



Manage Licenses

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Cisco Smart Licensing

Cisco Smart Licensing is a flexible licensing model that

- provides an easier, faster, and more consistent way to purchase and manage software across the Cisco portfolio and across your organization
- enables centralized control over license usage and access, and
- is secure allowing you to control what users can access.

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.

Benefits of Smart Licensing

Key benefits of Smart Licensing include:

- **Easy activation:** Establishes a pool of software licenses that can be used across the entire organization, eliminating the need for Product Activation Keys (PAKs).
- **Unified management:** Provides a complete view into all of your Cisco products and services in a user-friendly portal, helping you always know what you have and use.
- **License flexibility:** Allows you to easily use and move licenses as needed since the software is not node-locked to your hardware.

Configuring Smart Licensing

Summary

A Cisco Smart Account provides a repository for Smart enabled products. It 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 CSSM, you can create and manage multiple virtual accounts within your Smart Account to manage licenses. For details 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. You can register Cisco Crosswork Planning, edit the transport settings, renew the license, and deregister the application on this page.

Workflow

These are the stages of configuring Cisco Smart Licensing in Cisco Crosswork Planning.

1. Set up a Smart Account on Cisco Software Central (software.cisco.com).
 - Go to [Smart Account Request](#).
 - Follow the instructions on the website.
2. (Optional) Configure transport settings. For details, see [Configure the transport mode between Cisco Crosswork Planning and CSSM, on page 2](#).
3. Register Cisco Crosswork Planning with CSSM. For details, see [Register Cisco Crosswork Planning via token, on page 3](#) or [Register Cisco Crosswork Planning via offline reservation, on page 6](#).

Configure the transport mode between Cisco Crosswork Planning and CSSM

This topic describes how to configure the transport settings to control how Cisco Crosswork Planning communicates with CSSM.

Cisco Crosswork Planning supports multiple transport modes to connect with CSSM:

- **Direct:** Cisco Crosswork Planning directly connects with CSSM.
- **Transport Gateway:** Cisco Crosswork Planning communicates via a Transport Gateway or CSSM on-premises. This approach replicates a cloud-based user experience while keeping all communication on premises. For details on the CSSM on-premises option, see the [Smart Software Manager guide](#).



Note

Cisco Crosswork Planning supports only SmartTransport URL. The URL format is: `http://SSM-ONPREM-IP/SmartTransport`.

- **HTTP/HTTPS Proxy:** Cisco Crosswork Planning connects to the direct mode end point through the configured proxy, if a proxy exists.

Follow these steps to configure the transport mode between Cisco Crosswork Planning and CSSM.

Before you begin

If Cisco Crosswork Planning is in Registered mode, you cannot change the transport settings. To modify transport settings, you must first deregister the product.

Procedure

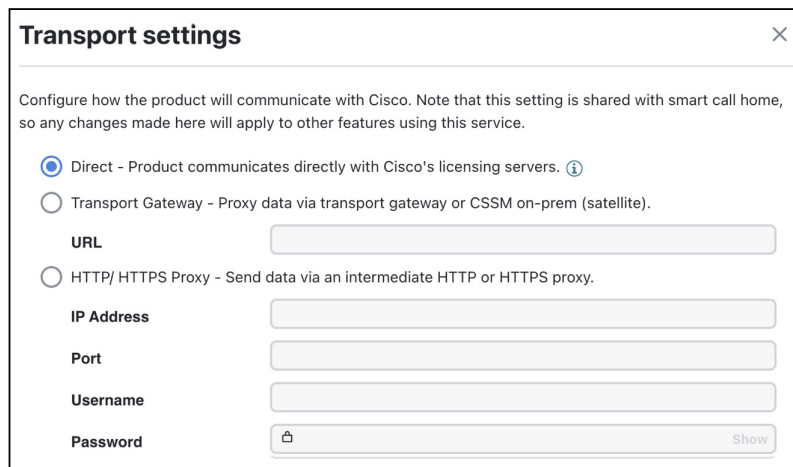
Step 1 From the main menu, choose **Licensing**.

The Smart License page opens.

Step 2 In the **Transport settings** field, view the current transport mode. To modify it, click **View / Edit**.

The Transport settings page appears.

Figure 1: Transport settings page



Step 3 Select the appropriate transport mode. Enter values in all the required fields.

Step 4 Click **Save**.

The selected transport mode and settings are saved. Cisco Crosswork Planning will use the configured transport mode for communication with CSSM.

