

Cisco Spaces Prerequisites

This chapter describes the system requirements for Cisco Spaces, the bandwidth requirements to deploy Cisco Spaces, and ports and IP addresses for Cisco Spaces.

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System Requirements

The system requirements for Cisco Spaces is described in the following table:

Table 1: System Requirements

Item	System Requirements
Operating System	• Microsoft Windows XP or a later version • macOS X 10.6 or a later version
Browser	Windows OS • Firefox Version 30 or a later version • Chrome Version 34 or a later version • Safari Version 5.1.7 or a later version macOS • Firefox Version 30 or a later version • Chrome Version 34 or a later version • Safari Version 5.1.7 or a later version

Item	System Requirements
Cisco AireOS Wireless Controller	8.3 or a later version **Note** 8.3 is End-of-Life (EOL). We recommend that you migrate to one of the recommended releases as per the *Guidelines for Cisco Wireless Software Release Product Bulletin* at: https://www.cisco.com/c/en/us/products/collateral/wireless/wireless-controllers/bulletin-c25-738147.html
Cisco Connected Mobile Experiences (CMX) - this is required only for Cisco AireOS/Catalyst Controllers used with Cisco CMX.	10.6 or a later version
Cisco Spaces: Connector (Only applicable for Cisco AireOS/Catalyst Controllers)	• vCPU: 2/4/8 • RAM: 4/8/16 GB • Hard Disk: 60 GB

Bandwidth Requirements to Deploy Cisco Spaces

The following table shows the internet bandwidth requirements for Cisco Spaces: Connector and Cisco Wireless Controller Direct Connect to send location updates.

Table 2: Bandwidth Requirements

Test Data	Type	Required Bandwidth
5000 APs 60000 clients	Cisco Wireless Controller Direct Connect	250 Kbps
5000 APs 60000 clients	Cisco Spaces: Connector	4 Mbps

Accessible Ports and IP Addresses

Cisco Spaces is a cloud-based solution, and there is no physical installation involved. So, there is no need to open any port to deploy Cisco Spaces for cloud-based wireless networks such as Cisco Meraki.

For some networks such as Cisco AireOS or Cisco Catalyst that are not cloud-based, you must open the required ports to establish a connection between your wireless network and. You can establish this connection through a public IP or VPN. In addition, some Cisco Spaces IP addresses must be allowed in the customer infrastructure. For more information on the IP addresses to be allowed, refer to the Cisco Spaces IP Addresses, on page 3.

Note For a default Cisco Unified Wireless Network installation, port 443 must be open to be publicly accessible.

Cisco CMX must be publicly accessible in the following scenarios where Cisco Spaces has to establish a connection with Cisco CMX:

- Connect to Cisco CMX
- Import location and access points
- View Cisco CMX maps
- View Cisco Spaces reports

Cisco Spaces IP Addresses

To establish a connection between Cisco Spaces and a Cisco AireOS or a Cisco Catalyst 9800 Series Wireless Controller, you must allow some Cisco Spaces IP addresses in your network infrastructure.

To establish a VPN connection, contact Cisco Spaces support team.

Note A publicly resolvable domain name is not required to connect to Cisco Spaces.

Certain domain names must also be allowed in a customer's infrastructure for the Cisco CMX instances that are deployed in a customer's network to be able to communicate with the Cisco Spaces analytical and notification servers. To know the domain names that should be allowed in the Cisco Spaces dashboard, in the **SSIDs** window, click **Configure Manually** link.