

Overview of connector

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Introduction to Cisco Spaces: Connector 2.x

Note **Cisco DNA Spaces** is now **Cisco Spaces**. We are in the process of updating our documentation with the new name. This includes updating GUIs and the corresponding procedures, screenshots, and URLs. For the duration of this activity, you might see occurrences of both **Cisco DNA Spaces** and **Cisco Spaces**. We take this opportunity to thank you for your continued support.

The Cisco Spaces: Connector enables Cisco Spaces to run different services on the Connector, which in turn, communicates with different network devices such as wireless controllers and switches.

The various services that run on the connector gather and aggregate data from wireless controllers, APs, and switches efficiently, and sends the aggregated data to Cisco Spaces. The connector architecture allows multiple wireless controllers, APs, and switches to connect to Cisco Spaces through a single point (the connector). A single connector can connect to a Cisco AireOS Wireless Controller, Cisco Catalyst 9800 Series Wireless Controller and Cisco Catalyst 9300 and 9400 Series Switches at the same time.

The connector sends data to Cisco Spaces over HTTPS; a proxy can also be used to route data.

Note The term wireless controller is used in this document to refer to the following. (See Compatibility Matrix for specific details).

- Cisco AireOS Wireless Controller (indicated on the Cisco Spaces dashboard as WLC AireOS)
- Cisco Catalyst 9800 Series Wireless Controller (indicated on the Cisco Spaces dashboard as Catalyst WLC)
- Cisco Embedded Wireless Controller on Cisco Catalyst Access Points (Cisco EWC-AP)

Recommended Deployment Architecture

The following is the recommended deployment architecture for Cisco Spaces: Connector:

- Virtual machine size (vCPU): 2
- RAM: 4 GB
- Hard disk: 60 GB
- NMSP messages per seconds: 10,500
- AP count: 12,500
- Minimum bandwidth required: 4 Mbps (5000 APs, 60,000 clients)

Note If you are using captive portals, we recommend a minimum bandwidth of 30 Mbps along with a buffer. The bandwidth allows for a good end-user experience while loading captive portals from Cisco Spaces.

Cisco Spaces: Connector Compatibility Matrix

Hardware or Application Name	Support for Cisco Spaces: Connector
Cisco AireOS Wireless Controller	• 8.3 • 8.5 • 8.8 • 8.9 • 8.10 **Note** • Use the latest software or maintenance release version for each listed release. • 8.3 is end-of-life (EOL). We recommend that you migrate to one of the recommended releases as specified in the Guidelines for Cisco Wireless Software Release Product Bulletin.

Hardware or Application Name	Support for Cisco Spaces: Connector
Cisco Catalyst 9800 Series Wireless Controllers	• 16.12.4a • 16.12.5 • 17.3.1 • 17.3.2 • 17.3.3 • 17.3.4 • 17.4.1 • 17.5.1 • 17.6.1 • 17.6.2 • 17.7.1 **Note** Use the latest software version or maintenance release for each listed release.
Cisco Embedded Wireless Controller on Cisco Catalyst Access Points (Cisco EWC-AP)	Supported versions are: • 16.12.5 • 17.3.1 • 17.3.2a, • 17.3.3 • 17.3.4 • 17.4.1 • 17.5.1 • 17.6.1 **Note** Use the latest software version or maintenance release for each listed release. Supported access points are: • Cisco Catalyst 9115 Series Access Points • Cisco Catalyst 9117 Series Access Points • Cisco Catalyst 9120 Series Access Points • Cisco Catalyst 9130 Series Access Points

Hardware or Application Name	Support for Cisco Spaces: Connector
Cisco Catalyst 9300 and 9400 Series Switches	Supported versions are 17.3.3 and later
Cisco Prime Infrastructure	—
Catalyst Center	—
Cisco Spaces: IoT Service	• Supported on Cisco Catalyst 9800 Series Wireless Controllers, Release 17.9.6 or 17.12.4 • Not supported on Cisco AireOS Wireless Controller • Not supported on Cisco Embedded Wireless Controller on Cisco Catalyst Access Points (Cisco EWC-AP) • Supported on Catalyst 9800 Controller running on Catalyst Switches in SD-Access mode (ECA) **Note** This support is conditional, and dependent on whether you have applied the fix described in CSCwk66790
OpenRoaming	• Supported on Cisco Catalyst 9800 Series Wireless Controllers, Release 16.12 and later • Supported on Cisco AireOS Wireless Controller 8.3 and later
Supported wireless controllers for Cisco FastLocate	• Supported on Cisco AireOS Wireless Controller, Release 8.1.122.0 and later. • Supported on all releases of Cisco Catalyst 9800 Series Wireless Controllers
Supported wireless controllers for Cisco Hyperlocation	• Supported on Cisco AireOS Wireless Controller • Supported on Cisco Catalyst 9800 Series Wireless Controllers
Connector Active-Active	• Not supported on Cisco Embedded Wireless Controller on Cisco Catalyst Access Points (Cisco EWC-AP) • Supported on Cisco Catalyst 9800 Series Wireless Controllers • Supported on Cisco AireOS Wireless Controller