Register Cisco Crosswork Planning via token

This topic describes how to register Cisco Crosswork Planning with CSSM using a registration token.

To enable the licensed features, you must register the Cisco Crosswork Planning application with CSSM using a registration token. Once registered, an Identity Certificate is saved securely in your Smart Account and used

for all ongoing communications. The certificate is valid for one year and is renewed automatically after six months to ensure continuous operation.

Before you begin

- Confirm that you have a Smart Account. If not, go to [Smart Account Request](#) and follow the instructions to create one.
- Ensure you have a valid product instance registration token. For guidance on generating the token, see the support resources in [Cisco Software Central](#).

Procedure

Step 1 From the main menu, choose **Licensing**.

The registration status and license authorization status display as **Unregistered** and **Evaluation mode**, respectively.

Figure 2: Smart software licensing unregistered example

i To register your Cisco Crosswork Planning application with Cisco smart licensing:

- 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](#).
- Log in to your smart account in [Cisco Smart Software Manager](#) or your on-premise Cisco smart software manager.
- Navigate to the virtual account containing the licenses to be used by this product instance.
- Generate a product instance registration token (this identifies your smart account), and copy or save it.

[Register](#) [Smart Software Licensing](#)

Smart software licensing status

Registration status	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

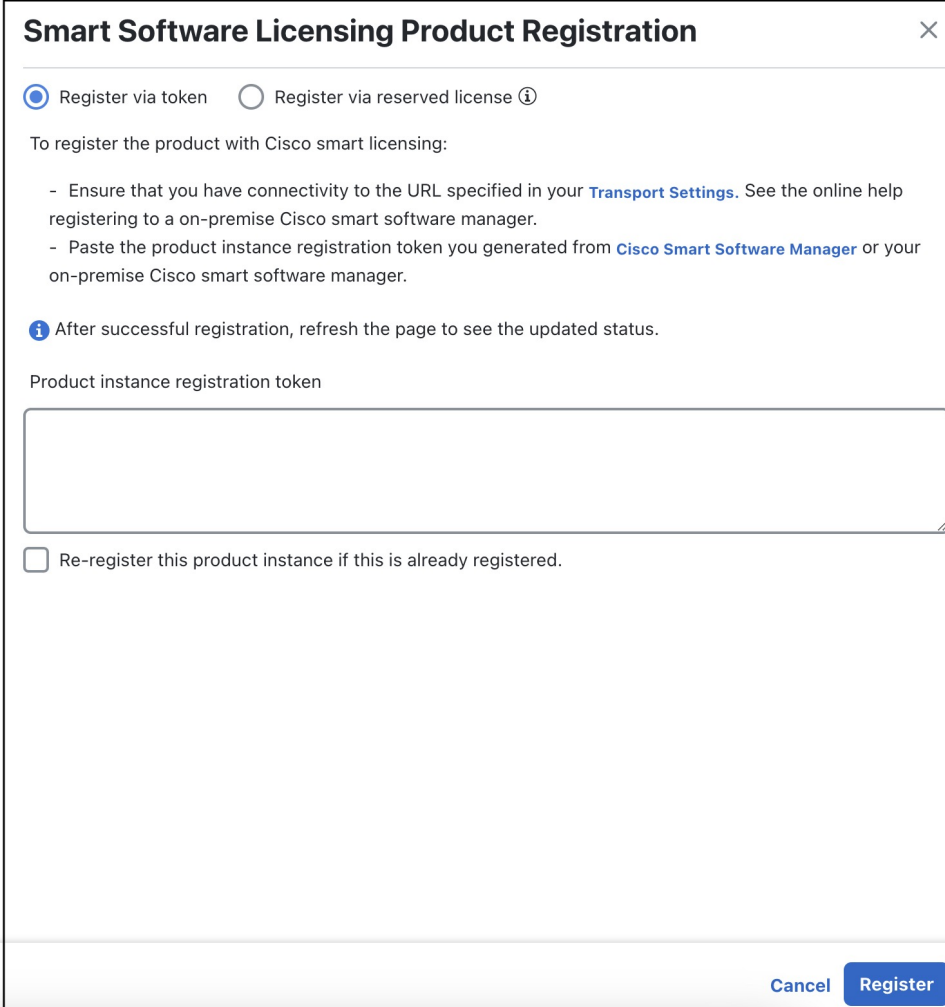
[Update license count](#)

License	Description	Count
CP_RTM_ESS	CP Essentials RTM	100

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

The Smart Software Licensing Product Registration page opens.

