fill request struct fields.
 // See
 https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
// Copyright 2025 Google LLC
//
// Licensed under the Apache License, Version 2.0 (the "License");
// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
// https://www.apache.org/licenses/LICENSE-2.0

```

```
//
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// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.
```

```
// Code generated by protoc-gen-go_gapic. DO NOT EDIT.
```

```
package licenseseamanager
```

```
import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 licenseseamanagerpb "cloud.google.com/go/licenseseamanager/apiv1/licenseseamanagerpb"
 "cloud.google.com/go/longrunning"
 lroauto "cloud.google.com/go/longrunning/autogen"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport
 "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 locationpb "google.golang.org/genproto/googleapis/cloud/location"
 "google.golang.org/grpc"
 "google.golang.org/grpc/codes"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)
```

```
var newClientHook clientHook
```

```
// CallOptions contains the retry settings for each method of Client.
```

```
type CallOptions struct {
 ListConfigurations []gax.CallOption
 GetConfiguration []gax.CallOption
 CreateConfiguration []gax.CallOption
 UpdateConfiguration []gax.CallOption
 DeleteConfiguration []gax.CallOption
}
```

```

ListInstances []gax.CallOption
GetInstance []gax.CallOption
DeactivateConfiguration []gax.CallOption
ReactivateConfiguration
 []gax.CallOption
QueryConfigurationLicenseUsage []gax.CallOption
AggregateUsage []gax.CallOption
ListProducts []gax.CallOption
GetProduct []gax.CallOption
GetLocation []gax.CallOption
ListLocations []gax.CallOption
CancelOperation []gax.CallOption
DeleteOperation []gax.CallOption
GetOperation []gax.CallOption
ListOperations []gax.CallOption
}

```

```

func defaultGRPCClientOptions() []option.ClientOption {
return []option.ClientOption{
 internaloption.WithDefaultEndpoint("licensemanager.googleapis.com:443"),
 internaloption.WithDefaultEndpointTemplate("licensemanager.UNIVERSE_DOMAIN:443"),
 internaloption.WithDefaultMTLSEndpoint("licensemanager.mtls.googleapis.com:443"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://licensemanager.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()),
 internaloption.EnableJwtWithScope(),
 internaloption.EnableNewAuthLibrary(),
 option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
 grpc.MaxCallRecvMsgSize(math.MaxInt32))),
}
}

```

```

func
defaultCallOptions() *CallOptions {
return &CallOptions{
 ListConfigurations: []gax.CallOption{
 gax.WithTimeout(60000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnCodes([]codes.Code{
 codes.Unavailable,
 }, gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 10000 * time.Millisecond,
 Multiplier: 1.30,
 })
 }),
 },
 },
 },
 GetConfiguration: []gax.CallOption{

```

```

gax.WithTimeout(60000 * time.Millisecond),
gax.WithRetry(func() gax.Retryer {
 return gax.OnCodes([]codes.Code{
 codes.Unavailable,
 }, gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 10000 * time.Millisecond,
 Multiplier: 1.30,
 })
}),
},
CreateConfiguration: []gax.CallOption{
 gax.WithTimeout(60000
* time.Millisecond),
},
UpdateConfiguration: []gax.CallOption{
 gax.WithTimeout(60000 * time.Millisecond),
},
DeleteConfiguration: []gax.CallOption{
 gax.WithTimeout(60000 * time.Millisecond),
},
ListInstances: []gax.CallOption{
 gax.WithTimeout(60000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnCodes([]codes.Code{
 codes.Unavailable,
 }, gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 10000 * time.Millisecond,
 Multiplier: 1.30,
 })
 }),
},
GetInstance: []gax.CallOption{
 gax.WithTimeout(60000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnCodes([]codes.Code{
 codes.Unavailable,
 }, gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 10000 * time.Millisecond,
 Multiplier: 1.30,
 })
 }),
},
DeactivateConfiguration: []gax.CallOption{},
ReactivateConfiguration: []gax.CallOption{},
QueryConfigurationLicenseUsage:

```

```

[]gax.CallOption{
 gax.WithTimeout(60000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnCodes([]codes.Code{
 codes.Unavailable,
 }, gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 10000 * time.Millisecond,
 Multiplier: 1.30,
 })
 }),
},
AggregateUsage: []gax.CallOption{
 gax.WithTimeout(60000 * time.Millisecond),
},
ListProducts: []gax.CallOption{
 gax.WithTimeout(60000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnCodes([]codes.Code{
 codes.Unavailable,
 }, gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 10000 * time.Millisecond,
 Multiplier: 1.30,
 })
 }),
},
GetProduct: []gax.CallOption{
 gax.WithTimeout(60000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnCodes([]codes.Code{
 codes.Unavailable,
 }, gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max:
10000 * time.Millisecond,
 Multiplier: 1.30,
 })
 }),
},
GetLocation: []gax.CallOption{},
ListLocations: []gax.CallOption{},
CancelOperation: []gax.CallOption{},
DeleteOperation: []gax.CallOption{},
GetOperation: []gax.CallOption{},
ListOperations: []gax.CallOption{},
}
}

```

```

func defaultRESTCallOptions() *CallOptions {
return &CallOptions{
ListConfigurations: []gax.CallOption{
gax.WithTimeout(60000 * time.Millisecond),
gax.WithRetry(func() gax.Retryer {
return gax.OnHTTPCodes(gax.Backoff{
Initial: 1000 * time.Millisecond,
Max: 10000 * time.Millisecond,
Multiplier: 1.30,
}),
http.StatusServiceUnavailable)
}),
},
GetConfiguration: []gax.CallOption{
gax.WithTimeout(60000 * time.Millisecond),
gax.WithRetry(func() gax.Retryer {
return gax.OnHTTPCodes(gax.Backoff{
Initial: 1000 * time.Millisecond,
Max: 10000 * time.Millisecond,
Multiplier: 1.30,
}),
http.StatusServiceUnavailable)
}),
},
CreateConfiguration:
[]gax.CallOption{
gax.WithTimeout(60000 * time.Millisecond),
},
UpdateConfiguration: []gax.CallOption{
gax.WithTimeout(60000 * time.Millisecond),
},
DeleteConfiguration: []gax.CallOption{
gax.WithTimeout(60000 * time.Millisecond),
},
ListInstances: []gax.CallOption{
gax.WithTimeout(60000 * time.Millisecond),
gax.WithRetry(func() gax.Retryer {
return gax.OnHTTPCodes(gax.Backoff{
Initial: 1000 * time.Millisecond,
Max: 10000 * time.Millisecond,
Multiplier: 1.30,
}),
http.StatusServiceUnavailable)
}),
},
GetInstance: []gax.CallOption{
gax.WithTimeout(60000 * time.Millisecond),

```

```

gax.WithRetry(func() gax.Retryer {
return gax.OnHTTPCodes(gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 10000 * time.Millisecond,
 Multiplier: 1.30,
}),
 http.StatusServiceUnavailable)
}),
},
DeactivateConfiguration: []gax.CallOption{},
ReactivateConfiguration:
[]gax.CallOption{},
QueryConfigurationLicenseUsage: []gax.CallOption{
 gax.WithTimeout(60000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 10000 * time.Millisecond,
 Multiplier: 1.30,
 }),
 http.StatusServiceUnavailable)
 }),
},
AggregateUsage: []gax.CallOption{
 gax.WithTimeout(60000 * time.Millisecond),
},
ListProducts: []gax.CallOption{
 gax.WithTimeout(60000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 10000 * time.Millisecond,
 Multiplier: 1.30,
 }),
 http.StatusServiceUnavailable)
 }),
},
GetProduct: []gax.CallOption{
 gax.WithTimeout(60000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max:
10000 * time.Millisecond,
 Multiplier: 1.30,
 }),
 http.StatusServiceUnavailable)
 }),
},

```



```

 },
 GetLocation: []gax.CallOption{},
 ListLocations: []gax.CallOption{},
 CancelOperation: []gax.CallOption{},
 DeleteOperation: []gax.CallOption{},
 GetOperation: []gax.CallOption{},
 ListOperations: []gax.CallOption{},
}
}

```

// internalClient is an interface that defines the methods available from License Manager API.

```

type internalClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 ListConfigurations(context.Context, *licensemanagerpb.ListConfigurationsRequest, ...gax.CallOption)
 *ConfigurationIterator
 GetConfiguration(context.Context, *licensemanagerpb.GetConfigurationRequest, ...gax.CallOption)
 (*licensemanagerpb.Configuration, error)
 CreateConfiguration(context.Context, *licensemanagerpb.CreateConfigurationRequest, ...gax.CallOption)
 (*CreateConfigurationOperation, error)
 CreateConfigurationOperation(name string) *CreateConfigurationOperation
 UpdateConfiguration(context.Context,
 *licensemanagerpb.UpdateConfigurationRequest, ...gax.CallOption) (*UpdateConfigurationOperation, error)
 UpdateConfigurationOperation(name string) *UpdateConfigurationOperation
 DeleteConfiguration(context.Context, *licensemanagerpb.DeleteConfigurationRequest, ...gax.CallOption)
 (*DeleteConfigurationOperation, error)
 DeleteConfigurationOperation(name string) *DeleteConfigurationOperation
 ListInstances(context.Context, *licensemanagerpb.ListInstancesRequest, ...gax.CallOption) *InstanceIterator
 GetInstance(context.Context, *licensemanagerpb.GetInstanceRequest, ...gax.CallOption)
 (*licensemanagerpb.Instance, error)
 DeactivateConfiguration(context.Context, *licensemanagerpb.DeactivateConfigurationRequest, ...gax.CallOption)
 (*DeactivateConfigurationOperation, error)
 DeactivateConfigurationOperation(name string) *DeactivateConfigurationOperation
 ReactivateConfiguration(context.Context, *licensemanagerpb.ReactivateConfigurationRequest,
 ...gax.CallOption) (*ReactivateConfigurationOperation, error)
 ReactivateConfigurationOperation(name string) *ReactivateConfigurationOperation
 QueryConfigurationLicenseUsage(context.Context, *licensemanagerpb.QueryConfigurationLicenseUsageRequest,
 ...gax.CallOption) (*licensemanagerpb.QueryConfigurationLicenseUsageResponse, error)
 AggregateUsage(context.Context, *licensemanagerpb.AggregateUsageRequest, ...gax.CallOption) *UsageIterator
 ListProducts(context.Context, *licensemanagerpb.ListProductsRequest, ...gax.CallOption) *ProductIterator
 GetProduct(context.Context, *licensemanagerpb.GetProductRequest, ...gax.CallOption)
 (*licensemanagerpb.Product, error)
 GetLocation(context.Context, *locationpb.GetLocationRequest, ...gax.CallOption) (*locationpb.Location, error)
 ListLocations(context.Context, *locationpb.ListLocationsRequest, ...gax.CallOption) *LocationIterator
 CancelOperation(context.Context, *longrunningpb.CancelOperationRequest, ...gax.CallOption) error
 DeleteOperation(context.Context,

```

```

*longrunningpb.DeleteOperationRequest, ...gax.CallOption) error
GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
ListOperations(context.Context, *longrunningpb.ListOperationsRequest, ...gax.CallOption) *OperationIterator
}

// Client is a client for interacting with License Manager API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
//
// Service describing handlers for resources
type Client struct {
 // The internal transport-dependent client.
 internalClient internalClient

 // The call options for this service.
 CallOptions *CallOptions

 // LROClient is used internally to handle long-running operations.
 // It is exposed so that its CallOptions can be modified if required.
 // Users should not Close this client.
 LROClient *lroauto.OperationsClient
}

// Wrapper methods routed to the internal client.

// Close
// closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *Client) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *Client) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *Client) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

```

```

// ListConfigurations lists Configurations in a given project and location.
func (c *Client) ListConfigurations(ctx context.Context, req *licensemanagerpb.ListConfigurationsRequest, opts
...gax.CallOption) *ConfigurationIterator {
 return c.internalClient.ListConfigurations(ctx,
 req, opts...)
}

// GetConfiguration gets details of a single Configuration.
func (c *Client) GetConfiguration(ctx context.Context, req *licensemanagerpb.GetConfigurationRequest, opts
...gax.CallOption) (*licensemanagerpb.Configuration, error) {
 return c.internalClient.GetConfiguration(ctx, req, opts...)
}

// CreateConfiguration creates a new Configuration in a given project and location.
func (c *Client) CreateConfiguration(ctx context.Context, req *licensemanagerpb.CreateConfigurationRequest, opts
...gax.CallOption) (*CreateConfigurationOperation, error) {
 return c.internalClient.CreateConfiguration(ctx, req, opts...)
}

// CreateConfigurationOperation returns a new CreateConfigurationOperation from a given name.
// The name must be that of a previously created CreateConfigurationOperation, possibly from a different process.
func (c *Client) CreateConfigurationOperation(name string) *CreateConfigurationOperation {
 return c.internalClient.CreateConfigurationOperation(name)
}

//
// UpdateConfiguration updates the parameters of a single Configuration.
func (c *Client) UpdateConfiguration(ctx context.Context, req *licensemanagerpb.UpdateConfigurationRequest,
opts ...gax.CallOption) (*UpdateConfigurationOperation, error) {
 return c.internalClient.UpdateConfiguration(ctx, req, opts...)
}

// UpdateConfigurationOperation returns a new UpdateConfigurationOperation from a given name.
// The name must be that of a previously created UpdateConfigurationOperation, possibly from a different process.
func (c *Client) UpdateConfigurationOperation(name string) *UpdateConfigurationOperation {
 return c.internalClient.UpdateConfigurationOperation(name)
}

// DeleteConfiguration deletes a single Configuration.
func (c *Client) DeleteConfiguration(ctx context.Context, req *licensemanagerpb.DeleteConfigurationRequest, opts
...gax.CallOption) (*DeleteConfigurationOperation, error) {
 return c.internalClient.DeleteConfiguration(ctx, req, opts...)
}

// DeleteConfigurationOperation returns
// a new DeleteConfigurationOperation from a given name.
// The name must be that of a previously created DeleteConfigurationOperation, possibly from a different process.
func (c *Client) DeleteConfigurationOperation(name string) *DeleteConfigurationOperation {

```

```

return c.internalClient.DeleteConfigurationOperation(name)
}

// ListInstances lists Instances in a given project and location.
func (c *Client) ListInstances(ctx context.Context, req *licensemanagerpb.ListInstancesRequest, opts
...gax.CallOption) *InstanceIterator {
return c.internalClient.ListInstances(ctx, req, opts...)
}

// GetInstance gets details of a single Instance.
func (c *Client) GetInstance(ctx context.Context, req *licensemanagerpb.GetInstanceRequest, opts
...gax.CallOption) (*licensemanagerpb.Instance, error) {
return c.internalClient.GetInstance(ctx, req, opts...)
}

// DeactivateConfiguration deactivates the given configuration.
func (c *Client) DeactivateConfiguration(ctx context.Context, req
*licensemanagerpb.DeactivateConfigurationRequest,
opts ...gax.CallOption) (*DeactivateConfigurationOperation, error) {
return c.internalClient.DeactivateConfiguration(ctx, req, opts...)
}

// DeactivateConfigurationOperation returns a new DeactivateConfigurationOperation from a given name.
// The name must be that of a previously created DeactivateConfigurationOperation, possibly from a different
process.
func (c *Client) DeactivateConfigurationOperation(name string) *DeactivateConfigurationOperation {
return c.internalClient.DeactivateConfigurationOperation(name)
}

// ReactivateConfiguration reactivates the given configuration.
func (c *Client) ReactivateConfiguration(ctx context.Context, req
*licensemanagerpb.ReactivateConfigurationRequest, opts ...gax.CallOption) (*ReactivateConfigurationOperation,
error) {
return c.internalClient.ReactivateConfiguration(ctx, req, opts...)
}

// ReactivateConfigurationOperation returns a new ReactivateConfigurationOperation from a given name.
// The name must
be that of a previously created ReactivateConfigurationOperation, possibly from a different process.
func (c *Client) ReactivateConfigurationOperation(name string) *ReactivateConfigurationOperation {
return c.internalClient.ReactivateConfigurationOperation(name)
}

// QueryConfigurationLicenseUsage license Usage information for a Configuration.
func (c *Client) QueryConfigurationLicenseUsage(ctx context.Context, req
*licensemanagerpb.QueryConfigurationLicenseUsageRequest, opts ...gax.CallOption)
(*licensemanagerpb.QueryConfigurationLicenseUsageResponse, error) {
return c.internalClient.QueryConfigurationLicenseUsage(ctx, req, opts...)
}

```

```

}

// AggregateUsage aggregates Usage per Instance for a Configuration.
func (c *Client) AggregateUsage(ctx context.Context, req *licensemanagerpb.AggregateUsageRequest, opts
...gax.CallOption) *UsageIterator {
 return c.internalClient.AggregateUsage(ctx, req, opts...)
}

// ListProducts lists Products in a given project and location.
func (c *Client)
 ListProducts(ctx context.Context, req *licensemanagerpb.ListProductsRequest, opts ...gax.CallOption)
*ProductIterator {
 return c.internalClient.ListProducts(ctx, req, opts...)
}

// GetProduct gets details of a single Product.
func (c *Client) GetProduct(ctx context.Context, req *licensemanagerpb.GetProductRequest, opts ...gax.CallOption)
(*licensemanagerpb.Product, error) {
 return c.internalClient.GetProduct(ctx, req, opts...)
}

// GetLocation gets information about a location.
func (c *Client) GetLocation(ctx context.Context, req *locationpb.GetLocationRequest, opts ...gax.CallOption)
(*locationpb.Location, error) {
 return c.internalClient.GetLocation(ctx, req, opts...)
}

// ListLocations lists information about the supported locations for this service.
func (c *Client) ListLocations(ctx context.Context, req *locationpb.ListLocationsRequest, opts ...gax.CallOption)
*LocationIterator {
 return c.internalClient.ListLocations(ctx, req, opts...)
}

