Setting Up the Device Connector

This chapter describes the tasks for configuring and claiming a Ciso Intersight Device Connector on the Cisco Application Services Engine platform.

This chapter contains the following sections:

About the Intersight Device Connector

Devices are connected to the Cisco Intersight portal through a Device Connector that is embedded in the management controller of each system. Device Connector provides a secure way for the connected devices to send information and receive control instructions from the Cisco Intersight portal, using a secure internet connection.

When an Intersight-enabled device or application starts, the Device Connector starts at boot by default, and attempts to connect to the cloud service. If the **Auto Update** option is enabled, the Device Connector is automatically updated to the latest version through a refresh by the Intersight service when you connect to Cisco Intersight. For more information on the **Auto Update** option, see Configuring the Device Connector, on page 1.

Configuring the Device Connector

Data center apps such as the Cisco NIA app is connected to the Cisco Intersight cloud portal through a Device Connector which is embedded in the management controller of the Cisco Application Services Engine platform.

Cisco Intersight is a Software-as-a-Service (SaaS) infrastructure management platform that is augmented by other intelligent systems. It provides global management of the Cisco Unified Computing System (Cisco UCS) and Cisco HyperFlex hyperconverged infrastructure, Cisco APIC, and other platforms including Cisco Application Services Engine. The Device Connector provides a secure way for a connected Cisco Application Services Engine to send and receive information from the Cisco Intersight cloud, using a secure Internet connection.

Use this procedure to setup the Device Connector:

Step 1 Open Cisco Application Services Engine GUI.

Step 2 In the **Navigation** pane, click **Infrastructure** then **Intersight**.

- If you see green dotted lines connecting **Internet** to **Intersight** in the **Device Connector** page, and the text **Claimed**, then your Intersight Device Connector is already configured and connected to the Intersight cloud service, and the device is claimed.
- If you see yellow dotted lines and a caution icon connecting **Internet** to **Intersight** in the **Device Connector** page, and the text **Not Claimed**, then your Intersight Device Connector is not yet configured and connected to the Intersight service, and the device is not yet claimed. Follow these procedures to configure the Intersight Device Connector and connect to the Intersight cloud service, and claim the device.

Note Red dotted lines connecting **Internet** to **Intersight** in the **Device Connector** page, indicate that you have configured the proxy incorrectly in step 8.

Step 3 Determine if you would like to update the software at this time, if there is a new Device Connector software version available.

If there is a new Device Connector software version available and you do not have the **Auto Update** option enabled, you will see a message towards the top of the screen,informing that Device Connector has important updates available (refer to step 5c).

- If you do not want to update the software at this time, go to step 5 to begin configuring the Intersight Device Connector.
- If you would like to update the software at this time, click one of the two links in the yellow bar towards the top of the page, depending on how you would like to update the software:
  - **Update Now**: Click this link to update the Device Connector software immediately.
  - **Enable Auto Update**: Click this link to go to the **General** page, where you can toggle the **Auto Update** field to ON, which allows the system to automatically update the Device Connector software. See step 6c for more information.

Step 4 Locate the **Settings** link to the right of the **Device Connector** heading and click the **Settings** link.

The **Settings** page appears, with the **General** tab selected by default.

Step 5 In the **General** page, configure the following settings.

a) In the **Device Connector** field, determine if you want to allow communication between the device and Cisco Intersight.

The **Device Connector** option (enabled by default) enables you to claim the device and leverage the capabilities of Intersight. If it is turned OFF, no communication will be allowed to Cisco Intersight.

b) In the **Access Mode** field, determine if you want to allow Intersight the capability to make changes to this device.

Access Mode enables you to allow full read or write operations from the cloud or restrict changes made to this device from Cisco Intersight.

- The **Allow Control** option (selected by default) enables you to perform full read or write operations from the cloud, based on the features available in Cisco Intersight.

