



Smart Software Licensing

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Smart Software Licensing Overview

Cisco Smart Software Licensing is a new way of thinking about licensing. It adds flexibility to your licensing and simplifies it across the enterprise. It also delivers visibility into your license ownership and consumption.

Cisco Smart Software Licensing helps you to procure, deploy, and manage licenses easily where devices self-register and report license consumption, removing the need for product activation keys (PAK). It pools license entitlements in a single account and allows you to move licenses freely through the network, wherever you need them. It is enabled across Cisco products and managed by a direct cloud-based or mediated deployment model.

The Cisco Smart Software Licensing service registers the product instance, reports license usage, and obtains the necessary authorization from Cisco Smart Software Manager or Cisco Smart Software Manager satellite.

You can use Smart Licensing to:

- See the license usage and count
- See the status of each license type
- See the product licenses available on Cisco Smart Software Manager or Cisco Smart Software Manager satellite
- Renew License Authorization with Cisco Smart Software Manager or Cisco Smart Software Manager satellite
- Renew the License Registration
- Deregister with Cisco Smart Software Manager or Cisco Smart Software Manager satellite



Note The License authorization is valid for 90 days with a renewal at least once in 30 days. The authorization will expire after 90 days if it is not connected to Cisco Smart Software Manager or Cisco Smart Software Manager satellite.

If the Cisco Smart Software Manager satellite option is selected, the satellite must have an internet connection to Cisco Smart Software Manager for the authorization to occur. The Cisco Smart Software Manager satellite can operate in 2 modes: Connected Mode in which the connection time is configurable, and Disconnected mode which requires a manual sync.

There are two main deployment options for Smart Licensing:

- Cisco Smart Software Manager
- Cisco Smart Software Manager satellite

Cisco Smart Software Manager

The Cisco Smart Software Manager is a cloud-based service that handles your system licensing. Use this option if Unified Communications Manager can connect to cisco.com, either directly or via a proxy server. Cisco Smart Software Manager allows you to:

- Manage and track licenses
- Move licenses across virtual account
- Remove registered product instance

Optionally, if Unified Communications Manager cannot connect directly to Cisco Smart Software Manager, you can deploy a proxy server to manage the connection.



Note If you are upgrading Unified Communications Manager registered to Cisco Smart Software Manager from Pre-15 releases to Release 15 or higher, Cisco Unified Communications Manager will not update the product version to 15 in the Cisco Smart Software Manager UI for the Product Instance. Refer to CSCwf94088 for more details.

For additional information about Cisco Smart Software Manager, go to <https://software.cisco.com>.

Cisco Smart Software Manager Satellite

Cisco Smart Software Manager satellite is an on-premise deployment that can handle your licensing needs if Unified Communications Manager cannot connect to cisco.com directly, either for security or availability reasons. When this option is deployed, Unified Communications Manager registers and report license consumption to the satellite, which synchronizes its database regularly with the backend Cisco Smart Software Manager that is hosted on cisco.com.

The Cisco Smart Software Manager satellite can be deployed in either Connected or Disconnected mode, depending on whether the satellite can connect directly to cisco.com.

- Connected—Used when there is connectivity to cisco.com directly from the Smart Software Manager satellite. Smart account synchronization occurs automatically.

- **Disconnected**—Used when there is no connectivity to [cisco.com](https://www.cisco.com) from the Smart Software Manager satellite. Smart Account synchronization must be manually uploaded and downloaded.



Note The Unified CM running in Dual Stack mode supports satellite configured with IPv4 and IPv6 address.



Note If you are upgrading Unified Communications Manager registered to Cisco Smart Software Manager Satellite from Pre-15 releases to Release 15 or higher, Cisco Unified Communications Manager will not update the product version to 15 in the Cisco Smart Software Manager UI for the Product Instance. Refer to CSCwf94088 for more details.

For Cisco Smart Software Manager satellite information and documentation, go to <https://www.cisco.com/c/en/us/buy/smart-accounts/software-manager-satellite.html>.

License Types

The following licensing types are available to cover your needs:

Cisco Unified Workspace Licensing

Cisco Unified Workspace Licensing (UWL) provides the most popular bundles of Cisco Collaboration applications and services in a cost-effective, simple package. It includes soft clients, applications server software, and licensing on a per-user basis.

Cisco User Connect Licensing

User Connect Licensing (UCL) is a per-user based license for individual Cisco Unified Communications applications, which includes the applications server software, user licensing, and a soft client. Depending on the type of device and number of devices that you require, UCL is available in Essential, Basic, Enhanced, and Enhanced Plus versions.

For more information about these license types and the versions in which they are available, see <http://www.cisco.com/c/en/us/products/unified-communications/unified-communications-licensing/index.html>.

Session Management Edition

Session Management Edition can be registered to either Cisco Smart Software Manager or Cisco Smart Software Manager satellite. You can register Session Management Edition using the same processes as for Unified Communications Manager, register to a virtual account that Cisco Unified Communications Manager is registered or a separate virtual account, and fulfill a minimal set of licenses requirement.



Note The SME registered in Specific License Reservation (SLR) requires a minimum set of licenses reserved in CSSM while generating an SLR authorization code.

Product Instance Evaluation Mode

After installation, Unified Communications Manager runs under the 90-day evaluation period. At the end of the evaluation period, Unified Communications Manager stops allowing addition of new users or devices until registered with Cisco Smart Software Manager or Cisco Smart Software Manager satellite.



Note Evaluation period is before the product is registered.



Note You cannot deploy a secure SIP trunk while running with a 90-day evaluation period. To deploy a secure SIP trunk, your system must have registered to a Smart Software Manager account with the **Allow export-controlled functionality** product registration token selected.

System Licensing Prerequisites

Planning your System Licensing

Review and understand the Unified Communications (UC) licensing structure. For details, see <http://www.cisco.com/c/en/us/products/unified-communications/unified-communications-licensing/index.html>.

Plan how you are going to connect Unified Communications Manager to the Smart Software Manager service:

- Direct connection to Cisco Smart Software Manager on cisco.com—Unified Communications Manager connects directly to the Cisco Smart Software Manager on cisco.com. With this option, you must configure DNS on Unified Communications Manager that resolves `tools.cisco.com`.
- Connection to Smart Software Manager via proxy server—Unified Communications Manager connects to a proxy server or transport gateway, which connects to the Cisco Smart Software Manager service on cisco.com. DNS is not required on Unified Communications Manager, but you do need to configure DNS on the proxy server that can resolve `tools.cisco.com`.
- Connection to on-premise Cisco Smart Software Manager satellite—Unified Communications Manager connects to an on-premise Smart Software Manager satellite. DNS is not required on Unified Communications Manager. DNS that can resolve `tools.cisco.com` is required on the satellite server if you are deploying Connected mode. DNS is not required on the satellite server if you are deploying Disconnected mode.