// CancelOperation is a utility
method from google.longrunning.Operations.
func (c *Client) CancelOperation(ctx context.Context, req *longrunningpb.CancelOperationRequest, opts
...gax.CallOption) error {
 return c.internalClient.CancelOperation(ctx, req, opts...)
}

// DeleteOperation is a utility method from google.longrunning.Operations.
func (c *Client) DeleteOperation(ctx context.Context, req *longrunningpb.DeleteOperationRequest, opts
...gax.CallOption) error {
 return c.internalClient.DeleteOperation(ctx, req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *Client) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest, opts

```

```

...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// ListOperations is a utility method from google.longrunning.Operations.
func (c *Client) ListOperations(ctx context.Context, req *longrunningpb.ListOperationsRequest, opts
...gax.CallOption) *OperationIterator {
 return
 c.internalClient.ListOperations(ctx, req, opts...)
}

// gRPCClient is a client for interacting with License Manager API over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type gRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing Client
 CallOptions **CallOptions

 // The gRPC API client.
 client licensemanagerpb.LicenseManagerClient

 // LROClient is used internally to handle long-running operations.
 // It is exposed so that its CallOptions can be modified if required.
 // Users should not Close this client.
 LROClient **lroauto.OperationsClient

 operationsClient longrunningpb.OperationsClient

 locationsClient locationpb.LocationsClient

 // The x-goog-* metadata to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

// NewClient creates a new license
manager client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service describing handlers for resources
func NewClient(ctx context.Context, opts ...option.ClientOption) (*Client, error) {
 clientOpts := defaultGRPCClientOptions()
 if newClientHook != nil {

```

```

hookOpts, err := newClientHook(ctx, clientHookParams{})
if err != nil {
 return nil, err
}
clientOpts = append(clientOpts, hookOpts...)
}

connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
if err != nil {
 return nil, err
}
client := Client{CallOptions: defaultCallOptions()}

c := &gRPCClient{
 connPool: connPool,
 client: licensemanagerpb.NewLicenseManagerClient(connPool),
 CallOptions: &client.CallOptions,
 logger: internaloption.GetLogger(opts),
 operationsClient: longrunningpb.NewOperationsClient(connPool),
 locationsClient: locationpb.NewLocationsClient(connPool),
}
c.setGoogleClientInfo()

client.internalClient
= c

client.LROClient, err = lroauto.NewOperationsClient(ctx, gtransport.WithConnPool(connPool))
if err != nil {
 // This error "should not happen", since we are just reusing old connection pool
 // and never actually need to dial.
 // If this does happen, we could leak connp. However, we cannot close conn:
 // If the user invoked the constructor with option.WithGRPCConn,
 // we would close a connection that's still in use.
 // TODO: investigate error conditions.
 return nil, err
}
c.LROClient = &client.LROClient
return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *gRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

```

```

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written
clients.
func (c *gRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc", grpc.Version, "pb", protoVersion)
 c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *gRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
type restClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // LROClient is used internally to handle long-running operations.
 // It is exposed so that its CallOptions can be modified if required.
 // Users should not Close this client.
 LROClient **lroauto.OperationsClient

 // The x-goog-*
 headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing Client
 CallOptions **CallOptions

 logger *slog.Logger
}

// NewRESTClient creates a new license manager rest client.
//
// Service describing handlers for resources
func NewRESTClient(ctx context.Context, opts ...option.ClientOption) (*Client, error) {
 clientOpts := append(defaultRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)

```



```

if err != nil {
 return nil, err
}

callOpts := defaultRESTCallOptions()
c := &restClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,
 logger: internaloption.GetLogger(opts),
}
c.setGoogleClientInfo()

lroOpts := []option.ClientOption{
 option.WithHTTPClient(httpClient),
 option.WithEndpoint(endpoint),
}
opClient, err := lroauto.NewOperationsRESTClient(ctx, lroOpts...)
if err != nil {
 return nil, err
}
c.LROClient = &opClient

return
&Client{internalClient: c, CallOptions: callOpts}, nil
}

func defaultRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://licensemanager.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://licensemanager.UNIVERSE_DOMAIN"),
 internaloption.WithDefaultMTLSEndpoint("https://licensemanager.mtls.googleapis.com"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://licensemanager.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()),
 internaloption.EnableNewAuthLibrary(),
 }
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *restClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(),
 "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

```

```

}
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *restClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *restClient) Connection() *grpc.ClientConn {
 return nil
}

func (c *gRPCClient) ListConfigurations(ctx context.Context, req *licensemanagerpb.ListConfigurationsRequest,
 opts ...gax.CallOption) *ConfigurationIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
 append((*c.CallOptions).ListConfigurations[0:len((*c.CallOptions).ListConfigurations):len((*c.CallOptions).ListCo
 nfigurations)],
 opts...)
 it := &ConfigurationIterator{}
 req = proto.Clone(req).(*licensemanagerpb.ListConfigurationsRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*licensemanagerpb.Configuration, string, error) {
 resp := &licensemanagerpb.ListConfigurationsResponse{}
 if pageToken != "" {
 req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
 req.PageSize = int32(pageSize)
 }
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.client.ListConfigurations, req, settings.GRPC, c.logger, "ListConfigurations")
 return err
 }, opts...)
 if err != nil {
 return nil, "", err
 }
 }
}

```

```

it.Response = resp
return resp.GetConfigurations(), resp.GetNextPageToken(), nil
}
fetch := func(pageSize int, pageToken string) (string, error) {
items, nextPageToken, err := it.InternalFetch(pageSize,
pageToken)
if err != nil {
return "", err
}
it.items = append(it.items, items...)
return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

func (c *gRPCClient) GetConfiguration(ctx context.Context, req *licensemanagerpb.GetConfigurationRequest, opts
...gax.CallOption) (*licensemanagerpb.Configuration, error) {
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

hds = append(c.xGoogHeaders, hds...)
ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
opts =
append((*c.CallOptions).GetConfiguration[0:len((*c.CallOptions).GetConfiguration):len((*c.CallOptions).GetConfi
guration)], opts...)
var resp *licensemanagerpb.Configuration
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
var err error
resp, err = executeRPC(ctx,
c.client.GetConfiguration, req, settings.GRPC, c.logger, "GetConfiguration")
return err
}, opts...)
if err != nil {
return nil, err
}
return resp, nil
}

func (c *gRPCClient) CreateConfiguration(ctx context.Context, req
*licensemanagerpb.CreateConfigurationRequest, opts ...gax.CallOption) (*CreateConfigurationOperation, error) {
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders, hds...)
ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)

```

```

opts =
append((*c.CallOptions).CreateConfiguration[0:len((*c.CallOptions).CreateConfiguration):len((*c.CallOptions).CreateConfiguration)], opts...)
var resp *longrunningpb.Operation
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.client.CreateConfiguration, req, settings.GRPC, c.logger, "CreateConfiguration")
 return err
}, opts...)
if err != nil {
 return
 nil, err
}
return &CreateConfigurationOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, resp),
 }, nil
}

```

```

func (c *gRPCClient) UpdateConfiguration(ctx context.Context, req
*licensemanagerpb.UpdateConfigurationRequest, opts ...gax.CallOption) (*UpdateConfigurationOperation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "configuration.name",
 url.QueryEscape(req.GetConfiguration().GetName()))}

```

```

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateConfiguration[0:len((*c.CallOptions).UpdateConfiguration):len((*c.CallOptions).UpdateConfiguration)], opts...)
var resp *longrunningpb.Operation
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.client.UpdateConfiguration, req, settings.GRPC, c.logger, "UpdateConfiguration")
 return err
}, opts...)
if err != nil {
 return nil, err
}
return
&UpdateConfigurationOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, resp),
 }, nil
}

```

```

func (c *gRPCClient) DeleteConfiguration(ctx context.Context, req
*licensemanagerpb.DeleteConfigurationRequest, opts ...gax.CallOption) (*DeleteConfigurationOperation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

```

```

 hds = append(c.xGoogHeaders, hds...)

```

```

ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
opts =
append((*c.CallOptions).DeleteConfiguration[0:len((*c.CallOptions).DeleteConfiguration):len((*c.CallOptions).DeleteConfiguration)], opts...)
var resp *longrunningpb.Operation
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.client.DeleteConfiguration, req, settings.GRPC, c.logger, "DeleteConfiguration")
 return err
}, opts...)
if err != nil {
 return nil, err
}
return &DeleteConfigurationOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient,
resp),
}, nil
}

```

```

func (c *gRPCClient) ListInstances(ctx context.Context, req *licensemanagerpb.ListInstancesRequest, opts
...gax.CallOption) *InstanceIterator {
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

```

```

hds = append(c.xGoogHeaders, hds...)
ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
opts =
append((*c.CallOptions).ListInstances[0:len((*c.CallOptions).ListInstances):len((*c.CallOptions).ListInstances)],
opts...)
it := &InstanceIterator{
 req = proto.Clone(req).(*licensemanagerpb.ListInstancesRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*licensemanagerpb.Instance, string, error) {
 resp := &licensemanagerpb.ListInstancesResponse{}
 if pageToken != "" {
 req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
 req.PageSize = int32(pageSize)
 }
 err := gax.Invoke(ctx,
func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.client.ListInstances, req, settings.GRPC, c.logger, "ListInstances")
 return err
 }, opts...)
 if err != nil {
 return nil, "", err
 }
 }
}

```

```

 }

 it.Response = resp
 return resp.GetInstances(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

func (c *gRPCClient) GetInstance(ctx context.Context, req *licensemanagerpb.GetInstanceRequest, opts
...gax.CallOption) (*licensemanagerpb.Instance, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds
 = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
 append((*c.CallOptions).GetInstance[0:len((*c.CallOptions).GetInstance):len((*c.CallOptions).GetInstance)],
 opts...)
 var resp *licensemanagerpb.Instance
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.client.GetInstance, req, settings.GRPC, c.logger, "GetInstance")
 return err
 }, opts...)
 if err != nil {
 return nil, err
 }
 return resp, nil
}

func (c *gRPCClient) DeactivateConfiguration(ctx context.Context, req
*licensemanagerpb.DeactivateConfigurationRequest, opts ...gax.CallOption) (*DeactivateConfigurationOperation,
error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

```

```

hds = append(c.xGoogHeaders, hds...)
ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
opts =
append((*c.CallOptions).DeactivateConfiguration[0:len((*c.CallOptions).DeactivateConfiguration):len((*c.CallOptions).DeactivateConfiguration)],
opts...)
var resp *longrunningpb.Operation
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.client.DeactivateConfiguration, req, settings.GRPC, c.logger,
"DeactivateConfiguration")
 return err
}, opts...)
if err != nil {
 return nil, err
}
return &DeactivateConfigurationOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, resp),
}, nil
}

```

```

func (c *gRPCClient) ReactivateConfiguration(ctx context.Context, req
*licensemanagerpb.ReactivateConfigurationRequest, opts ...gax.CallOption) (*ReactivateConfigurationOperation,
error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

```

```

hds = append(c.xGoogHeaders, hds...)
ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
opts =
append((*c.CallOptions).ReactivateConfiguration[0:len((*c.CallOptions).ReactivateConfiguration):len((*c.CallOptions).ReactivateConfiguration)],
opts...)
var resp *longrunningpb.Operation
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.client.ReactivateConfiguration, req, settings.GRPC, c.logger,
"ReactivateConfiguration")
 return err
}, opts...)
if err != nil {
 return nil, err
}
return &ReactivateConfigurationOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, resp),
}, nil
}

```

```

func (c *gRPCClient) QueryConfigurationLicenseUsage(ctx context.Context, req

```

```

*licensemanagerpb.QueryConfigurationLicenseUsageRequest, opts ...gax.CallOption)
(*licensemanagerpb.QueryConfigurationLicenseUsageResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
 append((*c.CallOptions).QueryConfigurationLicenseUsage[0:len((*c.CallOptions).QueryConfigurationLicenseUsage):len((*c.CallOptions).QueryConfigurationLicenseUsage)],
 opts...)
 var resp *licensemanagerpb.QueryConfigurationLicenseUsageResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.client.QueryConfigurationLicenseUsage, req, settings.GRPC, c.logger,
 "QueryConfigurationLicenseUsage")
 return err
 }, opts...)
 if err != nil {
 return nil, err
 }
 return resp, nil
}

```

```

func (c *gRPCClient) AggregateUsage(ctx context.Context, req *licensemanagerpb.AggregateUsageRequest, opts
...gax.CallOption) *UsageIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
 append((*c.CallOptions).AggregateUsage[0:len((*c.CallOptions).AggregateUsage):len((*c.CallOptions).Aggregate
 Usage)],
 opts...)
 it := &UsageIterator{}
 req = proto.Clone(req).(*licensemanagerpb.AggregateUsageRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*licensemanagerpb.Usage, string, error) {
 resp := &licensemanagerpb.AggregateUsageResponse{}
 if pageToken != "" {
 req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
 req.PageSize = int32(pageSize)
 }
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.client.AggregateUsage, req, settings.GRPC, c.logger, "AggregateUsage")

```



```

 return err
}, opts...)
if err != nil {
 return nil, "", err
}

it.Response = resp
return resp.GetUsages(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items,
items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

func (c *gRPCClient) ListProducts(ctx context.Context, req *licensemanagerpb.ListProductsRequest, opts
...gax.CallOption) *ProductIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).ListProducts[0:len((*c.CallOptions).ListProducts):len((*c.CallOptions).ListProducts)],
opts...)
 it := &ProductIterator{}
 req = proto.Clone(req).(*licensemanagerpb.ListProductsRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*licensemanagerpb.Product, string, error) {
 resp := &licensemanagerpb.ListProductsResponse{}
 if pageToken != "" {
 req.PageToken = pageToken
 }
 if
 pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
 req.PageSize = int32(pageSize)
 }
 }
}

```

```

err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.client.ListProducts, req, settings.GRPC, c.logger, "ListProducts")
 return err
}, opts...)
if err != nil {
 return nil, "", err
}

it.Response = resp
return resp.GetProducts(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

func (c *gRPCClient) GetProduct(ctx context.Context, req *licensemanagerpb.GetProductRequest,
 opts ...gax.CallOption) (*licensemanagerpb.Product, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).GetProduct[0:len((*c.CallOptions).GetProduct):len((*c.CallOptions).GetProduct)],
 opts...)
 var resp *licensemanagerpb.Product
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.client.GetProduct, req, settings.GRPC, c.logger, "GetProduct")
 return err
 }, opts...)
 if err != nil {
 return nil, err
 }
 return resp, nil
}

```

```

func (c *gRPCClient) GetLocation(ctx context.Context, req *locationpb.GetLocationRequest, opts
...gax.CallOption) (*locationpb.Location, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders,
 hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
 append((*c.CallOptions).GetLocation[0:len((*c.CallOptions).GetLocation):len((*c.CallOptions).GetLocation)],
 opts...)
 var resp *locationpb.Location
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.locationsClient.GetLocation, req, settings.GRPC, c.logger, "GetLocation")
 return err
 }, opts...)
 if err != nil {
 return nil, err
 }
 return resp, nil
}

func (c *gRPCClient) ListLocations(ctx context.Context, req *locationpb.ListLocationsRequest, opts
...gax.CallOption) *LocationIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
 append((*c.CallOptions).ListLocations[0:len((*c.CallOptions).ListLocations):len((*c.CallOptions).ListLocations)],
 opts...)
 it := &LocationIterator{}
 req
 = proto.Clone(req).(*locationpb.ListLocationsRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*locationpb.Location, string, error) {
 resp := &locationpb.ListLocationsResponse{}
 if pageToken != "" {
 req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
 req.PageSize = int32(pageSize)
 }
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.locationsClient.ListLocations, req, settings.GRPC, c.logger, "ListLocations")
 return err
 })
 }

```

```

 }, opts...)
 if err != nil {
 return nil, "", err
 }

 it.Response = resp
 return resp.GetLocations(), resp.GetNextPageToken(), nil
}
fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken,
 nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

func (c *gRPCClient) CancelOperation(ctx context.Context, req *longrunningpb.CancelOperationRequest, opts
...gax.CallOption) error {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
 append((*c.CallOptions).CancelOperation[0:len((*c.CallOptions).CancelOperation):len((*c.CallOptions).CancelOp
eration)], opts...)
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 _, err = executeRPC(ctx, c.operationsClient.CancelOperation, req, settings.GRPC, c.logger, "CancelOperation")
 return err
 }, opts...)
 return err
}

func (c *gRPCClient) DeleteOperation(ctx context.Context, req *longrunningpb.DeleteOperationRequest,
opts ...gax.CallOption) error {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)

```

```

opts =
append((*c.CallOptions).DeleteOperation[0:len((*c.CallOptions).DeleteOperation):len((*c.CallOptions).DeleteOperation)], opts...)
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 _, err = executeRPC(ctx, c.operationsClient.DeleteOperation, req, settings.GRPC, c.logger, "DeleteOperation")
 return err
}, opts...)
return err
}

```

```

func (c *gRPCClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest, opts
...gax.CallOption) (*longrunningpb.Operation, error) {
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

```

```

hds = append(c.xGoogHeaders, hds...)
ctx = gax.InsertMetadataIntoOutgoingContext(ctx,
hds...)
opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
var resp *longrunningpb.Operation
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
 return err
}, opts...)
if err != nil {
 return nil, err
}
return resp, nil
}

```

```

func (c *gRPCClient) ListOperations(ctx context.Context, req *longrunningpb.ListOperationsRequest, opts
...gax.CallOption) *OperationIterator {
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

hds = append(c.xGoogHeaders, hds...)
ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
opts =
append((*c.CallOptions).ListOperations[0:len((*c.CallOptions).ListOperations):len((*c.CallOptions).ListOperations)], opts...)
it := &OperationIterator{ }
req = proto.Clone(req).(*longrunningpb.ListOperationsRequest)
it.InternalFetch
= func(pageSize int, pageToken string) ([]*longrunningpb.Operation, string, error) {
 resp := &longrunningpb.ListOperationsResponse{ }
 if pageToken != "" {

```