- The **Read-only** option ensures that no changes are made to this device from Cisco Intersight. For example, actions such as upgrading firmware or a profile deployment will not be allowed in the Read-Only mode. However, the actions depend on the features available for a particular system.

c) In the **Auto Update** field, determine if you want to allow the system to automatically update the software.

We recommend that you toggle the **Auto Update** option to ON so that the system automatically updates the software. Note that toggling the **Auto Update** option to ON means that the Device Connector will automatically upgrade its image whenever there is any upgrade push from Intersight.

- Toggle ON to allow the system to automatically update the software.
- Toggle OFF so that you can manually update the software when necessary. You will be asked to manually update the software when new releases become available in this case.

Note If the **Auto Update** option is turned OFF, that may periodically cause the Device Connector to be out-of-date, which could affect the ability of the Device Connector to connect to Cisco Intersight.

Step 6 When you have completed the configurations in the **General** page, click **Save**.

The **Intersight - Device Connector** overview pages appears again. At this point, you can make or verify several configure settings for the Intersight Device Connector:

- If you want to configure the proxy that the Device Connector will use to communicate with the Cisco Intersight cloud, go to step 8.
- If you want to manage certificates with the Device Connector, go to step 11.

Note The Cisco Application Services Engine requires you to configure the Proxy Settings for the Intersight Device Connector.

Step 7 If you want to configure the proxy that the Device Connector will use to communicate with the Cisco Intersight cloud, click **Settings**, then click **Proxy Configuration**.

The **Proxy Configuration** page appears.

Step 8 In the **Proxy Configuration** page, configure the following settings.

In this page, you can configure the proxy that the Device Connector will use to communicate with the Cisco Intersight cloud.

Note The Device Connector does not mandate the format of the login credentials; they are passed as-is to the configured HTTP proxy server. Whether or not the username must be qualified with a domain name depends on the configuration of the HTTP proxy server.

a) In the **Enable Proxy** field, toggle the option to ON to configure the proxy settings.
b) In the **Proxy Hostname/IP** field, enter a Proxy Hostname and the IP address.
c) In the **Proxy Port** field, enter a proxy port number.
d) In the **Authentication** field, toggle the **Authentication** option to ON to configure the proxy authentication settings, then enter a proxy username and password for authentication.

Step 9 When you have completed the configurations in the **Proxy Configuration** page, click **Save**.

The **Intersight - Device Connector** overview pages appears again.

If you want to make manage certificates with the Device Connector, go to the next step.

Step 10 If you want to manage certificates with the Device Connector, click **Settings**, then click **Certificate Manager**.

The **Certificate Manager** page appears.

Step 11 In the **Certificate Manager** page, configure the following settings.

By default, the device connector trusts only the built-in svc.ucs-connect.com certificate. If the device connector establishes a TLS connection and a server sends a certificate that does not match the built-in svc.ucs-connect.com certificate, the device connector terminates TLS connections because it cannot determine if the server is a trusted device or not.

Click **Import** to import a CA signed certificate. The imported certificates must be in the *.pem (base64 encoded) format. After a certificate is successfully imported, it is listed in the list of **`Trusted Certificates`** and if the certificate is correct, it is shown in the **In-Use** column.

View these details for a list of certificates that are used to connect to svc.ucs-connect.com (intersight.com):

- **Name**—Common name of the CA certificate.
- **In Use**—Whether the certificate in the trust store was used to successfully verify the remote server.
- **Issued By**—The issuing authority for the certificate.
- **Expires**—The expiry date of the certificate.

Delete a certificate from the list of **`Trusted certificates`**. However, you cannot delete bundled certificates (root+intermediate certificates) from the list. The lock icon represents the bundled certificates.

Step 12 When you have completed the configurations in the **Certificate Manager** page, click **Close**.

You can claim the device using the instructions provided in Claiming a Device, on page 4.

