



# Configuring Cisco Smart Software Licensing

You need to configure Cisco Smart Software Licensing on [Cisco Smart Software Manager \(Cisco SSM\)](#) to easily procure, deploy, and manage licenses for your Cisco Container Platform instance. The number of licenses required depends on the number of VMs necessary for your deployment scenario.

Cisco SSM enables you to manage your Cisco Smart Software Licenses from one centralized website. With Cisco SSM, you can organize and view your licenses in groups called virtual accounts. You can also use Cisco SSM to transfer the licenses between virtual accounts as needed.

You can access Cisco SSM from the Cisco Software Central homepage, under the Smart Licensing area.

Cisco Container Platform is initially available for a 90-day evaluation period after which, you need to register the product.

Based on the level of security required for your environment, you can use one of the following licensing models:

- [Connected Model, on page 1](#)
- [Disconnected Model, on page 2](#)

You need to choose the licensing model when you register Cisco Container Platform.

This chapter contains the following topics:

- [Connected Model, on page 1](#)
- [Disconnected Model, on page 2](#)
- [License Usage and Compliance, on page 2](#)
- [Workflow in a Connected Model, on page 2](#)
- [Workflow in a Disconnected Model, on page 6](#)

## Connected Model

In a connected deployment model, the license usage information is directly sent over the Internet or through an HTTP proxy server to Cisco SSM.

For a higher degree of security, you can opt to use a partially connected deployment model, where the license usage information is sent from Cisco Container Platform to a locally installed VM-based satellite server (Cisco SSM satellite). Cisco SSM satellite synchronizes with Cisco SSM on a daily basis.



**Note** Ensure that you use Cisco SSM Satellite version 5.0 or later. For more information, see [Installing and Configuring Cisco SSM Satellite](#).

For more information, see [Workflow in a Connected Model, on page 2](#).

## Disconnected Model

For the highest degree of security, you can opt to use Specific License Reservations in a fully disconnected model. In this model, you do not need to have access to the Cisco SSM or Cisco SSM satellite. All license changes are processed manually.

For more information, see [Workflow in a Disconnected Model, on page 6](#).

## License Usage and Compliance

Once you register Cisco Container Platform with Cisco SSM, you will receive the **Cisco Container Platform License with Support** license.

Cisco SSM totals the license requirements for all your Cisco Container Platform instances and compares the total license usage to the number of licenses purchased. After data synchronization, your Cisco Container Platform instance displays one of the following status indicators:

- **Authorized**, when the number of licenses purchased is sufficient
- **Out of Compliance**, when the number of licenses is insufficient

For more information, see [Updating Reserved Licenses, on page 7](#).

- **Authorization Expired**, when the product has not communicated with Cisco SSM for a period of 90 days.

## Workflow in a Connected Model

The following table describes the workflow of Cisco Smart Software Licensing in a connected model.

Task	Related Section
Configure the transport settings using which Cisco Container Platform connects to Cisco SSM or Cisco SSM satellite	<a href="#">Configuring Transport Settings, on page 3</a>
Register the Cisco Container Platform instance	<a href="#">Registering Using Registration Token, on page 3</a>
Manage licenses	<a href="#">Renewing Authorization, on page 4</a> <a href="#">Reregistering Cisco Container Platform License, on page 5</a> <a href="#">Deregistering Registration, on page 5</a>

For more information, see [Connected Model, on page 1](#).

## Configuring Transport Settings

By default, Cisco Container Platform directly communicates with the Cisco SSM. You can modify the mode of communication by configuring the transport settings.

### Before you begin

Ensure that you have obtained the registration token for the Cisco Container Platform instance.