```

 req.PageToken = pageToken
}
if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
} else if pageSize != 0 {
 req.PageSize = int32(pageSize)
}
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.operationsClient.ListOperations, req, settings.GRPC, c.logger, "ListOperations")
 return err
}, opts...)
if err != nil {
 return nil, "", err
}

it.Response = resp
return resp.GetOperations(), resp.GetNextPageToken(), nil
}
fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo,
it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// ListConfigurations lists Configurations in a given project and location.
func (c *restClient) ListConfigurations(ctx context.Context, req *licensemanagerpb.ListConfigurationsRequest, opts
...gax.CallOption) *ConfigurationIterator {
 it := &ConfigurationIterator{}
 req = proto.Clone(req).(*licensemanagerpb.ListConfigurationsRequest)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*licensemanagerpb.Configuration, string, error) {
 resp := &licensemanagerpb.ListConfigurationsResponse{}
 if pageToken != "" {
 req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {

```

```

 req.PageSize = math.MaxInt32
} else if pageSize != 0 {
 req.PageSize = int32(pageSize)
}
baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return
 nil, "", err
}
baseUrl.Path += fmt.Sprintf("/v1/%v/configurations", req.GetParent())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")
if req.GetFilter() != "" {
 params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
}
if req.GetOrderBy() != "" {
 params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
}
if req.GetPageSize() != 0 {
 params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
}
if req.GetPageToken() != "" {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := append(c.xGoogHeaders, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil
 {
 return err
 }
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "ListConfigurations")
 if err != nil {
 return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

```

```

 }

 return nil
}, opts...)
if e != nil {
 return nil, "", e
}
it.Response = resp
return resp.GetConfigurations(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// GetConfiguration gets details of a single Configuration.
func (c *restClient) GetConfiguration(ctx context.Context, req *licensemanagerpb.GetConfigurationRequest,
 opts ...gax.CallOption) (*licensemanagerpb.Configuration, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =

```



```

append((*c.CallOptions).GetConfiguration[0:len((*c.CallOptions).GetConfiguration):len((*c.CallOptions).GetConfiguration)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &licensemanagerpb.Configuration{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetConfiguration")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// CreateConfiguration creates a new Configuration in a given project and location.
func (c *restClient) CreateConfiguration(ctx context.Context, req *licensemanagerpb.CreateConfigurationRequest,
opts ...gax.CallOption) (*CreateConfigurationOperation, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetConfiguration()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path

```

```

+= fmt.Sprintf("/v1/%v/configurations", req.GetParent())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")
params.Add("configurationId", fmt.Sprintf("%v", req.GetConfigurationId()))
if req.GetRequestId() != "" {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &longrunningpb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err !=
nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "CreateConfiguration")
 if err != nil {
 return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}

override := fmt.Sprintf("/v1/%s", resp.GetName())
return &CreateConfigurationOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, resp),

```

```

 pollPath: override,
}, nil
}

// UpdateConfiguration updates the parameters of a single Configuration.
func (c *restClient) UpdateConfiguration(ctx context.Context, req *licensemanagerpb.UpdateConfigurationRequest,
opts ...gax.CallOption) (*UpdateConfigurationOperation, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetConfiguration()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if
 err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetConfiguration().GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetRequestId() != "" {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }
 if req.GetUpdateMask() != nil {
 field, err := protojson.Marshal(req.GetUpdateMask())
 if err != nil {
 return nil, err
 }
 params.Add("updateMask", string(field[1:len(field)-1]))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "configuration.name",
url.QueryEscape(req.GetConfiguration().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 unmarshal := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context,
settings gax.CallSettings) error {
 if settings.Path != "" {

```

```

 baseUrl.Path = settings.Path
}
httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
if err != nil {
 return err
}
httpReq = httpReq.WithContext(ctx)
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateConfiguration")
if err != nil {
 return err
}
if err := unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}

override := fmt.Sprintf("/v1/%s", resp.GetName())
return &UpdateConfigurationOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, resp),
 pollPath: override,
}, nil
}

// DeleteConfiguration deletes a single Configuration.
func (c *restClient) DeleteConfiguration(ctx context.Context, req *licensemanagerpb.DeleteConfigurationRequest,
opts ...gax.CallOption) (*DeleteConfigurationOperation, error) {
 baseUrl,
 err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetRequestId() != "" {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

```

```

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &longrunningpb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq
 = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "DeleteConfiguration")
 if err != nil {
 return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}

override := fmt.Sprintf("/v1/%s", resp.GetName())
return &DeleteConfigurationOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, resp),
 pollPath: override,
}, nil
}

// ListInstances lists Instances in a given project and location.
func (c *restClient) ListInstances(ctx context.Context, req *licensemanagerpb.ListInstancesRequest, opts
...gax.CallOption) *InstanceIterator {
 it := &InstanceIterator{}
 req = proto.Clone(req).(*licensemanagerpb.ListInstancesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*licensemanagerpb.Instance, string, error) {

```

```

resp
:= &licensemanagerpb.ListInstancesResponse{}
if pageToken != "" {
 req.PageToken = pageToken
}
if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
} else if pageSize != 0 {
 req.PageSize = int32(pageSize)
}
baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, "", err
}
baseUrl.Path += fmt.Sprintf("/v1/%v/instances", req.GetParent())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")
if req.GetFilter() != "" {
 params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
}
if req.GetOrderBy() != "" {
 params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
}
if req.GetPageSize() != 0 {
 params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
}
if req.GetPageToken() != "" {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := append(c.xGoogHeaders, "Content-Type", "application/json")
headers
:= gax.BuildHeaders(ctx, hds...)
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "ListInstances")

```

```

 if err != nil {
 return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, "", e
}
it.Response = resp
return resp.GetInstances(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen,
it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// GetInstance gets details of a single Instance.
func (c *restClient) GetInstance(ctx context.Context, req *licensemanagerpb.GetInstanceRequest, opts
...gax.CallOption) (*licensemanagerpb.Instance, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.

```

```

hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).GetInstance[0:len((*c.CallOptions).GetInstance):len((*c.CallOptions).GetInstance)],
opts...)
unm :=
protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &licensemanagerpb.Instance{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
if settings.Path != "" {
baseUrl.Path = settings.Path
}
httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
if err != nil {
return err
}
httpReq = httpReq.WithContext(ctx)
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetInstance")
if err != nil {
return err
}

if err := unm.Unmarshal(buf, resp); err != nil {
return err
}

return nil
}, opts...)
if e != nil {
return nil, e
}
return resp, nil
}

// DeactivateConfiguration deactivates the given configuration.
func (c *restClient) DeactivateConfiguration(ctx context.Context, req
*licensemanagerpb.DeactivateConfigurationRequest, opts ...gax.CallOption) (*DeactivateConfigurationOperation,
error) {
m := protojson.MarshalOptions{AllowPartial: true,
UseEnumNumbers: true}
jsonReq, err := m.Marshal(req)
if err != nil {
return nil, err
}

```



```

}

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/v1/%v:deactivate", req.GetName())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &longrunningpb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "DeactivateConfiguration")
 if err != nil {
 return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}

override := fmt.Sprintf("/v1/%s", resp.GetName())

```

```

return &DeactivateConfigurationOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, resp),
 pollPath: override,
}, nil
}

// ReactivateConfiguration reactivates the given configuration.
func (c *restClient) ReactivateConfiguration(ctx context.Context, req
*licensemanagerpb.ReactivateConfigurationRequest, opts ...gax.CallOption) (*ReactivateConfigurationOperation,
error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err !=
 nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:reactivate", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq,

```

```

c.logger, jsonReq, "ReactivateConfiguration")
if err != nil {
 return err
}
if err := unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}

override := fmt.Sprintf("/v1/%s", resp.GetName())
return &ReactivateConfigurationOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, resp),
 pollPath: override,
}, nil
}

// QueryConfigurationLicenseUsage license Usage information for a Configuration.
func (c *restClient) QueryConfigurationLicenseUsage(ctx context.Context, req
*licensemanagerpb.QueryConfigurationLicenseUsageRequest, opts ...gax.CallOption)
(*licensemanagerpb.QueryConfigurationLicenseUsageResponse, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:queryLicenseUsage", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetEndTime() != nil {
 field, err := protojson.Marshal(req.GetEndTime())
 if
err != nil {
 return nil, err
 }
 params.Add("endTime", string(field[1:len(field)-1]))
 }
 if req.GetStartTime() != nil {
 field, err := protojson.Marshal(req.GetStartTime())
 if err != nil {
 return nil, err
 }
 params.Add("startTime", string(field[1:len(field)-1]))
 }
}

```

```

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).QueryConfigurationLicenseUsage[0:len((*c.CallOptions).QueryConfigurationLicenseUsage):len((*c.CallOptions).QueryConfigurationLicenseUsage)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &licensemanagerpb.QueryConfigurationLicenseUsageResponse{}
e := gax.Invoke(ctx, func(ctx
context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "QueryConfigurationLicenseUsage")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// AggregateUsage aggregates Usage per Instance for a Configuration.
func (c *restClient) AggregateUsage(ctx context.Context, req *licensemanagerpb.AggregateUsageRequest, opts
...gax.CallOption) *UsageIterator {
 it := &UsageIterator{}
 req = proto.Clone(req).(*licensemanagerpb.AggregateUsageRequest)

```

```

unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
it.InternalFetch = func(pageSize int, pageToken
string) ([]*licensemanagerpb.Usage, string, error) {
 resp := &licensemanagerpb.AggregateUsageResponse{}
 if pageToken != "" {
 req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
 req.PageSize = int32(pageSize)
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:aggregateUsage", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetEndTime() != nil {
 field, err := protojson.Marshal(req.GetEndTime())
 if err != nil {
 return nil, "", err
 }
 params.Add("endTime", string(field[1:len(field)-1]))
 }
 if req.GetFilter() != "" {
 params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req.GetOrderBy() != "" {
 params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req.GetPageSize() != 0 {
 params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if
 req.GetPageToken() != "" {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req.GetStartTime() != nil {
 field, err := protojson.Marshal(req.GetStartTime())
 if err != nil {
 return nil, "", err
 }
 params.Add("startTime", string(field[1:len(field)-1]))
 }
}

```

```

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := append(c.xGoogHeaders, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "AggregateUsage")
 if err != nil {
 return err
 }
 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return
nil
}, opts...)
if e != nil {
 return nil, "", e
}
it.Response = resp
return resp.GetUsages(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

```

```

// ListProducts lists Products in a given project and location.
func (c *restClient) ListProducts(ctx context.Context, req *licensemanagerpb.ListProductsRequest, opts
...gax.CallOption) *ProductIterator {
 it := &ProductIterator{}
 req = proto.Clone(req).(*licensemanagerpb.ListProductsRequest)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken
string) ([]*licensemanagerpb.Product, string, error) {
 resp := &licensemanagerpb.ListProductsResponse{}
 if pageToken != "" {
 req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
 req.PageSize = int32(pageSize)
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v/products", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetFilter() != "" {
 params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req.GetOrderBy() != "" {
 params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req.GetPageSize() != 0 {
 params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds
 := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 })
 }
}

```

```

 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "ListProducts")
 if err != nil {
 return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, "", e
}
it.Response = resp
return resp.GetProducts(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo,
it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// GetProduct gets details of a single Product.
func (c *restClient) GetProduct(ctx context.Context, req *licensemanagerpb.GetProductRequest, opts
...gax.CallOption) (*licensemanagerpb.Product, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }

```



```

baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).GetProduct[0:len((*c.CallOptions).GetProduct):len((*c.CallOptions).GetProduct)],
opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &licensemanagerpb.Product{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetProduct")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// GetLocation gets information about a location.
func (c *restClient) GetLocation(ctx context.Context, req *locationpb.GetLocationRequest, opts ...gax.CallOption)
(*locationpb.Location, error) {

```

```

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return
 nil, err
}
baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).GetLocation[0:len((*c.CallOptions).GetLocation):len((*c.CallOptions).GetLocation)],
opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &locationpb.Location{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header
= headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLocation")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e

```

```

}
return resp, nil
}

// ListLocations lists information about the supported locations for this service.
func (c *restClient) ListLocations(ctx context.Context, req *locationpb.ListLocationsRequest, opts
...gax.CallOption) *LocationIterator {
 it := &LocationIterator{}
 req = proto.Clone(req).(*locationpb.ListLocationsRequest)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*locationpb.Location, string, error) {
 resp := &locationpb.ListLocationsResponse{}
 if pageToken != "" {
 req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
 req.PageSize = int32(pageSize)
 }
 baseUrl,
 err := url.Parse(c.endpoint)
 if err != nil {
 return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v/locations", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetFilter() != "" {
 params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req.GetPageSize() != 0 {
 params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }

```

```

httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
if err != nil {
 return err
}
httpReq.Header
= headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "ListLocations")
if err != nil {
 return err
}
if err := unm.Unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, "", e
}
it.Response = resp
return resp.GetLocations(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// CancelOperation is a utility method from google.longrunning.Operations.
func (c *restClient) CancelOperation(ctx context.Context, req *longrunningpb.CancelOperationRequest, opts
...gax.CallOption)
error {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
 return err
 }

```

```

}

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return err
}
baseUrl.Path += fmt.Sprintf("/v1/%v:cancel", req.GetName())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
return gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header
 = headers

 _, err = executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "CancelOperation")
 return err
}, opts...)
}

// DeleteOperation is a utility method from google.longrunning.Operations.
func (c *restClient) DeleteOperation(ctx context.Context, req *longrunningpb.DeleteOperationRequest, opts
...gax.CallOption) error {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

```

```

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
return gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path !=
"" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 _, err = executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "DeleteOperation")
 return err
}, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *restClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest, opts
...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

hds = append(c.xGoogHeaders, hds...)
hds
= append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],

```

```

opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &longrunningpb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// ListOperations is a utility method from google.longrunning.Operations.
func
(c *restClient) ListOperations(ctx context.Context, req *longrunningpb.ListOperationsRequest, opts
...gax.CallOption) *OperationIterator {
 it := &OperationIterator{}
 req = proto.Clone(req).(*longrunningpb.ListOperationsRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*longrunningpb.Operation, string, error) {
 resp := &longrunningpb.ListOperationsResponse{}
 if pageToken != "" {
 req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
 req.PageSize = int32(pageSize)
 }
 }
}

```

```

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, "", err
}
baseUrl.Path += fmt.Sprintf("/v1/%v/operations", req.GetName())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")
if req.GetFilter() != "" {
 params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
}
if req.GetPageSize() != 0 {
 params.Add("pageSize",
fmt.Sprintf("%v", req.GetPageSize()))
}
if req.GetPageToken() != "" {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := append(c.xGoogHeaders, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "ListOperations")
 if err != nil {
 return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, "", e
}
it.Response = resp

```



```

 return resp.GetOperations(), resp.GetNextPageToken(),
 nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// CreateConfigurationOperation returns a new CreateConfigurationOperation from a given name.
// The name must be that of a previously created CreateConfigurationOperation, possibly from a different process.
func (c *gRPCClient) CreateConfigurationOperation(name string) *CreateConfigurationOperation {
 return &CreateConfigurationOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
 }
}

// CreateConfigurationOperation returns a new CreateConfigurationOperation from a given name.
// The name must
// be that of a previously created CreateConfigurationOperation, possibly from a different process.
func (c *restClient) CreateConfigurationOperation(name string) *CreateConfigurationOperation {
 override := fmt.Sprintf("/v1/%s", name)
 return &CreateConfigurationOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
 pollPath: override,
 }
}

// DeactivateConfigurationOperation returns a new DeactivateConfigurationOperation from a given name.
// The name must be that of a previously created DeactivateConfigurationOperation, possibly from a different
// process.
func (c *gRPCClient) DeactivateConfigurationOperation(name string) *DeactivateConfigurationOperation {
 return &DeactivateConfigurationOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
 }
}

```

```

// DeactivateConfigurationOperation returns a new DeactivateConfigurationOperation from a given name.
// The name must be that of a previously
// created DeactivateConfigurationOperation, possibly from a different process.
func (c *restClient) DeactivateConfigurationOperation(name string) *DeactivateConfigurationOperation {
 override := fmt.Sprintf("/v1/%s", name)
 return &DeactivateConfigurationOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
 pollPath: override,
 }
}

// DeleteConfigurationOperation returns a new DeleteConfigurationOperation from a given name.
// The name must be that of a previously created DeleteConfigurationOperation, possibly from a different process.
func (c *gRPCClient) DeleteConfigurationOperation(name string) *DeleteConfigurationOperation {
 return &DeleteConfigurationOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
 }
}

// DeleteConfigurationOperation returns a new DeleteConfigurationOperation from a given name.
// The name must be that of a previously created DeleteConfigurationOperation,
// possibly from a different process.
func (c *restClient) DeleteConfigurationOperation(name string) *DeleteConfigurationOperation {
 override := fmt.Sprintf("/v1/%s", name)
 return &DeleteConfigurationOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
 pollPath: override,
 }
}

// ReactivateConfigurationOperation returns a new ReactivateConfigurationOperation from a given name.
// The name must be that of a previously created ReactivateConfigurationOperation, possibly from a different
// process.
func (c *gRPCClient) ReactivateConfigurationOperation(name string) *ReactivateConfigurationOperation {
 return &ReactivateConfigurationOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
 }
}

// ReactivateConfigurationOperation returns a new ReactivateConfigurationOperation from a given name.
// The name must be that of a previously created ReactivateConfigurationOperation, possibly
// from a different process.
func (c *restClient) ReactivateConfigurationOperation(name string) *ReactivateConfigurationOperation {
 override := fmt.Sprintf("/v1/%s", name)
 return &ReactivateConfigurationOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
 pollPath: override,
 }
}

```

```

}

// UpdateConfigurationOperation returns a new UpdateConfigurationOperation from a given name.
// The name must be that of a previously created UpdateConfigurationOperation, possibly from a different process.
func (c *gRPCClient) UpdateConfigurationOperation(name string) *UpdateConfigurationOperation {
 return &UpdateConfigurationOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
 }
}

