



Upgrading Cisco Nexus Dashboard Fabric Controller

This chapter provides information about upgrading Cisco Nexus Dashboard Fabric Controller, and contains the following sections:

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- [Upgrading from Cisco DCNM 11.5\(x\) to Cisco NDFC Release 12.0.2f, on page 9](#)
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Upgrade Paths to Release 12.0.2f

The following table summarizes the type of upgrade that you must follow to upgrade to Release 12.0.2f.

Go to [Software Download](#) to download the Upgrade Tool scripts.

Current Release Number	Deployment Type	Upgrade type when upgrade to Release 12.0.2f
12.0.1a	All	<ol style="list-style-type: none">1. Upgrade Nexus Dashboard version 2.1.1e to version 2.1.2d2. Upgrade NDFC application to 12.0.2f.
11.5(3)	LAN Fabric Deployment Note Media Controller and all SAN deployments are not supported in Release 11.5(3).	<ol style="list-style-type: none">1. Backup using DCNM_To_NDFC_Upgrade_Tool_OVA_ISO.zip2. Restore on Nexus Dashboard Fabric Controller Web UI > Operations > Backup & Restore

Current Release Number	Deployment Type	Upgrade type when upgrade to Release 12.0.2f
11.5(2)	SAN Deployment on Windows and Linux	<ol style="list-style-type: none"> 1. Backup using DCNM_To_NDFC_Upgrade_Tool_LIN_WIN.zip 2. Restore on Nexus Dashboard Fabric Controller Web UI > Operations > Backup & Restore
	SAN Deployment on OVA/ISO/SE	<ol style="list-style-type: none"> 1. Backup using DCNM_To_NDFC_Upgrade_Tool_OVA_ISO.zip 2. Restore on Nexus Dashboard Fabric Controller Web UI > Operations > Backup & Restore
	LAN Fabric Deployment on OVA/ISO/SE	<ol style="list-style-type: none"> 1. Backup using DCNM_To_NDFC_Upgrade_Tool_OVA_ISO.zip 2. Restore on Nexus Dashboard Fabric Controller Web UI > Operations > Backup & Restore
11.5(1)	SAN Deployment on Windows and Linux	<ol style="list-style-type: none"> 1. Backup using DCNM_To_NDFC_Upgrade_Tool_LIN_WIN.zip 2. Restore on Nexus Dashboard Fabric Controller Web UI > Operations > Backup & Restore
	SAN Deployment on OVA/ISO/SE	<ol style="list-style-type: none"> 1. Backup using DCNM_To_NDFC_Upgrade_Tool_OVA_ISO.zip 2. Restore on Nexus Dashboard Fabric Controller Web UI > Operations > Backup & Restore
	LAN Fabric Deployment on OVA/ISO/SE	<ol style="list-style-type: none"> 1. Backup using DCNM_To_NDFC_Upgrade_Tool_OVA_ISO.zip 2. Restore on Nexus Dashboard Fabric Controller Web UI > Operations > Backup & Restore
	Media Controller Deployment on OVA/ISO	<ol style="list-style-type: none"> 1. Backup using DCNM_To_NDFC_Upgrade_Tool_OVA_ISO.zip 2. Restore on Nexus Dashboard Fabric Controller Web UI > Operations > Backup & Restore

Persona Compatibility for Upgrade

By using the appropriate Upgrade Tool, you can restore data that is backed up from DCNM Release 11.5(1) or 11.5(2) or 11.5(3) on a newly deployed Cisco Nexus Dashboard Fabric Controller for the personas as mentioned in the following table:

Backup from DCNM 11.5(x)^{1 2}	Persona Enabled in NDFC 12.0.2f after Upgrade
DCNM 11.5(x) LAN Fabric Deployment on OVA/ISO/SE	Fabric Controller + Fabric Builder
DCNM 11.5(x) PMN Deployment on OVA/ISO/SE	Fabric Controller + IP Fabric for Media (IPFM)
DCNM 11.5(x) SAN Deployment on OVA/ISO/SE	SAN Controller
DCNM 11.5(x) SAN Deployment on Linux	SAN Controller
DCNM 11.5(x) SAN Deployment on Windows	SAN Controller

¹ All references to 11.5(x) are for 11.5(1) or 11.5(2). Upgrade to NDFC 12 from DCNM 11.5(3) is supported for LAN Fabric Deployments only.

