



Initial Setup

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Initial Setup of Cisco Spaces: Connector

To get the Cisco Spaces: Connector up and running, perform these steps:

1. Install connector 3 in your local deployment network. See [Deploying the Connector 3 OVA \(Single Interface\)](#)
2. On the Cisco Spaces dashboard, create a Cisco Spaces: Connector and generate a token for connector. See [Activating Connector 3 on Cisco Spaces, on page 2](#)
3. Configure this token on the deployed Cisco Spaces: Connector. This establishes a connection between Cisco Spaces and the deployed Cisco Spaces: Connector. The equivalent connector 3 (based on the token) on the Cisco Spaces now turns active. See [Activating Connector 3 on Cisco Spaces, on page 2](#)
4. Add the services based on your required workflow on Cisco Spaces.

Table 1: Enabling Services

Service	Link
Service manager service	Enabled by default.
IoT service (wireless)	For information, see Configure IoT Service (Wireless) .
IoT service (wired)	For information, see Configure IoT Service (Wireless) .
Hotspot service	For information, see Configure Hotspot Service .
Local firehose service	For information, see Configure Hotspot Service .

Activating Connector 3 on Cisco Spaces

This section provides information about how to activate a deployed connector on your Cisco Spaces account.

Using the following procedure, you generate a token for a deployed connector that you want to add to your Cisco Spaces account. Note that you need a separate token for each deployed connector. Each token is specific to a connector and hence enables Cisco Spaces to identify and connect to connector.

Cisco Spaces supports multiple connectors, and you can associate each connector with one or multiple wireless controllers.



Note A Cisco Spaces: Connector instance can communicate with only one Cisco Spaces account at a time.

Before you begin

Download and deploy the Cisco Spaces: Connector OVA. See [Deploying the Connector 3 OVA \(Single Interface\)](#)

Step 1 Log in to **Cisco Spaces**.

Note The Cisco Spaces URL is region-dependent.

Step 2 From the left navigation pane, choose **Setup > Wireless Networks**.

Step 3 In the **Get your wireless network connected with Cisco DNA Spaces** area, click **Add New**.

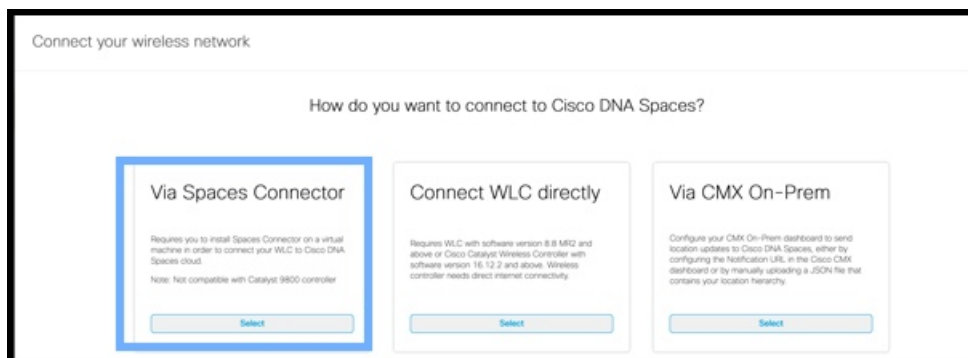
Step 4 In the **Cisco AireOS Controller/Catalyst 9800 Wireless Controller** area, click **Select**.

Figure 1: Choose Cisco AireOS Controller/Catalyst 9800 Wireless Controller

Activating Connector 3 on Cisco Spaces

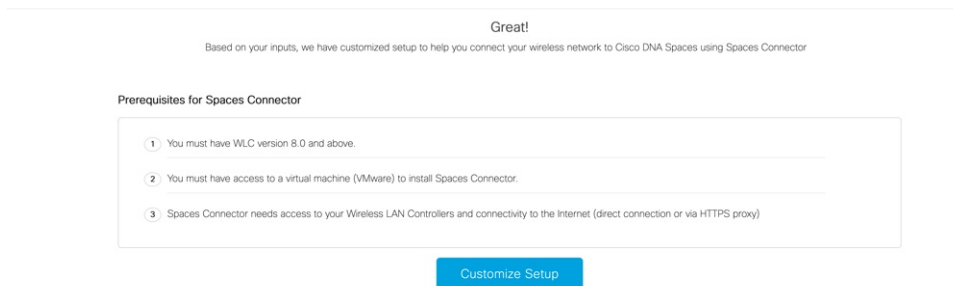
Step 5 In the **Via Spaces Connector** area, click **Select**.