// UpdateConfigurationOperation returns a new UpdateConfigurationOperation from a given name.
// The name must be that of a previously created UpdateConfigurationOperation, possibly from a different process.
func (c
*restClient) UpdateConfigurationOperation(name string) *UpdateConfigurationOperation {
 override := fmt.Sprintf("/v1/%s", name)
 return &UpdateConfigurationOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
 pollPath: override,
 }
}

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

```

```

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
 if err != nil {
 // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
 }
}

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```

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
// protoc-gen-go v1.35.2
// protoc v4.25.7
// source: google/cloud/discoveryengine/v1/user_license_service.proto

package discoveryenginepb

import (
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 _ "google.golang.org/genproto/googleapis/api/annotations"
 status "google.golang.org/genproto/googleapis/rpc/status"
 protoreflect
 "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
 reflect "reflect"
 sync "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Request message for
// [UserService.ListUserLicenses][google.cloud.discoveryengine.v1.UserService.ListUserLicenses].
type ListUserLicensesRequest struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The parent [UserStore][] resource name, format:
 // `projects/{project}/locations/{location}/userStores/{user_store_id}`.
 // Parent string `protobuf:"bytes,1,opt,name=parent,proto3"
 // json:"parent,omitempty"`
 // Optional. Requested page size. Server may return fewer items than
 // requested. If unspecified, defaults to 10. The maximum value is 50; values
 // above 50 will be coerced to 50.
 //
 // If this field is negative, an INVALID_ARGUMENT error is returned.

```

```

PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3" json:"page_size,omitempty"`
// Optional. A page token, received from a previous `ListUserLicenses` call.
// Provide this to retrieve the subsequent page.
//
// When paginating, all other parameters provided to `ListUserLicenses`
// must match the call that provided the page token.
PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
// Optional. Filter for the list request.
//
// Supported fields:
//
// * `license_assignment_state`
//
// Examples:
//
// * `license_assignment_state = ASSIGNED` to list assigned user licenses.
// * `license_assignment_state
= NO_LICENSE` to list not licensed users.
// * `license_assignment_state = NO_LICENSE_ATTEMPTED_LOGIN` to list users
// who attempted login but no license assigned.
// * `license_assignment_state != NO_LICENSE_ATTEMPTED_LOGIN` to filter
// out users who attempted login but no license assigned.
Filter string `protobuf:"bytes,4,opt,name=filter,proto3" json:"filter,omitempty"`
}

func (x *ListUserLicensesRequest) Reset() {
*x = ListUserLicensesRequest{}
mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[0]
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
ms.StoreMessageInfo(mi)
}

func (x *ListUserLicensesRequest) String() string {
return protoimpl.X.MessageStringOf(x)
}

func (*ListUserLicensesRequest) ProtoMessage() {}

func (x *ListUserLicensesRequest) ProtoReflect() protoreflect.Message {
mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[0]
if x != nil {
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
if
ms.LoadMessageInfo() == nil {
ms.StoreMessageInfo(mi)
}
return ms
}
}

```

```

return mi.MessageOf(x)
}

// Deprecated: Use ListUserLicensesRequest.ProtoReflect.Descriptor instead.
func (*ListUserLicensesRequest) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{0}
}

func (x *ListUserLicensesRequest) GetParent() string {
 if x != nil {
 return x.Parent
 }
 return ""
}

func (x *ListUserLicensesRequest) GetPageSize() int32 {
 if x != nil {
 return x.PageSize
 }
 return 0
}

func (x *ListUserLicensesRequest) GetPageToken() string {
 if x != nil {
 return x.PageToken
 }
 return ""
}

func (x *ListUserLicensesRequest) GetFilter() string {
 if x != nil {
 return x.Filter
 }
 return ""
}

// Response message for
// [UserLicenseService.ListUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.ListUserLicenses].
type ListUserLicensesResponse struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // All the customer's
 // [UserLicense][google.cloud.discoveryengine.v1.UserLicense]s.
 UserLicenses []*UserLicense `protobuf:"bytes,1,rep,name=user_licenses,json=userLicenses,proto3"
 json:"user_licenses,omitempty"`
}

```

```
// A token, which can be sent as `page_token` to retrieve the next page. If
// this field is omitted, there are no subsequent pages.
NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}
```

```
func (x *ListUserLicensesResponse) Reset() {
 *x = ListUserLicensesResponse{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}
```

```
func (x *ListUserLicensesResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}
```

```
func (*ListUserLicensesResponse) ProtoMessage() {}
```

```
func (x *ListUserLicensesResponse) ProtoReflect() protoreflect.Message
{
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[1]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}
```

// Deprecated: Use ListUserLicensesResponse.ProtoReflect.Descriptor instead.

```
func (*ListUserLicensesResponse) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{1}
}
```

```
func (x *ListUserLicensesResponse) GetUserLicenses() []*UserLicense {
 if x != nil {
 return x.UserLicenses
 }
 return nil
}
```

```
func (x *ListUserLicensesResponse) GetNextPageToken() string {
 if x != nil {
 return x.NextPageToken
 }
}
```



```

return ""
}

// Request message for
//
[UserLicenseService.BatchUpdateUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdat
eUserLicenses]
// method.
type BatchUpdateUserLicensesRequest struct {
 state protoimpl.MessageState
 sizeCache
 protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The source of the input.
 //
 // Types that are assignable to Source:
 //
 // *BatchUpdateUserLicensesRequest_InlineSource_
 Source isBatchUpdateUserLicensesRequest_Source `protobuf_oneof:"source"`
 // Required. The parent [UserStore][] resource name, format:
 // `projects/{project}/locations/{location}/userStores/{user_store_id}`.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. If true, if user licenses removed associated license config, the
 // user license will be deleted. By default which is false, the user license
 // will be updated to unassigned state.
 DeleteUnassignedUserLicenses bool
 `protobuf:"varint,4,opt,name=delete_unassigned_user_licenses,json=deleteUnassignedUserLicenses,proto3"
 json:"delete_unassigned_user_licenses,omitempty"`
}

func (x *BatchUpdateUserLicensesRequest) Reset() {
 *x = BatchUpdateUserLicensesRequest{}
 mi
 := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesRequest) ProtoMessage() {}

func (x *BatchUpdateUserLicensesRequest) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[2]
 if x != nil {

```

```

ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
}
return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use BatchUpdateUserLicensesRequest.ProtoReflect.Descriptor instead.
func (*BatchUpdateUserLicensesRequest) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{2}
}

func (m *BatchUpdateUserLicensesRequest) GetSource() isBatchUpdateUserLicensesRequest_Source {
 {
 if m != nil {
 return m.Source
 }
 return nil
 }
}

func (x *BatchUpdateUserLicensesRequest) GetInlineSource() *BatchUpdateUserLicensesRequest_InlineSource {
 if x, ok := x.GetSource().(*BatchUpdateUserLicensesRequest_InlineSource_); ok {
 return x.InlineSource
 }
 return nil
}

func (x *BatchUpdateUserLicensesRequest) GetParent() string {
 if x != nil {
 return x.Parent
 }
 return ""
}

func (x *BatchUpdateUserLicensesRequest) GetDeleteUnassignedUserLicenses() bool {
 if x != nil {
 return x.DeleteUnassignedUserLicenses
 }
 return false
}

type isBatchUpdateUserLicensesRequest_Source interface {
 isBatchUpdateUserLicensesRequest_Source()
}

type BatchUpdateUserLicensesRequest_InlineSource_ struct {

```

```

// The inline source for the input content for document embeddings.
InlineSource *BatchUpdateUserLicensesRequest_InlineSource
`protobuf:"bytes,2,opt,name=inline_source,json=inlineSource,proto3,oneof"`
}

func (*BatchUpdateUserLicensesRequest_InlineSource_) isBatchUpdateUserLicensesRequest_Source()
{}

// Metadata related to the progress of the
//
[UserLicenseService.BatchUpdateUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdateUserLicenses]
// operation. This will be returned by the google.longrunning.Operation.metadata
// field.
type BatchUpdateUserLicensesMetadata struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Operation create time.
 CreateTime *timestamppb.Timestamp `protobuf:"bytes,1,opt,name=create_time,json=createTime,proto3"
 json:"create_time,omitempty"`
 // Operation last update time. If the operation is done, this is also the
 // finish time.
 UpdateTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=update_time,json=updateTime,proto3"
 json:"update_time,omitempty"`
 // Count of user licenses successfully updated.
 SuccessCount int64 `protobuf:"varint,3,opt,name=success_count,json=successCount,proto3"
 json:"success_count,omitempty"`
 // Count
 // of user licenses that failed to be updated.
 FailureCount int64 `protobuf:"varint,4,opt,name=failure_count,json=failureCount,proto3"
 json:"failure_count,omitempty"`
}

func (x *BatchUpdateUserLicensesMetadata) Reset() {
 *x = BatchUpdateUserLicensesMetadata{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesMetadata) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesMetadata) ProtoMessage() {}

```

```

func (x *BatchUpdateUserLicensesMetadata) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[3]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use BatchUpdateUserLicensesMetadata.ProtoReflect.Descriptor
// instead.
func (*BatchUpdateUserLicensesMetadata) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{3}
}

func (x *BatchUpdateUserLicensesMetadata) GetCreateTime() *timestamppb.Timestamp {
 if x != nil {
 return x.CreateTime
 }
 return nil
}

func (x *BatchUpdateUserLicensesMetadata) GetUpdateTime() *timestamppb.Timestamp {
 if x != nil {
 return x.UpdateTime
 }
 return nil
}

func (x *BatchUpdateUserLicensesMetadata) GetSuccessCount() int64 {
 if x != nil {
 return x.SuccessCount
 }
 return 0
}

func (x *BatchUpdateUserLicensesMetadata) GetFailureCount() int64 {
 if x != nil {
 return x.FailureCount
 }
 return 0
}

// Response message for
//

```

```

[UserLicenseService.BatchUpdateUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdateUserLicenses]
// method.
type BatchUpdateUserLicensesResponse struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields
 protoimpl.UnknownFields

 // UserLicenses successfully updated.
 UserLicenses []*UserLicense `protobuf:"bytes,1,rep,name=user_licenses,json=userLicenses,proto3"
 json:"user_licenses,omitempty"`
 // A sample of errors encountered while processing the request.
 ErrorSamples []*status.Status `protobuf:"bytes,2,rep,name=error_samples,json=errorSamples,proto3"
 json:"error_samples,omitempty"`
}

func (x *BatchUpdateUserLicensesResponse) Reset() {
 *x = BatchUpdateUserLicensesResponse{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesResponse) ProtoMessage() {}

func (x *BatchUpdateUserLicensesResponse) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[4]
 if x != nil {
 ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use BatchUpdateUserLicensesResponse.ProtoReflect.Descriptor instead.
func (*BatchUpdateUserLicensesResponse) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{4}
}

```

```

func (x *BatchUpdateUserLicensesResponse) GetUserLicenses() []*UserLicense {
 if x != nil {
 return x.UserLicenses
 }
 return nil
}

func (x *BatchUpdateUserLicensesResponse) GetErrorSamples() []*status.Status {
 if x != nil {
 return x.ErrorSamples
 }
 return nil
}

// The inline source for the input config for BatchUpdateUserLicenses
// method.
type BatchUpdateUserLicensesRequest_InlineSource struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. A list of user licenses to update. Each user license
 //
 // must have a valid
 // [UserLicense.user_principal][google.cloud.discoveryengine.v1.UserLicense.user_principal].
 UserLicenses []*UserLicense `protobuf:"bytes,1,rep,name=user_licenses,json=userLicenses,proto3"
 json:"user_licenses,omitempty"`
 // Optional. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
 json:"update_mask,omitempty"`
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) Reset() {
 *x = BatchUpdateUserLicensesRequest_InlineSource{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesRequest_InlineSource) ProtoMessage() {}

func (x *BatchUpdateUserLicensesRequest_InlineSource) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[5]
 if

```

```

x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use BatchUpdateUserLicensesRequest_InlineSource.ProtoReflect.Descriptor instead.
func (*BatchUpdateUserLicensesRequest_InlineSource) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{2, 0}
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) GetUserLicenses() []*UserLicense {
 if x != nil {
 return x.UserLicenses
 }
 return nil
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
 return x.UpdateMask
 }
 return nil
}

var File_google_cloud_discoveryengine_v1_user_license_service_proto protoreflect.FileDescriptor

var file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc = []byte{
 0x0a, 0x3a, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x64,
 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x76,
 0x31, 0x2f, 0x75, 0x73, 0x65, 0x72, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x73,
 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x1f, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f,
 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x76, 0x31, 0x1a, 0x1c, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f, 0x74, 0x61,
 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74, 0x2e, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x66, 0x69, 0x69,
 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e,
 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70,
 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x1a, 0x32, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x64,

```

0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x76,  
0x31, 0x2f, 0x75, 0x73, 0x65, 0x72, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x2e, 0x70,  
0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x6c, 0x6f, 0x6e,  
0x67, 0x72, 0x75, 0x6e, 0x6e, 0x69, 0x6e, 0x67, 0x2f, 0x6f, 0x70, 0x65, 0x72, 0x61, 0x74, 0x69,  
0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c,  
0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64,  
0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70, 0x72,  
0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,  
0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d,  
0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67, 0x6f,  
0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x72, 0x70, 0x63, 0x2f, 0x73, 0x74, 0x61, 0x74, 0x75, 0x73, 0x2e,  
0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc6, 0x01, 0x0a, 0x17, 0x4c, 0x69, 0x73, 0x74, 0x55, 0x73,  
0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x73, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73,  
0x74, 0x12, 0x48, 0x0a, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x18, 0x01, 0x20, 0x01, 0x28,  
0x09, 0x42, 0x30, 0xe0, 0x41, 0x02, 0xfa, 0x41, 0x2a, 0x0a, 0x28, 0x64, 0x69, 0x73, 0x63, 0x6f,  
0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,  
0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x55, 0x73, 0x65, 0x72, 0x53, 0x74,  
0x6f, 0x72, 0x65, 0x52, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x12, 0x20,  
0x0a, 0x09, 0x70,  
0x61, 0x67, 0x65, 0x5f, 0x73, 0x69, 0x7a, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x05, 0x42, 0x03,  
0xe0, 0x41, 0x01, 0x52, 0x08, 0x70, 0x61, 0x67, 0x65, 0x53, 0x69, 0x7a, 0x65, 0x12, 0x22, 0x0a,  
0x0a, 0x70, 0x61, 0x67, 0x65, 0x5f, 0x74, 0x6f, 0x6b, 0x65, 0x6e, 0x18, 0x03, 0x20, 0x01, 0x28,  
0x09, 0x42, 0x03, 0xe0, 0x41, 0x01, 0x52, 0x09, 0x70, 0x61, 0x67, 0x65, 0x54, 0x6f, 0x6b, 0x65,  
0x6e, 0x12, 0x1b, 0x0a, 0x06, 0x66, 0x69, 0x6c, 0x74, 0x65, 0x72, 0x18, 0x04, 0x20, 0x01, 0x28,  
0x09, 0x42, 0x03, 0xe0, 0x41, 0x01, 0x52, 0x06, 0x66, 0x69, 0x6c, 0x74, 0x65, 0x72, 0x22, 0x95,  
0x01, 0x0a, 0x18, 0x4c, 0x69, 0x73, 0x74, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e,  
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0x73, 0x65, 0x72, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x73, 0x18, 0x01, 0x20, 0x03,  
0x28, 0x0b, 0x32, 0x2c, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75,  
0x64, 0x2e,  
0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e,  
0x65, 0x2e, 0x76, 0x31, 0x2e, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,  
0x52, 0x0c, 0x75, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x73, 0x12, 0x26,  
0x0a, 0x0f, 0x6e, 0x65, 0x78, 0x74, 0x5f, 0x70, 0x61, 0x67, 0x65, 0x5f, 0x74, 0x6f, 0x6b, 0x65,  
0x6e, 0x18, 0x02, 0x20, 0x01, 0x28, 0x09, 0x52, 0x0d, 0x6e, 0x65, 0x78, 0x74, 0x50, 0x61, 0x67,  
0x65, 0x54, 0x6f, 0x6b, 0x65, 0x6e, 0x22, 0xe0, 0x03, 0x0a, 0x1e, 0x42, 0x61, 0x74, 0x63, 0x68,  
0x55, 0x70, 0x64, 0x61, 0x74, 0x65, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73,  
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0x69, 0x6e, 0x65, 0x5f, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b,  
0x32, 0x4c, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e,  
0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65,  
0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e,  
0x76, 0x31, 0x2e, 0x42, 0x61, 0x74, 0x63, 0x68, 0x55, 0x70, 0x64, 0x61, 0x74, 0x65, 0x55, 0x73,  
0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x73, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73,  
0x74, 0x2e, 0x49, 0x6e, 0x6c, 0x69, 0x6e, 0x65, 0x53, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x48, 0x00,  
0x52, 0x0c, 0x69, 0x6e, 0x6c, 0x69, 0x6e, 0x65, 0x53, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x12, 0x48,  
0x0a, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x30,  
0xe0, 0x41, 0x02, 0xfa, 0x41, 0x2a, 0x0a, 0x28, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72,



0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70,  
0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x55, 0x73, 0x65, 0x72, 0x53, 0x74, 0x6f, 0x72, 0x65,  
0x52, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x12, 0x4a, 0x0a, 0x1f, 0x64, 0x65, 0x6c, 0x65,  
0x74, 0x65, 0x5f, 0x75, 0x6e, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x65,  
0x64, 0x5f, 0x75, 0x73,  
0x65, 0x72, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x73, 0x18, 0x04, 0x20, 0x01, 0x28,  
0x08, 0x42, 0x03, 0xe0, 0x41, 0x01, 0x52, 0x1c, 0x64, 0x65, 0x6c, 0x65, 0x74, 0x65, 0x55, 0x6e,  
0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65,  
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0x0b,  
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0x6f, 0x62, 0x75, 0x66, 0x2e, 0x46, 0x69, 0x65, 0x6c, 0x64, 0x4d, 0x61, 0x73, 0x6b, 0x42, 0x03,  
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0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescOnce sync.Once
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData =
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc
)

func file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP() []byte {
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescOnce.Do(func()
 {
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData =
 protoimpl.X.CompressGZIP(file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData)
 })
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData
}

var file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 6)
var file_google_cloud_discoveryengine_v1_user_license_service_proto_goTypes = []any{
 (*ListUserLicensesRequest)(nil), // 0: google.cloud.discoveryengine.v1.ListUserLicensesRequest
 (*ListUserLicensesResponse)(nil), // 1: google.cloud.discoveryengine.v1.ListUserLicensesResponse
 (*BatchUpdateUserLicensesRequest)(nil), // 2:
 google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest
 (*BatchUpdateUserLicensesMetadata)(nil), // 3:
 google.cloud.discoveryengine.v1.BatchUpdateUserLicensesMetadata
 (*BatchUpdateUserLicensesResponse)(nil), // 4: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesResponse
 (*BatchUpdateUserLicensesRequest_InlineSource)(nil), // 5:

```

```

google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource
(*UserLicense)(nil), // 6: google.cloud.discoveryengine.v1.UserLicense
(*timestamppb.Timestamp)(nil), // 7: google.protobuf.Timestamp
(*status.Status)(nil), // 8: google.rpc.Status
(*fieldmaskpb.FieldMask)(nil), // 9: google.protobuf.FieldMask
(*longrunningpb.Operation)(nil), // 10: google.longrunning.Operation
}

var file_google_cloud_discoveryengine_v1_user_license_service_proto_depIdxs = []int32{
 6, // 0: google.cloud.discoveryengine.v1.ListUserLicensesResponse.user_licenses:type_name ->
google.cloud.discoveryengine.v1.UserLicense
 5, // 1: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.inline_source:type_name
-> google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource
 7, // 2: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesMetadata.create_time:type_name ->
google.protobuf.Timestamp
 7, // 3: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesMetadata.update_time:type_name ->
google.protobuf.Timestamp
 6, // 4: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesResponse.user_licenses:type_name ->
google.cloud.discoveryengine.v1.UserLicense
 8, // 5: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesResponse.error_samples:type_name ->
google.rpc.Status
 6, // 6: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource.user_licenses:type_name -
> google.cloud.discoveryengine.v1.UserLicense
 9, // 7: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource.update_mask:type_name -
> google.protobuf.FieldMask
 0, // 8: google.cloud.discoveryengine.v1.UserLicenseService.ListUserLicenses:input_type
-> google.cloud.discoveryengine.v1.ListUserLicensesRequest
 2, // 9: google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdateUserLicenses:input_type ->
google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest
 1, // 10: google.cloud.discoveryengine.v1.UserLicenseService.ListUserLicenses:output_type ->
google.cloud.discoveryengine.v1.ListUserLicensesResponse
 10, // 11: google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdateUserLicenses:output_type ->
google.longrunning.Operation
 10, // [10:12] is the sub-list for method output_type
 8, // [8:10] is the sub-list for method input_type
 8, // [8:8] is the sub-list for extension type_name
 8, // [8:8] is the sub-list for extension extendee
 0, // [0:8] is the sub-list for field type_name
}

func init() { file_google_cloud_discoveryengine_v1_user_license_service_proto_init() }
func file_google_cloud_discoveryengine_v1_user_license_service_proto_init() {
 if File_google_cloud_discoveryengine_v1_user_license_service_proto
 != nil {
 return
 }
 file_google_cloud_discoveryengine_v1_user_license_proto_init()
 file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[2].OneofWrappers = []any{
 (*BatchUpdateUserLicensesRequest_InlineSource_)(nil),

```

```

}
type x struct{}
out := protoimpl.TypeBuilder{
 File: protoimpl.DescBuilder{
 GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
 RawDescriptor: file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc,
 NumEnums: 0,
 NumMessages: 6,
 NumExtensions: 0,
 NumServices: 1,
 },
 GoTypes: file_google_cloud_discoveryengine_v1_user_license_service_proto_goTypes,
 DependencyIndexes: file_google_cloud_discoveryengine_v1_user_license_service_proto_depIdxs,
 MessageInfos: file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes,
}.Build()
File_google_cloud_discoveryengine_v1_user_license_service_proto = out.File
file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc
= nil
file_google_cloud_discoveryengine_v1_user_license_service_proto_goTypes = nil
file_google_cloud_discoveryengine_v1_user_license_service_proto_depIdxs = nil
}
// Copyright 2025 Google LLC
//
// Licensed under the Apache License, Version 2.0 (the "License");
// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
// https://www.apache.org/licenses/LICENSE-2.0
//
// Unless required by applicable law or agreed to in writing, software
// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.
// Code generated by protoc-gen-go_gapic. DO NOT EDIT.
//go:build go1.23
package licensemanager_test
import (
 "context"
 licensemanager "cloud.google.com/go/licensemanager/apiv1"
 licensemanagerpb "cloud.google.com/go/licensemanager/apiv1/licensemanagerpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 locationpb "google.golang.org/genproto/googleapis/cloud/location"

```

)

```
func ExampleClient_AggregateUsage_all()
{
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &licensemanagerpb.AggregateUsageRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#AggregateUsageRequest.
 }
 for resp, err := range c.AggregateUsage(ctx, req).All() {
 if err != nil {
 // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
 }
}

func ExampleClient_ListConfigurations_all() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &licensemanagerpb.ListConfigurationsRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#ListConfigurationsRequest.
 }
 for resp, err := range c.ListConfigurations(ctx, req).All() {
```

```

if err != nil {
 // TODO: Handle error and break/return/continue. Iteration will stop after any error.
}
// TODO: Use resp.
_ = resp
}
}

func ExampleClient_ListInstances_all() {
 ctx := context.Background()
 // This
 snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &licensemanagerpb.ListInstancesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#ListInstancesRequest.
 }
 for resp, err := range c.ListInstances(ctx, req).All() {
 if err != nil {
 // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
 }
}

func ExampleClient_ListProducts_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and
 should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()
}

```

```

req := &licenseanagerpb.ListProductsRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/licenseanager/apiv1/licenseanagerpb#ListProductsRequest.
}
for resp, err := range c.ListProducts(ctx, req).All() {
 if err != nil {
 // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
}
}

```

```

func ExampleClient_ListLocations_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It
 will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licenseanager.NewClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

```

```

req := &locationpb.ListLocationsRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/location#ListLocationsRequest.
}
for resp, err := range c.ListLocations(ctx, req).All() {
 if err != nil {
 // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
}
}

```

```

func ExampleClient_ListOperations_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require
 correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:

```



```

// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := licensemanager.NewClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &longrunningpb.ListOperationsRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#ListOperationsRequest.
}
for resp, err := range c.ListOperations(ctx, req).All() {
 if err != nil {
 // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
}
}
// Copyright 2025 Google LLC
//
// Licensed under the Apache License, Version 2.0 (the "License");
// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
// http://www.apache.org/licenses/LICENSE-2.0
//
// Unless required by applicable law or agreed to in writing, software
// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
// protoc-gen-go v1.35.2
// protoc v4.25.7
// source: google/cloud/discoveryengine/v1/user_license.proto

package discoveryenginepb

import (
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
 reflect

```

```

"reflect"
sync "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// License assignment state enumeration.
type UserLicense_LicenseAssignmentState int32

const (
 // Default value.
 UserLicense_LICENSE_ASSIGNMENT_STATE_UNSPECIFIED UserLicense_LicenseAssignmentState = 0
 // License assigned to the user.
 UserLicense_ASSIGNED UserLicense_LicenseAssignmentState = 1
 // No license assigned to the user.
 // Deprecated, translated to NO_LICENSE.
 UserLicense_UNASSIGNED UserLicense_LicenseAssignmentState = 2
 // No license assigned to the user.
 UserLicense_NO_LICENSE UserLicense_LicenseAssignmentState = 3
 // User attempted to login but no license assigned to the user.
 // This state is only used for no user first time login attempt
 // but cannot
 // get license assigned.
 // Users already logged in but cannot get license assigned will be assigned
 // NO_LICENSE state(License could be unassigned by admin).
 UserLicense_NO_LICENSE_ATTEMPTED_LOGIN UserLicense_LicenseAssignmentState = 4
)

// Enum value maps for UserLicense_LicenseAssignmentState.
var (
 UserLicense_LicenseAssignmentState_name = map[int32]string{
 0: "LICENSE_ASSIGNMENT_STATE_UNSPECIFIED",
 1: "ASSIGNED",
 2: "UNASSIGNED",
 3: "NO_LICENSE",
 4: "NO_LICENSE_ATTEMPTED_LOGIN",
 }
 UserLicense_LicenseAssignmentState_value = map[string]int32{
 "LICENSE_ASSIGNMENT_STATE_UNSPECIFIED": 0,
 "ASSIGNED": 1,
 "UNASSIGNED": 2,
 "NO_LICENSE": 3,
 "NO_LICENSE_ATTEMPTED_LOGIN": 4,
 }
)

```

```

}
)

func (x UserLicense_LicenseAssignmentState) Enum() *UserLicense_LicenseAssignmentState {
 p := new(UserLicense_LicenseAssignmentState)
 *p = x
 return p
}

func (x UserLicense_LicenseAssignmentState)
String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protorelect.EnumNumber(x))
}

func (UserLicense_LicenseAssignmentState) Descriptor() protorelect.EnumDescriptor {
 return file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes[0].Descriptor()
}

func (UserLicense_LicenseAssignmentState) Type() protorelect.EnumType {
 return &file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes[0]
}

func (x UserLicense_LicenseAssignmentState) Number() protorelect.EnumNumber {
 return protorelect.EnumNumber(x)
}

// Deprecated: Use UserLicense_LicenseAssignmentState.Descriptor instead.
func (UserLicense_LicenseAssignmentState) EnumDescriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_proto_rawDescGZIP(), []int{0, 0}
}

// User License information assigned by the admin.
type UserLicense struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 //
 // Required. Immutable. The user principal of the User, could be email address
 // or other principal identifier. This field is immutable. Admin assign
 // licenses based on the user principal.
 UserPrincipal string `protobuf:"bytes,1,opt,name=user_principal,json=userPrincipal,proto3"
 json:"user_principal,omitempty"`
 // Optional. The user profile.
 // We use user full name(First name + Last name) as user profile.
 UserProfile string `protobuf:"bytes,3,opt,name=user_profile,json=userProfile,proto3"
 json:"user_profile,omitempty"`
 // Output only. License assignment state of the user.

```

```

// If the user is assigned with a license config, the user login will be
// assigned with the license;
// If the user's license assignment state is unassigned or unspecified, no
// license config will be associated to the user;
LicenseAssignmentState UserLicense_LicenseAssignmentState
`protobuf:"varint,4,opt,name=license_assignment_state,json=licenseAssignmentState,proto3,enum=google.cloud.discoveryengine.v1.UserLicense_LicenseAssignmentState"
json:"license_assignment_state,omitempty"`
// Optional. The full resource name of the Subscription(LicenseConfig)
// assigned to the user.
LicenseConfig string `protobuf:"bytes,5,opt,name=license_config,json=licenseConfig,proto3"
json:"license_config,omitempty"`
// Output only. User created timestamp.
CreateTime *timestamppb.Timestamp `protobuf:"bytes,6,opt,name=create_time,json=createTime,proto3"
json:"create_time,omitempty"`
// Output only. User update timestamp.
UpdateTime *timestamppb.Timestamp `protobuf:"bytes,7,opt,name=update_time,json=updateTime,proto3"
json:"update_time,omitempty"`
// Output only. User last logged in time.
// If the user has not logged in yet, this field will be empty.
LastLoginTime *timestamppb.Timestamp
`protobuf:"bytes,8,opt,name=last_login_time,json=lastLoginTime,proto3" json:"last_login_time,omitempty"`
}

func (x *UserLicense) Reset() {
 *x = UserLicense{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes[0]
 ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UserLicense) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UserLicense) ProtoMessage() {}

func (x *UserLicense) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes[0]
 if x != nil {
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 if ms.LoadMessageInfo() == nil {
 ms.StoreMessageInfo(mi)
 }
 return ms
 }
 return mi.MessageOf(x)
}

```

```

}

// Deprecated: Use UserLicense.ProtoReflect.Descriptor instead.
func (*UserLicense) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_proto_rawDescGZIP(), []int{0}
}

func (x *UserLicense) GetUserPrincipal() string {
 if x != nil {
 return x.UserPrincipal
 }
 return ""
}

func (x *UserLicense) GetUserProfile() string {
 if x != nil {
 return x.UserProfile
 }
 return ""
}

func (x *UserLicense) GetLicenseAssignmentState()
 UserLicense_LicenseAssignmentState {
 if x != nil {
 return x.LicenseAssignmentState
 }
 return UserLicense_LICENSE_ASSIGNMENT_STATE_UNSPECIFIED
}

func (x *UserLicense) GetLicenseConfig() string {
 if x != nil {
 return x.LicenseConfig
 }
 return ""
}

func (x *UserLicense) GetCreateTime() *timestamppb.Timestamp {
 if x != nil {
 return x.CreateTime
 }
 return nil
}

func (x *UserLicense) GetUpdateTime() *timestamppb.Timestamp {
 if x != nil {
 return x.UpdateTime
 }
 return nil
}

```

```

}

func (x *UserLicense) GetLastLoginTime() *timestamppb.Timestamp {
 if x != nil {
 return x.LastLoginTime
 }
 return nil
}

var File_google_cloud_discoveryengine_v1_user_license_proto protoreflect.FileDescriptor

var file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc = []byte{
 0x0a, 0x32, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x64,
 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x76,
 0x31,
 0x2f, 0x75, 0x73, 0x65, 0x72, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x2e, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f,
 0x75, 0x64, 0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69,
 0x6e, 0x65, 0x2e, 0x76, 0x31, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70,
 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74,
 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62,
 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x22, 0xa6, 0x05, 0x0a, 0x0b, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e,
 0x73, 0x65, 0x12, 0x2d, 0x0a, 0x0e,
 0x75, 0x73, 0x65, 0x72, 0x5f, 0x70, 0x72, 0x69, 0x6e, 0x63,
 0x69, 0x70, 0x61, 0x6c, 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x05, 0xe0,
 0x41, 0x02, 0x52, 0x0d, 0x75, 0x73, 0x65, 0x72, 0x50, 0x72, 0x69, 0x6e, 0x63, 0x69, 0x70, 0x61,
 0x6c, 0x12, 0x26, 0x0a, 0x0c, 0x75, 0x73, 0x65, 0x72, 0x5f, 0x70, 0x72, 0x6f, 0x66, 0x69, 0x6c,
 0x65, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x03, 0xe0, 0x41, 0x01, 0x52, 0x0b, 0x75, 0x73,
 0x65, 0x72, 0x50, 0x72, 0x6f, 0x66, 0x69, 0x6c, 0x65, 0x12, 0x82, 0x01, 0x0a, 0x18, 0x6c, 0x69,
 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74,
 0x5f, 0x73, 0x74, 0x61, 0x74, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x43, 0x2e, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x64, 0x69, 0x73, 0x63,
 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x76, 0x31, 0x2e, 0x55,
 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x2e,
 0x4c, 0x69, 0x63, 0x65, 0x6e,
 0x73, 0x65, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x74, 0x61, 0x74,
 0x65, 0x42, 0x03, 0xe0, 0x41, 0x03, 0x52, 0x16, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x41,
 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x74, 0x61, 0x74, 0x65, 0x12, 0x5b,
 0x0a, 0x0e, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x63, 0x6f, 0x6e, 0x66, 0x69, 0x67,
 0x18, 0x05, 0x20, 0x01, 0x28, 0x09, 0x42, 0x34, 0xe0, 0x41, 0x01, 0xfa, 0x41, 0x2e, 0x0a, 0x2c,
 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e,
 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x4c,
 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x43, 0x6f, 0x6e, 0x66, 0x69, 0x67, 0x52, 0x0d, 0x6c, 0x69,
 0x63, 0x65, 0x6e, 0x73, 0x65, 0x43, 0x6f, 0x6e, 0x66, 0x69, 0x67, 0x12, 0x40, 0x0a, 0x0b, 0x63,
 0x72, 0x65, 0x61, 0x74, 0x65, 0x5f, 0x74, 0x69, 0x6d, 0x65, 0x18, 0x06, 0x20, 0x01, 0x28, 0x0b,