Smart Licensing Enrollment

Set up Smart and Virtual accounts. For details, see <https://software.cisco.com/>.

Optional. If you want to deploy Cisco Smart Software Manager satellite, install and set up the satellite. Refer to documentation, including the *Smart Software Manager satellite Installation Guide*. You can find documentation at <https://www.cisco.com/c/en/us/buy/smart-accounts/software-manager-satellite.html>.

Smart Software Licensing Task Flow

Complete these tasks to set up system licensing for Unified Communications Manager.

Procedure

	Command or Action	Purpose
Step 1	Obtain the Product Instance Registration Token, on page 5.	Use this procedure to generate a product instance registration token for your virtual account.
Step 2	Configure Connection to Smart Software Licensing, on page 6	Select transport settings through which Unified Communications Manager connects to the Smart Software Licensing service. The Direct option is selected by default where the product communicates directly with Cisco licensing servers.
Step 3	Register with Cisco Smart Software Manager, on page 7.	Perform this step to register Unified Communications Manager with Cisco Smart Software Manager or Cisco Smart Software Manager satellite.

Obtain the Product Instance Registration Token

Before you begin

Obtain the product instance registration token from Cisco Smart Software Manager or Cisco Smart Software Manager satellite to register the product instance. Tokens can be generated with or without the Export-Controlled functionality feature being enabled.

Procedure

-
- Step 1** Log in to your smart account in either Cisco Smart Software Manager or your Cisco Smart Software Manager satellite.
 - Step 2** Navigate to the virtual account with which you want to associate the Unified Communications Manager cluster.
 - Step 3** Generate a “Product Instance Registration Token”.

Note Select the **Allow export-controlled functionality on the products registered with this token** check box to turn on the Export-Controlled functionality for tokens of a product instance you wish in this smart account. By checking this check box and accepting the terms, you enable higher levels of the product encryption for products registered with this Registration Token. By default, this check box is selected. You can uncheck this check box if you wish not to allow the Export-Controlled functionality to be made available for use with this token.

Caution Use this option only if you are compliant with the Export-Controlled functionality.

Note The **Allow export-controlled functionality on the products registered with this token** check box is not displayed for the Smart Accounts that are not permitted to use the Export-Controlled functionality.

- Step 4** Copy the token or save it to another location.
For more information, see <https://software.cisco.com/>.

Configure Connection to Smart Software Licensing

Complete this task to connect Unified Communications Manager to the Smart Software Licensing service.

Procedure

- Step 1** From Cisco Unified CM Administration, choose **System > Licensing > License Management**. The **License Management** window appears.
- Step 2** From the **Smart Software Licensing** section, click the **View/Edit the Licensing Smart Call Home settings** link. The **Transport Settings** dialog box appears.
- Step 3** Select the method of connecting Unified Communications Manager to the Smart Licensing service:
- **Direct**—Unified Communications Manager connects directly to the Smart Software Manager on `cisco.com`. This is the default option. With this option, you must deploy DNS on Unified Communications Manager that can resolve `tools.cisco.com`.
 - **Transport Gateway**—Unified Communications Manager connects to an on-premise Cisco Smart Software Manager satellite or Transport Gateway for system licensing. In the URL text box, enter the address and port of the Smart Software Manager satellite or Transport Gateway. For example, `fqdn_of_smart_software_manager:port_number`. For HTTPS, use port 443.
 - **HTTP/HTTPS Proxy**— Unified Communications Manager connects to a proxy server, which connects to the Cisco Smart Software Manager service along with Transport Gateway also along with satellite on `cisco.com`. Enter the IP address or hostname of the proxy server along with the port:
 - Authentication needed on HTTP or HTTPS proxy—Enable the checkbox if want to register to Cisco Smart Software Manager using authentication based proxy server.
 - IP Address/Host Name
 - Port—For HTTPS, use port 443.
 - User Name
 - Password
- Step 4** Check the **Do not share my hostname or IP address with Cisco** check box to restrict Unified Communications Manager from sharing its IP address and hostname during the Smart Licensing registration.
- Step 5** Click **Save**.

Register with Cisco Smart Software Manager

Use this procedure to register your product with Cisco Smart Software Manager or Cisco Smart Software Manager satellite. Until you register, your product is still in Evaluation Mode.

Procedure

-
- Step 1** From Cisco Unified CM Administration, choose **System > Licensing > License Management**. The **License Management** window appears.
- Step 2** From the **Smart Software Licensing** section, click the **Register** button. The **Registration** window appears.
- Step 3** In the **Product Instance Registration Token** section, paste the copied or saved “Registration Token Key” that you generated using the Smart Software Manager or Smart Software Manager satellite.
- Step 4** Click **Register** to complete the registration process.
- Step 5** Click **Close**. For more information, see the online help.
- Step 6** In the **License Usage Report** section, click **Update Usage Details** to manually update the system license usage information.
- Note** Usage information is updated once every 24 hours automatically. For more information, see the online help.
-

Additional Tasks with Smart Software Licensing

The following optional tasks are available for Unified Communications Manager and Smart Software Licensing:

Procedure

	Command or Action	Purpose
Step 1	Renew Authorization, on page 9	Complete this task to manually renew the License Authorization Status for all the license listed under the License Type.

	Command or Action	Purpose
		<p>Note The license authorization is renewed automatically every 30 days. The authorization status will expire after 90 days if it is not connected to Cisco Smart Software Manager or Cisco Smart Software Manager satellite.</p> <p>If the Cisco Smart Software Manager satellite option is selected, the satellite must have an internet connection to Cisco Smart Software Manager for the authorization to occur. The Cisco Smart Software Manager satellite can operate in 2 modes: Connected Mode in which the connection time is configurable, and Disconnected mode which requires a manual sync.</p>
Step 2	Renew Registration, on page 9	<p>Complete this task to renew the registration information manually.</p> <p>Note The initial registration is valid for one year. Renewal of registration is automatically done every six months provided the product is connected to Cisco Smart Software Manager or Cisco Smart Software Manager satellite.</p>
Step 3	Deregister, on page 10	<p>Complete this task to disconnect the Unified Communications Manager cluster from Cisco Smart Software Manager or Cisco Smart Software Manager satellite. The product reverts to evaluation mode as long as the evaluation period is not expired. All license entitlements used for the product are immediately released back to the virtual account and are available for other product instances to use it.</p>
Step 4	Reregister License with Cisco Smart Software Manager, on page 11	<p>Complete this task to reregister Unified Communications Manager with Cisco Smart Software Manager or Cisco Smart Software Manager satellite.</p> <p>Note Product may migrate to a different virtual account by reregistering with token from a new virtual account.</p>

Renew Authorization

Use this procedure to manually renew the License Authorization Status for all the licenses listed under the License Type.



