



## Adding and Deleting Sites

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## Cisco MSO and APIC Interoperability Support

Cisco Multi-Site Orchestrator (MSO) does not require a specific version of APIC to be running in all sites. The APIC clusters in each site as well as the MSO itself can be upgraded independently of each other and run in mixed operation mode as long as each fabric is running APIC, Release 3.2(6) or later. As such, we recommend that you always upgrade to the latest release of the Multi-Site Orchestrator.

However, keep in mind that if you upgrade the MSO before upgrading the APIC clusters in one or more sites, some of the new MSO features may not yet be supported by an earlier APIC release. In that case a check is performed on each template to ensure that every configured option is supported by the target sites.

The check is performed when you save a template or deploy a template. If the template is already assigned to a site, any unsupported configuration options will not be saved; if the template is not yet assigned, you will be able to assign it to a site, but not be able to save or deploy the schema if it contains configuration unsupported by that site.

In case an unsupported configuration is detected, an error message will show, for example: `This APIC site version <site-version> is not supported by MSO. The minimum version required for this <feature> is <required-version> or above.`

The following table lists the features and the minimum required APIC release for each one:



**Note** While some of the following features are supported on earlier Cisco APIC releases, Release 4.2(4) is the earliest release that can be on-boarded to the Nexus Dashboard and managed by this release of Multi-Site Orchestrator.

Feature	Minimum APIC Version
ACI Multi-Pod Support	Release 4.2(4)
Service Graphs (L4-L7 Services)	Release 4.2(4)

Feature	Minimum APIC Version
External EPGs	Release 4.2(4)
ACI Virtual Edge VMM Support	Release 4.2(4)
DHCP Support	Release 4.2(4)
Consistency Checker	Release 4.2(4)
vzAny	Release 4.2(4)
Host Based Routing	Release 4.2(4)
CloudSec Encryption	Release 4.2(4)
Layer 3 Multicast	Release 4.2(4)
MD5 Authentication for OSPF	Release 4.2(4)
EPG Preferred Group	Release 4.2(4)
Intersite L3Out	Release 4.2(4)

## Adding Cisco APIC Sites

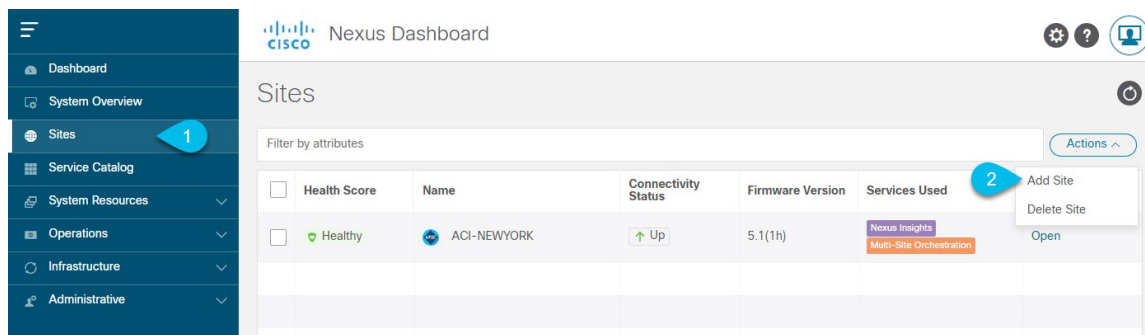
This section describes how to add a Cisco APIC site using the Nexus Dashboard GUI and then enable that site to be managed by Multi-Site Orchestrator.

### Before you begin

- You must have completed the site-specific configurations in each site's APIC, as described in previous sections in this chapter.
- You must ensure that the site(s) you are adding are running Cisco APIC, Release 4.2(4) or later.

**Step 1** Log in to the Nexus Dashboard GUI

**Step 2** Add a new site.



a) From the left navigation menu, select **Sites**.

- b) In the top right of the main pane, select **Actions > Add Site**.

**Step 3**

Provide site information.

- a) For **Site Type**, select **ACI**.  
 b) Provide the APIC controller information.

You need to provide the **Host Name/IP Address**, **User Name**, and **Password** for the APIC controller currently managing your ACI fabrics.

If you plan to use this site with Day-2 Operations applications such as Nexus Insights, you must also provide the **In-Band EPG** name used to connect the Nexus Dashboard to the fabric you are adding. Otherwise, if you will use this site with Multi-Site Orchestrator only, you can leave this field blank.

- c) Click **Add** to finish adding the site.

At this time, the sites will be available in the Nexus Dashboard, but you still need to enable them for Multi-Site Orchestrator management as described in the following steps.

**Step 4** Repeat the previous steps for any additional APIC sites.

**Step 5** From the Nexus Dashboard's **Service Catalog**, open the Multi-Site Orchestrator application.

You will be automatically logged in using the Nexus Dashboard user's credentials.

**Step 6** In the Multi-Site Orchestrator GUI, enable the sites.

Multi-Site Orchestrator Cluster Status 1/1

Sites

Filter by attributes

Health	Name	Type	Templates	State	Controller URL
N/A	Fabric1	DCNM	0	Unmanaged	https://10.23.234.161:44...
N/A	Fabric2 Site ID: 65002	DCNM	0	Unmanaged	https://10.23.234.159:44...
N/A	Fabric3 Site ID: 65003	DCNM	0	Unmanaged	https://10.23.234.159:44...

- From the left navigation menu, select **Infrastructure** > **Sites**.
- In the main pane, change the **State** from `Unmanaged` to `Managed` for each fabric that you want the MSO to manage.

## Removing Sites

This section describes how to disable site management for one or more sites using the Multi-Site Orchestrator GUI. The sites will remain present in the Nexus Dashboard.

### Before you begin

You must ensure that all templates associated with the site you want to remove are not deployed.

**Step 1** Open the Multi-Site Orchestrator GUI.

You can open the MSO application from the Nexus Dashboard's **Service Catalog**. You will be automatically logged in using the Nexus Dashboard user's credentials.

**Step 2** In the Multi-Site Orchestrator GUI, disable the sites.

Multi-Site Orchestrator Cluster Status 1/1

Sites

Filter by attributes

Health	Name	Type	Templates	State	Controller URL
N/A	Fabric1	DCNM	0	Unmanaged	https://10.23.234.161:44...
N/A	Fabric2 Site ID: 65002	DCNM	0	Unmanaged	https://10.23.234.159:44...
N/A	Fabric3 Site ID: 65003	DCNM	0	Unmanaged	https://10.23.234.159:44...

- From the left navigation menu, select **Infrastructure** > **Sites**.

- b) In the main pane, change the **State** from `Managed` to `Unmanaged` for each fabric that you want the MSO to stop managing.

**Note** If the site is associated with one or more deployed templates, you will not be able to change its state to `Unmanaged` until you undeploy those templates.

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## Cross Launch to Fabric Controllers

Multi-Site Orchestrator currently supports a number of configuration options for each type of fabrics. For many additional configuration options, you may need to log in directly into the fabric's controller.

You can cross launch into the specific site controller's GUI from the MSO's **Infrastructure > Sites** screen by selecting the actions ( . . . ) menu next to the site and clicking **Open in user interface**. Note that cross-launch works with out-of-band (OOB) management IP of the fabric.

If your Nexus Dashboard and the fabric are configured for remote user authentication, you will be logged in automatically into the fabric's controller using the same log in information as the Nexus Dashboard user.