² DCNM Release 11.5(3) does not support Media Controller and SAN deployments.

Feature Compatibility Post Upgrade

The following table lists caveats associated with features that are restored from DCNM 11.5(x) backup after upgrade to NDFC, Release 12.0.2f.

Feature in DCNM 11.5(x)	Upgrade Support
Nexus Dashboard Insights configured Refer to Nexus Dashboard Insights User Guide for more information.	Supported
Container Orchestrator (K8s) Visualizer	Supported
VMM Visibility with vCenter	Supported
Nexus Dashboard Orchestrator configured	Not Supported
Preview features configured	Not supported
LAN switches in SAN installations	Not supported
Switches discovered over IPv6	Not supported
DCNM Tracker	Not supported
SAN CLI templates	Not carried over from 11.5(x) to 12.0.2f
Switch images/Image Management data	Not carried over from 11.5(x) to 12.0.2f
Slow drain data	Not carried over from 11.5(x) to 12.0.2f
Infoblox configuration	Not carried over from 11.5(x) to 12.0.2f
Endpoint Locator configuration	You must reconfigure Endpoint Locator (EPL) post upgrade to Release 12.0.2f. However, historical data is retained up to a maximum size of 500 MB.
Alarm Policy configuration	Not carried over from 11.5(x) to 12.0.2f

Feature in DCNM 11.5(x)	Upgrade Support
Performance Management data	CPU/Memory/Interface statistics up to 90 days is restored post upgrade.

Downloading the Nexus Dashboard Fabric Controller Upgrade Tool

To download Upgrade tool to upgrade from Cisco DCNM to Nexus Dashboard Fabric Controller, perform the following steps:

Before you begin

- Identify the deployment type of Cisco DCNM Release 11.5(x) setup.

Procedure

-
- Step 1** Go to the following site: <http://software.cisco.com/download/>.
A list of the latest release software for Cisco Nexus Dashboard Fabric Controller available for download is displayed.
- Step 2** In the Latest Releases list, choose Release 12.0.2f.
- Step 3** Based on your Cisco DCNM 11.5(x) deployment type, locate the **DCNM_To_NDFC_Upgrade_Tool** and click the **Download** icon.
The following table displays the DCNM 11.5(x) deployment type, and the corresponding Nexus Dashboard Fabric Controller upgrade tool that you must download.

Table 1: DCNM 11.5(x) Deployment type and Upgrade Tool Compatibility Matrix

DCNM 11.5(x) deployment type	UpgradeTool Name
ISO/OVA	DCNM_To_NDFC_Upgrade_Tool_OVA_ISO
Linux	DCNM_To_NDFC_Upgrade_Tool_LIN_WIN.zip
Windows	DCNM_To_NDFC_Upgrade_Tool_LIN_WIN.zip

- Step 4** Save the appropriate **Upgrade Tool** to the 11.5(x) server using **sysadmin** credentials.
-

Backup Using the Upgrade Tool

Stop Performance Management collection before running backup script for large scaled DCNM. To stop the Performance Management collection, perform the following steps:

- Navigate to **Administration > DCNM Server > Server Status**.
- Click on **Stop Service** of **Performance Collector** and wait a few seconds.
- Click on the **refresh** icon on the top right to check the status. Make sure it shows **Stopped**.

The backup tool collects last 90 days Performance Management data.

To run the **DCNM_To_NDFC_Upgrade_Tool** to take a backup of all the applications and data on DCNM 11.5, perform the following steps:

Before you begin

- On Cisco DCNM Release 11.5(1), ensure that you validate each fabric before proceeding to take backup. Choose Cisco DCNM **Web UI > Administration > Credentials Management > SAN Credentials**. Select each fabric and click **Validate** to validate credentials before taking backup.
- Ensure that you've copied the appropriate Upgrade Tool to the server of your DCNM 11.5(x) setup.
- Ensure that you have enabled execution permissions to the Upgrade tool. Use **chmod +x .** to enable executable permissions.

```
[root@dcnm]# chmod +x ./DCNM12UpgradeToolOVAISO
```

Procedure

Step 1 Log on to the Cisco DCNM Release 11.5(x) appliance console.

