# Upgrading or Downgrading MSO Application

## Overview

The following sections describe how to upgrade or downgrade Cisco Multi-Site Orchestrator, Release 3.2(1) or later that is deployed in Cisco Nexus Dashboard.

If you are running an earlier release deployed in VMware ESX VMs or Cisco Application Services Engine, you must deploy a brand new cluster and then transfer the configuration from your existing cluster, as described in the "Migrating Existing Cluster to Nexus Dashboard" chapter of the *Multi-Site Orchestrator Deployment Guide*.

## Prerequisites and Guidelines

Before you upgrade or downgrade your Cisco Multi-Site Orchestrator cluster:

- Stateful upgrades from releases prior to Release 3.2(1) are not supported and you would need to re-deploy the cluster and restore existing configuration backup.

- Ensure that your current Nexus Dashboard cluster is healthy.

  You can check the Nexus Dashboard cluster health in one of two ways:

  - By logging into your Nexus Dashboard GUI and verifying system status in the **System Overview** page.

  - By logging into any one of the nodes directly as `rescue-user` and running the following command:

    ```
    # acs health
    All components are healthy
    ```

- Ensure that your current Cisco Multi-Site Orchestrator is running properly.

- You can upgrade the MSO application in one of two ways:

- Using the Nexus Dashboard's App Store, as described in Upgrading MSO Application Using Cisco App Store, on page 2.

  In this case, the Cisco DC App Center must be reachable from the Nexus Dashboard via the Management Network directly or using a proxy configuration. Nexus Dashboard proxy configuration is described in the *Nexus Dashboard User Guide*.

  Note that the App Store allows you to upgrade to the latest available version of the application only.

- By manually uploading the new app image, as described in this section, as described in Upgrading Multi-Site Orchestrator Application Manually, on page 4.

  You can use this approach if you are unable to establish the connection to the DC App Center or if you want to upgrade to a version of the application that is not the latest available release.

- The downgrade workflow is similar to the manual upgrade process and is described in Downgrading MSO Application, on page 6.

- Downgrading to releases prior to Release 3.2(1) is not supported.

  If you want to downgrade to an earlier release, you must deploy a new Multi-Site Orchestrator cluster on a platform supported by that release, then restore the older configuration backup. Restoring backups created on Release 3.2(1) or later to an older MSO cluster is not supported.

# Upgrading MSO Application Using Cisco App Store

This section describes how to upgrade Cisco Multi-Site Orchestrator, Release 3.2(1) or later.
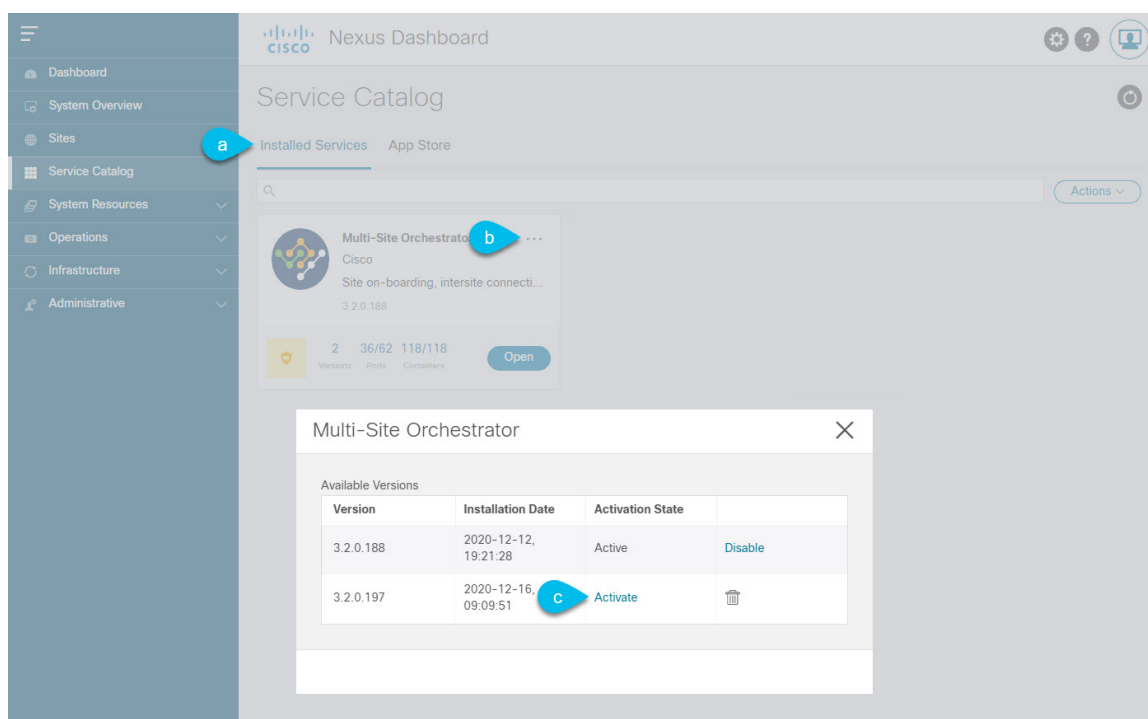
**Before you begin**

- Ensure that you have completed the prerequisites described in Prerequisites and Guidelines, on page 1.

