

Onboarding Fabrics

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Onboarding ACI Fabrics

This section describes how to onboard one or more ACI fabrics to your Nexus Dashboard.

Before you begin

- You can on-board only 1 type of sites (ACI, NDFC, or Standalone NX-OS) within the same cluster.

  Onboarding a mix of ACI and NDFC, ACI and NX-OS, or NDFC and NX-OS within the same cluster is not supported.
- Fabric connectivity must be already configured as described in Fabric Connectivity.
- EPG/L3Out for Nexus Dashboard data network IP connectivity must be already configured as described in Fabric Connectivity.
- IP connectivity from Nexus Dashboard to Cisco APIC in-band IP over the data network must be already configured.
- IP connectivity from Nexus Dashboard to the leaf nodes' and spine nodes' in-band IPs over the data network must be already configured.

Procedure

Step 1 Navigate to **Manage** > **Sites**.

Step 2 Click **Add Site**.

This starts the site onboarding workflow.

Step 3 In the **Add Site** screen, choose **Controller Based Site**.

If you don't have the Insights service installed, this selection will not be visible and site onboarding defaults to this option.

Step 4 Provide site information.

- **Host Name/IP Address** — provide the IP address used to communicate with the Cisco APIC.

  Note
  When providing the address, do not include the protocol (`http://` or `https://`) as part of the URL string or site onboarding will fail.

- **User Name** and **Password** — login credentials for a user with admin privileges on the site you are adding.
- (Optional) **Login Domain** — if you leave this field empty, the site's local login is used.
- (Optional) **Validate Peer Certificate** — allows Nexus Dashboard to verify that the certificates of hosts to which it connects (such as site controllers) are valid and are signed by a trusted Certificate Authority (CA).

  Note
  You must have the certificate for this site already imported into your Nexus Dashboard before you can add a site using this option. If you have not yet added the certificates, cancel the onboarding workflow and follow the instructions described in the "Administrative Tasks" article in the Nexus Dashboard *documentation library*; then after you have imported the certificates, add the site as described here. If you enable the Verify Peer Certificate option but don't import the valid certificate, site onboarding will fail.

- (Optional) Enable the **Use Proxy** option if connectivity to this site's controller requires the proxy.

  The proxy must be already configured in the Nexus Dashboard's **Admin Console**.

Step 5 Provide additional site **Details**.

- **Name** — a descriptive name for the site.
- **Location** — site's geographical location. This option is available only for on-premises sites.

Step 6 In the **Summary** page, verify the information and click **Save** to finish adding the site.

Onboarding NDFC Fabrics

This section describes how to onboard one or more NDFC fabrics to your Nexus Dashboard.



Note After the cluster is deployed, ensure that you configure the NDFC deployment persona by navigating to **Fabric Controller** > **System Settings** > **Feature Management** and selecting one of the supported modes.

When you create fabrics in your NDFC service, they are automatically added as sites to the Nexus Dashboard. The following steps are only required if you are on-boarding sites from a different Nexus Dashboard cluster for Fabric Controller and Insights co-location use case where each service is deployed in separate clusters.

Before you begin

- You can on-board only 1 type of sites (ACI, NDFC, or Standalone NX-OS) within the same cluster.

Onboarding a mix of ACI and NDFC, ACI and NX-OS, or NDFC and NX-OS within the same cluster is not supported.

- Fabric connectivity must be already configured as described in Fabric Connectivity.
- Layer 3 connectivity to the fabric and switches must be already configured.
- If your cluster is deployed in AWS or Azure, you must configure inbound rules on the data interface.

Procedure

Step 1 Navigate to **Manage** > **Sites**.

Step 2 Click **Add Site**.

This starts the site onboarding workflow.

Step 3 In the **Add Site** screen, choose **Controller Based Site**.

Step 4 Provide site information.

- **Host Name/IP Address** — provide the IP address used to communicate with the Cisco NDFC.

  Note
  For NDFC sites, this must be the in-band IP address of NDFC.