Step 2 Run the following command to create a screen session.

```
dcnm# screen
```

This creates a session which allows you to execute the commands. The commands continue to run even when the window is not visible or if you get disconnected.

Step 3 Log on to the /root/ directory, by using the su command.

```
dcnm# su
Enter password: <<enter-password>>
[root@dcnm]#
```

Step 4 Execute the upgrade tool, by using the **./DCNM_To_NDFC_Upgrade_Tool** command.

For OVA/ISO-

```
[root@dcnm]# ./DCNM_To_NDFC_Upgrade_Tool_OVA_ISO /* for OVA/ISO
```

For Windows/Linux-

```
root@dcnm]# unzip DCNM_To_NDFC_Upgrade_Tool_LIN_WIN.zip
[root@dcnm-rhel]# cd DCNM_To_NDFC_Upgrade_Tool_LIN_WIN/
[root@dcnm-rhel DCNM_To_NDFC_Upgrade_Tool_LIN_WIN]# ls
DCNMBackup.bat DCNMBackup.sh jar
[root@rhel DCNM_To_NDFC_Upgrade_Tool_LIN_WIN]# ./DCNMBackup.sh /* Enter this command
for Linux appliance */
OR
[root@rhel DCNM_To_NDFC_Upgrade_Tool_LIN_WIN]# ./DCNMBackup.bat /* Enter this command
for Windows appliance */
```

The upgrade tool analysis the DCNM appliance data, and determines whether you can upgrade to Cisco Nexus Dashboard Fabric Controller Release 12.0.2f or not.

Note The backup that is generated by using this tool can be used to restore data, after upgrade.

Step 5 At the prompt to continue with backup, press **y**.

```
*****
Welcome to DCNM-to-NDFC Upgrade Tool for OVA/ISO.
This tool will analyze this system and determine whether you can move to NDFC 12.0.2f or
not.
If upgrade to NDFC 12.0.2f is possible, this tool will create files to be used for performing
the upgrade.
NOTE: only backup files created by this tool can be used for upgrading, older backup files
created with 'appmgr backup'
CAN NOT be used for upgrading to NDFC 12.0.2f
Thank you!
*****

Continue? [y/n]: y

Collect operational data (e.g. PM, EPL)? [y/n]: y

Does this DCNM 11.5(1) have DCNM Tracker feature enabled on any switch on any fabric? [y/n]:
n
```

Step 6 Enter the encryption key to the backup file.

Note You must provide this encryption key when you're restoring the backup file. Ensure that you save the encryption key in a safe location. If you lose the encryption key, you cannot restore the backup.

Sensitive information will be encrypted using an encryption key.
This encryption key will have to be provided when restoring the backup file generated by this tool.

```
Please enter the encryption key: /* enter the encryption key for the backup file */
Enter it again for verification: /* re-enter the encryption key for the backup file
*/

...
...
Creating backup file
Done.
Backup file: backup11_dcnm-172-23-87-224_20210928-093355.tar.gz /* backup file name*/
[root@dcnm]#
```

The encrypted backup file is created.

Step 7 Copy the backup file to a safe location and shut down the application 11.5(x) DCNM appliance.

Example

Example for taking backup using the DCNM backup Tool

- Taking backup on DCNM 11.5(x) OVA/ISO appliance

```
[root@dcnm]# chmod +x DCNM_To_NDFC_Upgrade_Tool_OVA_ISO
[root@dcnm]# ./DCNM_To_NDFC_Upgrade_Tool_OVA_ISO
*****
```

Welcome to DCNM-to-NDFC Upgrade Tool for OVA/ISO.

This tool will analyze this system and determine whether you can move to NDFC 12.0.2f or not.

If upgrade to NDFC 12.0.2f is possible, this tool will create files to be used for performing the upgrade.

NOTE:

only backup files created by this tool can be used for upgrading, older backup files created with 'appmgr backup' CAN NOT be used for upgrading to NDFC 12.0.2f

Thank you!

Continue? [y/n]: **y**

Collect operational data (e.g. PM, EPL)? [y/n]: **y**

Does this DCNM 11.5(1) have DCNM Tracker feature enabled on any switch on any fabric?
[y/n]: **n**

Sensitive information will be encrypted using an encryption key.
This encryption key will have to be provided when restoring
the backup file generated by this tool.

Please enter the encryption key: **/* enter the encryption key for the backup file */**

Enter it again for verification: **/* re-enter the encryption key for the backup file */**

Adding backup header

Collecting DB table data

Collecting DB sequence data

Collecting stored credentials

Collecting Custom Templates

Collecting CC files

Collecting L4-7-service data

Collecting CVisualizer data

Collecting EPL data

Collecting PM data - WARNING: this will take a while!

Collecting AFW app info

Decrypting stored credentials

Creating backup file

Done.

Backup file: backup11_dcnm-172-23-87-224_20210913-012857.tar.gz

/* backup file

name*/

[root@dcnm]#

• Taking backup on DCNM 11.5(x) Windows/Linux appliance

```
[root@dcnm]# chmod +x DCNM_To_NDFC_Upgrade_Tool_LIN_WIN
```

```
[root@dcnm]# unzip DCNM_To_NDFC_Upgrade_Tool_LIN_WIN.zip
```

```
Archive: DCNM_To_NDFC_Upgrade_Tool_LIN_WIN.zip
```

```
  creating: DCNM_To_NDFC_Upgrade_Tool_LIN_WIN/
```

```
  creating: DCNM_To_NDFC_Upgrade_Tool_LIN_WIN/jar/
```

```
  inflating: DCNM_To_NDFC_Upgrade_Tool_LIN_WIN/jar/bcprov-jdk15on-1.68.jar
```

```
  inflating: DCNM_To_NDFC_Upgrade_Tool_LIN_WIN/jar/DCNMBackup.java
```

```
  inflating: DCNM_To_NDFC_Upgrade_Tool_LIN_WIN/jar/sequences.info.oracle
```

```
  inflating: DCNM_To_NDFC_Upgrade_Tool_LIN_WIN/jar/slf4j-simple-1.7.21.jar
```

```
  inflating: DCNM_To_NDFC_Upgrade_Tool_LIN_WIN/jar/jnm.jar
```

```
  inflating: DCNM_To_NDFC_Upgrade_Tool_LIN_WIN/jar/not-going-to-be-commons-ssl-0.3.20.jar
```

```

inflating: DCNM_To_NDFC_Upgrade_Tool_LIN_WIN/jar/tables.info.postgres
inflating:
DCNM_To_NDFC_Upgrade_Tool_LIN_WIN/jar/jarchivelib-0.7.1-jar-with-dependencies.jar
inflating: DCNM_To_NDFC_Upgrade_Tool_LIN_WIN/jar/tables.info.oracle
inflating: DCNM_To_NDFC_Upgrade_Tool_LIN_WIN/jar/sequences.info.postgres
inflating: DCNM_To_NDFC_Upgrade_Tool_LIN_WIN/jar/log4j.properties
inflating: DCNM_To_NDFC_Upgrade_Tool_LIN_WIN/DCNMBackup.sh
inflating: DCNM_To_NDFC_Upgrade_Tool_LIN_WIN/DCNMBackup.bat

[root@dcnm-rhel]# cd DCNM_To_NDFC_Upgrade_Tool_LIN_WIN/
[root@dcnm-rhel DCNM_To_NDFC_Upgrade_Tool_LIN_WIN]# ls
DCNMBackup.bat DCNMBackup.sh jar
[root@rhel DCNM_To_NDFC_Upgrade_Tool_LIN_WIN]# ./DCNMBackup.sh      /* Enter this
command for Linux appliance */
OR
[root@rhel DCNM_To_NDFC_Upgrade_Tool_LIN_WIN]# ./DCNMBackup.bat   /* Enter this
command for Windows appliance */

Enter DCNM root directory [/usr/local/cisco/dcm]:

Initializing, please wait...

Note: ./jar/DCNMBackup.java uses unchecked or unsafe operations.
Note: Recompile with -Xlint:unchecked for details.
*****

Welcome to DCNM-to-NDFC Upgrade Tool for Linux/Windows.

This tool will analyze this system and determine whether you can move to NDFC 12.0.2f
or not.

If upgrade to NDFC 12.0.2f is possible, this tool will create files to be used for
performing the upgrade.

Thank you!

*****

This tool will backup config data. Exporting Operational data like Performance(PM) might
take some time.

Do you want to export operational data also? [y/N]: y
*****

Sensitive information will be encrypted using an encryption key.
This encryption key will have to be provided when restoring the backup file generated
by this tool.

Please enter the encryption key:      /* enter the encryption key for the backup file
*/
Enter it again for verification:     /* re-enter the encryption key for the backup
file */
2021-09-13 14:36:31 INFO DCNMBackup:223 - Inside init() method
2021-09-13 14:36:31 INFO DCNMBackup:245 - Loading properties...
2021-09-13 14:36:31 INFO DCNMBackup:301 - Inside checkLANSwitches...
2021-09-13 14:36:32 INFO DCNMBackup:315 - LAN Switch count: 0
2021-09-13 14:36:32 INFO DCNMBackup:342 - Inside exportDBTables...
2021-09-13 14:36:32 INFO DCNMBackup:358 - Exporting -----> statistics
2021-09-13 14:36:32 INFO DCNMBackup:358 - Exporting -----> sequence
...
...
...
2021-09-13 14:49:48 INFO DCNMBackup:1760 - ##### Total time to export Hourly data:

```



```
42 seconds.
```

```
2021-09-13 14:49:48 INFO DCNMBackup:1767 - Exporting SanPort Daily entries.
2021-09-13 14:49:48 INFO DCNMBackup:1768 - Total number of ports: 455
2021-09-13 14:49:48 INFO DCNMBackup:1769 - This might take a while, please wait...
2021-09-13 14:50:23 INFO DCNMBackup:1791 - Total number of Json data entries in
backup/es/pmdb_sanportratedata_daily.data ==> 13751
2021-09-13 14:50:23 INFO DCNMBackup:1795 - ##### Total time to export Daily data: 34
seconds.
```

```
2021-09-13 14:50:23 INFO DCNMBackup:1535 - ##### Total time to export PM data: 81
seconds.
```

```
2021-09-13 14:50:23 INFO DCNMBackup:879 - Creating final tar.gz file....
2021-09-13 14:50:30 INFO DCNMBackup:892 - Final tar.gz elapsed time: 7049 in ms
2021-09-13 14:50:30 INFO DCNMBackup:893 - Backup done.
2021-09-13 14:50:30 INFO DCNMBackup:894 - Log file: backup.log
2021-09-13 14:50:30 INFO DCNMBackup:895 - Backup file:
backup11_rhel77-160_20210913-149215.tar.gz      /* backup file name*/
[root@rhel DCNM_To_NDFC_Upgrade_Tool_LIN_WIN]#
```

Upgrading from Cisco DCNM 11.5(x) to Cisco NDFC Release 12.0.2f

To upgrade to Cisco Nexus Dashboard Fabric Controller Release 12.0.2f from DCNM Release 11.5(x), perform the following steps:

context here

Before you begin

- Ensure that you've access to the Backup file created from 11.5(x) appliance.
If you do not have the encryption key, you cannot restore from the backup file.
- Ensure that you've installed the required form factor of Cisco Nexus Dashboard. For instructions, refer to [Cisco Nexus Dashboard Deployment Guide](#).
- Ensure that you've installed a fresh installation of Cisco Nexus Dashboard Fabric Controller. For instructions to install Cisco Nexus Dashboard Fabric Controller, refer to:
 - [Installing Nexus Dashboard Fabric Controller Service Manually](#).
 - [Installing Nexus Dashboard Fabric Controller Service Using App Store](#)

Procedure

-
- Step 1** On **Nexus Dashboard > Services**, identify Cisco Nexus Dashboard Fabric Controller card and click **Open**. On the Nexus Dashboard Fabric Controller Web UI, **Feature Management** screen is displayed.

Note that none of the personas are selected on the freshly installed Nexus Dashboard Fabric Controller.

Step 2 Click **Restore**.

The **Operations > Backup & Restore** window opens.

Step 3 Click **Restore**.

The **Restore now** window appears.

Step 4 Under **Type**, select your desired format to restore.

- Choose **Config only** to restore only configuration data.
- Choose **Full** to restore all previous version data to this application.

Step 5 Choose the appropriate destination where you have stored the backup file.

- Choose **Upload File** if the file is stored in a local directory.
 - a. Open the directory where you've saved the backup file.
 - b. Drag and drop the backup file to the **Restore now** window
or
Click **Browse**. Navigate to the directory where you've saved the backup file. Select the backup file and click **Open**.
 - c. Enter the **Encryption Key** to the backup file.
- Choose **Import from SCP** if the backup file is stored in a remote directory.
 - a. In the **SCP Server** field, provide the SCP server IP Address.
 - b. In the **File Path** field, provide the relative file path to the backup file.
 - c. In the **Username** and **Password** fields, enter appropriate details.
 - d. In the **Encryption Key** field, enter the Encryption Key to the backup file.

Step 6 Click **Restore**.

A progress bar appears showing the completed percentage and the description of the operation. The Web UI is locked while the upgrade is in progress. After the restore is complete, the backup file appears in the table on **Backup & Restore** screen. The time required to restore depends on the data in the backup file.

Note An error appears if you've not allocated with IP pool addresses on the Cisco Nexus Dashboard. For more information, refer to *Cluster Configuration* section in [Cisco Nexus Dashboard User Guide](#).

After successful restoration, a notification banner appears as below:

Reload the page to see latest changes.

Click **Reload the page**, or refresh the browser page to complete restore and begin using you Cisco Nexus Dashboard Fabric Controller Web UI.

Upgrading from Cisco NDFC Release 12.0.1a to NDFC Release 12.0.2f

To upgrade to Cisco Nexus Dashboard Fabric Controller Release 12.0.2f from NDFC Release 12.0.1a, perform the following steps:

context here

Before you begin

- Cisco NDFC 12.0.2f is compatible with Nexus Dashboard Release 2.1.2d or later. Upgrade the Nexus Dashboard to Release 2.1.2d. For instructions, refer to [Upgrading Nexus Dashboard](#).



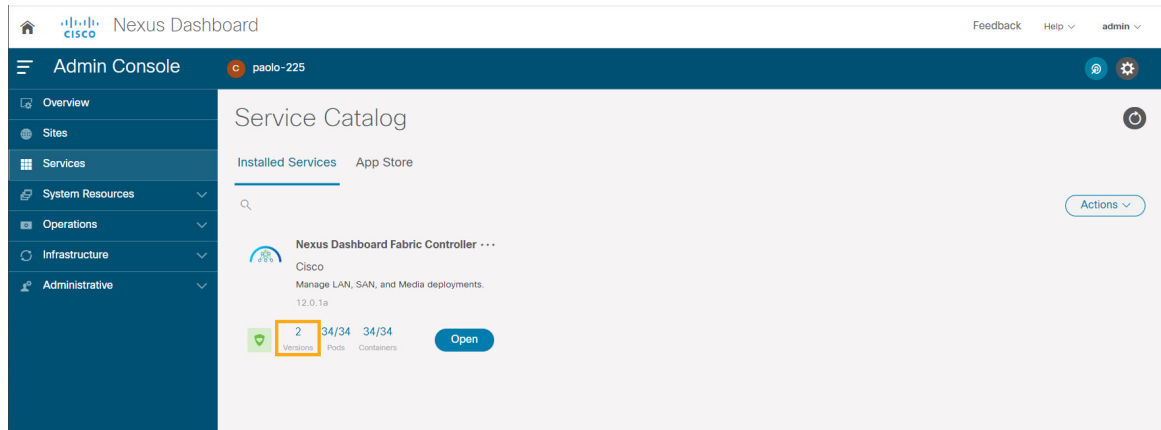
Note You cannot install or upgrade to NDFC Release 12.0.2f without Nexus Dashboard Release 2.1.2d or later. If NDFC Release 12.0.1a is disabled, you cannot upgrade to NDFC Release 12.0.2f.

- Ensure that NDFC Release 12.0.1a is up and operational.
- If you've enabled preview features in 12.0.1a, you must disable those features (such as VMM Visualization and Kubernetes Visualization). On the Web UI, choose **Settings > Feature Management**. Ensure that you the **VMM Visualizer** and **Kubernetes Visualizer** check boxes are unchecked.