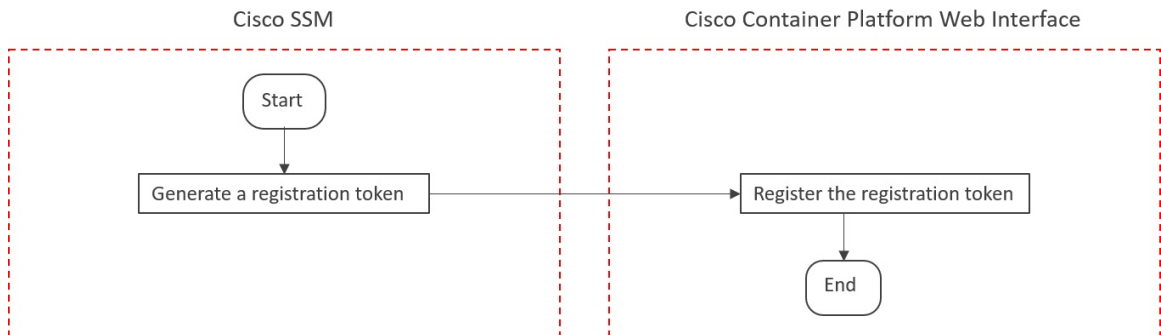
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- Step 1** Log in to the Cisco Container Platform web interface.
- Step 2** In the left pane, click **Licensing**.  
If you are running Cisco Container Platform in the Evaluation mode, a license notification is displayed on the **Smart Software Licensing** pane.
- Step 3** If a license notification is displayed, click the **edit the Smart Call Home Transport Settings** link.  
Alternatively, click the **Licensing Status** tab, and then click the **View/Edit** link that appears under **Transport Settings**.
- Step 4** Perform one of the following steps in the **Transport Settings** dialog box:
- a) If you want to configure Cisco Container Platform to send the license usage information to Cisco SSM using the Internet:
    1. From the **TRANSPORT MODE** drop-down list, choose **DIRECT**.
    2. From the **GATEWAY URL** drop-down list, choose the default URL or enter a custom URL.
    3. To configure a proxy server such as Cisco Transport Gateway or Apache:
      - a. Click the **CONNECT USING HTTP/HTTPS PROXY** toggle button to enable using a proxy server.
      - b. In the **IP ADDRESS** field, enter the IP address of the proxy server.
      - c. In the **PORT** field, enter the port number of the proxy server.
      - d. Click **SAVE**.
  - b) If you want to configure Cisco Container Platform to send the license usage information to Cisco SSM using the Cisco SSM satellite:
    1. From the **TRANSPORT MODE** drop-down list, choose **Gateway**.
    2. In the **GATEWAY URL** field, enter a custom URL.
    3. Click **SAVE**.
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## Registering Using Registration Token

You need to register your Cisco Container Platform instance with Cisco SSM or Cisco SSM satellite before the 90-day evaluation period expires.

The following figure shows the workflow for registering Cisco Container Platform using a registration token.

**Figure 1: Workflow of Registering Using Registration Token**



### Before you begin

Ensure that you have configured the transport settings. For more information, see [Configuring Transport Settings](#).

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- Step 1** Perform these steps on [Cisco SSM](#) or Cisco SSM satellite to generate a registration token:
- Go to **Inventory** > <Choose your virtual account> > **General**, and then click **New Token**.
  - If you want to enable higher levels of encryption for the products registered using the registration token, check the **Allow export-controlled functionality on the products registered with this token** check box.
 

**Note** This option is available only if you are compliant with the Export-Controlled functionality.
  - Download or copy the token.
- Step 2** Perform these steps in the Cisco Container Platform web interface to register the registration token and complete the license registration process:
- In the left pane, click **Licensing**.
  - In the license notification, click **Register**.  
The **Smart Software Licensing Product Registration** dialog box appears.
  - In the **Product Instance Registration Token** field, enter, copy and paste, or upload the registration token that you generated in Step 1.
  - Click **REGISTER** to complete the registration process.

If registering the token fails, you can reregister the Cisco Container Platform instance using a new token. For more information, see [Reregistering Cisco Container Platform License](#).

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## Renewing Authorization

By default, the authorization is automatically renewed every 30 days. However, Cisco Container Platform allows a user to manually initiate the authorization renew in case the automatic renewal process fails. The authorization expires if Cisco Container Platform is not connected to Cisco SSM or Cisco SSM satellite for 90 days and the licenses consumed by Cisco Container Platform are reclaimed and put back to the license pool.

### Before you begin

Ensure that the Cisco Container Platform instance is registered with Cisco SSM or Cisco SSM satellite.

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- Step 1** Log in to the Cisco Container Platform web interface.
  - Step 2** In the left pane, click **Licensing**.
  - Step 3** From the **ACTIONS** drop-down list, choose **Renew Authorization Now**.
  - Step 4** Click **OK** in the **Renew Authorization** dialog box.  
Cisco Container Platform synchronizes with Cisco SSM or Cisco SSM satellite to check the license authorization status and Cisco SSM or Cisco SSM satellite reports back the status to Cisco Container Platform, on a daily basis.
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## Reregistering Cisco Container Platform License

You can reregister Cisco Container Platform with Cisco SSM or Cisco SSM satellite by deregistering it and registering it again, or by using a register force option.

### Before you begin

Ensure that you have obtained a new registration token from Cisco SSM or Cisco SSM satellite.