-
- Note** The license authorization is renewed automatically every 30 days. The authorization status will expire after 90 days if it is not connected to Cisco Smart Software Manager or Cisco Smart Software Manager satellite.
- If the Cisco Smart Software Manager satellite option is selected, the satellite must have an internet connection to Cisco Smart Software Manager for the authorization to occur. The Cisco Smart Software Manager satellite can operate in 2 modes: Connected Mode in which the connection time is configurable, and Disconnected mode which requires a manual sync.
-

Before you begin

The product should be registered with Cisco Smart Software Manager or Cisco Smart Software Manager satellite.

Procedure

- Step 1** From Cisco Unified CM Administration, choose **System > Licensing > License Management**. The **License Management** window appears.
- Step 2** From the **Smart Software Licensing** section, click the **Actions** drop-down list.
- Step 3** Choose **Renew Authorization Now**. The **Renew Authorization** window appears.
- Step 4** Click **Ok**.
- Unified Communications Manager sends a request to Cisco Smart Software Manager or Cisco Smart Software Manager satellite to check the “License Authorization Status” and Cisco Smart Software Manager or Cisco Smart Software Manager satellite reports back the status to Unified Communications Manager. For more information, see the online help.
- Step 5** In the **License Usage Report** section, click **Update Usage Details** to manually update the system license usage information.
- Note** Usage information is updated once every 24 hours automatically. For more information on the fields and their configuration options, see the system Online Help.
-

Renew Registration

During product registration to Cisco Smart Software Manager or Cisco Smart Software Manager satellite, there is a security association used to identify the product and is anchored by the registration certificate, which has a lifetime of one year (that is, registration period). This is different from the registration token ID expiration, which has the time limit for the token to be active. This registration period is automatically renewed every 6 months. However, if there is an issue, you can manually renew this registration period.

Before you begin

The product should be registered with Cisco Smart Software Manager or Cisco Smart Software Manager satellite.

Procedure

-
- Step 1** From Cisco Unified CM Administration, choose **System > Licensing > License Management**. The **License Management** window appears.
- Step 2** From the **Smart Software Licensing** section, click the **Actions** drop-down list.
- Step 3** Choose **Renew Registration Now**. The **Renew Registration** window appears.
- Step 4** Click **Ok**.
Unified Communications Manager sends a request to Cisco Smart Software Manager or Cisco Smart Software Manager satellite to check the “Registration Status” and Cisco Smart Software Manager or Cisco Smart Software Manager satellite reports back the status to Unified Communications Manager.
- Step 5** In the **License Usage Report** section, click **Update Usage Details** to manually update the system license usage information.

Note Usage information is updated once every 24 hours automatically. For more information on the fields and their configuration options, see the system Online Help.

Deregister

Use this procedure to unregister from Cisco Smart Software Manager or Cisco Smart Software Manager satellite and release all the licenses from the current virtual account. This procedure also disconnects Unified Communications Manager cluster from Cisco Smart Software Manager or Cisco Smart Software Manager satellite. All license entitlements used for the product are released back to the virtual account and is available for other product instances to use.



Note If Unified Communications Manager is unable to connect with the Cisco Smart Software Manager or Cisco Smart Software Manager satellite, and the product is still deregistered, then a warning message is displayed. This message notifies you to remove the product manually from Cisco Smart Software Manager or Cisco Smart Software Manager satellite to free up licenses.

Before you begin

The product should be registered with Cisco Smart Software Manager or Cisco Smart Software Manager satellite.

Procedure

-
- Step 1** From Cisco Unified CM Administration, choose **System > Licensing > License Management**.

- The **License Management** window appears.
- Step 2** From the **Smart Software Licensing** section, click the **Actions** drop-down list.
- Step 3** Choose **Deregister**.
The **Deregister** window appears.
- Step 4** Click **Ok**.
- Step 5** In the **License Usage Report** section, click **Update Usage Details** to manually update the system license usage information.

Note Usage information is updated once every 24 hours automatically. For more information on the fields and their configuration options, see the system Online Help.

Note

- If the data plane encryption (Unified Communications Manager cluster in mixed-mode) has been enabled after registered with Cisco Smart Software Manager or Cisco Smart Software Manager satellite and the product is later deregistered, then mixed-mode will continue to be enabled.

An alert named SmartLicenseExportControlNotAllowed is sent to the administrator to set cluster to non-secure mode when the product is deregistered from Cisco Smart Software Manager or Cisco Smart Software Manager satellite. The mixed-mode will continue to be enabled even after the reboot.

- This behavior after deregistration, may change in future versions of the product. For more details on setting up CTL Client, see the “Set Up Cisco CTL Client” chapter of the *Security Guide for Cisco Unified Communications Manager* at <http://www.cisco.com/c/en/us/support/unified-communications/unified-presence/products-maintenance-guides-list.html>.

For more details on Mixed Mode with Tokenless CTL, see the “CUCM Mixed Mode with Tokenless CTL” section at <http://www.cisco.com/c/en/us/support/unified-communications/unified-communications-manager-callmanager/products-tech-notes-list.html>.

Reregister License with Cisco Smart Software Manager

Use this procedure to Reregister Cisco Unified Communications Manager with Cisco Smart Software Manager or Cisco Smart Software Manager satellite.

Before you begin

[Obtain the Product Instance Registration Token, on page 5.](#)

Procedure

- Step 1** From Cisco Unified CM Administration, choose **System > Licensing > License Management**.
The **License Management** window appears.
- Step 2** From the **Smart Software Licensing** section, click the **Register** button.
The **Registration** window appears.
- Step 3** From the **Smart Software Licensing** section, click the **Actions** drop—down list.
- Step 4** Choose **Reregister**.

The **Reregister** window appears.

Step 5 Click **Ok**.

Step 6 In the **Product Instance Registration Token** section, paste the copied or saved “Registration Token Key” that you generated using the Cisco Smart Software Manager or Cisco Smart Software Manager satellite.

Step 7 Click **Register** to complete the registration process.

Step 8 Click **Close**. For more information, see the online help.

Step 9 In the **License Usage Report** section, click **Update Usage Details** to manually update the system license usage information.