Hardware or Application Name	Support for Cisco Spaces: Connector
Tested VMware Environments	• VMware ESXi: 6.5.0 Update 2 (Build 13004031), 6.7.0 Update 2 (Build 13006603), 6.7.0 Update 3 (Build 16316930), VMware ESXi 7.0 • VMware vSphere Client Version 6.7.0 • VMware vCenter Server Appliance 6.7.0
Tested Hyper-V Environments	Hyper-V version 10.0.17763.1
Test AMI Environments	Supported

Tested Proxies	• Squid Proxy
	  • Forward-only mode (SSL tunneling)
	  • Squid-in-the-Middle mode (SSL tunneling with intercept capabilities)
	• McAfee
	• Cisco web security appliance

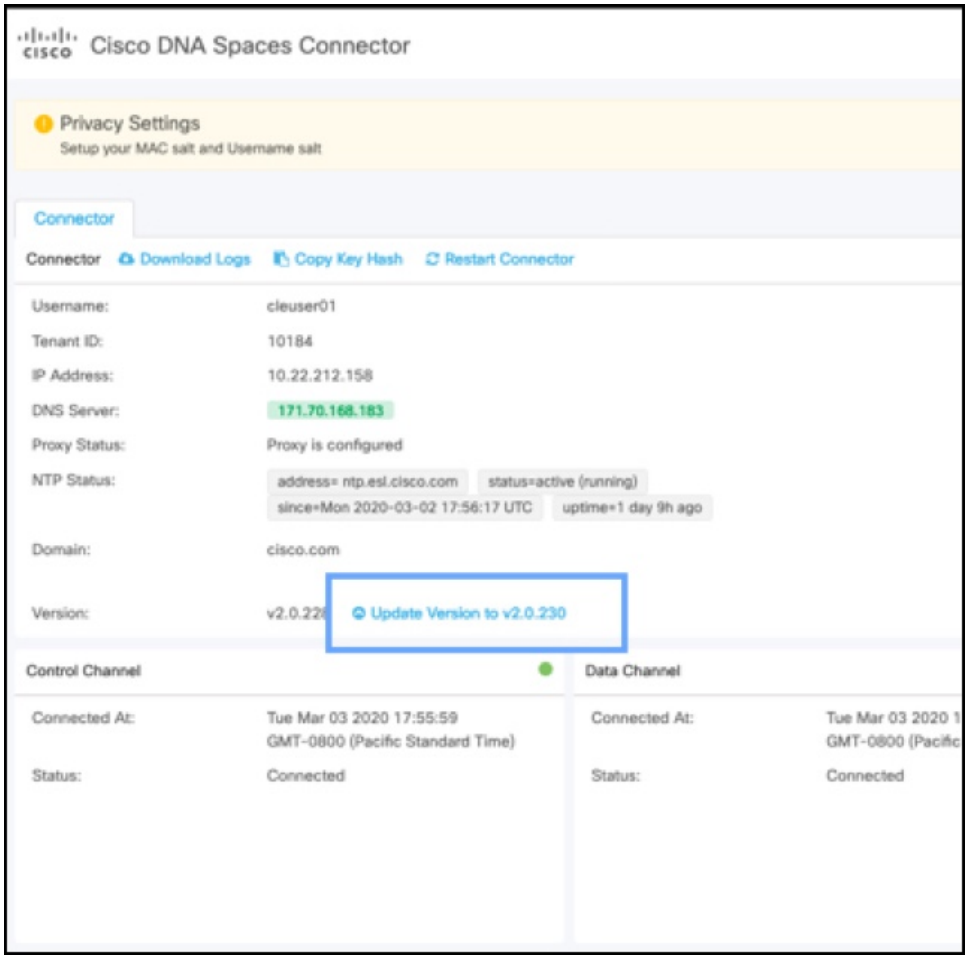
Tested Access Points for Cisco FastLocate	• Cisco Aironet 2800 Series Access Points • Cisco Aironet 3800 Series Access Points • Cisco Aironet 4800 Series Access Points
Tested Access Points for Cisco FastLocate (Wi-Fi 6)	• Cisco Catalyst 9120 Series Access Points • Cisco Catalyst 9130 Series Access Points
Tested Access Points for Cisco Hyperlocation	• Cisco Aironet 3700 Series Access Points (Requires hyperlocation antenna) • Cisco Aironet 4800 Series Access Points
Connector minimum requirement and sizing	• 2 vCPU • 4-GB RAM • 60-GB hard disk