  When providing the address, do not include the protocol (`http://` or `https://`) as part of the URL string or site onboarding will fail.

- **User Name** and **Password** — login credentials for a user with admin privileges on the site you are adding.
- (Optional) **Login Domain** — if you leave this field empty, the site's local login is used.
- (Optional) **Validate Peer Certificate** — allows Nexus Dashboard to verify that the certificates of hosts to which it connects (such as site controllers) are valid and are signed by a trusted Certificate Authority (CA).

  Note
  You must have the certificate for this site already imported into your Nexus Dashboard before you can add a site using this option. If you have not yet added the certificates, cancel the onboarding workflow and follow the instructions described in the "Administrator" article in the Nexus Dashboard *documentation library*; then after you have imported the certificates, add the site as described here. If you enable the Verify Peer Certificate option but don't import the valid certificate, site onboarding will fail.

Step 5 Provide additional site **Details**.

- **Name** — a descriptive name for the site.
- **Location** — site's geographical location. This option is available only for on-premises sites.

Step 6 In the **Summary** page, verify the information and click **Save** to finish adding the site.

Onboarding NX-OS Switches

This section describes how to onboard one or more standalone NX-OS switches to your Nexus Dashboard.



Note When onboarding standalone NX-OS switches without a controller (such as APIC or NDFC), the following restrictions apply:

- You can on-board only 1 type of sites (ACI, NDFC, or Standalone NX-OS) within the same cluster.

  Onboarding a mix of ACI and NDFC, ACI and NX-OS, or NDFC and NX-OS within the same cluster is not supported.
- Only Nexus Dashboard Insights service supports standalone NX-OS switches.
- Only physical Nexus Dashboard clusters support onboarding NX-OS switches.
- You must not install the NDFC service in the same Nexus Dashboard cluster where you will onboard standalone NX-OS switches.
- Before onboarding standalone NX-OS switches, you must enable "NX-OS switch discovery" in your cluster as mentioned in Step 3 below.

  Enabling NX-OS switch discovery must be done by an Admin user.
- You must also configure 10 persistent IPs (if using IPv4) and 8 IPs (if using IPv6) in the data network.

  Persistent IPs can be configured in the **Nexus Dashboard** > **Admin Console** > **System Settings** > **External Service Pools** > **Data Service IPs** page.
- You must enable NX-OS switches auto-discovery Cisco Discovery Protocol (CDP) in all NX-OS Switches.
- You must configure Nexus Dashboard reachability to NX-OS switches' management network because NX-OS switches auto-discovery uses the switches' management interfaces.

  You must configure Nexus Dashboard data network reachability to NX-OS switches' in-band network.

Procedure

Step 1 Navigate to **Manage** > **Sites**.

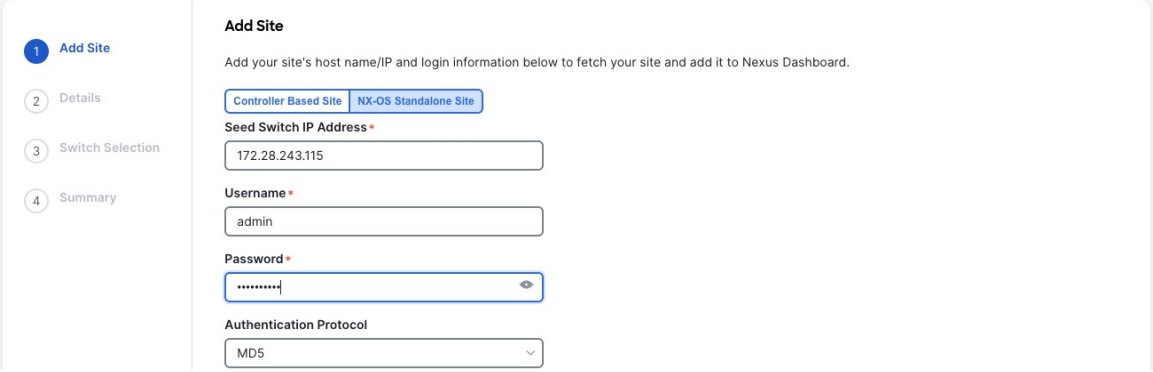
Step 2 Click **Add Site**.