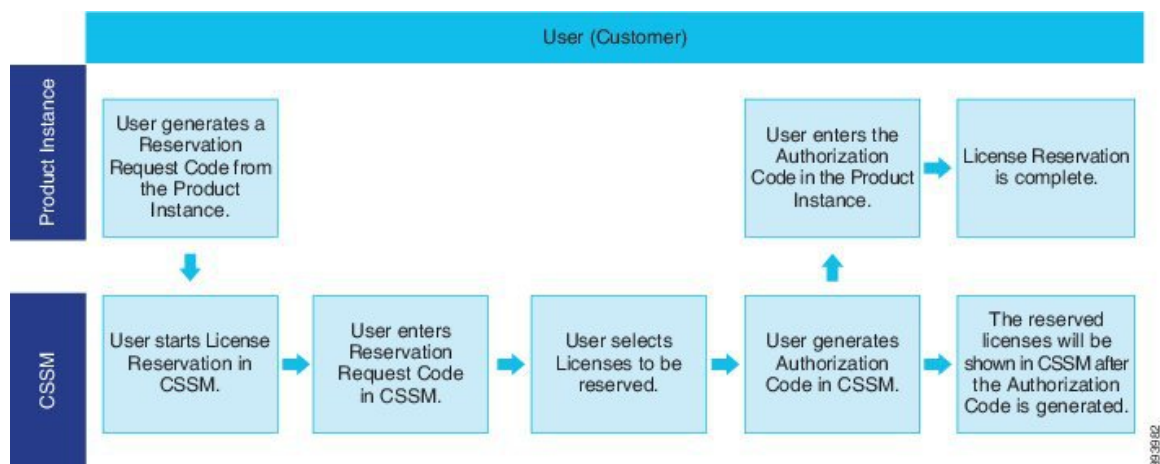
Note Usage information is updated once every 24 hours automatically. For more information on the fields and their configuration options, see the system Online Help.

Specific License Reservation

Specific License Reservation is a feature that is used in highly secure networks. It provides a method for customers to deploy a software license on a device (Product Instance - Unified Communications Manager) without communicating usage information.

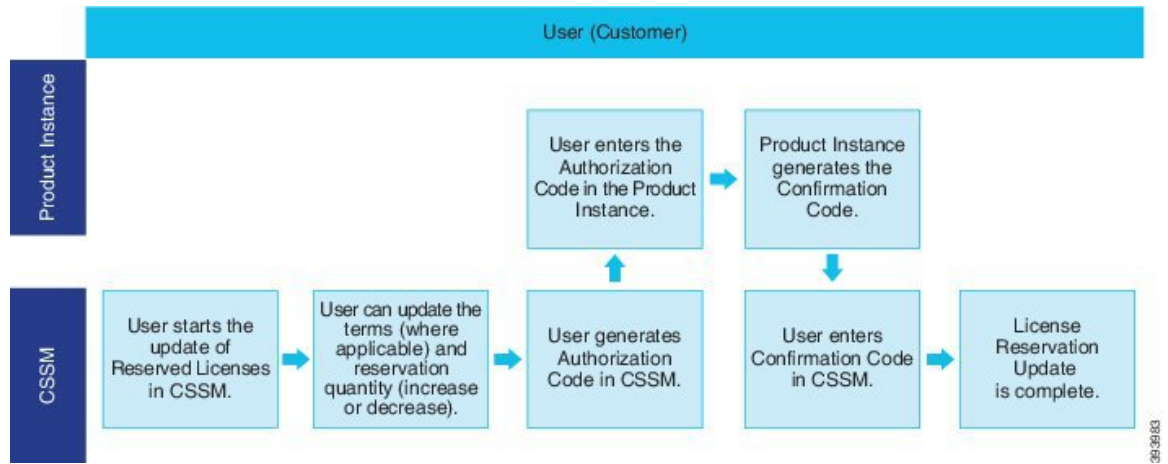
The user can specify and reserve perpetual or term-based licenses against the Unified Communications Manager product. After authorization code is exchanged, regular product synchronization is not required until there are changes in the reservation. Reserved licenses remain blocked in Cisco Smart Software Manager unless released from the product with a return code.

Figure 1: Reserve Licenses



An update or change in reserved licenses (increase or decrease) can be done on previously reserved licenses in Cisco Smart Software Manager. The new authorization code can be installed on the Product and a confirmation code can be obtained. The new changes remain in transit status unless confirmation code from the product is installed on the Cisco Smart Software Manager.

Figure 2: Update Reserve Licenses

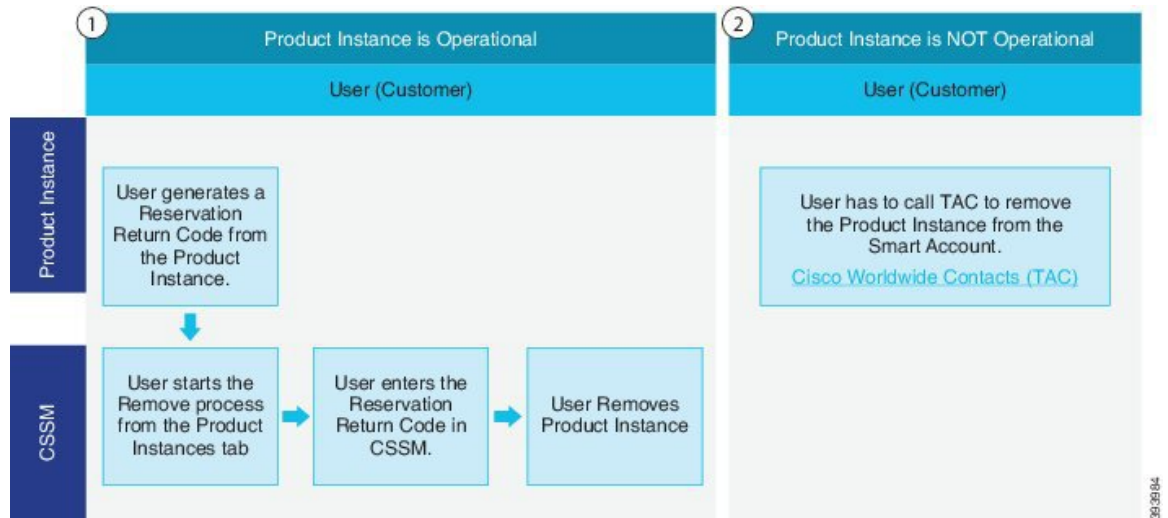


When licenses are reserved on a Product Instance (Unified Communications Manager), there are two ways to remove the product from the smart account and release all the licenses that are reserved for that Product Instance (Unified Communications Manager):

Product Instance is operational (graceful removal): User can return the Specific License Reservation authorization by creating a Reservation Return code on the Product Instance (which removes the Authorization Code) and then enter the Reservation Return code into Cisco Smart Software Manager.