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- Step 1** Log in to the Cisco Container Platform web interface.
  - Step 2** In the left pane, click **Licensing**.
  - Step 3** From the **ACTIONS** drop-down list, choose **Reregister**.
  - Step 4** In the **Product Instance Registration Token** field of the **Smart Software Licensing Product Reregistration** dialog box, enter the registration token that you generated using Cisco SSM or Cisco SSM satellite.
  - Step 5** Click **REGISTER** to complete the registration process.  
Cisco Container Platform sends a request to Cisco SSM or Cisco SSM satellite to check the registration status and Cisco SSM or Cisco SSM satellite reports back the status to Cisco Container Platform, on a daily basis.
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## Deregistering Registration

You can deregister the Cisco Container Platform instance from Cisco SSM or Cisco SSM satellite to release all the licenses from the current Virtual account and the licenses are available for use by other products in the virtual account. Deregistering disconnects Cisco Container Platform from Cisco SSM or Cisco SSM satellite.

### Before you begin

Ensure that the Cisco Container Platform instance is registered with Cisco SSM or Cisco SSM satellite.

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- Step 1** Log in to the Cisco Container Platform web interface.
- Step 2** In the left pane, click **Licensing**.
- Step 3** From the **ACTIONS** drop-down list, choose **Deregister**.
- Step 4** Click **DEREGISTER** in the confirmation dialog box.

Cisco Container Platform sends a request to Cisco SSM or Cisco SSM satellite to check the deregistration status and Cisco SSM or Cisco SSM satellite reports back the status to Cisco Container Platform, on a daily basis.

## Workflow in a Disconnected Model

The following table describes the workflow of Cisco Smart Software Licensing in a disconnected model.

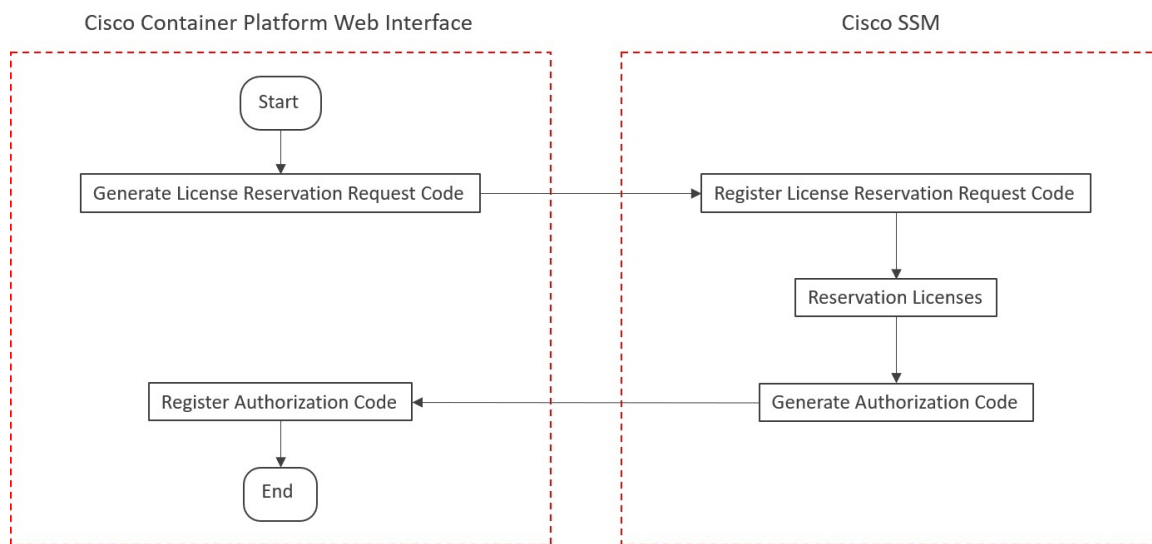
Task	Related Section
Register the Cisco Container Platform instance	<a href="#">Registering Using Specific License Reservations, on page 6</a>
Manage licenses	<a href="#">Updating Reserved Licenses, on page 7</a> <a href="#">Deregistering Registration by Returning Reserved Licenses, on page 8</a>

For more information, see [Disconnected Model, on page 2](#).

## Registering Using Specific License Reservations

The following figure shows the workflow for registering Cisco Container Platform using Specific License Reservations (SLRs).

**Figure 2: Workflow of Registering Using SLRs**



### Before you begin

Ensure that your smart account is authorized for License Reservation.