Figure 2: Via Spaces Connector



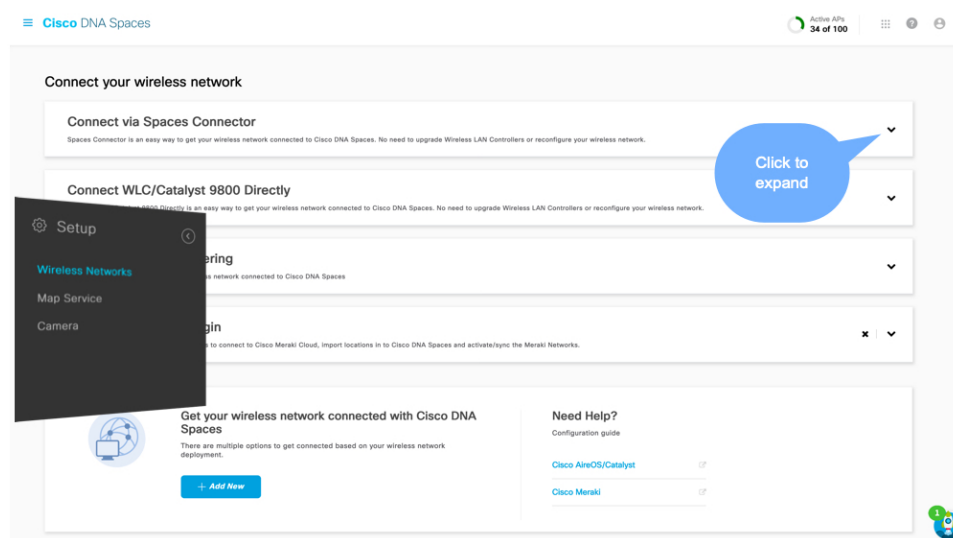
Step 6 In the **Prerequisites for Spaces Connector** dialog box, click **Continue Setup**.

Figure 3: Read Prerequisites for Spaces Connector



Step 7 Expand the **Connect via Spaces Connector** area using the respective drop-down arrow.

Figure 4: Expand Connect via Spaces Connector



Step 8 In the displayed list of steps, in the **Configure Spaces Connector** area, click **Create Connector**.

Figure 5: Connect via Spaces Connector > Create Connector

The screenshot displays the 'Create Connector' window in Cisco Spaces, which is organized into five numbered steps on the left side of the main content area:

- 1 Install Spaces Connector OVA**
Download and install Spaces Connector OVA as a virtual machine.
[Download Spaces Connector](#)
- 2 Configure Spaces Connector**
You will need a token to configure Spaces Connector. You need to connect to `https://<your connector IP>/` from a browser to configure the token. You can optionally configure Spaces Connector to connect via HTTPS proxy.
0 / 6 connector(s) active
[Create Connector](#)
[View Connectors](#)
- 3 Add Controllers**
Add and associate controllers to your Cisco DNA Spaces Connector(s)
0 / 3 controller(s) active
[Add Controllers](#)
[View Controllers](#)
- 4 Import Maps**
Prime/DNAC map requires in order to work Locate & detect, Asset tracker, and IOT services, and proximity Report
1 buildings imported
3 floors imported
[Import/Sync Maps](#)
[Map Upload History](#)
[Manage Maps](#)
- 5 Setup location hierarchy**
Once the maps imported, you can add them into location hierarchy
0 controller(s) imported to location hierarchy
[Add Locations](#)
[Manage Location Hierarchy](#)

Step 9

In the **Create connector** window that is displayed, enter a name for connector, and click **Version 3.0 (beta)**, as the **Connector Version**, and click **Save**.

Figure 6: Name and Version of Connector

Create Connector

Spaces Connector Name

Enter the spaces connector name

Connector Version

☒ **Version 2.x**
First generation Connector designed to transfer location data efficiently to Cisco Spaces cloud

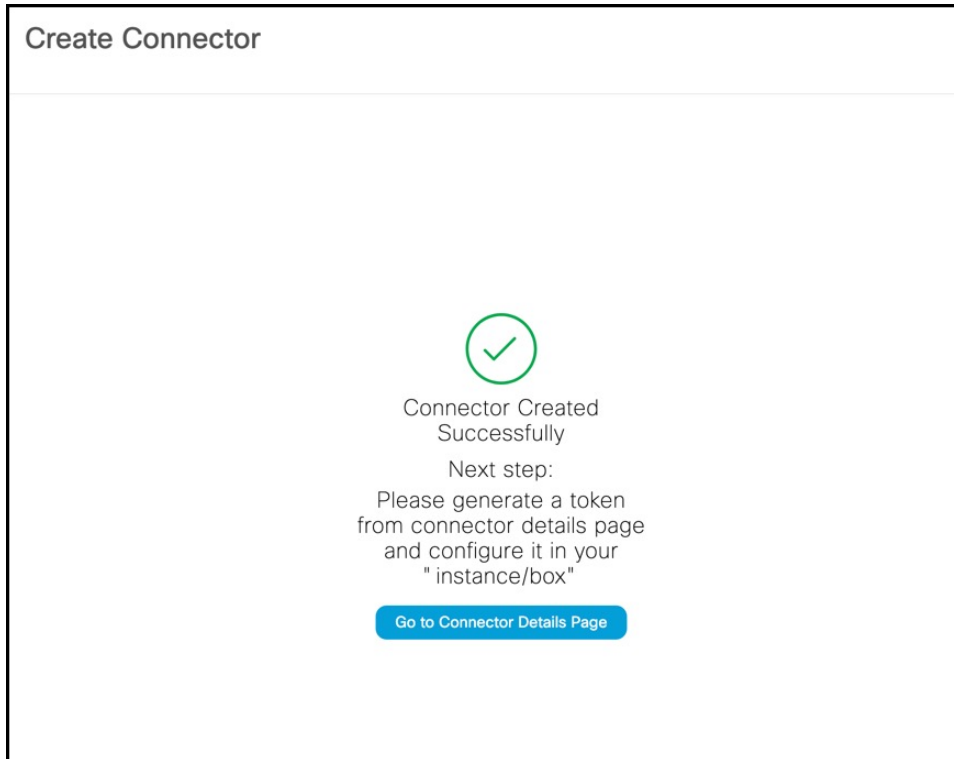
☐ **Version 3.0**

- Support for deploying and managing multiple individual services
- Enhanced monitoring and troubleshooting of the connector and connector services
- Seamless services and system upgrades
- Refer to the Connector 3.0 [Configuration Guide](#) for more details

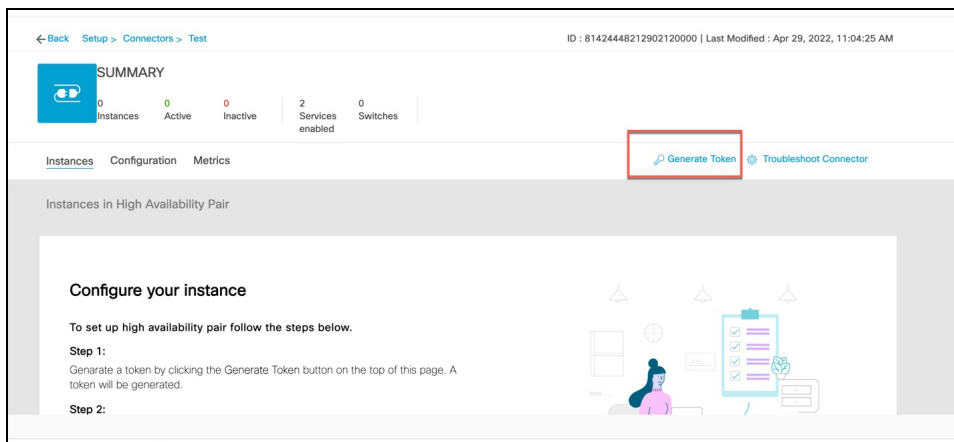
☒ Enable Location Services ⓘ

[Cancel](#) [Save](#)

Connector is successfully created. Click **Go to Connector Details Page**.

Figure 7: Connector Created Successfully**Step 10**

In the connector details window, you can see a summary of the configurations for this connector. Click **Generate Token**.

Figure 8: Generate Token**Step 11**

In the **Token** window that is displayed, click **Copy Token**.

Token

Configure the token below on your instance/box

```
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ2ZXZjaW9uIjoiaVJlLCJ0b2t1bkkiKjoiNzM3MTlyYTAtY2I3MS0xMWVjLWFmYmUtMTU0MTA0NjY3NjQwIiwiaW5joIiG9jYXRpb24iLCJ0eXBlljoIY29ubmVjdG9yX2F1dGhfdG9rZW4iLCJ0ZW5hbnRlJZCil6IjEyaMTExliwiY29ubmVjdG9ySWQiOjgxdNDiNDQ4MjEyOTAyMTlwMDAwLCJlbmRwb2ludCI6Imh0dHBzOi8vY29ubmVjdG9yLnFnFLWRuYXNwYWVlcyc5pybyslmVudmlyb25tZW50IjoIdGVzdCslJlZ2Ivbill6lnVzLVWhc3QtMSlslmlhdCl6MTY1MTY0NDg2N30.OVV08ozAsaDcZr0Abo_G1Y732TQENGpJr1uXJlW5bY0
```

[Copy Token](#)

[View Documentation](#)

To set up your connector instance, follow the steps below.

Step 1:

Copy the generated token above.

Step 2:

Login to your connector UI and configure the token. Follow the [documentation](#) if you haven't setup your connector yet.

Step 13 (Optional) If your network is behind a proxy, configure the GUI with the proxy. See [Configure a Proxy](#)

Step 14 In the **Configure Token** area that is displayed, click **Configure Token**.

Dashboard
Configure Connector
Configure HTTP proxy
Privacy Settings
Manage API Keys
Troubleshoot

Configure Token
Without the token, the connector will not be able to start.

Connector 3.1
Hostname: `connector3.1-08`
[Show More](#)

General Information

Connector Name	Not Available
Tenant ID	Not Available
Connector ID	Not Available
Instance ID	005056a754c8
Proxy	https://proxy.esl.cisco.com:80
NTP Address	ntp.esl.cisco.com
NTP Status	active (running)

Click to configure the token copied from Cisco Spaces

H3 Config Mode
Not VIP Paired

Primary Interface

IP Address	10.89.45.9024
MAC Address	00:50:56:A7:54:C8
Gateway	10.89.45.1
DNS Server	171.70.168.183
Domain	cisco.com
IP Stack	ipv4

Step 15 In the window that is displayed, in the **Token** text field enter the token copied from Cisco Spaces and click **Configure**.

Step 16 Add the following services as required:

- Configuring IoT Services
- Configuring Hotspot Services

Upgrading the Connector from Cisco Spaces Dashboard

Use the connector's GUI to upgrade connector. Log in to the connector GUI, check for new upgrades and the summary of changes, and initiate the upgrade. Note that you must ensure that the connector's Service manager service is updated before you start the connector upgrade. You can upgrade the Service manager service from the connector GUI. The following procedure describes how to first upgrade the Service manager service and then upgrade connector itself from the connector GUI.