Claiming a Device

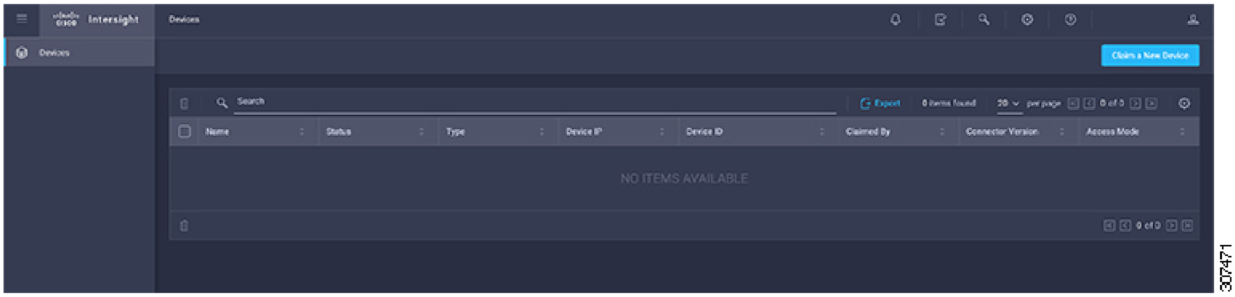
Before you begin

You have configured the Intersight Device Connector from the Cisco Application Services Engine.

Step 1 Log into the Cisco Intersight cloud site:

https://www.intersight.com

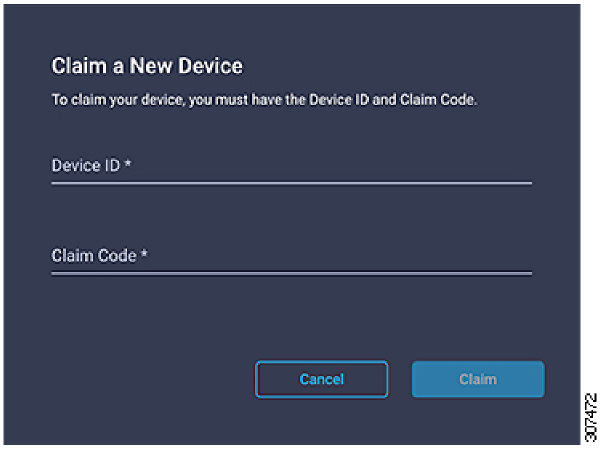
Step 2 In the Cisco Intersight cloud site, click **Devices** tab, and then click **Claim a New Device**.



Name	Status	Type	Device IP	Device ID	Claimed By	Connector Version	Access Mode

NO ITEMS AVAILABLE

The **Claim a New Device** page appears.



Claim a New Device

To claim your device, you must have the Device ID and Claim Code.

Device ID *

Claim Code *

Step 3 In the Cisco APIC UI navigate to the **Apps** page.

a) On the list of **Apps** page, select Cisco Application Services Engine.

b) In the **Navigation** pane, click **Intersight**.

Step 4 Copy the **Device ID** and **Claim Code** from the Cisco Application Services Engine App UI running on Cisco APIC and

Step 5 In the Cisco Intersight cloud site, paste them into the proper fields

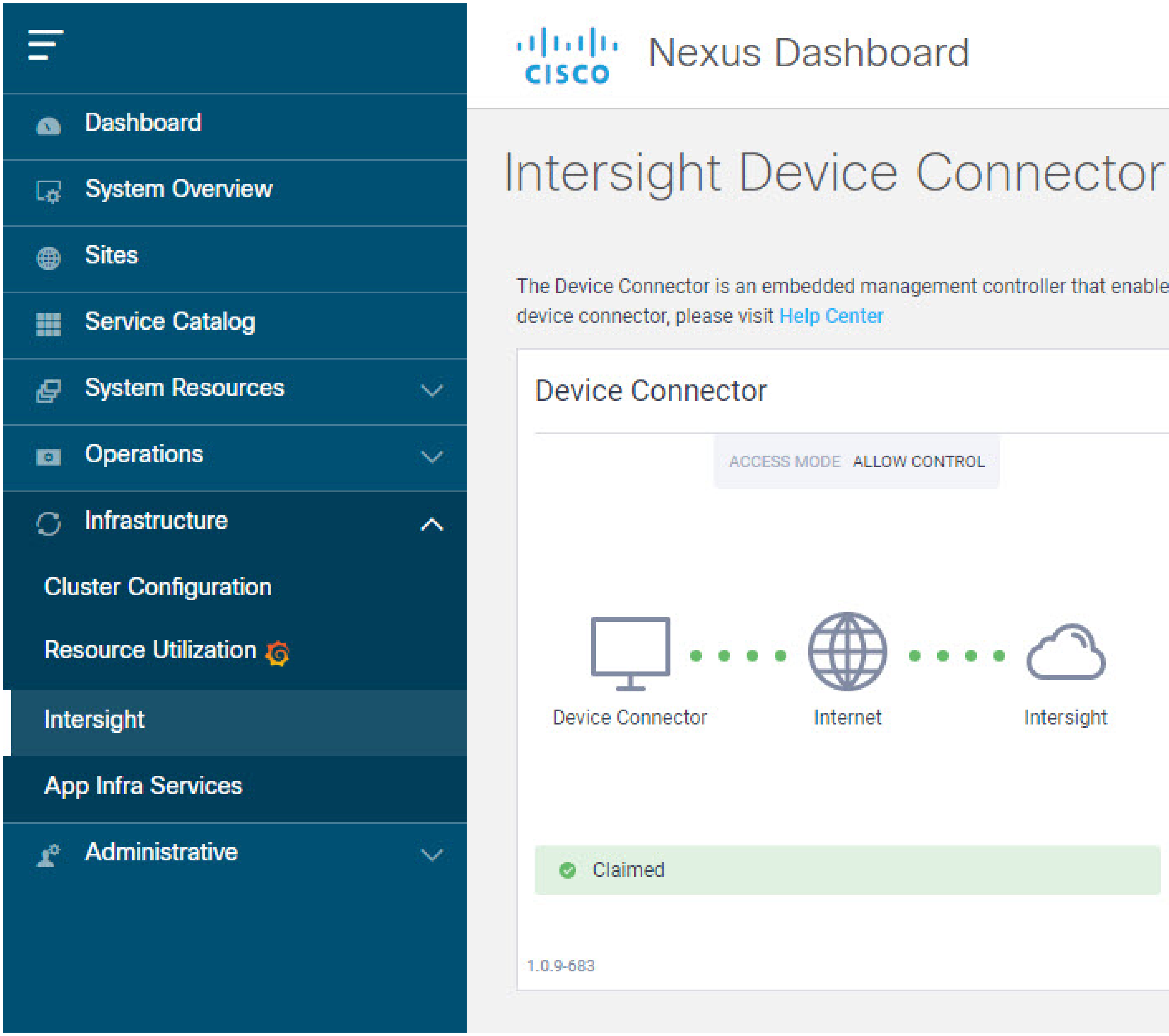
Step 6 **Claim a New Device** page in the Intersight cloud site.

Step 7 Click **Claim**.

The message "Your device has been successfully claimed" is displayed in the **Claim a New Device** page. Also, in the main page, you should see your Cisco Application Services Engine platform, with Connected shown in the Status column.

Step 8 Go back to the **Intersight - Device Connector** page in the Cisco Application Services Engine App UI in Cisco APIC GUI and verify that the system was claimed successfully.

You should see green dotted lines connecting **Internet** to **Intersight** in the **Device Connector** page, and the text **Claimed**.



Nexus Dashboard

Intersight Device Connector

The Device Connector is an embedded management controller that enable
device connector, please visit Help Center

Device Connector

ACCESS MODE ALLOW CONTROL

Claimed

1.0.9-683

Note You may have to click **Refresh** in the **Intersight - Device Connector** page to update the information in the page to the current state.

To unclaim this device, click the **Unclaim** link in the **Intersight - Device Connector**.