```

```

0x32,
0x1a, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62,
0x75, 0x66, 0x2e, 0x54, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x42, 0x03, 0xe0, 0x41,
0x03, 0x52, 0x0a, 0x63, 0x72, 0x65, 0x61, 0x74, 0x65, 0x54, 0x69, 0x6d, 0x65, 0x12, 0x40, 0x0a,
0x0b, 0x75, 0x70, 0x64, 0x61, 0x74, 0x65, 0x5f, 0x74, 0x69, 0x6d, 0x65, 0x18, 0x07, 0x20, 0x01,
0x28, 0x0b, 0x32, 0x1a, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74,
0x6f, 0x62, 0x75, 0x66, 0x2e, 0x54, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x42, 0x03,
0xe0, 0x41, 0x03, 0x52, 0x0a, 0x75, 0x70, 0x64, 0x61, 0x74, 0x65, 0x54, 0x69, 0x6d, 0x65, 0x12,
0x47, 0x0a, 0x0f, 0x6c, 0x61, 0x73, 0x74, 0x5f, 0x6c, 0x6f, 0x67, 0x69, 0x6e, 0x5f, 0x74, 0x69,
0x6d, 0x65, 0x18, 0x08, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x1a, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2e, 0x54, 0x69, 0x6d, 0x65, 0x73,
0x74, 0x61, 0x6d, 0x70, 0x42,
0x03, 0xe0, 0x41, 0x03, 0x52, 0x0d, 0x6c, 0x61, 0x73, 0x74, 0x4c,
0x6f, 0x67, 0x69, 0x6e, 0x54, 0x69, 0x6d, 0x65, 0x22, 0x90, 0x01, 0x0a, 0x16, 0x4c, 0x69, 0x63,
0x65, 0x6e, 0x73, 0x65, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x74,
0x61, 0x74, 0x65, 0x12, 0x28, 0x0a, 0x24, 0x4c, 0x49, 0x43, 0x45, 0x4e, 0x53, 0x45, 0x5f, 0x41,
0x53, 0x53, 0x49, 0x47, 0x4e, 0x4d, 0x45, 0x4e, 0x54, 0x5f, 0x53, 0x54, 0x41, 0x54, 0x45, 0x5f,
0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x0c, 0x0a,
0x08, 0x41, 0x53, 0x53, 0x49, 0x47, 0x4e, 0x45, 0x44, 0x10, 0x01, 0x12, 0x0e, 0x0a, 0x0a, 0x55,
0x4e, 0x41, 0x53, 0x53, 0x49, 0x47, 0x4e, 0x45, 0x44, 0x10, 0x02, 0x12, 0x0e, 0x0a, 0x0a, 0x4e,
0x4f, 0x5f, 0x4c, 0x49, 0x43, 0x45, 0x4e, 0x53, 0x45, 0x10, 0x03, 0x12, 0x1e, 0x0a, 0x1a, 0x4e,
0x4f, 0x5f, 0x4c, 0x49, 0x43, 0x45, 0x4e, 0x53, 0x45, 0x5f, 0x41, 0x54, 0x54, 0x45, 0x4d, 0x50,
0x54, 0x45, 0x44, 0x5f, 0x4c, 0x4f, 0x47, 0x49, 0x4e, 0x10,
0x04, 0x42, 0x83, 0x02, 0x0a, 0x23,
0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64,
0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65,
0x2e, 0x76, 0x31, 0x42, 0x10, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,
0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x4d, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x64, 0x69, 0x73,
0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x61, 0x70, 0x69,
0x76, 0x31, 0x2f, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69,
0x6e, 0x65, 0x70, 0x62, 0x3b, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e,
0x67, 0x69, 0x6e, 0x65, 0x70, 0x62, 0xa2, 0x02, 0x0f, 0x44, 0x49, 0x53, 0x43, 0x4f, 0x56, 0x45,
0x52, 0x59, 0x45, 0x4e, 0x47, 0x49, 0x4e, 0x45, 0xaa, 0x02, 0x1f, 0x47, 0x6f, 0x6f, 0x67,
0x6c,
0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x44, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72,
0x79, 0x45, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x56, 0x31, 0xca, 0x02, 0x1f, 0x47, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x44, 0x69, 0x73, 0x63, 0x6f, 0x76,
0x65, 0x72, 0x79, 0x45, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x5c, 0x56, 0x31, 0xea, 0x02, 0x22, 0x47,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a, 0x3a, 0x44, 0x69,
0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x45, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x3a, 0x3a, 0x56,
0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

```

```

var (
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDescOnce sync.Once
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData =
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc

```

)

```
func file_google_cloud_discoveryengine_v1_user_license_proto_rawDescGZIP() []byte {
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDescOnce.Do(func()
 {
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData)
 })
 return file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData
}

var file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes = make([]protoimpl.EnumInfo, 1)
var file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_cloud_discoveryengine_v1_user_license_proto_goTypes = []any{
 (UserLicense_LicenseAssignmentState)(0), // 0:
google.cloud.discoveryengine.v1.UserLicense.LicenseAssignmentState
 (*UserLicense)(nil), // 1: google.cloud.discoveryengine.v1.UserLicense
 (*timestamppb.Timestamp)(nil), // 2: google.protobuf.Timestamp
}
var file_google_cloud_discoveryengine_v1_user_license_proto_depIdxs = []int32{
 0, // 0: google.cloud.discoveryengine.v1.UserLicense.license_assignment_state:type_name
-> google.cloud.discoveryengine.v1.UserLicense.LicenseAssignmentState
 2, // 1: google.cloud.discoveryengine.v1.UserLicense.create_time:type_name -> google.protobuf.Timestamp
 2, // 2: google.cloud.discoveryengine.v1.UserLicense.update_time:type_name -> google.protobuf.Timestamp
 2, // 3: google.cloud.discoveryengine.v1.UserLicense.last_login_time:type_name -> google.protobuf.Timestamp
 4, // [4:4] is the sub-list for method output_type
 4, // [4:4] is the sub-list for method input_type
 4, // [4:4] is the sub-list for extension type_name
 4, // [4:4] is the sub-list for extension extendee
 0, // [0:4] is the sub-list for field type_name
}

func init() { file_google_cloud_discoveryengine_v1_user_license_proto_init() }
func file_google_cloud_discoveryengine_v1_user_license_proto_init() {
 if File_google_cloud_discoveryengine_v1_user_license_proto != nil {
 return
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
 File: protoimpl.DescBuilder{
 GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
 RawDescriptor:
file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc,
 NumEnums: 1,
 NumMessages: 1,
 NumExtensions: 0,
 NumServices: 0,
 },
 }
```



```

GoTypes: file_google_cloud_discoveryengine_v1_user_license_proto_goTypes,
DependencyIndexes: file_google_cloud_discoveryengine_v1_user_license_proto_depIdxs,
EnumInfos: file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes,
MessageInfos: file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes,
}.Build()
File_google_cloud_discoveryengine_v1_user_license_proto = out.File
file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc = nil
file_google_cloud_discoveryengine_v1_user_license_proto_goTypes = nil
file_google_cloud_discoveryengine_v1_user_license_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }

```

```

}
defer c.Close()

// TODO: Use client.
_ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
 // TODO: Fill request struct fields.
 // See
 https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 //

```

TODO: Use resp.

```
_ = resp
}
```

```
func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
```

```
 ctx := context.Background()
```

```
 // This snippet has been automatically generated and should be regarded as a code template only.
```

```
 // It will require modifications to work:
```

```
 // - It may require correct/in-range values for request initialization.
```

```
 // - It may require specifying regional endpoints when creating the service client as shown in:
```

```
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
```

```
 c, err := procurement.NewLicenseManagementClient(ctx)
```

```
 if err != nil {
```

```
 // TODO: Handle error.
```

```
 }
```

```
 defer c.Close()
```

```
 req := &procurementpb.EnumerateLicensedUsersRequest{
```

```
 // TODO: Fill request struct fields.
```

```
 // See
```

```
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicensedUsersRequest.
```

```
 }
```

```
 it := c.EnumerateLicensedUsers(ctx, req)
```

```
 for {
```

```
 resp, err := it.Next()
```

```
 if err == iterator.Done {
```

```
 break
```

```
 }
```

```
 if err != nil {
```

```
 // TODO: Handle error.
```

```
 }
```

```
 //
```

```
 TODO: Use resp.
```

```
 _ = resp
```

```
 // If you need to access the underlying RPC response,
```

```
 // you can do so by casting the `Response` as below.
```

```
 // Otherwise, remove this line. Only populated after
```

```
 // first call to Next(). Not safe for concurrent access.
```

```
 _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
```

```
 }
```

```
}
```

```
func ExampleLicenseManagementClient_GetLicensePool() {
```

```
 ctx := context.Background()
```

```
 // This snippet has been automatically generated and should be regarded as a code template only.
```

```
 // It will require modifications to work:
```

```

// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := procurement.NewLicenseManagementClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &procurementpb.GetLicensePoolRequest{
 // TODO: Fill request struct fields.
 //
 See
 https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
 quest.
}
resp, err := c.GetLicensePool(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
 // TODO: Fill request struct fields.
 // See
 https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.

```

```

_ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
 // TODO: Fill request struct fields.
 // See
 https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoolRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }

```

```

resp, err := c.GetOperation(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

```

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```
// Code generated by protoc-gen-go_gopic. DO NOT EDIT.

//go:build go1.23

package compute_test

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// Code generated by protoc-gen-go_gopic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1beta"
 computepb "cloud.google.com/go/compute/apiv1beta/compute_pb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 //
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}
```

```

}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &compute.DeleteLicenseRequest{
 //
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
 // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &compute.GetLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#GetLicenseRequest.
 }

```



```

resp,
err := c.Get(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
{
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()
}

```

```

req := &computepb.InsertLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#InsertLicenseRequest.
}
op, err := c.Insert(ctx, req)
if err != nil {
 // TODO: Handle error.
}

err = op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded
 // as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
 resp, err := it.Next()
 if err == iterator.Done {
 break
 }
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after

```

```

// first call to Next(). Not safe for concurrent access.
-
= it.Response.(*compute.LicensesListResponse)
}
}

func ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &compute.SetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 //
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &compute.TestIamPermissionsLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#TestIamPermissionsLicenseRequest.
 }

```

```

}
resp, err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_Update() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require
 modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.UpdateLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/compute#UpdateLicenseRequest.
 }
 op, err := c.Update(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
 // TODO: Handle error.
 }
}

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```

```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
 // TODO: Fill request

```

```

struct fields.
// See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
}
resp, err := c.Get(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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```

```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
 // TODO: Fill request struct fields.
 // See
 https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicensedUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
 if err != nil {
 // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
 }
}

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```

```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package discoveryengine

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 "cloud.google.com/go/longrunning"
 lroauto "cloud.google.com/go/longrunning/autogen"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax
 "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/grpc/codes"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newUserLicenseClientHook clientHook

// UserLicenseCallOptions contains the retry settings for each method of UserLicenseClient.
type UserLicenseCallOptions struct {
 ListUserLicenses []gax.CallOption
 BatchUpdateUserLicenses []gax.CallOption
 CancelOperation []gax.CallOption
 GetOperation []gax.CallOption

```



```

ListOperations []gax.CallOption
}

func defaultUserLicenseGRPCClientOptions() []option.ClientOption {
return []option.ClientOption{
 internaloption.WithDefaultEndpoint("discoveryengine.googleapis.com:443"),
 internaloption.WithDefaultEndpointTemplate("discoveryengine.UNIVERSE_DOMAIN:443"),
 internaloption.WithDefaultMTLSEndpoint("discoveryengine.mtls.googleapis.com:443"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://discoveryengine.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()),
 internaloption.EnableJwtWithScope(),
 internaloption.EnableNewAuthLibrary(),
 option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
 grpc.MaxCallRecvMsgSize(math.MaxInt32))),
}
}

func
defaultUserLicenseCallOptions() *UserLicenseCallOptions {
return &UserLicenseCallOptions{
 ListUserLicenses: []gax.CallOption{},
 BatchUpdateUserLicenses: []gax.CallOption{},
 CancelOperation: []gax.CallOption{
 gax.WithTimeout(30000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnCodes([]codes.Code{
 codes.Unavailable,
 }, gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 10000 * time.Millisecond,
 Multiplier:
1.30,
 })
 }),
 },
 GetOperation: []gax.CallOption{
 gax.WithTimeout(30000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnCodes([]codes.Code{
 codes.Unavailable,
 }, gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 10000 * time.Millisecond,
 Multiplier: 1.30,
 })
 }),
 },
}

```

```

ListOperations: []gax.CallOption{
 gax.WithTimeout(300000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnCodes([]codes.Code{
 codes.Unavailable,
 }, gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 30000 * time.Millisecond,
 Multiplier: 1.30,
 })
 }),
},
}

func defaultUserLicenseRESTCallOptions() *UserLicenseCallOptions {
 return &UserLicenseCallOptions{
 ListUserLicenses: []gax.CallOption{},
 BatchUpdateUserLicenses: []gax.CallOption{},
 CancelOperation: []gax.CallOption{
 gax.WithTimeout(30000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer
 {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 10000 * time.Millisecond,
 Multiplier: 1.30,
 },
 http.StatusServiceUnavailable)
 }),
 },
 GetOperation: []gax.CallOption{
 gax.WithTimeout(30000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 10000 * time.Millisecond,
 Multiplier: 1.30,
 },
 http.StatusServiceUnavailable)
 }),
 },
 ListOperations: []gax.CallOption{
 gax.WithTimeout(300000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 1000 * time.Millisecond,
 Max: 30000 * time.Millisecond,

```

```

Multiplier: 1.30,
},
http.StatusServiceUnavailable)
}),
},
}
}

// internalUserLicenseClient is an interface that defines the methods available from Discovery Engine API.
type internalUserLicenseClient
interface {
Close() error
setGoogleClientInfo(...string)
Connection() *grpc.ClientConn
ListUserLicenses(context.Context, *discoveryenginepb.ListUserLicensesRequest, ...gax.CallOption)
*UserLicenseIterator
BatchUpdateUserLicenses(context.Context, *discoveryenginepb.BatchUpdateUserLicensesRequest,
...gax.CallOption) (*BatchUpdateUserLicensesOperation, error)
BatchUpdateUserLicensesOperation(name string) *BatchUpdateUserLicensesOperation
CancelOperation(context.Context, *longrunningpb.CancelOperationRequest, ...gax.CallOption) error
GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
ListOperations(context.Context, *longrunningpb.ListOperationsRequest, ...gax.CallOption) *OperationIterator
}

// UserLicenseClient is a client for interacting with Discovery Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// Service for managing
User Licenses.
type UserLicenseClient struct {
// The internal transport-dependent client.
internalClient internalUserLicenseClient

// The call options for this service.
CallOptions *UserLicenseCallOptions

// LROClient is used internally to handle long-running operations.
// It is exposed so that its CallOptions can be modified if required.
// Users should not Close this client.
LROClient *lroauto.OperationsClient
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.

```

```

func (c *UserLicenseClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *UserLicenseClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns
// a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *UserLicenseClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// ListUserLicenses lists the User Licenses.
func (c *UserLicenseClient) ListUserLicenses(ctx context.Context, req
*discoveryenginepb.ListUserLicensesRequest, opts ...gax.CallOption) *UserLicenseIterator {
 return c.internalClient.ListUserLicenses(ctx, req, opts...)
}

// BatchUpdateUserLicenses updates the User License.
// This method is used for batch assign/unassign licenses to users.
func (c *UserLicenseClient) BatchUpdateUserLicenses(ctx context.Context, req
*discoveryenginepb.BatchUpdateUserLicensesRequest, opts ...gax.CallOption)
(*BatchUpdateUserLicensesOperation, error) {
 return c.internalClient.BatchUpdateUserLicenses(ctx, req, opts...)
}

// BatchUpdateUserLicensesOperation returns a new BatchUpdateUserLicensesOperation from a given name.
//
// The name must be that of a previously created BatchUpdateUserLicensesOperation, possibly from a different
// process.
func (c *UserLicenseClient) BatchUpdateUserLicensesOperation(name string)
*BatchUpdateUserLicensesOperation {
 return c.internalClient.BatchUpdateUserLicensesOperation(name)
}

// CancelOperation is a utility method from google.longrunning.Operations.
func (c *UserLicenseClient) CancelOperation(ctx context.Context, req *longrunningpb.CancelOperationRequest,
opts ...gax.CallOption) error {
 return c.internalClient.CancelOperation(ctx, req, opts...)
}

```

```

// GetOperation is a utility method from google.longrunning.Operations.
func (c *UserLicenseClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest, opts
...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// ListOperations is a utility method from google.longrunning.Operations.
func (c *UserLicenseClient) ListOperations(ctx context.Context,
 req *longrunningpb.ListOperationsRequest, opts ...gax.CallOption) *OperationIterator {
 return c.internalClient.ListOperations(ctx, req, opts...)
}

// userLicenseGRPCClient is a client for interacting with Discovery Engine API over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
type userLicenseGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing UserLicenseClient
 CallOptions **UserLicenseCallOptions

 // The gRPC API client.
 userLicenseClient discoveryenginepb.UserLicenseServiceClient

 // LROClient is used internally to handle long-running operations.
 // It is exposed so that its CallOptions can be modified if required.
 // Users should not Close this client.
 LROClient **lroauto.OperationsClient

 operationsClient longrunningpb.OperationsClient

 // The x-goog-* metadata
 // to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

// NewUserLicenseClient creates a new user license service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing User Licenses.
func NewUserLicenseClient(ctx context.Context, opts ...option.ClientOption) (*UserLicenseClient, error) {
 clientOpts := defaultUserLicenseGRPCClientOptions()
 if newUserLicenseClientHook != nil {

```

```

hookOpts, err := newUserLicenseClientHook(ctx, clientHookParams{})
if err != nil {
 return nil, err
}
clientOpts = append(clientOpts, hookOpts...)
}

connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
if err != nil {
 return nil, err
}
client := UserLicenseClient{CallOptions: defaultUserLicenseCallOptions()}

c := &userLicenseGRPCClient{
 connPool: connPool,
 userLicenseClient: discoveryenginepb.NewUserLicenseServiceClient(connPool),
 CallOptions:
 &client.CallOptions,
 logger: internaloption.GetLogger(opts),
 operationsClient: longrunningpb.NewOperationsClient(connPool),
}
c.setGoogleClientInfo()

client.internalClient = c

client.LROClient, err = lroauto.NewOperationsClient(ctx, gtransport.WithConnPool(connPool))
if err != nil {
 // This error "should not happen", since we are just reusing old connection pool
 // and never actually need to dial.
 // If this does happen, we could leak connp. However, we cannot close conn:
 // If the user invoked the constructor with option.WithGRPCConn,
 // we would close a connection that's still in use.
 // TODO: investigate error conditions.
 return nil, err
}
c.LROClient = &client.LROClient
return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *userLicenseGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

//

```

```

setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *userLicenseGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc", grpc.Version, "pb", protoVersion)
 c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *userLicenseGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
type userLicenseRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // LROClient is used internally
 // to handle long-running operations.
 // It is exposed so that its CallOptions can be modified if required.
 // Users should not Close this client.
 LROClient **lroauto.OperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing UserLicenseClient
 CallOptions **UserLicenseCallOptions

 logger *slog.Logger
}

// NewUserLicenseRESTClient creates a new user license service rest client.
//
// Service for managing User Licenses.
func NewUserLicenseRESTClient(ctx context.Context, opts ...option.ClientOption) (*UserLicenseClient, error) {
 clientOpts := append(defaultUserLicenseRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {

```

```

 return nil, err
}

callOpts := defaultUserLicenseRESTCallOptions()
c := &userLicenseRESTClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,
 logger: internaloption.GetLogger(opts),
}
c.setGoogleClientInfo()

lroOpts
:= []option.ClientOption{
 option.WithHTTPClient(httpClient),
 option.WithEndpoint(endpoint),
}
opClient, err := lroauto.NewOperationsRESTClient(ctx, lroOpts...)
if err != nil {
 return nil, err
}
c.LROClient = &opClient

return &UserLicenseClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultUserLicenseRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://discoveryengine.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://discoveryengine.UNIVERSE_DOMAIN"),
 internaloption.WithDefaultMTLSEndpoint("https://discoveryengine.mtls.googleapis.com"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://discoveryengine.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()),
 internaloption.EnableNewAuthLibrary(),
 }
}

// setGoogleClientInfo
// sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *userLicenseRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gax", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

```



```

}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *userLicenseRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *userLicenseRESTClient) Connection() *grpc.ClientConn {
 return nil
}

func (c *userLicenseGRPCClient) ListUserLicenses(ctx context.Context, req
*discoveryenginepb.ListUserLicensesRequest,
opts ...gax.CallOption) *UserLicenseIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).ListUserLicenses[0:len((*c.CallOptions).ListUserLicenses):len((*c.CallOptions).ListUser
Licenses)], opts...)
 it := &UserLicenseIterator{}
 req = proto.Clone(req).(*discoveryenginepb.ListUserLicensesRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*discoveryenginepb.UserLicense, string, error) {
 resp := &discoveryenginepb.ListUserLicensesResponse{}
 if pageToken != "" {
 req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
 req.PageSize = int32(pageSize)
 }
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx,
c.userLicenseClient.ListUserLicenses, req, settings.GRPC, c.logger, "ListUserLicenses")
 return err
 }, opts...)
 if err != nil {
 return nil, "", err
 }
 }
}

```

```

it.Response = resp
return resp.GetUserLicenses(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
if err != nil {
return "", err
}
it.items = append(it.items, items...)
return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

func (c *userLicenseGRPCClient) BatchUpdateUserLicenses(ctx context.Context, req
*discoveryenginepb.BatchUpdateUserLicensesRequest, opts ...gax.CallOption)
(*BatchUpdateUserLicensesOperation, error) {
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders,
hds...)
ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
opts =
append((*c.CallOptions).BatchUpdateUserLicenses[0:len((*c.CallOptions).BatchUpdateUserLicenses):len((*c.Call
Options).BatchUpdateUserLicenses)], opts...)
var resp *longrunningpb.Operation
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
var err error
resp, err = executeRPC(ctx, c.userLicenseClient.BatchUpdateUserLicenses, req, settings.GRPC, c.logger,
"BatchUpdateUserLicenses")
return err
}, opts...)
if err != nil {
return nil, err
}
}
return &BatchUpdateUserLicensesOperation{
lro: longrunning.InternalNewOperation(*c.LROClient, resp),
}, nil
}

func (c *userLicenseGRPCClient) CancelOperation(ctx context.Context, req
*longrunningpb.CancelOperationRequest, opts ...gax.CallOption) error {
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

```

```

hds = append(c.xGoogHeaders, hds...)
ctx = gax.InsertMetadataIntoOutgoingContext(ctx,
hds...)
opts =
append((*c.CallOptions).CancelOperation[0:len((*c.CallOptions).CancelOperation):len((*c.CallOptions).CancelOp
eration)], opts...)
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 _, err = executeRPC(ctx, c.operationsClient.CancelOperation, req, settings.GRPC, c.logger, "CancelOperation")
 return err
}, opts...)
return err
}

```

```

func (c *userLicenseGRPCClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

```

```

hds = append(c.xGoogHeaders, hds...)
ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
var resp *longrunningpb.Operation
err := gax.Invoke(ctx, func(ctx context.Context,
settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
 return err
}, opts...)
if err != nil {
 return nil, err
}
return resp, nil
}

```

```

func (c *userLicenseGRPCClient) ListOperations(ctx context.Context, req *longrunningpb.ListOperationsRequest,
opts ...gax.CallOption) *OperationIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

```

```

hds = append(c.xGoogHeaders, hds...)
ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
opts =
append((*c.CallOptions).ListOperations[0:len((*c.CallOptions).ListOperations):len((*c.CallOptions).ListOperations
)], opts...)
it := &OperationIterator{ }
req = proto.Clone(req).(*longrunningpb.ListOperationsRequest)

```

```

it.InternalFetch = func(pageSize int, pageToken string) ([]*longrunningpb.Operation, string, error) {
 resp := &longrunningpb.ListOperationsResponse{}
 if pageToken != "" {
 req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
 req.PageSize = int32(pageSize)
 }
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.operationsClient.ListOperations, req, settings.GRPC, c.logger, "ListOperations")
 return err
 }, opts...)
 if err != nil {
 return nil, "", err
 }

 it.Response = resp
 return resp.GetOperations(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// ListUserLicenses lists the
// User Licenses.
func (c *userLicenseRESTClient) ListUserLicenses(ctx context.Context, req
*discoveryenginepb.ListUserLicensesRequest, opts ...gax.CallOption) *UserLicenseIterator {
 it := &UserLicenseIterator{}
 req = proto.Clone(req).(*discoveryenginepb.ListUserLicensesRequest)
 unmarshalOptions := &protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*discoveryenginepb.UserLicense, string, error) {
 resp := &discoveryenginepb.ListUserLicensesResponse{}

```

```

if pageToken != "" {
 req.PageToken = pageToken
}
if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
} else if pageSize != 0 {
 req.PageSize = int32(pageSize)
}
baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, "", err
}
baseUrl.Path += fmt.Sprintf("/v1/%v/userLicenses", req.GetParent())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")
if req.GetFilter() != "" {
 params.Add("filter", fmt.Sprintf("%v",
req.GetFilter()))
}
if req.GetPageSize() != 0 {
 params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
}
if req.GetPageToken() != "" {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := append(c.xGoogHeaders, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "ListUserLicenses")
 if err != nil {
 return err
 }
 if err := unmarshal(buf, resp); err != nil {
 return err
 }

```

```

 }

 return nil
}, opts...)
if e != nil {
 return nil, "", e
}
it.Response
= resp
return resp.GetUserLicenses(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// BatchUpdateUserLicenses updates the User License.
// This method is used for batch assign/unassign licenses to users.
func (c *userLicenseRESTClient) BatchUpdateUserLicenses(ctx context.Context, req
*discoveryenginepb.BatchUpdateUserLicensesRequest, opts ...gax.CallOption)
(*BatchUpdateUserLicensesOperation, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if
 err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:batchUpdateUserLicenses", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

```

```

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &longrunningpb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err
:= executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "BatchUpdateUserLicenses")
 if err != nil {
 return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}

override := fmt.Sprintf("/v1/%s", resp.GetName())
return &BatchUpdateUserLicensesOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, resp),
 pollPath: override,
}, nil
}

// CancelOperation is a utility method from google.longrunning.Operations.
func (c *userLicenseRESTClient) CancelOperation(ctx context.Context, req
*longrunningpb.CancelOperationRequest, opts ...gax.CallOption) error {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}

```

```

jsonReq, err := m.Marshal(req)
if err != nil {
 return err
}

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return err
}
baseUrl.Path += fmt.Sprintf("/v1/%v:cancel", req.GetName())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery
= params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
return gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 _, err = executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "CancelOperation")
 return err
}, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *userLicenseRESTClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption)
(*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

```



```

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &longrunningpb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET",
baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// ListOperations is a utility method from google.longrunning.Operations.
func (c *userLicenseRESTClient) ListOperations(ctx context.Context, req *longrunningpb.ListOperationsRequest,

```

```

opts ...gax.CallOption) *OperationIterator {
it := &OperationIterator{}
req = proto.Clone(req).(*longrunningpb.ListOperationsRequest)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
it.InternalFetch = func(pageSize int, pageToken string) ([]*longrunningpb.Operation, string, error) {
 resp := &longrunningpb.ListOperationsResponse{}
 if pageToken != "" {
 req.PageToken
 = pageToken
 }
 if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
 req.PageSize = int32(pageSize)
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v/operations", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetFilter() != "" {
 params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req.GetPageSize() != 0 {
 params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path
 = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq.Header = headers

```

```

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "ListOperations")
 if err != nil {
 return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, "", e
}
it.Response = resp
return resp.GetOperations(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// BatchUpdateUserLicensesOperation returns a new
// BatchUpdateUserLicensesOperation from a given name.
// The name must be that of a previously created BatchUpdateUserLicensesOperation, possibly from a different
// process.
func (c *userLicenseGRPCClient) BatchUpdateUserLicensesOperation(name string)
*BatchUpdateUserLicensesOperation {
 return &BatchUpdateUserLicensesOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
 }
}

// BatchUpdateUserLicensesOperation returns a new BatchUpdateUserLicensesOperation from a given name.
// The name must be that of a previously created BatchUpdateUserLicensesOperation, possibly from a different
// process.

```

```

func (c *userLicenseRESTClient) BatchUpdateUserLicensesOperation(name string)
*BatchUpdateUserLicensesOperation {
 override := fmt.Sprintf("/v1/%s", name)
 return &BatchUpdateUserLicensesOperation{
 lro: longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
 pollPath: override,
 }
}

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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1beta/compute"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var

```

```
newLicensesClientHook clientHook
```

```
// LicensesCallOptions contains the retry settings for each method of LicensesClient.
```

```
type LicensesCallOptions struct {
 Delete []gax.CallOption
 Get []gax.CallOption
 GetIamPolicy []gax.CallOption
 Insert []gax.CallOption
 List []gax.CallOption
 SetIamPolicy []gax.CallOption
 TestIamPermissions []gax.CallOption
 Update []gax.CallOption
}
```

```
func defaultLicensesRESTCallOptions() *LicensesCallOptions {
```

```
 return &LicensesCallOptions{
 Delete: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 },
 Get: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier:
1.30,
 },
 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
 }),
 },
 GetIamPolicy: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier: 1.30,
 },
 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
 }),
 },
 Insert: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 },
 List: []gax.CallOption{
```

```

gax.WithTimeout(600000 * time.Millisecond),
gax.WithRetry(func() gax.Retryer {
 return gax.OnHTTPCodes(gax.Backoff{
 Initial: 100 * time.Millisecond,
 Max: 60000 * time.Millisecond,
 Multiplier: 1.30,
 },
 http.StatusGatewayTimeout,
 http.StatusServiceUnavailable)
 }),
},
SetIamPolicy: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
},
TestIamPermissions: []gax.CallOption{
 gax.WithTimeout(600000
* time.Millisecond),
},
Update: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
},
}
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
 error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
 error)
 TestIamPermissions(context.Context,
 *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption) (*computepb.TestPermissionsResponse, error)
 Update(context.Context, *computepb.UpdateLicenseRequest, ...gax.CallOption) (*Operation, error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
// method calls.
//
// The Licenses API.
type LicensesClient struct {

```

```

// The internal transport-dependent client.
internalClient internalLicensesClient

// The call options for this service.
CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header
// passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
// creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
// who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context,
 req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
// Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts

```

```

...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available
in the specified project. This method does not get any licenses that belong to other projects, including licenses
attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this
method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return
 c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 return c.internalClient.Update(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type

```



```

licensesRESTClient struct {
// The http endpoint to connect to.
endpoint string

// The http client.
httpClient *http.Client

// operationClient is used to call the operation-specific management service.
operationClient *GlobalOperationsClient

// The x-goog-* headers to be sent with each request.
xGoogHeaders []string

// Points back to the CallOptions field of the containing LicensesClient
CallOptions **LicensesCallOptions

logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
 return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
 endpoint: endpoint,
 httpClient: httpClient,
 CallOptions: &callOpts,
 logger:
 internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
 option.WithHTTPClient(httpClient),
 option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
 return nil, err
 }
 c.operationClient = opC

```

```

return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
 internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
 internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
 internaloption.WithDefaultUniverseDomain("googleapis.com"),
 internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()...),
 internaloption.EnableNewAuthLibrary(),
}
}

// setGoogleClientInfo sets the name and version of the application
in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
c.xGoogHeaders = []string{
 "x-goog-api-client", gax.XGoogHeader(kv...),
}
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
// Replace httpClient with nil to force cleanup.
c.httpClient = nil
if err := c.operationClient.Close(); err != nil {
 return err
}
return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
return nil
}

// Delete deletes the specified license. Caution This resource is intended for

```

```

use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *compute.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)],
opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &compute.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
 if err != nil {
 return err
 }

 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
 })

```

```

 }, opts...)
 if e != nil {
 return nil, e
 }
 op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project: req.GetProject(),
 },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
// who are creating
// Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
 url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")

```

```

if err != nil {
 return err
}

if err := unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
// Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
 opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/getIamPolicy",
 req.GetProject(), req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
 params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
 url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
 append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
 opts...)
 unmarshal := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error

```

```

{
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
 if err != nil {
 return err
 }

 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

```

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```

func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

```

```

baseUrl, err
:= url.Parse(c.endpoint)
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses", req.GetProject())

```

```

params := url.Values{}
if req != nil && req.RequestId != nil {

```

```

params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq,
err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
}
op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project: req.GetProject(),
 },
}
return op, nil

```

```
}
```

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended

for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
```

```
...gax.CallOption) *LicenseIterator {
```

```
it := &LicenseIterator{}
```

```
req = proto.Clone(req).(*computepb.ListLicensesRequest)
```

```
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
```

```
it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
```

```
resp := &computepb.LicensesListResponse{}
```

```
if pageToken != "" {
```

```
 req.PageToken = proto.String(pageToken)
```

```
}
```

```
if pageSize > math.MaxInt32 {
```

```
 req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
```

```
} else if pageSize != 0 {
```

```
 req.MaxResults = proto.Uint32(uint32(pageSize))
```

```
}
```

```
baseUrl, err := url.Parse(c.endpoint)
```

```
if err != nil {
```

```
 return nil, "", err
```

```
}
```

```
baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses", req.GetProject())
```

```
params := url.Values{}
```

```
if req != nil && req.Filter !=
```

```
nil {
```

```
 params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
```

```
}
```

```
if req != nil && req.MaxResults != nil {
```

```
 params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
```

```
}
```

```
if req != nil && req.OrderBy != nil {
```

```
 params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
```

```
}
```

```
if req != nil && req.PageToken != nil {
```

```
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
```

```
}
```

```
if req != nil && req.ReturnPartialSuccess != nil {
```

```
 params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
```

```
}
```

```
baseUrl.RawQuery = params.Encode()
```



```

// Build HTTP headers from client and context metadata.
hds := append(c.xGoogHeaders, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
 return
 }
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
 if err != nil {
 return err
 }
 if err := unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, "", e
}
it.Response = resp
return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
 return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

```

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This

resource is intended for use only by third-party partners who are creating

Cloud Marketplace images.

```
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }
```

```
 baseUrl, err := url.Parse(c.endpoint)
```

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

```
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())
```

```
 // Build HTTP headers from client and context metadata.
```

```
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}
```

```
 hds = append(c.xGoogHeaders, hds...)
```

```
 hds = append(hds, "Content-Type", "application/json")
```

```
 headers := gax.BuildHeaders(ctx, hds...)
```

```
 opts =
```

```
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
```

```
 unmarshalOptions := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
```

```
 resp := &computepb.Policy{}
```

```
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
```

```
 if settings.Path != "" {
```

```
 baseUrl.Path = settings.Path
```

```
 }
```

```
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
```

```
 if err != nil {
```

```
 return err
```

```
 }
```

```
 httpReq = httpReq.WithContext(ctx)
```

```
 httpReq.Header = headers
```

```
 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
```

```
 if err != nil {
```

```
 return err
```

```
 }
```

```
 if err := unmarshal(buf, resp); err != nil {
```

```
 return err
```

```

 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
// intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient)
TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts
...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
 req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
 url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
 append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
 tIamPermissions)],
 opts...)
 unmarshal := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 }, httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {

```

```

 return err
}
httpReq = httpReq.WithContext(ctx)
httpReq.Header = headers

buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
if err != nil {
 return err
}

if err := unm.Unmarshal(buf, resp); err != nil {
 return err
}

return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient)
Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
 return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }
 if req != nil && req.UpdateMask != nil {
 params.Add("updateMask", fmt.Sprintf("%v", req.GetUpdateMask()))
 }

 baseUrl.RawQuery = params.Encode()

```

```

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

hds = append(c.xGoogHeaders, hds...)
hds
= append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Update[0:len((*c.CallOptions).Update):len((*c.CallOptions).Update)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &compute.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
 baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Update")
 if err != nil {
 return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
 return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
 c: c.operationClient,
 proto: resp,
 project:
 req.GetProject(),
 },
}
return op, nil
}

```

```

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// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
// protoc-gen-go v1.35.2
// protoc v4.25.7
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 reflect "reflect"
 sync
 "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.

```

```

Permission_GROUP Permission_GrantType = 2
// Represents access to everyone. No extra information is required.
Permission_EVERYONE Permission_GrantType = 3
)

// Enum value maps for Permission_GrantType.
var (
 Permission_GrantType_name = map[int32]string{
 0: "GRANTEE_TYPE_UNSPECIFIED",
 1: "USER",
 2:
 "GROUP",
 3: "EVERYONE",
 }
 Permission_GrantType_value = map[string]int32{
 "GRANTEE_TYPE_UNSPECIFIED": 0,
 "USER": 1,
 "GROUP": 2,
 "EVERYONE": 3,
 }
)

func (x Permission_GrantType) Enum() *Permission_GrantType {
 p := new(Permission_GrantType)
 *p = x
 return p
}

func (x Permission_GrantType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GrantType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GrantType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GrantType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GrantType.Descriptor instead.
func (Permission_GrantType) EnumDescriptor() ([]byte,
[]int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

```

```

}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
 0: "ROLE_UNSPECIFIED",
 1: "OWNER",
 2: "WRITER",
 3: "READER",
 }
 Permission_Role_value = map[string]int32{
 "ROLE_UNSPECIFIED": 0,
 "OWNER": 1,
 "WRITER": 2,
 "READER": 3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {

```



```

return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
// you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state protoimpl.MessageState
 sizeCache protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
 `protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Permission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user or group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.