Product Instance is not operational (failure/RMA or due to destroying the VM/container): User must contact TAC, who can remove the Product Instance from their smart account.

Figure 3: Remove a Product Instance - Unified Communications Manager



Note User can use only the CLI configuration to enable Specific License Reservation.



Note When Specific License Reservation is enabled on Unified Communications Manager, voucher generation for cloud on-boarding will is not supported.

Customer who is entitled to License reservation feature on their Smart Account can reserve licenses from their virtual account, tie them to a devices UDI and use their device with these reserved licenses in a disconnected mode. The customer reserves specific licenses and counts for a UDI from their virtual account. The following options describe the new functionality and design elements for Specific License Reservation:

- license smart reservation enable
- license smart reservation disable
- license smart reservation request
- license smart reservation cancel
- update license reservation
- license smart reservation install "<authorization-code>"
- license smart reservation install-file <url>
- license smart reservation return
- license smart reservation return-authorization "<authorization-code>"

Specific License Reservation Task Flow

Complete these tasks to reserve specific licenses for Unified Communications Manager.

license smart reservation enable

Use this procedure to enable Specific License Reservation.

Before you begin

Unified Communications Manager is unregistered with Cisco Smart Software Manager or satellite.

Procedure

From Cisco Unified CM Admin Console execute the below CLI command.

- license smart reservation enable
-

license smart reservation request

Use this procedure to generate reservation request code generate request code from Unified Communications Manager product.

Before you begin

Make sure Unified Communications Manager Registration Status is Reservation in progress, by executing **license smart reservation enable**.

command

Procedure

- Step 1** From Cisco Unified CM Admin Console execute *license smart reservation request* command.
- Step 2** Log into CSSM [Cisco Smart Software manager] and enter the reservation request code.

The screenshot displays the Cisco Smart Software Licensing (CSSM) web interface. At the top, the breadcrumb navigation shows 'Cisco Software Central > Smart Software Licensing'. The main header includes 'Smart Software Licensing' and a user profile 'BU Production Test'. Below the header, there are navigation tabs: Alerts, Inventory, Convert to Smart Licensing, Reports, Preferences, On-Prem Accounts, and Activity. The 'Virtual Account' is set to 'UCM-Test'. The 'Licenses' tab is selected, and the 'License Reservation...' button is highlighted with a red box. Below this, the 'Smart License Reservation' dialog box is open, showing a four-step process: STEP 1: Enter Request Code, STEP 2: Select Licenses, STEP 3: Review and confirm, and STEP 4: Authorization Code. The current step is STEP 1. The dialog box contains instructions on how to generate a Reservation Request Code and a list of steps to follow. A text input field for the 'Reservation Request Code' is visible, along with 'Browse' and 'Upload' buttons. The dialog box also includes 'Cancel' and 'Next' buttons at the bottom right.

- Step 3** Select the licenses that have to be reserved for this device and generate Authorization code.

450364

license smart reservation install "<authorization-code>"

Smart License Reservation

STEP 1 ✓ Enter Request Code | **STEP 2 Select Licenses** | STEP 3 Review and confirm | STEP 4 Authorization Code

Product Instance Details

Product Type: UCL
 UDI PID: UCM
 UDI Serial Number: edb16
 UUID: d9a2c661-8fe1-4ce7-9e6f-bbc68a3ed16

Licenses to Reserve

In order to continue, ensure that you have a surplus of the licenses you want to reserve in the Virtual Account.

Reserve a specific license

License	Expires	Purchased	Available	Reserve
Level 1 Supports substitution				
HCS UCM Standard License	2020-Aug-31	1	0	<input type="text" value="0"/>
Level 2				
UC Manager CUWL License (12.X)	-	0	0	<input type="text" value="1"/>

Cancel **Next**

450365

Step 4 Copy the authorization code to the product instance and execute the **license smart reservation install "<authorization-code>"** command to install.

```
admin:license smart reservation install "<specificPID><authorizationCode><flag></flag><version></version><pid>4b055e4f-bf01-4c5c-9f1f-b46d501be5f</pid><timestamp>15540019264</timestamp><entitlements><entitlement>
  <tag>revvid.2017-01.com.cisco.UCM_UCMv.12.0.uc9379a-1c08-4b36-ef482abb965</tag><count>1</count><startDate>2020-Mar-04 UTC</startDate><endDate>2020-Aug-31 UTC</endDate><licenseType>TERM</licenseType><single
  <file>PK Manager CUWL License (12.X)</file><file>PK Manager CUWL License (12.X)</file><subscriptionID></subscriptionID><entitlements></entitlements></authorizationCode><signature>e80C1ba0ca119d6
  2VvWb37yM7mqJ9qUj3F9A1q0190401Yf00caj14k4m75M8rv9e9990f1M8B9vftA==</signature><udi>PIDM,3:edb16,Udm9a2c661-8fe1-4ce7-9e6f-bbc68a3ed16</udi></specificPID>"
  Authorization code installed successfully.
  >>>
```

450366

license smart reservation install "<authorization-code>"

Use this procedure to install license reservation authorization-code generated from Cisco Smart Software Manager.

Before you begin

Make Unified Communications Manager Registration Status is Reservation In Progress, by executing commands in below sequence:

- license smart reservation enable
- license smart reservation request

Procedure

From Cisco Unified CM Admin Console execute the below CLI command.

- license smart reservation install "<authorization-code>"
-

license smart reservation install-file <url>

Use this procedure to install the license reservation authorization-code file generated on the Cisco Smart Software Manager.

Before you begin

Make sure Unified Communications Manager registration status is Reservation In Progress, by executing commands in below sequence.:

- **license smart reservation enable**
- **license smart reservation request**



Note url is mandatory Path to the authorization-code file on SFTP server in below format:

```
sftp://<HostName/IP>:<port>/<Path to Authorization-Code file>
```

Procedure

From Cisco Unified CM Admin Console execute the below CLI command.

- license smart reservation install-file <url>
-

Additional Tasks with Specific License Reservation

The following additional tasks are available on Unified Communications Manager for Specific License Reservation:

license smart reservation disable

Use this procedure to disable specific license reservation.

Before you begin

Specific License Reservation is enabled on Unified Communications Manager

Procedure

From Cisco Unified CM Admin Console execute the below CLI command.

- license smart reservation disable
-

update license reservation

Use this procedure to update the license reservation for your product instance and get a new authorization code.

Before you begin

Make sure Unified Communications Manager Registration Status is Registered- Specific License Reservation by executing commands in below sequence:

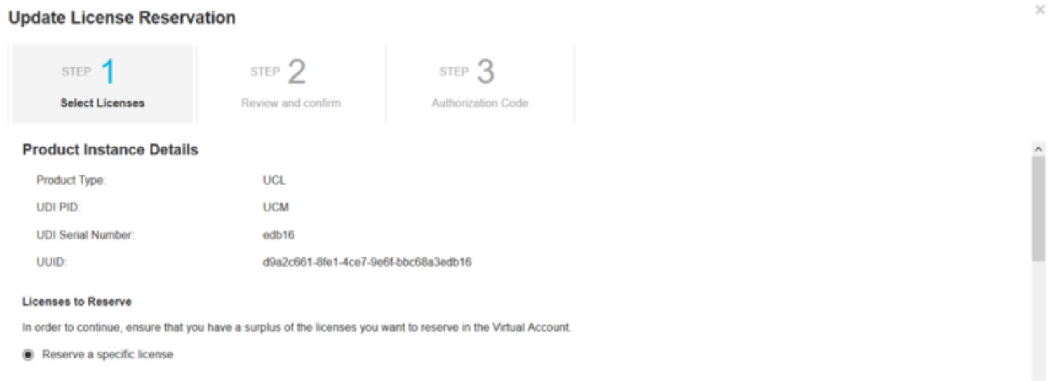
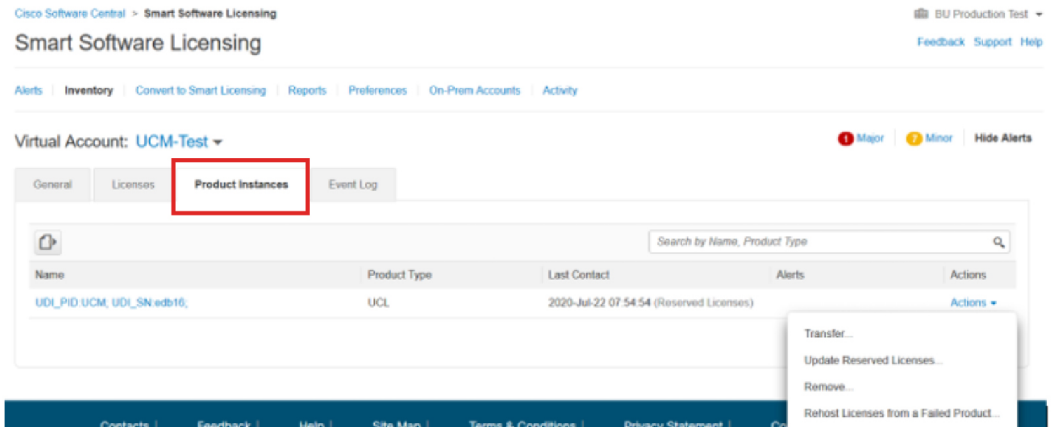
- license smart reservation enable
- license smart reservation request
- license smart reservation install "<authorization-code>"



Note License borrowing from a higher tier does not happen automatically when a Specific License Reservation is enabled on Unified Communications Manager. License Reservation has to be updated manually to the Unified Communications Manager license consumption/usage.

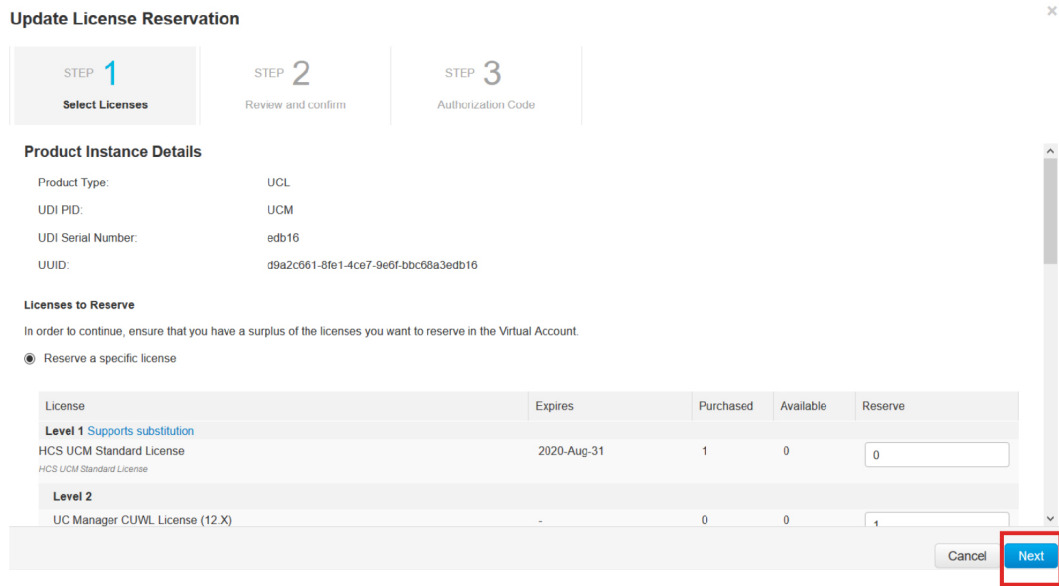
Procedure

- Step 1** Select Update Reserved Licenses from Actions drop-down list next to the Product Instance that you wish to update reservation on CSSM.



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Step 2 Update the reservation (Add/Remove/Update licenses for this product instance) and generate authorization code.



450367

Step 3 Copy the authorization code to the product instance and execute the **license smart reservation install** “<authorization-code>” command to install.

Update License Reservation x

STEP 1 ✓
Select Licenses

STEP 2 ✓
Review and confirm

STEP 3
Authorization Code

✓ The Reservation Authorization Code below has been generated for this product instance. Several steps remain:

- This code must be entered into the Product Instance's Smart Licensing settings to complete the reservation.
- When the code has been entered, a Reservation Confirmation Code will be generated.
- To release licenses in transition, enter confirmation code generated by device into CSSM.

Authorization Code:

```
<specificPLR><authorizationCode><flag>A</flag><version>C</version><pid>6191f5e5-319e-41ff-abba-b220ea4b2e1</pid><timestamp>1585405336190</timestamp><entitlements>
<entitlement><tag>regid.2017-02.com.cisco.UCM_CUWL_12_0_cc59375a-1cd8-4b36-8366-6f42abba905</tag><count>1</count><startDate>2020-Mar-04 UTC</startDate><endDate>2020-
Aug-31 UTC</endDate><licenseType>TERM</licenseType><displayName>UC Manager CUWL License (12.X)</displayName><tagDescription>UC Manager CUWL License</tagDescription>
<subscriptionID></subscriptionID></entitlement><entitlement><tag>regid.2016-07.com.cisco.UCM_Enhanced.12.0_66d0d1cf-4883-4761-91d0-d01d3eb1949a</tag><count>1</count>
<startDate></startDate><endDate></endDate><licenseType>PERPETUAL</licenseType><displayName>UC Manager Enhanced License (12.X)</displayName><tagDescription>UC Manager
Enhanced License</tagDescription><subscriptionID></subscriptionID></entitlement></entitlements></authorizationCode><signature>MEQCIFLpw4k+0Q+Zr3bp
/ucJ3KNyKVGdGumUvN0BuGyiv9JAiBCB6O+c2GxA52FUfIAZdVhHz9xcVbbr/rAwoavm9Hnw==</signature></udi>P.UCM,S.edb16.U.d9a2c661-8fe1-4ce7-9e6f-bbc68a3ed3b16</udi>
```

To learn how to enter this code, see the configuration guide for the product being licensed

Download as File
Copy to Clipboard
Enter Confirmation Code
Close

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Step 4 Confirmation code is generated on the product after the authorization code is successfully installed.

```
admin#license smart reservation install "specificPLR<authorizationCode><flag>A</flag><version>C</version><pid>6191f5e5-319e-41ff-abba-b220ea4b2e1</pid><timestamp>1585405336190</timestamp><entitlements>
<entitlement><tag>regid.2017-02.com.cisco.UCM_CUWL_12_0_cc59375a-1cd8-4b36-8366-6f42abba905</tag><count>1</count><startDate>2020-Mar-04 UTC</startDate><endDate>2020-Aug-31 UTC</endDate><licenseType>TERM</licenseType><diapla
yName>UC Manager CUWL License (12.X)</displayName><tagDescription>UC Manager CUWL License</tagDescription><subscriptionID></subscriptionID></entitlement><entitlement><tag>regid.2016-07.com.cisco.UCM_Enhanced.12.0_66
d0d1cf-4883-4761-91d0-d01d3eb1949a</tag><count>1</count><startDate></startDate><endDate></endDate><licenseType>PERPETUAL</licenseType><displayName>UC Manager Enhanced License (12.X)</displayName><tagDescription>UC M
anager Enhanced License</tagDescription><subscriptionID></subscriptionID></entitlement></entitlements></authorizationCode><signature>MEQCIFLpw4k+0Q+Zr3bp
/ucJ3KNyKVGdGumUvN0BuGyiv9JAiBCB6O+c2GxA52FUfIAZdVhHz9xcVbbr/rAwoavm9Hnw==</signature></udi>P.UCM,S.edb16.U.d9a2c661-8fe1-4ce7-9e6f-bbc68a3ed3b16</udi>
Please enter the confirmation code to CSSM account:4ef63f1
admin#
```

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Step 5 Copy the confirmation code to the CSSM and enter to complete the reservation update.

Update License Reservation

STEP 1 ✓
Select Licenses

STEP 2 ✓
Review and confirm

STEP 3
Authorization Code

✓ The Reservation Authorization Code below has been generated for this product instance. Several steps remain:

1. This code must be entered into the Product Instance's Smart Licensing settings to complete the reservation.
2. When the code has been entered, a Reservation Confirmation Code will be generated.
3. To release licenses in transition, enter confirmation code generated by device into CSSM.

Authorization Code:

```
<specificPLR><authorizationCode><flag>A</flag><version>C</version><pid>8191f5e5-319e-41ff-abba-be220ea4b2e1</pid><timestamp>1595405336190</timestamp><entitlements>
<entitlement><tag>regid.2017-02.com.cisco.UCM_CUWL.12.0_c:59375a-1c18-4b36-8366-6f4d2abba965</tag><count>1</count><startDate>2020-Mar-04 UTC</startDate><endDate>2020-
Aug-31 UTC</endDate><licenseType>TERM</licenseType><displayName>UC Manager CUWL License (12.X)</displayName><tagDescription>UC Manager CUWL License</tagDescription>
<subscriptionID></subscriptionID><entitlement><entitlement><tag>regid.2016-07.com.cisco.UCM_Enhanced.12.0_66d0d1cf-4863-4761-91d0-d01d3eb1949a</tag><count>1</count>
<startDate></startDate><endDate></endDate><licenseType>PERPETUAL</licenseType><displayName>UC Manager Enhanced License (12.x)</displayName><tagDescription>UC Manager
Enhanced License</tagDescription><subscriptionID></subscriptionID><entitlement><entitlements><authorizationCode><signature>MEQCIFDLpw4k+0O+Zr3bp
/ucJ3KnykVGDGumUvN0BuGyvi9JAiBcB6O+c2GxA52FUIfAIzdVhHz9xcVbbr/raWoavm9Hnw==</signature><udi>P-UCM,S.edb16,U.d9a2c661-8fe1-4ce7-9e6f-bbc68a3edb16</udi>
```

To learn how to enter this code, see the configuration guide for the product being licensed

Download as File

Copy to Clipboard

Enter Confirmation Code

Close

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license smart reservation cancel

Use this procedure to cancel the reservation process before the authorization code from Cisco Smart Software Manager against CUCM request code is installed.

Before you begin

Make sure Unified Communications Manager Registration Status is Reservation In Progress, by executing commands in below sequence:

- **license smart reservation enable**
- **license smart reservation request**

Procedure

From Cisco Unified CM Admin Console execute the below CLI command.

- **license smart reservation cancel**

license smart reservation return

Use this procedure to generate a return code that must be entered into the Cisco Smart Software Manager to return the licenses to the virtual account pool and remove the product instance from CSSM.

Before you begin

Make sure Unified Communications Manager Registration Status is Registered- Specific License Reservation by executing commands in below sequence:

- **license smart reservation enable**
- **license smart reservation request**
- **license smart reservation install "<authorization-code>"**

Procedure

- Step 1** From Cisco Unified CM Admin Console execute the license smart reservation return command.
- Step 2** Copy the reservation return code to CSSM and remove the product instance.

The screenshot shows the Cisco Smart Software Licensing web interface. The top navigation bar includes 'Cisco Software Central > Smart Software Licensing' and 'BU Production Test'. The main header is 'Smart Software Licensing' with links for 'Feedback', 'Support', and 'Help'. Below the header, there are navigation tabs: 'Alerts', 'Inventory', 'Convert to Smart Licensing', 'Reports', 'Preferences', 'On-Prem Accounts', and 'Activity'. The 'Virtual Account' is set to 'UCM-Test'. The 'Product Instances' tab is selected and highlighted with a red box. A table lists product instances with columns for Name, Product Type, Last Contact, Alerts, and Actions. One instance is listed: 'UDL_PID UCM, UDLSN edb10', 'UCL', '2020-Jul-22 08:11:19 (Reserved Licenses)'. A context menu is open over the 'Actions' column, showing options: 'Transfer...', 'Update Reserved Licenses...', 'Remove...', and 'Rehost Licenses from a Failed Product...'. Below the table, a 'Remove Product Instance' dialog box is displayed. The dialog has a title bar with a close button. The main text reads: 'To remove a Product Instance that has reserved licenses and make those licenses once again available to other Product Instances, enter in the Reservation Return Code generated by the Product Instance. If you cannot generate a Reservation Return Code, contact [Cisco Support](#)'. Below this, there is a field labeled '* Reservation Return Code:' with a placeholder text 'Enter the Reservation Return Code'. At the bottom of the dialog, there are two buttons: 'Remove Product Instance' (in blue) and 'Cancel'.

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license smart reservation return-authorization "<authorization-code>"

Use this procedure to generate a return code for the authorization code not installed yet. The return code must be entered into the Cisco Smart Software Manager to return the licenses to the virtual account pool and remove the product instance from CSSM.

Before you begin

Make sure Unified Communications Manager Registration Status is Reservation In Progress, by executing commands in below sequence:

- **license smart reservation enable**

- license smart reservation request

Procedure

- Step 1** From Cisco Unified CM Admin Console execute the license smart reservation return-authorization "<authorization-code>" command.
- Step 2** Copy the reservation return code to CSSM and remove the product instance.

The screenshot shows the Cisco Software Central interface for Smart Software Licensing. The 'Product Instances' tab is selected and highlighted with a red box. A table lists product instances, with one instance selected. An 'Actions' dropdown menu is open, showing options like 'Remove...'. Below the table, a 'Remove Product Instance' dialog box is displayed, prompting the user to enter a 'Reservation Return Code'.

Virtual Account: UCM-Test

Alerts | Inventory | Convert to Smart Licensing | Reports | Preferences | On-Prem Accounts | Activity

Major | Minor | Hide Alerts

General | Licenses | **Product Instances** | Event Log

Search by Name, Product Type

Name	Product Type	Last Contact	Alerts	Actions
UDI_PID UCM; UDI_SN edb10;	UCL	2020-Jul-22 08:11:19 (Reserved Licenses)		Actions

Transfer...
Update Reserved Licenses...
Remove...
Rehost Licenses from a Failed Product...

Remove Product Instance

To remove a Product Instance that has reserved licenses and make those licenses once again available to other Product Instances, enter in the Reservation Return Code generated by the Product Instance. If you cannot generate a Reservation Return Code, contact [Cisco Support](#)

* **Reservation Return Code:**

Remove Product Instance Cancel

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Upgrading Specific License Reservation Enabled System to Version 14

If you are upgrading the 12.5 Unified Communications Manager system which is enabled for license reservation to version 14 following are the scenarios need to be considered:

1. Before upgrade to version 14, return the 12.x licenses using "license smart reservation return" command (Recommended).
OR
After upgrade to version 14, return the 12.x licenses using "license smart reservation return" command.
2. Create request code using the "license smart reservation request" command. Generate authorization code with version less licenses in Cisco Smart Software Manager.
3. Install the authorization code using "license smart reservation install <auth-code>" command in Cisco Unified Communications Manager.

Upgrading Permanent License Reservation Enabled System to Version 15

If you are upgrading the 14 SU2 and above Unified Communications Manager systems which is enabled for Permanent License Reservation (PLR) to version 15, consider the following scenarios:

1. Before upgrade to version 15, return the license using the "license smart reservation return" command.
2. After upgrade, create request code using the "license smart reservation request" command. Generate authorization code with PLR license in Cisco Smart Software Manager.
3. Install the authorization code using "license smart reservation install <auth-code>" command in Unified Communications Manager.

Version Independent Licensing



Important This section is applicable from Release 14 onwards.

Unified Communications Manager supports Version Independent User Licenses. The Licenses are annuity-style and issued for the subscription term. You can order these V14 licenses through Flex EA (Enterprise Agreement) or Flex NU (Named User—Professional, Enhanced, Access). For more information, see the [Ordering Guide](#).

Unified Communications Manager continues to use the version 12.X License.

The licenses are managed on CSSM (Cisco Smart Software Manager). For more information, see [Smart Software Licensing, on page 1](#).

Smart Licensing Export Compliance

Smart Licensing provides a method that allows user to use export control features. In the connected state, use export control feature using the registration process. In the disconnected state, use export control feature using Smart License Reservation.

This export control feature is a solution for customers with a smart account, for whom Export Restrictions apply. This feature allows the user to request a regulatory Export License that is granted in the Cisco Smart Software Manager or the satellite and enable the export restricted feature on Cisco Unified Communications Manager.

The following options describe the new functionality and design elements for the export control feature:

- license smart export request local <exportfeaturename>
- license smart export return local <exportfeaturename>
- license smart export cancel

Export Control Task Flow

Complete the following tasks to export control licenses for Cisco Unified Communications Manager.

license smart export request local <exportfeaturename>

This command allows user with Smart Account for whom Export Restrictions apply, to request a regulatory export license from Cisco Smart Software Manager or satellite.

The command returns an export authorization key if regulatory export license is available on Cisco Smart Software Manager or satellite and enable export restricted feature on the product.

Before you begin

Cisco Unified Communications Manager is registered with Cisco Smart Software Manager or satellite. Make sure <CUCM Export Restricted Authorization Key> license is available on Cisco Smart Software Manager.

Procedure

From Cisco Unified CM Admin Console, execute the following CLI command:

- license smart export request local <exportfeaturename>
-

license smart export return local <exportfeaturename>

The command allows to return a previously requested export restricted license to Cisco Smart Software Manager or satellite. The export authorization key for the export restricted feature is removed from the system.

Before you begin

Export authorization key is generated for the feature.

Procedure

From Cisco Unified CM Admin Console, execute the following CLI command:

- license smart export return local <exportfeaturename>
-

license smart export cancel

This command allows user with Smart Account for whom Export Restrictions apply, to cancel the automatic retry of previously failed export request or return from Cisco Smart Software Manager or satellite.

Before you begin

Cisco Unified Communications Manager is registered with Cisco Smart Software Manager or satellite.

Procedure

From Cisco Unified CM Admin Console, execute the following CLI command:

- license smart export cancel
-