Figure 3: Smart software licensing product registration page



The image shows a 'Smart Software Licensing Product Registration' dialog box. At the top, there are two radio buttons: 'Register via token' (selected) and 'Register via reserved license' (with an information icon). Below this, a text block explains how to register with Cisco smart licensing, including instructions on connectivity and token generation. An information icon followed by text states: 'After successful registration, refresh the page to see the updated status.' Below this is a text input field labeled 'Product instance registration token'. At the bottom, there is a checkbox labeled 'Re-register this product instance if this is already registered.' and two buttons: 'Cancel' and 'Register'.

Smart Software Licensing Product Registration ✕

☒ Register via token ☐ Register via reserved license ⓘ

To register the product with Cisco smart licensing:

- 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.
- Paste the product instance registration token you generated from [Cisco Smart Software Manager](#) or your on-premise Cisco smart software manager.

ⓘ After successful registration, refresh the page to see the updated status.

Product instance registration token

☐ Re-register this product instance if this is already registered.

Cancel Register

Step 3 In the **Product instance registration token** field, enter the registration token generated from your Smart Account. Ensure the token ID is accurate and within its 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**.

Note

- The request takes at least 20 seconds to succeed. If you do not receive a correct response from the backend within 20 seconds, the UI continues to check every 10 seconds for up to 5 minutes. If you do not receive any response after 5 minutes, a generic error message appears.
- If you see a registration error (such as "Communication send error" or "Invalid response from licensing cloud"), wait for some time and then retry the registration. If the error persists after multiple attempts, contact the Cisco Customer Experience team.
- In some cases, after successful registration, you may need to refresh the page manually to see the updated status.

After the registration is successful, a "Product Registration completed successfully" message appears.

Cisco Crosswork Planning is now registered with CSSM using a registration token. The registration and license authorization statuses are change to **Registered** and **Authorized**, respectively.

Manually perform licensing actions

This topic describes how to manually renew, register, or de-register licenses in Cisco Crosswork Planning.

By default, Cisco Crosswork Planning automatically handles registration and authorization renewals. However, if communication between the application and the Cisco server fails, manually initiate specific licensing actions using the **Actions** drop-down menu.

Before you begin

Ensure the Cisco Crosswork Planning application is in Registered mode.

Procedure

Step 1 From the main menu, choose **Licensing**.

The Smart License page appears.

Step 2 Click the **Actions** drop-down button.

Step 3 Select one of these options as required.

- a) **Renew Authorization:** manually renews authorization if automatic renewal fails after 30 days.
- b) **Renew Registration:** manually renews registration if automatic renewal fails after six months.
- c) **Re-register:** re-registers the application, for example, if registration token has expired.
- d) **De-register:** de-registers the application, for example, when you need to change the transport settings.

Note

After you de-register the application, it enters the **Evaluation** mode if evaluation period is available. Otherwise, it enters the **Evaluation Expired** mode. For more information, see [License authorization statuses, on page 11](#).

The selected manual licensing action completes, and the application's license status is updated accordingly.

Register Cisco Crosswork Planning via offline reservation

This topic describes how to register Cisco Crosswork Planning with CSSM using offline reservation.

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

Before you begin

Confirm that you have a Smart Account. If not, go to [Smart Account Request](#) and follow the instructions to create one.

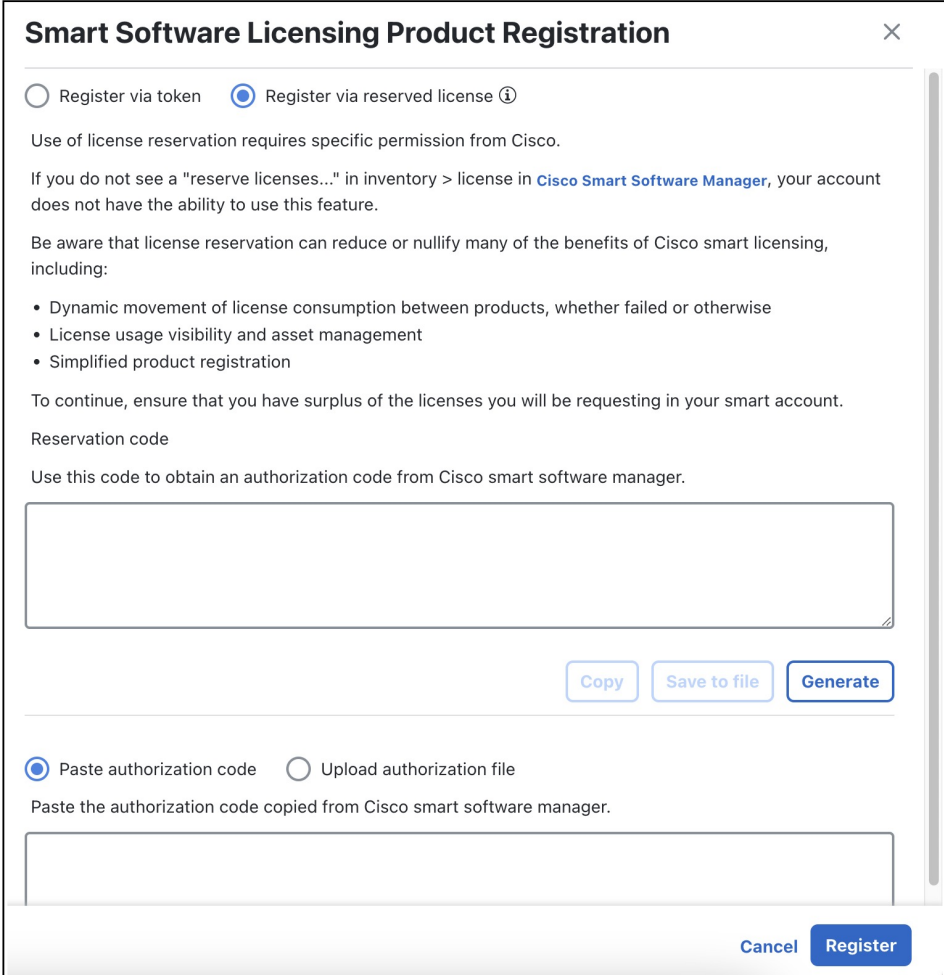
Procedure

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 page opens.

Figure 4: Smart software licensing product registration page



The image shows a 'Smart Software Licensing Product Registration' dialog box. At the top, there are two radio buttons: 'Register via token' and 'Register via reserved license' (which is selected). Below the radio buttons, there is a paragraph of text explaining that using license reservation requires specific permission from Cisco. This is followed by a warning that if the user does not see a 'reserve licenses...' option in the inventory, their account may not have the necessary permissions. Another paragraph states that license reservation can reduce or nullify many benefits of Cisco smart licensing, including dynamic movement of license consumption, license usage visibility, and simplified product registration. A note advises the user to ensure a surplus of licenses in their smart account. Below this, there is a section for a 'Reservation code' with a text input field and 'Copy', 'Save to file', and 'Generate' buttons. At the bottom, there are two radio buttons: 'Paste authorization code' (selected) and 'Upload authorization file'. A final text input field is provided for pasting the authorization code. 'Cancel' and 'Register' buttons are at the bottom right.

Smart Software Licensing Product Registration ×

☐ 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:

- Dynamic movement of license consumption between products, whether failed or otherwise
- License usage visibility and asset management
- Simplified product registration

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.

☒ Paste authorization code ☐ Upload authorization file

Paste the authorization code copied from Cisco smart software manager.

Step 3 Select the **Register via reserved license** option.

Step 4 Generate a Reservation Request Code.

- Click **Generate** in the Reservation code section. The Reservation Request Code appears in the text field.
- Click the **Copy** button to copy the generated code.

Step 5 Generate the Authorization Code in CSSM.

- a) Log in to CSSM and select the appropriate Virtual Account.
- b) Click the **Licenses** tab and then click **License Reservation**.
- c) Paste the Reservation Request Code you generated in Step 4 and click **Next**.
- d) On the Select Licenses page, select the type of reservation you need and click **Next**.
- e) On the Review and Confirm page, click **Generate Authorization Code**.
- f) Copy the generated code using the **Copy to Clipboard** button.

Step 6 Navigate back to the Smart Software Licensing Product Registration page in Cisco Crosswork Planning.

Step 7 Select the **Paste authorization code** option and paste the authorization code in the text field.

Step 8 Click **Register**.

It may take a few minutes to process the registration.

Cisco Crosswork Planning is now registered with CSSM using the offline reservation method. The registration and license authorization statuses change to **Registered** and **Authorized**, respectively.

Update offline reservation

This topic describes how to update the license counts associated with a product instance that uses offline reservation.

Procedure

- Step 1** From the main menu, choose **Licensing**. Note the Product Instance Name under the Smart Software Licensing Status section.
- Step 2** Generate the Authorization Code in CSSM.
- a) Log in to CSSM and select the appropriate Virtual Account.
 - b) Click the name of the product instance that matches your Product Instance Name.
 - c) For this product instance, click **Actions** > **Update Reservation**.
 - d) On the Select Licenses page, select the type of reservation you need, update the count of the necessary licenses from the list, and then click **Next**.
 - e) On the Review and Confirm page, click **Generate Authorization Code**.
 - f) Copy the generated Authorization Code using **Copy to Clipboard**.
- Step 3** Navigate back to the Smart License page on the Cisco Crosswork Planning UI.
- Step 4** Click **Actions** > **Update Reservation**.
- Step 5** Paste the Authorization Code generated in Step 2 and click **Update**.
- A Confirmation Code is generated. You can find it under the Smart Software Licensing Status section. Copy this code.
- Step 6** Enter the Confirmation Code in CSSM.
- a) Navigate back to CSSM and click the required product instance name.
 - b) Click **Actions** > **Enter Confirmation Code**.
 - c) Enter or paste the Reservation Confirmation Code generated in Step 5.

- d) Click **OK**.

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

Disable offline reservation

This topic describes how to release reserved licenses in Cisco Crosswork Planning.

Releasing the reserved licenses returns them to the pool and stops the application from consuming reserved licenses. After you release the licenses, the application enters the **Evaluation** mode if an evaluation period is available. Otherwise, it enters the **Evaluation Expired** mode.

Procedure

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- Step 1** From the main menu, choose **Licensing**. Note the Product Instance Name under the Smart Software Licensing Status section.
- Step 2** Click **Actions > Return Reservation**.
- Step 3** On the Confirm Return Reservation page, click **Confirm**.
- The system generates a Release Code (Reservation Return Code). Use the **Copy** button to copy this code .
- Step 4** Enter the Reservation Request Code in CSSM.
- a) Log in to CSSM and select the appropriate virtual account.
 - b) Click the name of the product instance that matches your Product Instance Name.
 - c) For this product instance, click **Actions > Remove**.
 - d) In the Remove Reservation page, paste the Reservation Return Code that you generated in Step 3 and click **Remove Reservation**.
- Step 5** Navigate back to the Smart License page in the Cisco Crosswork Planning UI. Notice that the Registration status has changed to **Unregistered**.
- Step 6** Click **Actions > Disable License Reservation**.

The reserved licenses are released. The application enters Evaluation mode if available, or enters Evaluation Expired mode.

Update license counts

This topic describes how to update license counts in Cisco Crosswork Planning to ensure compliance and proper operation of the tools in the Cisco Crosswork Planning Design application.

Before you begin

Ensure you have a sufficient number of licenses in your Virtual Account in CSSM. Otherwise, the licenses will be out of compliance.

Procedure

- Step 1** From the main menu, choose **Licensing**.
- Step 2** In the **License usage** section, click **Update license count**.
The Update License Count page appears.
- Step 3** Enter the required license count in the **Modified count** column.

Figure 5: Update license count page

License	Description	Count	Modified count
CP_RTM_ESS	CP Essentials RTM	1000	<input type="text"/>
CP_RTU_ESS	CP Essentials RTU	1000	<input type="text"/>
CP_RTU_ADV	CP Advantage RTU	1000	<input type="text"/>

There are three types of licenses in Cisco Crosswork Planning:

- **CP_RTM_ESS**: You can choose to have either one license or a number of licenses equal to the number of nodes in the network. Cisco Crosswork Planning Collector application functions even if there is only one license. 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**: A count of 1 is sufficient for both Cisco Crosswork Planning Collector and Design applications to function correctly.
- **CP_RTU_ADV**: A count of 1 is sufficient for both Cisco Crosswork Planning Collector and Design applications to function correctly.

- Step 4** Click **Save**.

The system updates and applies the number of licenses.

License authorization statuses

Based on the system registration status, the application displays several distinct license authorization statuses. This topic describes each possible combination of registration status and license authorization status and explains what each means for application usage.

Table 1: License authorization statuses

Registration status	License authorization status	Description
Unregistered	Evaluation mode	A 90-day evaluation period during which all 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 cannot contact the CSSM before its Identity Certificates expire, causing it to return to the unregistered state. The application resumes the remaining evaluation period, if available. At this stage, a new registration ID token is required to reregister the application.
Registered	Authorized (In Compliance)	The application is 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 or 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.