- Ensure that Cisco DC App Center is reachable from the Nexus Dashboard via the Management Network directly or using a proxy configuration.

  Nexus Dashboard proxy configuration is described in the *Nexus Dashboard User Guide*

**Procedure**

**Step 1**    Log in to your Nexus Dashboard..

**Step 2**    From the left navigation menu, select **Service Catalog**.

**Step 3**    Upgrade the application using the App Store.

    a) In the **Service Catalog** screen, select the **App Store** tab.

    b) In the **Multi-Site Orchestrator** tile, click **Upgrade**.

    c) In the License Agreement window that opens, click **Agree and Download**.

**Step 4**    Wait for the new image to initialize.

It may take up to 20 minutes for the new application image to become available.

**Step 5**    Activate the new image.

a) In the **Service Catalog** screen, select the **Installed Services** tab.

b) In the top right of the Multi-Site Orchestrator tile, click the menu ( . . . ) and choose **Available Versions**.

c) In the available versions window, click **Activate** next to the new image.

> **Note**
> Do not **Disable** the currently running image before activating the new image. The image activation process will recognize the currently running image and perform the upgrade workflows necessary for the currently running app version.

It may take up to 20 additional minutes for all the application services to start and the GUI to become available. The page will automatically reload when the process is completed.

**Step 6**    (Optional) Delete the old application image.

You can choose to retain the old application version in case you ever want to downgrade. Or you can delete it as described in this step.

a) In the **Service Catalog** screen, select the **Installed Services** tab.

b) In the top right of the Multi-Site Orchestrator tile, click the menu ( . . . ) and choose **Available Versions**.

c) In the available versions window, click the delete icon next to the image you want to delete.

It may take up to 20 additional minutes for all the application services to start and the GUI to become available. The page will automatically reload when the process is completed.

**Step 7**    Launch the app.

To launch the app, simply click **Open** on the application tile in the Nexus Dashboard's **Service Catalog** page.

The single sign-on (SSO) feature allows you to log in to the application using the same credentials as you used for the Nexus Dashboard.

# Upgrading Multi-Site Orchestrator Application Manually

This section describes how to upgrade Cisco Multi-Site Orchestrator, Release 3.2(1) or later.

**Before you begin**

- Ensure that you have completed the prerequisites described in .

**Procedure**

**Step 1** Download the target release image.

    a) Browse to the Multi-Site Orchestrator page on DC App Center:

       https://dcappcenter.cisco.com/nexus-dashboard-orchestrator.html

    b) From the **Version** drop-down, choose the version you want to install and click **Download**.

    c) Click **Agree and download** to accept the license agreement and download the image.

**Step 2** Log in to your Nexus Dashboard..

**Step 3** Upload the image to your Nexus Dashboard.

    a) From the left navigation menu, select **Service Catalog**.

    b) In the Nexus Dashboard's **Service Catalog** screen, select the **Installed Services** tab.

    c) From the **Actions** menu in the top right of main pane, select **Upload App**.

    d) In the **Upload App** window, choose the location of the image

       If you downloaded the application image to your system, choose **Local**.

       If you are hosting the image on a server, choose **Remote**.

    e) Choose the file.

       If you chose **Local** in the previous substep, click **Select File** and select the app image you downloaded.

       If you chose **Remote**, provide the full URL to the image file, for example
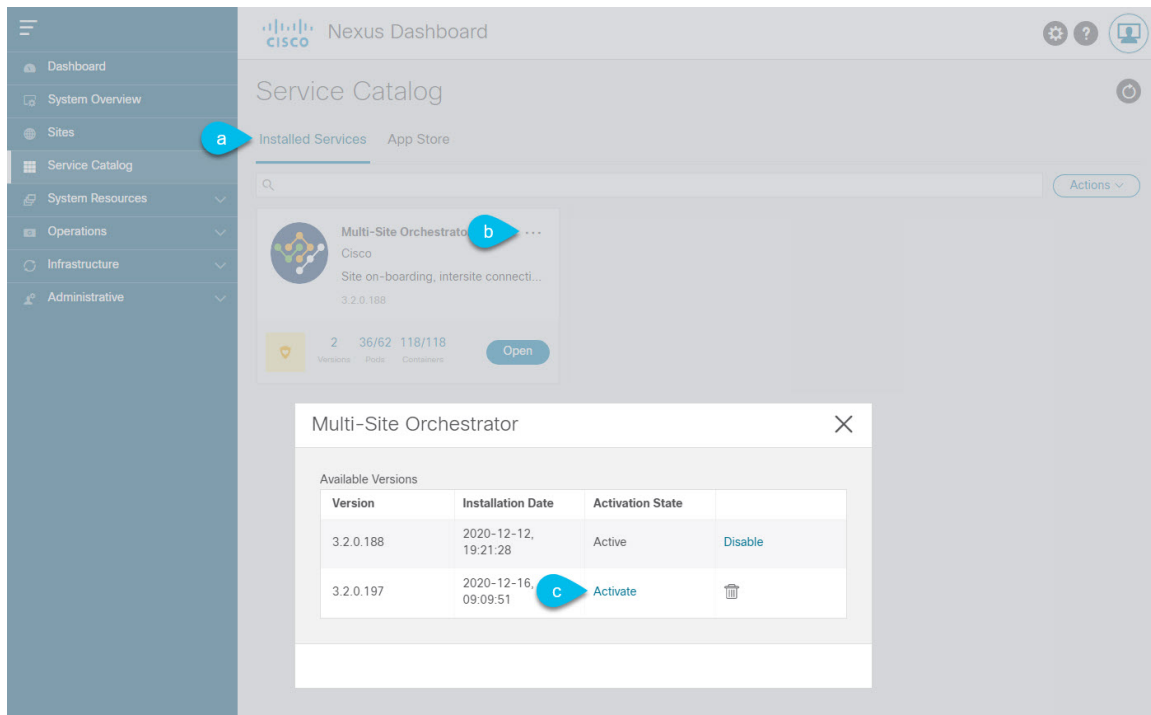       `http://<ip-address>:<port>/<full-path>/cisco-mso-<version>.aci`.

    f) Click **Upload** to add the app to the cluster.

       A new tile will appear with the upload progress bar. Once the image upload is completed, the Nexus Dashboard will recognize the new image as an existing application and add it as a new version.

**Step 4** Wait for the new image to initialize.

It may take up to 20 minutes for the new application image to become available.

**Step 5** Activate the new image.

a)  In the **Service Catalog** screen, select the **Installed Services** tab.

b)  In the top right of the Multi-Site Orchestrator tile, click the menu ( . . . ) and choose **Available Versions**.

c)  In the available versions window, click **Activate** next to the new image.

> **Note**
> Do not **Disable** the currently running image before activating the new image. The image activation process will recognize the currently running image and perform the upgrade workflows necessary for the currently running app version.

It may take up to 20 additional minutes for all the application services to start and the GUI to become available. The page will automatically reload when the process is completed.

**Step 6**   (Optional) Delete the old application image.

You can choose to retain the old application version in case you ever want to downgrade. Or you can delete it as described in this step.

a)  In the **Service Catalog** screen, select the **Installed Services** tab.

b)  In the top right of the Multi-Site Orchestrator tile, click the menu ( . . . ) and choose **Available Versions**.

c)  In the available versions window, click the delete icon next to the image you want to delete.

It may take up to 20 additional minutes for all the application services to start and the GUI to become available. The page will automatically reload when the process is completed.

**Step 7**   Launch the app.

To launch the app, simply click **Open** on the application tile in the Nexus Dashboard's **Service Catalog** page.

The single sign-on (SSO) feature allows you to log in to the application using the same credentials as you used for the Nexus Dashboard.

# Downgrading MSO Application

This section describes how to downgrade Cisco Multi-Site Orchestrator, Release 3.2(1) or later.

The downgrade workflow is similar to the upgrade workflow and involves uploading the target release image and switching the currently running app version to the new image as described below.

### Before you begin

- Downgrading to releases prior to Release 3.2(1) is not supported.

  If you want to downgrade to an earlier release, you must deploy a new Multi-Site Orchestrator cluster on a platform supported by that release, then restore the older configuration backup. Restoring backups created on Release 3.2(1) or later to an older MSO cluster is not supported.

- Ensure that you have completed the prerequisites described in Prerequisites and Guidelines, on page 1

### Procedure

**Step 1** Download the target release image.

a) Browse to the Multi-Site Orchestrator application DC App Center page: https://dcappcenter.cisco.com/multi-site-orchestrator.html.

b) From the **Version** dropdown, choose the version you want to install and click **Download**.

c) Accept the license agreement and download the image.

**Step 2** Log in to your Nexus Dashboard..

**Step 3** Upload the image to your Nexus Dashboard.

a) From the left navigation menu, select **Service Catalog**.

b) In the Nexus Dashboard's **Service Catalog** screen, select the **Installed Services** tab.

c) From the **Actions** menu in the top right of main pane, select **Upload App**.

d) In the **Upload App** window, choose the location of the image

If you downloaded the application image to your system, choose **Local**.

If you are hosting the image on a server, choose **Remote**.

e) Choose the file.

If you chose **Local** in the previous substep, click **Select File** and select the app image you downloaded.

If you chose **Remote**, provide the full URL to the image file, for example
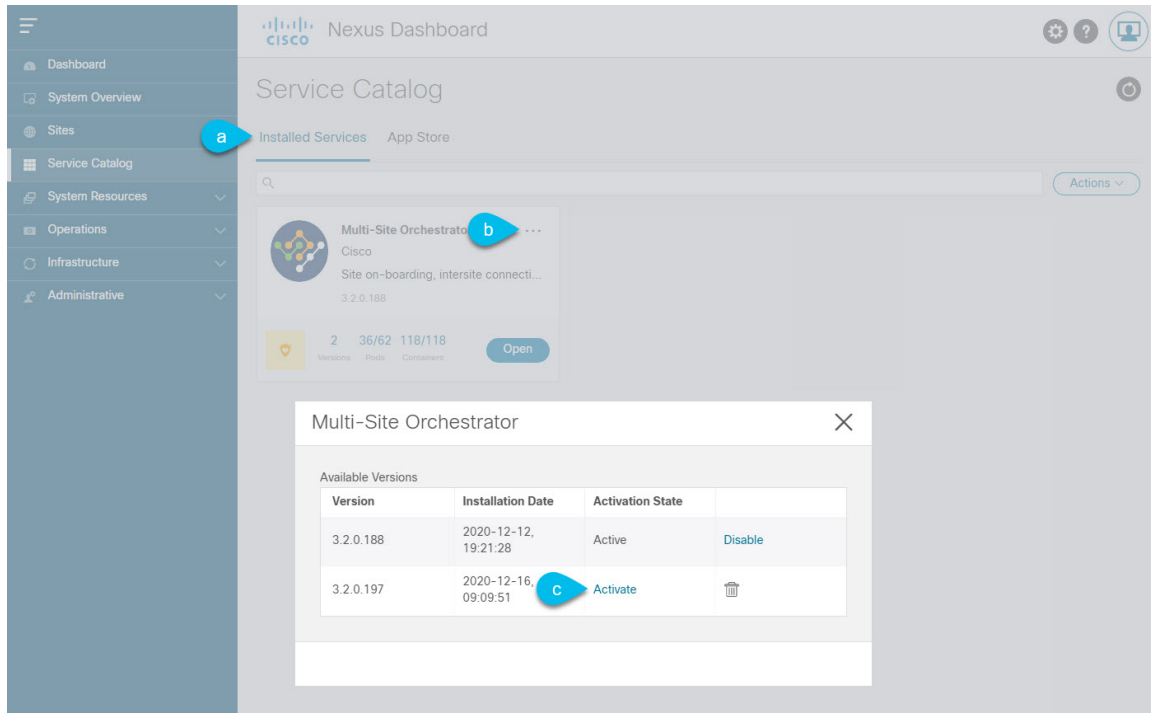`http://<ip-address>:<port>/<full-path>/cisco-mso-<version>.aci`.

f) Click **Upload** to add the app to the cluster.

A new tile will appear with the upload progress bar. Once the image upload is completed, the Nexus Dashboard will recognize the new image as an existing application and add it as a new version.

**Step 4** Wait for the new image to initialize.

It may take up to 20 minutes for the new application image to become available.

**Step 5** Activate the new image.



a) In the **Service Catalog** screen, select the **Installed Services** tab.
b) In the top right of the Multi-Site Orchestrator tile, click the menu ( . . . ) and choose **Available Versions**.
c) In the available versions window, click **Activate** next to the new image.

    **Note**
    Do not **Disable** the currently running image before activating the new image. The image activation process will recognize the currently running image and perform the downgrade workflows necessary for the currently running app version.

    It may take up to 20 additional minutes for all the application services to start and the GUI to become available. The page will automatically reload when the process is completed.

**Step 6** (Optional) Delete the old application image.

You can choose to retain the old application version in case you ever want to downgrade. Or you can delete it as described in this step.

a) In the **Service Catalog** screen, select the **Installed Services** tab.
b) In the top right of the Multi-Site Orchestrator tile, click the menu ( . . . ) and choose **Available Versions**.
c) In the available versions window, click the delete icon next to the image you want to delete.

It may take up to 20 additional minutes for all the application services to start and the GUI to become available. The page will automatically reload when the process is completed.

**Step 7** Launch the app.

To launch the app, simply click **Open** on the application tile in the Nexus Dashboard's **Service Catalog** page.

The single sign-on (SSO) feature allows you to log in to the application using the same credentials as you used for the Nexus Dashboard.