```

```

EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
// Required. The role granted by this permission.
Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
*x = Permission{}
mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
{
mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
if x != nil {
ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
if ms.LoadMessageInfo() == nil {
ms.StoreMessageInfo(mi)
}
return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
if x != nil {
return x.Name
}
return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
if x != nil && x.GranteeType != nil {

```

```

 return *x.GranteeType
}
return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
 return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
 return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
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0x72,  
0x6f, 0x74, 0x6f, 0x33,  
}

```
var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
```

```

)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GrantType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GrantType
 (Permission_Role)(0), // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil), // 2: google.ai.generativelanguage.v1beta.Permission
}

var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GrantType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
{
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
 return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
 File: protoimpl.DescBuilder{
 GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
 RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
 NumEnums: 2,
 NumMessages: 1,
 NumExtensions: 0,
 NumServices: 0,
 },
 GoTypes: file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
 }

```

```

DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
EnumInfos: file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
MessageInfos: file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1beta_permission_proto = out.File
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
= nil
file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package discoveryengine_test

import (
 "context"

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
)

func ExampleUserLicenseClient_ListUserLicenses_all() {
 ctx := context.Background()
 //
 This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {

```

```

// TODO: Handle error.
}
defer c.Close()

req := &discoveryenginepb.ListUserLicensesRequest{
// TODO: Fill request struct fields.
// See https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#ListUserLicensesRequest.
}
for resp, err := range c.ListUserLicenses(ctx, req).All() {
if err != nil {
// TODO: Handle error and break/return/continue. Iteration will stop after any error.
}
// TODO: Use resp.
_ = resp
}
}

func ExampleUserLicenseClient_ListOperations_all() {
ctx := context.Background()
//
This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := discoveryengine.NewUserLicenseClient(ctx)
if err != nil {
// TODO: Handle error.
}
defer c.Close()

req := &longrunningpb.ListOperationsRequest{
// TODO: Fill request struct fields.
// See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#ListOperationsRequest.
}
for resp, err := range c.ListOperations(ctx, req).All() {
if err != nil {
// TODO: Handle error and break/return/continue. Iteration will stop after any error.
}
// TODO: Use resp.
_ = resp
}
}

```

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// Code generated by protoc-gen-go\_gapic. DO NOT EDIT.

// [START discoveryengine\_v1\_generated\_UserLicenseService\_BatchUpdateUserLicenses\_sync]

package main

import (

    "context"

    discoveryengine "cloud.google.com/go/discoveryengine/apiv1"

    discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"

)

func main() {

    ctx := context.Background()

    // This snippet has been automatically generated  
    and should be regarded as a code template only.

    // It will require modifications to work:

    // - It may require correct/in-range values for request initialization.

    // - It may require specifying regional endpoints when creating the service client as shown in:

```

// https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := discoveryengine.NewUserLicenseClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &discoveryenginepb.BatchUpdateUserLicensesRequest{
 // TODO: Fill request struct fields.
 // See
 https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#BatchUpdateUserLicensesReque
 st.
}
op, err := c.BatchUpdateUserLicenses(ctx, req)
if err != nil {
 // TODO: Handle error.
}

resp, err := op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

// [END discoveryengine_v1_generated_UserLicenseService_BatchUpdateUserLicenses_sync]
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package compute_test

import (
 "context"

```

```

compute "cloud.google.com/go/compute/apiv1"
computepb "cloud.google.com/go/compute/apiv1/computepb"
"google.golang.org/api/iterator"
)

```

```

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

```

```

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
 //
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {

```

```

// TODO: Handle error.
}
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)

```

```

if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_Insert()
{
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
 // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 // only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
}

```



```

defer c.Close()

req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
}
it := c.List(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
 break
 }
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*computepb.LicensesListResponse)
}
}

func
ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
}

```

```

// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Update() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may
 require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 // https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.UpdateLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/compute#UpdateLicenseRequest.
 }

```

```

op, err := c.Update(ctx, req)
if err != nil {
 // TODO: Handle error.
}

err = op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
}

```

# 1.105 otel-metric 1.36.0

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# 1.106 otel-trace 1.36.0

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## 1.107 bobesa-go-domain-util 0.0.0-20250410211237-17ab3b2f4a95

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# 1.108 genproto-googleapis-rpc 0.0.0-20250603155806-513f23925822

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# 1.109 github.com/bobesa/go-domain-util

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# 1.110 contrib-instrumentation-net-http-otelhttp 0.61.0

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## 1.115 ca-certificates 20250619-r0

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```
#!/usr/bin/env perl

*
* _ _ _ _ _
* Project _||| _\|
* / _|||_|||
* |(_||| _<| _
* \ _\ _/| \ _\
*
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*
```

```
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*

This Perl script creates a fresh ca-bundle.crt file for use with libcurl.
It downloads certdata.txt from Mozilla's source tree (see URL below),
then parses certdata.txt and extracts CA Root Certificates into PEM format.
These are then processed with the OpenSSL commandline tool to produce the
final ca-bundle.crt file.
The script is based on the parse-certs script written by Roland Krikava.
This Perl script works on almost any platform since its only external
dependency is the OpenSSL commandline tool for optional text listing.
Hacked by Guenter Knauf.
#
```

Found in path(s):

```
* /ca-certificates-20250619-tar-bz2/ca-certificates-20250619/mk-ca-bundle.pl
```

No license file was found, but licenses were detected in source scan.

```
/* c_rehash.c - Create hash symlinks for certificates
* C implementation based on the original Perl and shell versions
*
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*/
```

Found in path(s):

```
* /ca-certificates-20250619-tar-bz2/ca-certificates-20250619/c_rehash.c
```

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Found in path(s):

\* /ca-certificates-20250619-tar-bz2/ca-certificates-20250619/certdata.txt

## 1.116 ca-certificates-bundle 20250619-r0

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#!/usr/bin/env perl

# \*\*\*\*\*

# \*

# \* Project            \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

# \*                    / \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

# \*                    | ( \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

# \*                    \ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

# \*

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# \*\*\*\*\*

# This Perl script creates a fresh ca-bundle.crt file for use with libcurl.

# It downloads certdata.txt from Mozilla's source tree (see URL below),

```
then parses certdata.txt and extracts CA Root Certificates into PEM format.
These are then processed with the OpenSSL commandline tool to produce the
final ca-bundle.crt file.
The script is based on the parse-certs script written by Roland Krikava.
This Perl script works on almost any platform since its only external
dependency is the OpenSSL commandline tool for optional text listing.
Hacked by Guenter Knauf.
#
```

Found in path(s):

```
* /ca-certificates-20250619-tar-bz2/ca-certificates-20250619/mk-ca-bundle.pl
```

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```
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* C implementation based on the original Perl and shell versions
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*/
```

Found in path(s):

```
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```

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```

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```
* /ca-certificates-20250619-tar-bz2/ca-certificates-20250619/certdata.txt
```

## 1.117 alpine-release 3.21.4-r0

### 1.117.1 Available under license :

```
Contributor: Carlo Landmeter <clandmeter@alpinelinux.org>
Maintainer: Kevin Daudt <kdaudt@alpinelinux.org>
pkgname=spdx-licenses
pkgver=3.27.0
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 rdft 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="
16d59c81e331b54b52639826f83408d98144cdaa70eacc3e8ce35dc3b13992e4794cf7515eb9db200efd390a0c0e35ae9
d4706fbe0ca6a8d236189e88870720c license-list-data-3.27.0.tar.gz
"

MIT License

```

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OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

# 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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mini\_sendmail - accept email on behalf of real sendmail

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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="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e76654309e001aee9bace727b5b4c8589405256a3c020 libart-lgpl-2.3.21.tar.bz2"

# 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>

/\* \$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

#ifdef 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.
 */
#ifdef QUEUEDEBDEBUG
#define QUEUEDEBDEBUG_LIST_INSERT_HEAD(head, elm, field) \
if ((head)->lh_first && \
 (head)->lh_first->field.le_prev != &(head)->lh_first) \
 QUEUEDEBDEBUG_ABORT("LIST_INSERT_HEAD %p %s:%d", (head), \
 __FILE__, __LINE__);
#define QUEUEDEBDEBUG_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 { \
 QUEUEDEBBUG_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 { \
 QUEUEDEBBUG_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 { \
 QUEUEDEBBUG_TAILQ_PREREMOVE((head), (elm), field) \
 QUEUEDEBBUG_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; \
 QUEUEDEBBUG_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); \
 QUEUEDEBBUG_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 sentinel 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;
}

#ifdef 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\n\
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 { \
 QUEUEDEBBUG_CIRCLEQ_HEAD((head), field) \
 QUEUEDEBBUG_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 { \
 QUEUEDEBBUG_CIRCLEQ_HEAD((head), field) \
 QUEUEDEBBUG_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 { \
 QUEUEDEBBUG_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 { \
 QUEUEDEBBUG_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) (__launter_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
"

/* $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>
* All rights reserved.
*
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* modification, are permitted provided that the following conditions
* are met:
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*
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```

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 \* IN NO EVENT SHALL THE  
 AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT,  
 \* 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  $2\lg(n+1)$ .
- \*/

```
#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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pkgname=perl-software-license
pkgver=0.104007
pkgrel=0
_pkgreal is used by apkbuild-cpan to find modules at MetaCpan
_pkgreal=Software-License
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url="https://metacpan.org/release/Software-License/"
arch="noarch"
license="GPL-1.0-or-later OR Artistic-1.0-Perl"
depends="perl perl-data-section perl-text-template"
checkdepends="perl-try-tiny"
subpackages="$pkgname-doc"
source="https://cpan.metacpan.org/authors/id/L/LE/LEONT/Software-License-$pkgver.tar.gz"
buildid="$srcdir/${_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="
12d75e9583b3013d9b4a282467f1ac80ab6b7f3251926d66591d01404489b528f22adc396dfd4528a0f0ca650f0eed6d
9c959e69eace2169c6ed1cffe5277e4
Software-License-0.104007.tar.gz
"

```

## 1.118 alpine-base 3.21.4-r0

### 1.118.1 Available under license :

```

Contributor: Natanael Copa <ncopa@alpinelinux.org>
Maintainer: Natanael Copa <ncopa@alpinelinux.org>
pkgname=alpine-base
pkgver=3.21.4
pkgrel=0
pkgdesc="Meta package for minimal alpine base"
url="https://alpinelinux.org"
arch="noarch"
license="MIT"
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```

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

LZ4 Library

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parts of src/rdfnv1a.c: [http://www.isthe.com/chongo/src/fnv/hash\\_32a.c](http://www.isthe.com/chongo/src/fnv/hash_32a.c)

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regex.c and regex.h from <https://github.com/ccxvii/minilibs> sha 875c33568b5a4aa4fb3dd0c52ea98f7f0e5ca684

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FindZstd.cmake: [git@github.com:facebook/folly](https://github.com/facebook/folly).git 87f1a403b49552dae75ae94c8610dd5979913477

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 */
```

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at revision 3a0bb77429bd3a61596f5e8a3172445844342120

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

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librdkafka - Apache Kafka C driver library

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## 1.120 [github.com/google/uuid](https://github.com/google/uuid) 1.6.0

### 1.120.1 Available under license :

Paul Borman <borman@google.com>

bmatsuo

shawnp

theory

jboverfelt

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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
"
```

bzip2 applet in busybox is based on lightly-modified source  
of bzip2 version 1.0.4. bzip2 source is distributed  
under the following conditions (copied verbatim from LICENSE file)

=====

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Julian Seward, Cambridge, UK.

jseward@bzip.org

bzip2/libbzip2 version 1.0.4 of 20 December 2006

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# 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 \
--sourcedir=/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
"

Vintage Dreams Waves v 2.0. for Creative Labs' AWE Soundcards
(EMU Soundfont 2 Format)

```

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[vintagedreamworks@hotmail.com](mailto:vintagedreamworks@hotmail.com)

<http://www.geocities.com/SiliconValley/Campus/8645/index.html>

<http://members.nbci.com/silicon39/>

<http://www.mp3.com/silicon39>

<https://analoguesque.x10host.com/>

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# Contributor: Carlo Landmeter <clandmeter@alpinelinux.org>

# Maintainer: Kevin Daudt <kdaudt@alpinelinux.org>

pkgname=spdx-licenses

pkgver=3.24.0

pkgrel=0

pkgdesc="Various data formats for the SPDX License List"

url="https://spdx.org/"

arch="noarch"

options="!check" # no test suite

license="CC-BY-3.0"

source="license-list-data-\$pkgver.tar.gz::https://github.com/spdx/license-list-data/archive/v\$pkgver.tar.gz"

builddir="\$srcdir/license-list-data-\$pkgver"

subpackages="\$pkgname-list"

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

for type in \$\_types; do

subpackages="\$subpackages \$pkgname-\$type:\_subpkg"

done

package() {

mkdir -p "\$pkgdir"

}

\_subpkg() {

local type=\${subpkgname/\$pkgname-/}

pkgdesc="\$pkgdesc (\$type)"

install\_if="\$pkgname=\$pkgver-r\$pkgrel"

mkdir -p "\$subpkgdir"/usr/share/spdx

cp -r "\$builddir"/\$type "\$subpkgdir"/usr/share/spdx/

```

}

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

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

mini_sendmail - accept email on behalf of real sendmail

```

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```

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"
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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"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>

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

```
/*
```

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* are met:
```

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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 { \
 QUEUEDEBBUG_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 { \
 QUEUEDEBBUG_TAILQ_PREREMOVE((head), (elm), field) \
 QUEUEDEBBUG_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; \
 QUEUEDEBBUG_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); \
 QUEUEDEBBUG_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 sentinel 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) (__laundry_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-gp517 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() {
 gp517 build-wheel \
 --wheel-dir .dist \
 --output-fd 3 3>&1 >&2
}

package() {
 gp517 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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* 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 $2\lg(n+1)$.
 */

#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_ */
Contributor: Dhruvin Gandhi <contact@dhruvin>
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pkgname=py3-license-expression
_pkgname=license_expression
pkgver=30.4.0
pkgrel=0
pkgdesc="Library to parse, compare, simplify and normalize license expressions"

```

```

url="https://github.com/nexB/license-expression"
arch="noarch"
license="Apache-2.0"
depends="python3 py3-boolean.py"
makedepends="py3-setuptools py3-setuptools_scm py3-gpep517 py3-wheel"
checkdepends="py3-pytest py3-pytest-xdist"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/l/${_pkgname}/${_pkgname}-${pkgver}.tar.gz"
builddir="$srcdir/${_pkgname}-${pkgver}"

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

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

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

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

```

## 1.123 cJSON 1.7.18-r1

### 1.123.1 Notifications :

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit  
(<http://www.openssl.org/>)

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com).

This product includes software written by Tim Hudson (tjh@cryptsoft.com).

### 1.123.2 Available under license :

Contributors

=====

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- \* [Max](https://github.com/maebex)
- \* [MaxBrandtner](https://github.com/MaxBrandtner)
- \* [Mateusz Szafoni](https://github.com/raiden00pl)
- \* Mike Pontillo
- \* [miaoerduo](https://github.com/miaoerduo)

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 [mohawk2](https://github.com/mohawk2)  
 \* [Mike Jerris](https://github.com/mjerris)  
 \* [Mike Robinson](https://github.com/mhrobinson)  
 \* [Moorthy](https://github.com/moorthy-bs)  
 \* [myd7349](https://github.com/myd7349)  
 \* [NancyLi1013](https://github.com/NancyLi1013)  
 \* [Orri](https://github.com/sbvoxel)  
 \* Paulo Antonio Alvarez  
 \* [Pawe Malowany](https://github.com/PawelMalowany)  
 \* [Pawel Winogrodzki](https://github.com/PawelWMS)  
 \* [prefetchnta](https://github.com/prefetchnta)  
 \* [Rafael Leal Dias](https://github.com/rafaeldias)  
 \* [Randy](https://github.com/andy408)  
 \* [raiden00pl](https://github.com/raiden00pl)  
 \* [Robin Mallinson](https://github.com/rmallins)  
 \* [Rod Vagg](https://github.com/rvagg)  
 \* [Roland Meertens](https://github.com/rmeertens)  
 \* [Romain Porte](https://github.com/MicroJoe)  
 \* [SANJEEV BA](https://github.com/basanjeev)  
 \* [Sang-Heon Jeon](https://github.com/Intuition)  
 \* [Sayan Bandyopadhyay](https://github.com/saynb)  
 \* [Simon Sobisch](https://github.com/GitMensch)  
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 [Simon Ricaldone](https://github.com/simon-p-r)  
 \* [Stoian Ivanov](https://github.com/sdrsdr)  
 \* [SuperH-0630](https://github.com/SuperH-0630)  
 \* [Square789](https://github.com/Square789)  
 \* [Stephan Gatzka](https://github.com/gatzka)  
 \* [Tony Langhammer](https://github.com/BigBrainAFK)  
 \* [Vemake](https://github.com/vemakereporter)  
 \* [Wei Tan](https://github.com/tan-wei)  
 \* [Weston Schmidt](https://github.com/schmidtwt)  
 \* [xiaomianhehe](https://github.com/xiaomianhehe)  
 \* [yangfl](https://github.com/yangfl)  
 \* [yuta-oxo](https://github.com/yuta-oxo)  
 \* [Zach Hindes](https://github.com/zhindes)  
 \* [Zhao Zhixu](https://github.com/zhaozhixu)  
 \* [10km](https://github.com/10km)

And probably more people on [SourceForge](https://sourceforge.net/p/cjson/bugs/search/?q=status%3Aclosed-rejected+or+status%3Aclosed-out-of-date+or+status%3Awont-fix+or+status%3Aclosed-fixed+or+status%3Aclosed&page=0)

Also thanks to all the people who reported bugs and suggested new features.

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## 1.124 curl 8.14.1-r1

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