Procedure

- Step 1** Ensure that the Nexus Dashboard Release 2.1.2d or later is installed.
On **Nexus Dashboard > Services**, you must see Nexus Dashboard Fabric Controller Release 12.0.1a.
- Step 2** From the **Actions** drop-down list, choose **Upload Service**.
- Step 3** Choose the **Location** toggle button and select either Remote or Local.
You can choose to either upload the service from a remote or local directory.
- If you select **Remote**, in the **URL** field, provide an absolute path to the directory where the Nexus Dashboard Fabric Controller application is saved.
 - If you select **Local**, click **Browse** and navigate to the location where the Nexus Dashboard Fabric Controller application is saved. Select the application and click **Open**.
- Step 4** Click **Upload**.
A second Nexus Dashboard Fabric Controller application appears in the Services Catalog. The progress bar indicates the upload status.
Wait for the application to be downloaded to the Nexus Dashboard and deployed.
It may take up to 30 minutes for the application to replicate to all nodes and all services to fully deploy.

Nexus Dashboard Fabric Controller application appears in the **Services Catalog**. Note that Versions displays as 2 on the Nexus Dashboard Fabric Controller card.



Step 5 On the Nexus Dashboard Fabric Controller card, click on ellipsis (...) icon. From the drop-down list, select **Available Versions**.

The **Available Versions** table displays both **12.0.1a** and **12.0.2f**.

Step 6 Click **Activate** in the 12.0.2f version row to activate NDFC Release 12.0.2f.

The **Activate Nexus Dashboard Fabric Controller** window appears.

Step 7 Verify if all the configurations displayed are correct. Click **Activate**.

After the services are enabled, the button on the Nexus Dashboard Fabric Controller card shows **Open**.

Wait until all the pods and containers are up and running.

Step 8 Click on **Open** to launch Cisco Nexus Dashboard Fabric Controller Web UI.

Note 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.

The **Nexus Dashboard Fabric Controller Web UI** opens in a new browser. The **Feature Management** window appears.

Note If External Service Pool IP addresses are not configured, an error message appears. Go to **Nexus Dashboard Web UI > Infrastructure > Cluster Configuration**. Configure the Management Service and Data Service IP addresses in the External Service Pools section. For more information, refer to *Cluster Configuration* section in [Cisco Nexus Dashboard User Guide](#).

Three cards namely **Fabric Discovery**, **Fabric Controller**, and **SAN Controller** is displayed.

Step 9 Based on the requirement, select the deployment.

From the list of Features, select features that you need to enable on the Nexus Dashboard Fabric Controller deployment.

Note The list of features displayed is based on the Deployment selected on the card.

Step 10 Click **Apply** to deploy Nexus Dashboard Fabric Controller with the selected features.

After the installation is complete, the deployment card and all the features status show as **Started**.

Feature Management

After restoring the backup, based on the type of deployment, Nexus Dashboard Fabric Controller Release 12.0.2f is deployed with one of the following personalities:

- Fabric Controller
- SAN Controller

The status on the Feature Management changes to **Starting**. Additionally, you can select the features that you want to enable. Check the **Feature** check box and click **Save & Continue**.



Note There are caveats associated with features enabled on DCNM 11.5(x) with respect to upgrade to NDFC, Release 12.0.2f. For more information, see [Feature Compatibility Post Upgrade, on page 3](#).

Changing across Feature-Set

Nexus Dashboard Fabric Controller 12 allows you to switch from one feature set to another. Choose **Settings > Feature Management**. Select the desired feature set and applications in the table below. Click **Save & Continue**. Refresh the browser to begin using Cisco Nexus Dashboard Fabric Controller with the new feature set and applications.

There are a few features/applications supported with specific deployments. When you change the feature set, some of these features are not supported in the new deployment. The following table provides details about the pre-requisites and criteria based on which you can change the feature set.

Table 2: Supported Switching between deployments

From/To	Fabric Discovery	Fabric Controller	SAN Controller
Fabric Discovery	-	Only monitor mode fabric is supported in Fabric Discovery deployment. When you change the feature set, the fabric can be used in the Fabric Controller deployment.	Not supported
Fabric Controller	You must delete the existing fabrics before changing the fabric set.	If you're changing from Easy Fabric to IPFM fabric application, you must delete the exiting fabrics.	Not supported
SAN Controller	Not supported	Not supported	-

Post Upgrade Tasks

The following sections describe the tasks that must be performed post upgrading to Cisco NDFC, Release 12.0.2f.

Post Upgrade tasks for SAN Controller

After restoring the data from backup, all the server-smart licenses are **OutofCompliance**.

To migrate to Smart Licensing using Policy, launch Nexus Dashboard Fabric Controller. On the Web UI, choose **Operations > License Management > Smart** tab. Establish trust with CCSM using SLP. For instructions, refer to *License Management* chapter in *Cisco Nexus Dashboard Fabric Controller Configuration Guides*.

Post Upgrade tasks for Fabric Controller

The following features are not carried over when you upgrade from DCNM 11.5(x) to Cisco NDFC 12.0.2f:

- Endpoint Locator must be reconfigured
- IPAM Integration must be reconfigured
- Alarm Policies must be reconfigured
- Custom topologies must be recreated and saved
- PM collection must be re-enabled on fabrics
- Switch images must be uploaded

Managing Trap IP on Nexus Dashboard and Nexus Dashboard Fabric Controller

Deployment Type in Release 11.5(x)	In 11.5(x), trap IP address is collected from	LAN Device Management Connectivity	In 12.0.2f, trap IP address belongs to	Result
LAN Fabric Media Controller	eth1 (or vip1 for HA systems)	Management	Belongs to Management subnet	Honored ³
LAN Fabric Media Controller	eth0 (or vip0 for HA systems)	Management	Does not belong to Management subnet	Ignored, another IP from the Management pool will be used as trap IP
LAN Fabric Media Controller	eth0 (or vip0 for HA systems)	Data	Belongs to Data subnet	Honored
LAN Fabric Media Controller	eth0 (or vip0 for HA systems)	Data	Does not belong to Data subnet	Ignored, another IP from the Data pool will be used as trap IP

Deployment Type in Release 11.5(x)	In 11.5(x), trap IP address is collected from	LAN Device Management Connectivity	In 12.0.2f, trap IP address belongs to	Result
SAN Management	OVA/ISO – <ul style="list-style-type: none"> • trap.registaddress (if set) • eth0 (if trap.registaddress is not set) Windows/Linux – <ul style="list-style-type: none"> • trap.registaddress (if set) • Interface based on event-manager algorithm (if trap.registaddress is not set) 	Not applicable	Belongs to Data subnet	Honored
		Not applicable	Does not belong to Data subnet	Ignored, another IP from the Data pool will be used as trap IP

³ There is no configuration difference. No further action required.

* **Honored** - There is no configuration difference. No further action required.

** **Ignored** - Configuration difference is created. On the **Web UI > LAN > Fabrics > Fabrics**, double click on the Fabric to view **Fabric Overview**. From **Fabrics Actions** drop-down list, select **Recalculate Config**. Click **Deploy Config**.

Changes to Templates for Fabric, Interfaces, and Links

The following fabrics, interface and link template names are changed in Nexus Dashboard Fabric Controller Release 12.0.2f, where the **_11_1** string is removed.

Fabric Templates:

- Easy_Fabric.template
- External_Fabric.template
- MSD_Fabric.template

Interface Policy Template :

- int_access_host.template
- int_dot1q_tunnel_host.template
- int_routed_host.template
- int_trunk_host.template
- int_intra_fabric_num_link.template
- int_intra_fabric_unnum_link.template

- int_intra_vpc_peer_keep_alive_link.template
- int_loopback.template
- int_mgmt.template
- int_monitor_ethernet.template
- int_monitor_port_channel.template
- int_nve.template
- int_port_channel_aa_fex.template
- int_port_channel_fex.template
- int_port_channel_access_host.template
- int_port_channel_dot1q_tunnel_host.template
- int_port_channel_trunk_host.template
- int_subif.template
- int_vpc_access_host.template
- int_vpc_dot1q_tunnel.template
- int_vpc_trunk_host.template
- int_vpc_peer_link_po.template

Link IFC Templates:

- ext_fabric_setup.template
- ext_multisite_underlay_setup.template