Upgrade the Cisco Spaces: Connector Docker

You can upgrade the connector docker to the latest version from the connector GUI. Note that the upgrade link appears only if a new upgrade image is available.

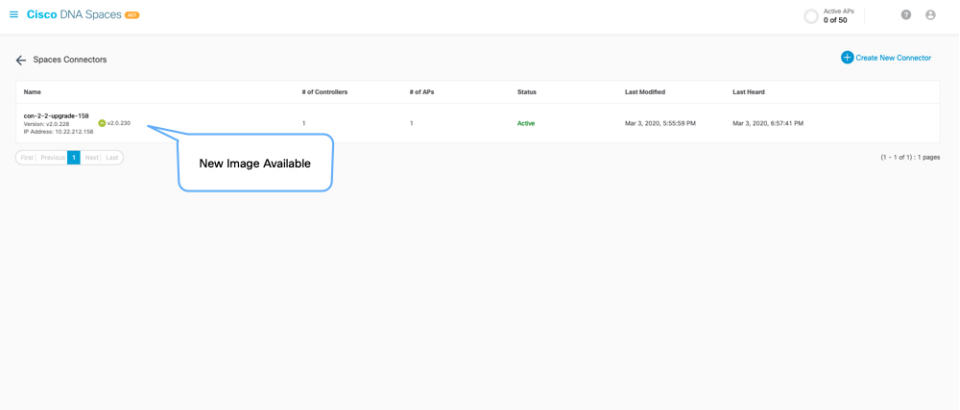
Note This procedure does not upgrade the connector OVA.

Figure 1: Docker Upgrade Link on the Connector



You can also upgrade the connector docker to the latest version from the Cisco Spaces dashboard. The upgrade link appears only if a new upgrade image is available.

Figure 2: Docker Upgrade Link Appears Only if New Image is Available



Upgrade Path

The following table is best viewed in the HTML format. Here is a description of the contents of the table.

- **Release Number**: Lists the identifying number of the release.
- **Platforms**: Lists the platforms (OVA, VHDX, AMI) on which this release can be installed or the corresponding installation file name.
- **Upgrade to This Release**: Lists the releases to which you can upgrade the release mentioned in the **Release Number** column.
- **Upgrade File**: Lists the *.connector* upgrade files you can use to upgrade to the release mentioned in the **Upgrade to This Release** column.

Table 1: Upgrade Path for Active Releases

Release Number	Platforms	Upgrade to This Release	Upgrade File
2.3.4	cisco-dna-spaces-connector-2.3.507.ova	N.A	N.A
	cisco-dna-spaces-connector-2.3.507.vhdx		
2.3.3	cisco-dna-spaces-connector-2.3.497.ova	2.3.4	cisco-dna-spaces-connector-2.3.507.connector
2.3.2	cisco-dna-spaces-connector-2.3.495.ova	2.3.3	cisco-dna-spaces-connector-2.3.497.connector
	cisco-dna-spaces-connector-2.3.496.vhdx		
2.3.1	cisco-dna-spaces-connector-2.3.478.ova	2.3.2	cisco-dna-spaces-connector-2.3.495.connector
	cisco-dna-spaces-connector-2.3.478.vhdx		
2.3	cisco-dna-spaces-connector-2.3.462.ova	2.3.1	cisco-dna-spaces-connector-2.3.478.connector
2.2	cisco-dna-spaces-connector-2.2.295.ova	2.3	cisco-dna-spaces-connector-2.3.462.connector

Note All release versions prior to 2.2 are deferred. We recommend that you deploy the latest OVA to get all the latest updates.

Table 2: Upgrade Path for AMI Releases

Release Number	Platforms	Upgrade to This Release	Upgrade File
2.3.4	AMI	N.A	N.A
2.3.3	AMI	2.3.4	cisco-dna-spaces-connector-ami-2.3.507.connector