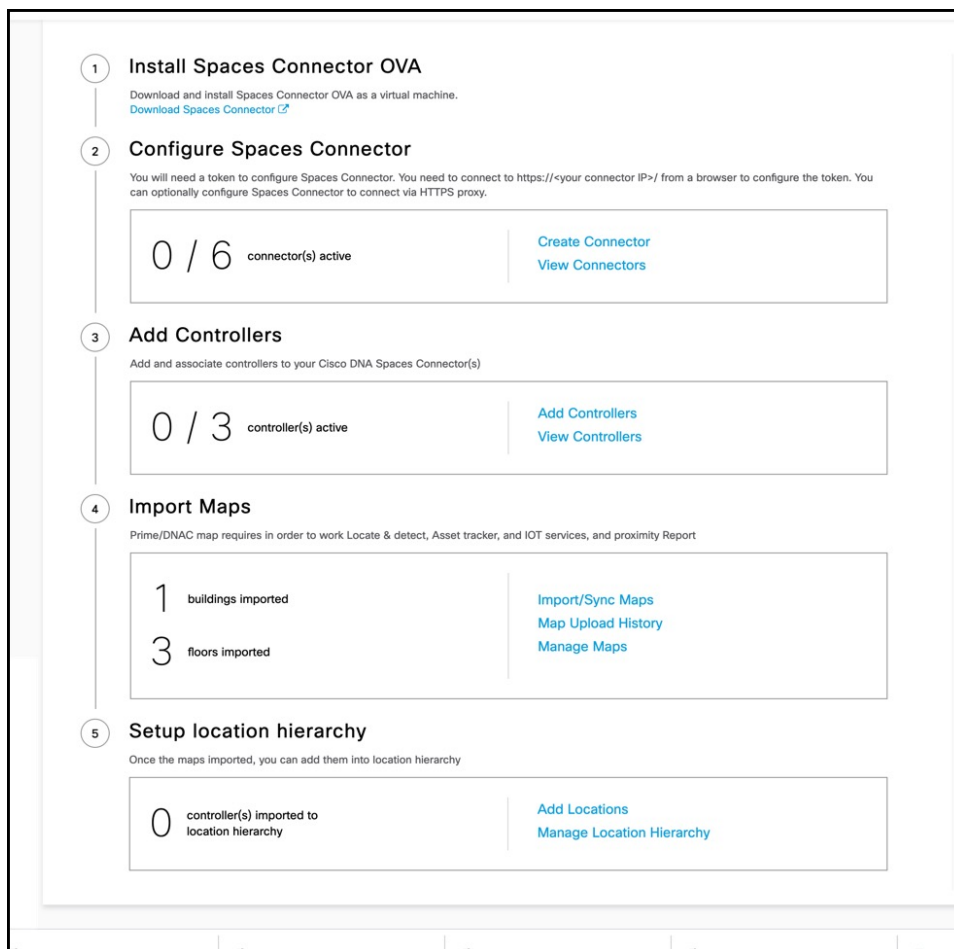
Step 1 Log in to **Cisco Spaces**.

Note The Cisco Spaces URL is region-dependent.

Step 2 In the Cisco Spaces dashboard, choose **Setup > Wireless Networks**.

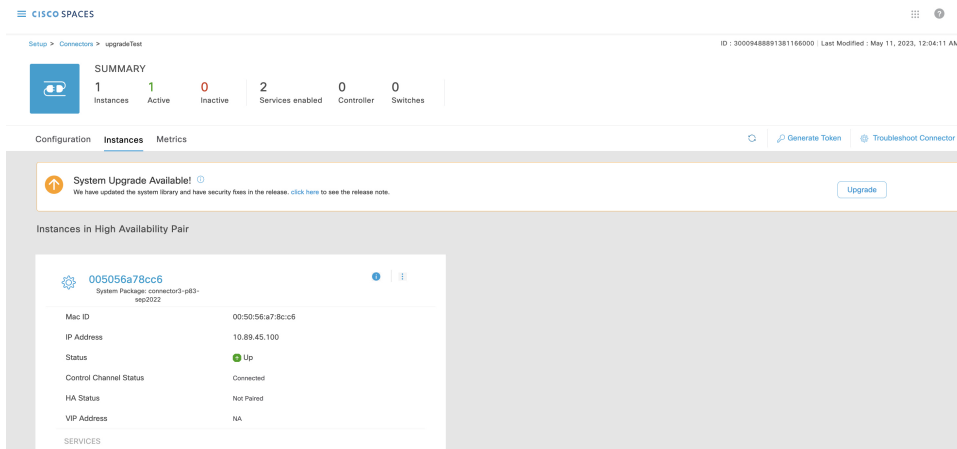
Step 3 From the **2. Configure Spaces Connector** area, click **View Connectors**

Figure 11: View Connectors

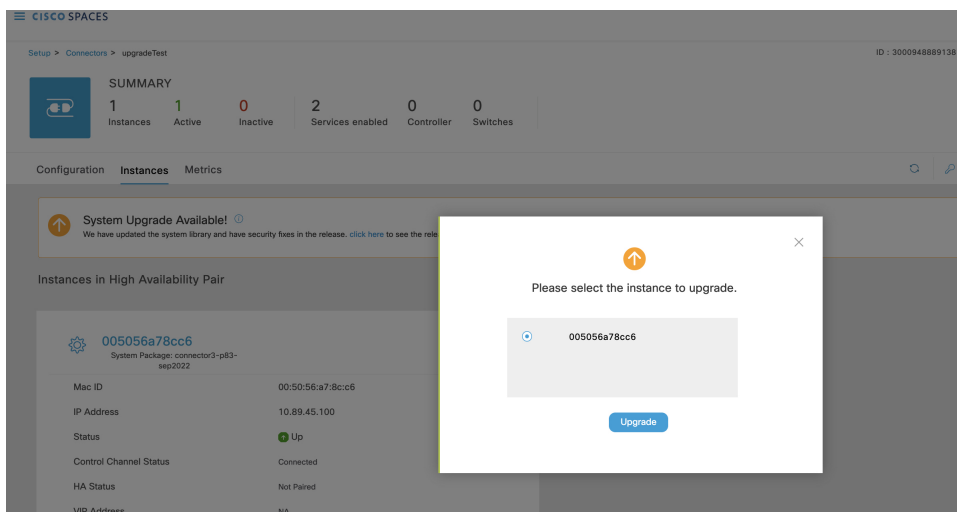


Step 4 From the list of connectors that are displayed, click the connector of your choice.

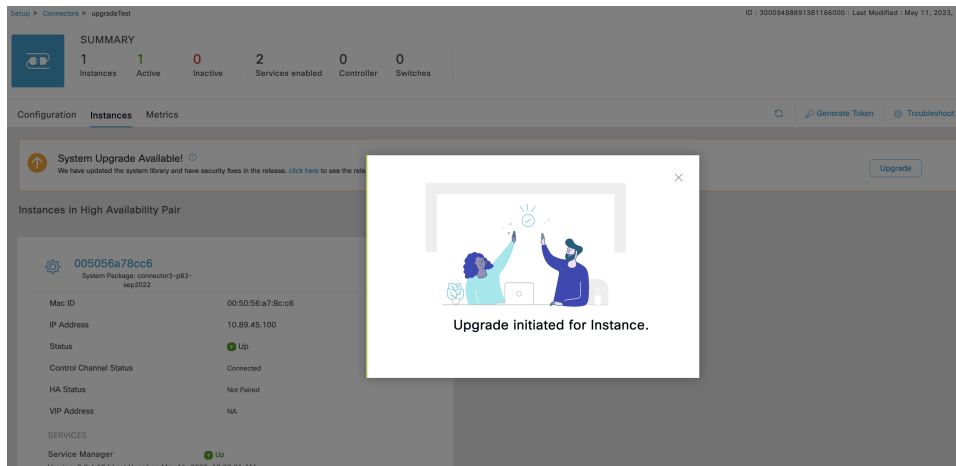
- Step 5** From the **Configuration** tab of the specific connector, ensure that the Service manager service is upgraded. If not upgraded, under the **Actions** column, check for any available **Upgrade** option.
- Step 6** Click the **Instances** tab, and choose the instances you want to upgrade.
- Step 7** In the **System Upgrade Available** area, and click **Upgrade**.

Figure 12: Upgrade

- Step 8** From the popup displayed, select the instance you want to upgrade.

Figure 13: Select instance

An **Upgrade Initiated for instance** message is displayed.

Figure 14: Upgrade Initiated for Instance

Step 9 Observe the status of the installation by clicking the three-dot icon of an instance. From the menu displayed, choose **Configuration History**.

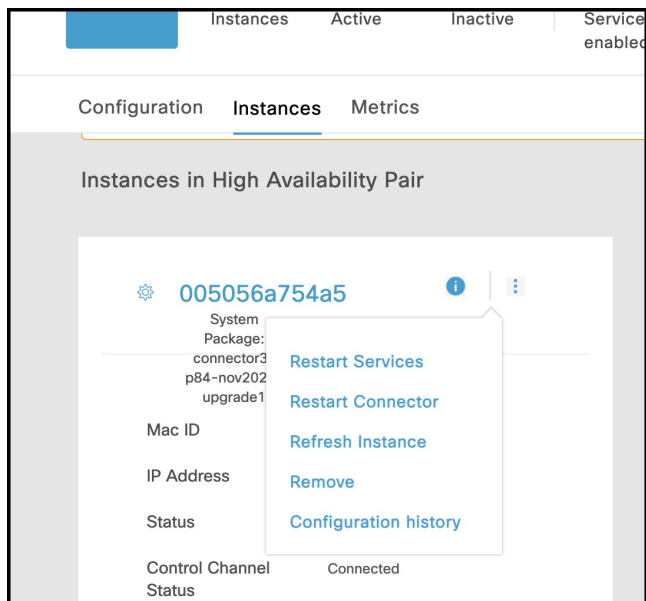
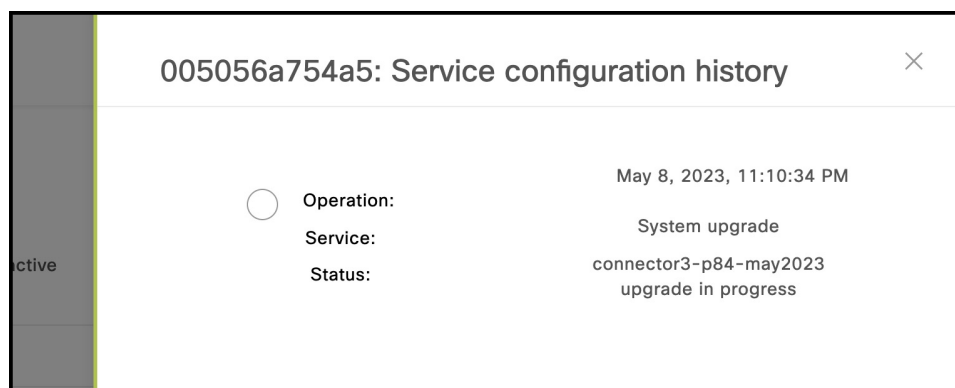
Figure 15: Configuration History

Figure 16: Configuration History



Upgrading the Connector Using CLI

Use the connector's CLI to upgrade connector. Log in to the connector CLI, check for new upgrades and the summary of changes, and initiate the upgrade. Note that you must ensure that the connector's Service manager service service is updated before you start the connector command line upgrade. You can upgrade the Service manager service from the connector GUI. then upgrade connector itself from the connector CLI.

Before you begin

Ensure that the Service manager service is upgraded from the connector GUI.

- Step 1** Log in to the connector CLI.
- Step 2** Check the availability of upgrades, and view a summary of the changes that are part of this upgrade package. Run the **connectorctl systemupgrade list** command.
- Step 3** Initiate the upgrade of connector packages. Run the **connectorctl systemupgrade install** command:

```
[spacesadmin@connector03 ~]$ connectorctl systemupgrade install
```

```
Executing command:systemupgrade
Command execution status :Success
```

```
System upgrade operation is queued. Use tail -f
/opt/spaces-connector/runtime/logs/service-manager/system-upgrade/system-upgrade.log to see upgrade
progress
```

- Step 4** Observe the status of the upgrade. Do one of the following:
 - To populate the CLI with regular updates of the upgrade, run the **tail -f /opt/spaces-connector/runtime/logs/service-manager/system-upgrade/system-upgrade.log** command.
 - To view the status of the upgrade at any point in time, run the **connectorctl systemupgrade status** command:

```
[spacesadmin@connector ~]$ connectorctl systemupgrade status
Executing command:systemupgrade
Command execution status: Success
```

```
System upgrade is in progress for package:connector3-p84-jan2023-upgrade2 at:Jan-10-2023 05:31:33.  
Details:Downloading image.
```

```
[spacesadmin@connector ~]$ connectorctl systemupgrade status  
Executing command: systemupgrade  
Command execution status: Success
```

```
Successfully upgraded system to package: connector3-p84-jan2023-upgrade2 at :Jan-1  
0-2023 04:34:04
```

Occasionally, you may see the following error while running the **connectorctl systemupgrade status** command. Ignore this output and wait for a few minutes before running the **connectorctl systemupgrade status** command again:

```
[spacesadmin@connector ~]$ connectorctl systemupgrade status  
Traceback (most recent call last):  
  File "/opt/spaces-connector/static/service-agent/core/src/cli/cli.py".line10,in<module>  
    from core.src.log.log_task import Loglask  
  
File"/opt/spaces-connector/static/service-agent/core/src/cli/../../../../core/src/log/log_task-py".line16,in<module>  
  
    from -utils import pathconstant, constant, utilities  
  File  
"/opt/spaces-connector/static/service-agent/core/src/cli/../../../../core/src/utls/utilities-py",line31,in<module>  
  
    import psutil  
ModuleNotFoundError: No module named >psutil'
```