This starts the site onboarding workflow.

Step 3 In the **Add Site** screen, choose **NX-OS Standalone Site**.

Note
If this is the first time you are onboarding NX-OS switches without a controller, click **Enable NXOS Discovery**.

Step 4 Provide site information.



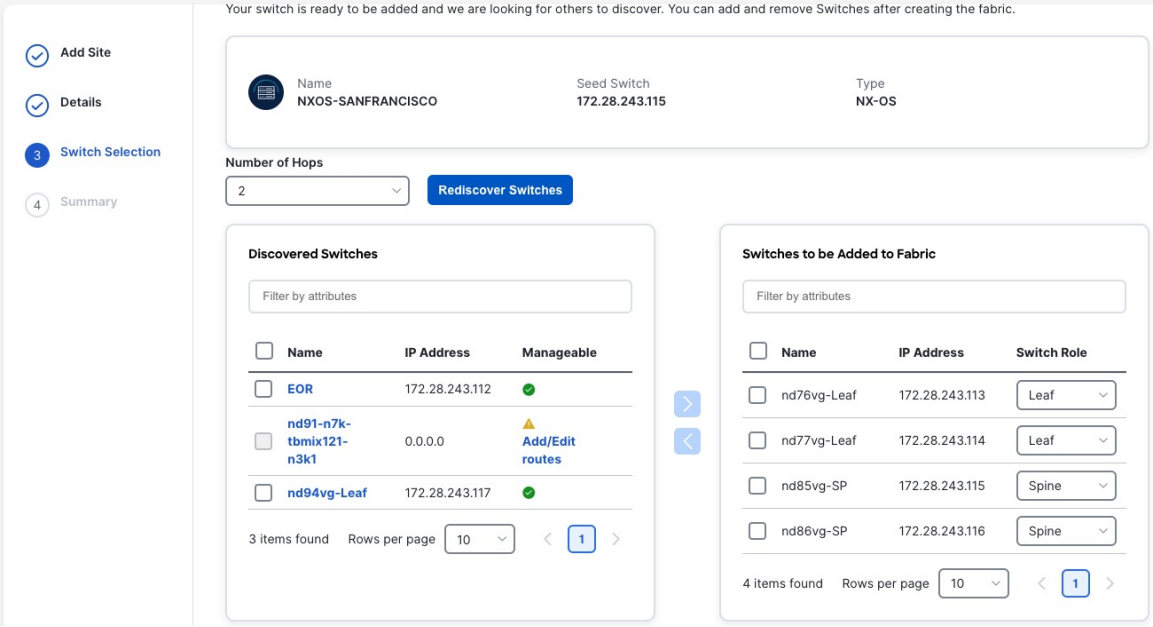
- **Seed Switch IP Address** — provide the IP address of the seed switch used to discover other switches in the site.
- **Username** and **Password** — login credentials on the seed switch.

Step 5 Provide additional site **Details**.

- **Name** — a descriptive name for the site.
- **Location** — site's geographical location. This option is available only for on-premises sites.

Step 6 In the **Switch Selection** page, select one or more switches to add to the site.

By default, the switch discovery process will show switches that are 2 hops away from the seed switch. You can change the default setting using the **Number of Hops** dropdown and clicking **Rediscover Switches**.



After the switches are discovered, simply select all the switches you want to add to the site from the list on the left and click on the right arrow to move them to right-hand list.

The switches are added with the default `Leaf` role, but you can change it to other roles as required, then click **Next** to continue.

Step 7 In the **Summary** page, verify the information and click **Save** to finish adding the site.

Step 8 (Optional) Add switches to an existing standalone NX-OS site.

After you first add the site, you can **Add Switches** by selecting the site in the GUI:

