

# **Manage Licenses**

Cisco Crosswork Planning supports Cisco Smart Licensing. A license is required to use all the features in Cisco Crosswork Planning. If you have questions about obtaining a license, contact your Cisco support representative or system administrator.

This chapter contains the following topics:

- Cisco Smart Licensing Overview, on page 1
- Workflow: Smart Licensing Configuration, on page 1
- Configure the Transport Mode Between Cisco Crosswork Planning and CSSM, on page 2
- Register Cisco Crosswork Planning via Token, on page 3
- Register Cisco Crosswork Planning via Offline Reservation, on page 6
- Update License Counts, on page 9
- License Authorization Statuses, on page 10

## **Cisco Smart Licensing Overview**

Cisco Smart Licensing is a flexible licensing model that provides you with an easier, faster, and more consistent way to purchase and manage software across the Cisco portfolio and across your organization. And it's secure – you control what users can access. With Smart Licensing you get:

- Easy Activation: Smart Licensing establishes a pool of software licenses that can be used across the entire organization—no more PAKs (Product Activation Keys).
- Unified Management: My Cisco Entitlements (MCE) provides a complete view into all of your Cisco products and services in an easy-to-use portal, so you always know what you have and what you are using.
- License Flexibility: Your software is not node-locked to your hardware, so you can easily use and transfer licenses as needed.

## **Workflow: Smart Licensing Configuration**

The high-level steps involved in configuring Cisco Smart Licensing are as follows:

Step	Action           Go to Smart Account Request and follow the instructions on the website.	
1. Set up a Smart Account on Cisco Software Central (software.cisco.com).		
2. (Optional) Configure transport settings.	Configure the Transport Mode Between Cisco Crosswork Planning and CSSM, on page 2.	
3. Register Cisco Crosswork Planning with the Cisco Smart Software Manager (CSSM).	<ul> <li>See:</li> <li>Register Cisco Crosswork Planning via Token, on page 3</li> <li>Register Cisco Crosswork Planning via Offline Reservation, on page 6</li> </ul>	

#### Table 1: Smart Licensing Configuration Workflow

A **Cisco Smart Account** provides the repository for Smart enabled products and enables you to activate Cisco licenses, monitor license usage and track Cisco purchases. The **Cisco Smart Software Manager (CSSM)** enables you to manage all your Cisco Smart software licenses from one centralized website. With Cisco Smart Software Manager, you may create and manage multiple virtual accounts within your Smart Account to manage licenses. For a more detailed overview on Cisco Licensing, go to cisco.com/go/licensingguide.

In the Cisco Crosswork Planning UI, from the main menu, choose **Licensing**. The Smart License page opens. On this page, you can register Cisco Crosswork Planning, edit the transport settings, renew the license, and de-register the application.

# Configure the Transport Mode Between Cisco Crosswork Planning and CSSM

You can configure the transport settings to decide how Cisco Crosswork Planning communicates with CSSM.

- Direct: Cisco Crosswork Planning directly connects with CSSM.
- **Transport Gateway**: Cisco Crosswork Planning communicates via a Transport Gateway or CSSM On-prem, which replicates the cloud-based user experience but keeps all communication on premises. For more information on the CSSM On-prem option, see the Smart Software Manager guide.



**Note** Cisco Crosswork Planning supports only SmartTransport URL. The URL is in the format: http://<*SSM-ONPREM-IP*>/SmartTransport.

 HTTP/HTTPS Proxy: Cisco Crosswork Planning communicates to the direct mode end point via the configured proxy, if proxy is configured.



**Note** Transport settings cannot be changed while the Cisco Crosswork Planning product is in Registered mode. You have to de-register to change them.

**Step 1** From the main menu, choose **Licensing**. The Smart License page opens.

**Step 2** The **Transport settings** field displays the current transport mode selected. To modify, click **View / Edit**. The Transport settings dialog box is displayed.

#### Figure 1: Transport Settings Dialog Box

Transport settings					
Configure how the product will com so any changes made here will appl	municate with Cisco. Note that this setting is shared with smart call home, y to other features using this service.	,			
Direct - Product communication	tes directly with Cisco's licensing servers. (j)				
O Transport Gateway - Proxy o	O Transport Gateway - Proxy data via transport gateway or CSSM on-prem (satellite).				
URL					
O HTTP/ HTTPS Proxy - Send	data via an intermediate HTTP or HTTPS proxy.				
IP Address					
Port					
Username					
Password	۵ Show				

- **Step 3** Select the relevant transport mode and make relevant entries in the fields provided.
- Step 4 Click Save.

## **Register Cisco Crosswork Planning via Token**

To enable the licensed features, the Cisco Crosswork Planning application must be registered to CSSM using a registration ID token. Once registered, an Identity Certificate is saved securely in the Smart Account and used for all ongoing communications. The certificate is valid for one year and will be renewed automatically after six months to ensure continuous operation.



**Note** For information on generating the registration token, please refer to the support resources provided in the Cisco Software Central web page.

#### Before you begin

Confirm that you have a Smart Account. If not, go to Smart Account Request and follow the instructions on the website.

**Step 1** From the main menu, choose **Licensing**. The registration status and license authorization status will be **Unregistered** and **Evaluation mode** respectively.

#### Figure 2: Smart Software Licensing Unregistered Example

i To register your Cisco Crosswork Planning application with Cisco smart licensing:					
<ul> <li>Ensure that the product has access to the internet or on-premise Cisco smart software manager installed on your network. This might require you to edit Transport Settings.</li> <li>Log in to your smart account in Cisco Smart Software Manager or your on-premise Cisco smart software manager.</li> <li>Navigate to the virtual account containing the licenses to be used by this product instance.</li> <li>Generate a product instance registration token (this identifies your smart account), and copy or save it.</li> </ul> Register Smart Software Licensing					
Smart software licensing s	Smart software licensing status				
Registration status	4 Unregistered				
License authorization status	🔥 Evaluation mode (90 days, 0 hr, 0 min, 0 sec remaining)				
Export-controlled functionality	Not allowed				
Transport settings	Direct View / Edit				
Smart license usage					
Update license count					
License	Description	Count			
CP_RTM_ESS	CP Essentials RTM	100			

**Step 2** In the Smart Software Licensing information box at the top, click **Register**.

The Smart Software Licensing Product Registration dialog box is displayed.

Figure 3: Smart Software Licensing Product Registration Dialog Box

Smart Software Licensing Product Registration	$\times$
Register via token O Register via reserved license (1)	
To register the product with Cisco smart licensing:	
<ul> <li>Ensure that you have connectivity to the URL specified in your Transport Settings. See the online help registering to a on-premise Cisco smart software manager.</li> <li>Paste the product instance registration token you generated from Cisco Smart Software Manager or yo on-premise Cisco smart software manager.</li> </ul>	ur
<ol> <li>After successful registration, refresh the page to see the updated status.</li> </ol>	
Product instance registration token	
	ĥ
Re-register this product instance if this is already registered.	
Cancel Regi	ster

- **Step 3** In the **Product instance registration token** field, enter the registration token generated from your Smart Account. Make sure the token ID is accurate and within validity period.
- **Step 4** (Optional) If you are re-registering the application, check the **Re-register this product registration if it is already registered** check box.
- **Step 5** Click **Register**. It may take a few minutes to process the registration. If successful, the 'Product Registration completed successfully' message is displayed.

The registration status and license authorization status will be updated as **Registered** and **Authorized** respectively.

- It will take a minimum of 20 seconds for the request to succeed. If you do not get the correct response from the backend within the first 20 seconds, the UI will continue to check every 10 seconds for up to five minutes. If no response is obtained after five minutes, the system will display a generic error message.
  - If you encounter a registration error (for example, "Communication send error" or "Invalid response from licensing cloud"), wait for some time and retry the registration. If the error persists after multiple attempts, contact the Cisco Customer Experience team.
  - In some cases, after successful registration, the page may need to be refreshed manually to see the updated status.

### **Manually Perform Licensing Actions**

The renewal of registration and authorization is automatically enabled for Cisco Crosswork Planning, by default. However, in the event of a communication failure between the application and the Cisco server, these actions can be manually initiated. You can use the **Actions** drop-down button to manually renew, re-register and de-register the application.

#### Before you begin

Make sure that the application is in Registered mode.

- **Step 1** From the main menu, choose **Licensing**. The Smart License page appears.
- **Step 2** Click the **Actions** drop-down button and select the relevant option for the following quick actions.
  - a) Actions > Renew Authorization: To renew the authorization manually if the automatic renewal service fails at the end of 30 days.
  - b) Actions > Renew Registration: To renew the registration manually if the automatic renewal service fails at the end of 6 months.
  - c) Actions > Re-register: Re-register the application, for example, on account of the expiry of registration tokens.
  - d) Actions > De-register: De-register the application, for example, when the transport settings need to be changed.
    - **Note** Once de-registered, the application will be moved to **Evaluation** mode (if evaluation period is available) or **Evaluation Expired** mode. For more information, see License Authorization Statuses, on page 10.

## **Register Cisco Crosswork Planning via Offline Reservation**

When Smart Licensing is used, Cisco Crosswork Planning shares usage information to CSSM at regular intervals. If you do not want to connect with CSSM regularly, Cisco Smart Licensing provides an option of offline reservation.

There are two modes of offline reservation:

• Specific License Reservation (SLR)—In this mode, you can select the number of licenses of each entitlement that has to be reserved.

• Permanent License Reservation (PLR)—In this mode, there will be a single license that will make the entire product In Compliance.

#### Before you begin

Confirm that you have a Smart Account. If not, go to Smart Account Request and follow the instructions on the website.

- **Step 1** From the main menu, choose **Licensing**.
- **Step 2** In the Smart Software Licensing information box at the top, click **Register**.

The Smart Software Licensing Product Registration dialog box is displayed.

#### Step 3 Choose the **Register via reserved license** option.

#### Figure 4: Smart Software Licensing Product Registration Dialog Box

Smart Software Licensing Product Registration $ imes$
🔿 Register via token 🛛 💿 Register via reserved license 🛈
Use of license reservation requires specific permission from Cisco.
If you do not see a "reserve licenses" in inventory > license in Cisco Smart Software Manager, your account does not have the ability to use this feature.
Be aware that license reservation can reduce or nullify many of the benefits of Cisco smart licensing, including:
<ul> <li>Dynamic movement of license consumption between products, whether failed or otherwise</li> <li>License usage visibility and asset management</li> <li>Simplified product registration</li> </ul>
To continue, ensure that you have surplus of the licenses you will be requesting in your smart account.
Reservation code
Use this code to obtain an authorization code from Cisco smart software manager.
Copy Save to file Generate
<ul> <li>Paste authorization code O Upload authorization file</li> <li>Paste the authorization code copied from Cisco smart software manager.</li> </ul>
Cancel Register

**Step 4** Click the **Generate** button under the Reservation code section. Your Reservation Request Code is generated and populated in the text field. Copy this code using **Copy** button.

Step 5	Go to CSSM and select the appropriate Virtual Account.		
Step 6	Click the <b>Licenses</b> tab, then click <b>License Reservation</b> . Paste the Reservation Request Code that you generated in Step 3 and click <b>Next</b> .		
Step 7	On the Select Licenses page, select the <b>Reserve a specific license</b> or <b>Reserve a permanent license</b> radio button, respectively, based on the type of reservation you need (SLR or PLR). Then, click <b>Next</b> .		
Step 8	On the Review and Confirm page, click Generate Authorization Code. Copy the code using the Copy to Clipboard button.		
Step 9	Navigate back to the Smart Software Licensing Product Registration page in the Cisco Crosswork Planning UI. Select the <b>Paste authorization code</b> radio button and paste the authorization code in the text field.		
Step 10	Click <b>Register</b> . It may take a few minutes to process the registration.		
	The registration status and license authorization status will be updated as <b>Registered</b> and <b>Authorized</b> respectively.		

### **Update Offline Reservation**

Use the Update Reservation option to update the license counts reserved via offline reservation.

- **Step 1** From the main menu, choose **Licensing**. Make a note of the Product Instance Name (available under the Smart Software Licensing Status section).
- **Step 2** Go to CSSM and select the appropriate virtual account.
- **Step 3** Click the name of the product instance that matches your Product Instance Name.
- **Step 4** For this product instance, click the **Actions** drop-down button and choose **Update Reservation**.
- Step 5 In the Select Licenses screen, select the Reserve a Specific License radio button, update the count of the necessary licenses from the list and click Next.
- **Step 6** In the Review and Confirm page, click **Generate Authorization Code**. Copy the code using **Copy to Clipboard** button.
- Step 7Navigate back to the Smart License page on the Cisco Crosswork Planning UI. Click the Actions drop-down button<br/>and choose Update Reservation. Paste the Authorization Code that you generated in the previous step and click Update.

A Confirmation Code is generated. You can find this under the Smart Software Licensing Status section. Copy this code.

- **Step 8** Navigate back to CSSM. Click the required product instance name.
- **Step 9** Click the **Actions** drop-down button and choose **Enter Confirmation Code**.
- **Step 10** Enter/paste the Reservation Confirmation Code that was generated in Step 7 and click **OK**.

The license count will be updated on the Smart License page of the Cisco Crosswork Planning UI.

### **Disable Offline Reservation**

Use the **Return Reservation** option to release the reserved licenses. Once the licenses are released, the application will be moved to **Evaluation** mode (if evaluation period is available), or **Evaluation Expired** mode. For more information, see License Authorization Statuses, on page 10.

Step 1	From the main menu, choose <b>Licensing</b> . Make a note of the Product Instance Name (available under the Smart Software Licensing Status section).			
Step 2	Click the Actions drop-down button and choose Return Reservation.			
Step 3	In the Confirm Return Reservation window, click Confirm.			
	A Release Code (Reservation Return Code) is generated. Copy this code using the Copy button.			
Step 4	Navigate to CSSM and select the appropriate virtual account.			
Step 5	Click the name of the product instance that matches your Product Instance Name.			
Step 6	For this product instance, click the Actions drop-down button and choose Remove.			
Step 7	In the Remove Reservation pop-up, paste the Reservation Return Code that you generated in Step 3 and click <b>Remove Reservation</b> .			
	The Registration status will be updated to Unregistered in the Smart License page of the Cisco Crosswork Planning UI.			
Step 8	Navigate back to the Smart License page in the Cisco Crosswork Planning UI. Click the <b>Actions</b> drop-down button and choose <b>Disable License Reservation</b> .			

# **Update License Counts**

In Cisco Crosswork Planning, you can enter number of licenses for usage as per your requirement. Ensure that you have a sufficient number of licenses in the Virtual Account; otherwise, it will be out of compliance.

For the tools in the Cisco Crosswork Planning Design application to function correctly, you must have the appropriate number of licenses. Follow these steps to update the license counts.

Step 1	From th	e main	menu,	choose	Licensing.
--------	---------	--------	-------	--------	------------

Step 2 Under the License usage section, click Update license count.

The Update License Count window appears.

**Step 3** Enter the required license count in the **Modified count** column.

Figure 5: Update License Count

Update License Count				
i Modify the license licenses in the vi	se count to be used by this p irtual account containing this	roduct. Ensure that you have product; otherwise, it will be	a sufficient number of out of compliance.	
			Total 3 🔞	-
License	Description	Count	Modified count	
CP_RTM_ESS	CP Essentials RTM	1000		$\supset$
CP_RTU_ESS	CP Essentials RTU	1000		$\supset$
CP_RTU_ADV	CP Advantage RTU	1000		$\supset$

There are three types of licenses in Cisco Crosswork Planning:

- CP\_RTM\_ESS—You can choose to have either 1 license or a number of licenses equal to the number of nodes in the network. Cisco Crosswork Planning Collector application functions even if only one license is available. However, for Cisco Crosswork Planning Design application, the count must match the number of nodes in the network. This is necessary for the tools and initializers to function correctly.
- CP\_RTU\_ESS—You can have a count of 1 for both Cisco Crosswork Planning Collector and Design applications to function correctly.
- CP\_RTU\_ADV—You can have a count of 1 for both Cisco Crosswork Planning Collector and Design applications to function correctly.

Step 4 Click Save.

## **License Authorization Statuses**

Based on the registration status, you can see the following License Authorization Statuses.

Registration Status	License Authorization Status	Description
Unregistered	Evaluation mode	A 90-day evaluation period during which the licensed features of the application can be freely used. This state is initiated when you use the application for the first time.
	Evaluation Expired	The application has not been successfully registered at the end of the evaluation period. During this state, the application features are disabled, and you must register to continue using the application.
	Registered Expired	The application is unable to contact the CSSM before the expiration of Identity Certificates and has returned to the unregistered state. The application resumes the remaining evaluation period, if available. At this stage, new registration ID token is required to reregister the application.
Registered	Authorized (In Compliance)	The application has been fully authorized to use the reserved licensed features. The authorization is automatically renewed every 30 days.
	Out of Compliance	The associated Virtual Account does not have enough licenses to reserve for the application's current feature use. You must renew the entitlement/usage limit registered with the token to continue using the application.
	Authorization Expired	The application is unable to communicate with the CSSM for 90 days or more, and the authorization has expired.

#### **Table 2: License Authorization Statuses**

I