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- Step 1** Perform these steps in the Cisco Container Platform web interface:
- In the left pane, click **Licensing**.
  - In the license notification, click **Register**.  
The **Smart Software Licensing Product Registration** dialog box appears.
  - Click the **start here** link to initiate **Specific License Reservation**.
  - In the **Ensure Smart Account Can Use License Reservation** dialog box, check the **YES, MY SMART ACCOUNT IS LICENSE RESERVATION ENABLED** check box, and then click **CONTINUE**.
  - In the **Smart License Reservation** dialog box, click **GENERATE REQUEST CODE**.
  - Copy and save the **License Reservation Request Code**.
- Step 2** Perform these steps on Cisco SSM:
- Go to **Inventory > <Choose your virtual account> > Licenses**, and then click **License Reservation**.  
**Note** If you cannot find the **License Reservation** button, contact Cisco support to enable this feature.  
The **Smart License Reservation** dialog box appears.
  - In the **Reservation Request Code** field, enter, paste, or upload the **License Reservation Request Code** from Step 1, and then click **Next**.
  - In the **Licenses to Reserve** area, check the **Reserve a specific license** check box.
  - Under the **Quantity To Reserve** column, type the number of licenses to reserve for your product instance, and then click **Next**.
  - Click **Generate Authorization Code**.
  - Copy or download the authorization code.
- Step 3** Perform these steps in the Cisco Container Platform web interface:
- In the left pane, click **Licensing**.
  - In the license notification, click **ENTER RESERVATION AUTHORIZATION CODE**.  
The **Enter Reservation Authorization Code** dialog box appears.
  - In the **RESERVATION AUTHORIZATION CODE** field, enter, paste, or upload the authorization code from Step 2.
  - Click **RESERVE**.  
The number of licenses reserved is displayed in **Licensing > Smart Licensing Usage**. When your license usage is out of compliance, you can [Updating Reserved Licenses](#).
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For more information, see [License Usage and Compliance, on page 2](#).

## Updating Reserved Licenses

If your license usage is out of compliance, or you want to increase the number of licenses for your Cisco Container Platform instance, you can update the number of reserved licenses.

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- Step 1** Perform these steps in Cisco SSM:
- Go to **Inventory > <Choose your virtual account> > Product Instances**.
  - From the **ACTIONS** drop-down list of your Cisco Container Platform instance, choose **Update reserved licenses**.  
The **Update License Reservation** dialog box appears.
  - In the **Licenses to Reserve** area, check the **Reserve a specific license** check box.

- d) Under the **Quantity To Reserve** column, modify the number of reserved licenses for your product instance, and then click **Next**.
- e) Click **Generate Authorization Code**.
- f) Copy or download the authorization code.

**Step 2** Perform these steps in the Cisco Container Platform web interface:

- a) In the left pane, click **Licensing > Smart Licensing Usage**.
- b) From **ACTIONS** drop-down list, click **Update Reservation**.  
The **Enter Reservation Authorization Code** dialog box appears.
- c) In the **RESERVATION AUTHORIZATION CODE** field, enter, paste, or upload the reservation code from Step 1.
- d) Click **RESERVE**.  
A license reservation confirmation code is generated.

**Step 3** Perform these steps in Cisco SSM:

- a) In the **Update License Reservation** dialog box, click **Enter Confirmation Code**.
- b) In the **Reservation Confirmation Code** field, enter, paste, or upload the confirmation code that you received in Step 2.
- c) Click **OK**.  
The number of reserved licenses for your product instance is updated on Cisco SSM.

For more information, see [License Usage and Compliance, on page 2](#).

## Deregistering Registration by Returning Reserved Licenses

You can deregister your Cisco Container Platform instance from Cisco SSM by returning the reserved licenses. Consequently, these licenses are available for other product instances.

**Step 1** Perform these steps in the Cisco Container Platform web interface:

- a) In the left pane, click **Licensing**.  
The **Smart Software Licensing** page appears.
- b) From **ACTIONS** drop-down list, click **Return reserved licenses**.  
The **Confirm Return Licenses** dialog box appears.
- c) Click **GENERATE RESERVATION RETURN CODE**.  
If you cannot generate a **Reservation Return Code**, contact Cisco support.

**Caution** The licenses remain reserved in Cisco SSM and cannot be used for other product instances until they are released on Cisco SSM.

**Step 2** Follow these steps in the Cisco SSM to release the licenses:

- a) Go to **Inventory > <Choose your virtual account> > Product Instances**.
- b) From the **ACTIONS** drop-down list of your Cisco Container Platform instance, choose **Remove**.  
The **Remove Product Instance** dialog box appears.
- c) In the **Reservation Return Code** field, enter, paste, or upload the reservation return code from Step 1.
- d) Click **Remove Product Instance**.



The reserved licenses are released, and you can use them for other product instances. Your Cisco Container Platform instance goes back to the evaluation mode.

