



Deploying Cisco Nexus Dashboard Data Broker as a Service

Beginning with Release 3.10.1, Cisco Nexus Data Broker (NDB) has been renamed to Cisco Nexus Dashboard Data Broker. However, some instances of NDB are present in this document, to correspond with the GUI, and installation folder structure. References of NDB/ Nexus Data Broker/ Nexus Dashboard Data Broker, can be used interchangeably.

This chapter contains the following details:

- [Downloading Cisco Nexus Dashboard Data Broker Application from the Cisco App Center, on page 1](#)
- [Installing Cisco Nexus Dashboard Data Broker as a Service on Cisco APIC , on page 2](#)
- [Installing Cisco Nexus Dashboard Data Broker as a Service on Cisco Nexus Dashboard , on page 4](#)
- [Guidelines and Limitations, on page 6](#)
- [Taking Backup of the Configuration File , on page 7](#)

Downloading Cisco Nexus Dashboard Data Broker Application from the Cisco App Center

Use this procedure to download Cisco Nexus Dashboard Data Broker application.

Before you begin

You must have administrative credentials to download applications.

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| Step 1 | Log in to the GUI with admin privileges.
If you do not have admin privileges, log in to Cisco App Center to download the application. |
| Step 2 | Select Apps. |
| Step 3 | Click the Download Applications icon (far-right side of the work pane).
A new window or browser tab opens to the Cisco App Center. |
| Step 4 | In the Search bar, search for <i>Nexus Dashboard Data Broker</i> . |
| Step 5 | Select the Cisco Nexus Dashboard Data Broker application and click Download . |

Step 6 Review the licence agreement and, if OK, click **Agree and Download**.

The Cisco Nexus Dashboard Data Broker app is downloaded to your local machine.

Alternatively, you can move the downloaded app to a HTTP server. This is optional.

What to do next

Install the Nexus Dashboard Data Broker app on Cisco APIC/ Nexus Dashboard.

Installing Cisco Nexus Dashboard Data Broker as a Service on Cisco APIC

You can install Cisco Nexus Dashboard Data Broker as a service on Cisco APIC using either of these methods:

- [Installing Cisco Nexus Dashboard Data Broker as a Service on Cisco APIC from a Local Machine](#) , on page 2
- [Installing Cisco Nexus Dashboard Data Broker as a Service on Cisco APIC from a Server](#) , on page 3

Installing Cisco Nexus Dashboard Data Broker as a Service on Cisco APIC from a Local Machine

Use this procedure to install Cisco Nexus Dashboard Data Broker as a service on Cisco APIC from your local machine.

You can also use this procedure if you are migrating from centralized deployment of the Cisco Nexus Dashboard Data Broker to deploying it on APIC.

Before you begin

You must have administrative credentials to install Cisco Nexus Dashboard Data Broker as a service.

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- Step 1** Log in to the Cisco APIC GUI with admin privileges.
 - Step 2** Click the **Apps** tab.
 - Step 3** To add Cisco Nexus Dashboard Data Broker as a service to APIC from your local machine, click **Add Application**.
 - Step 4** In the **Add application to APIC** dialog box that is displayed, browse and provide the path of the `.aci` file.
 - Step 5** The **Location** is by default selected as APIC.
 - Step 6** Click **Submit**.
After Cisco Nexus Dashboard Data Broker is installed on APIC, it appears under the **Apps** tab.
 - Step 7** Click the green **Enable** button to enable Nexus Dashboard Data Broker on APIC.
After you enable, the Nexus Dashboard Data Broker service is displayed with a blue **Open** button.
 - Step 8** Click **Open**.

The standard Nexus Dashboard Data Broker GUI is displayed. This may take a few minutes.

If you are migrating from centralized deployment to deployment on APIC, continue to steps 9, 10, 11.

Step 9 On the Nexus Dashboard Data Broker GUI, navigate to **Administration > Backup/ Restore > Actions > Restore Locally**.

For the detailed procedure about backing up the configuration file, see [Taking Backup of the Configuration File](#), on page 7.

Note To reconfigure the device during the upgrade, select the **Restore** option (by checking the check-box) during configuration upload.

Step 10 On the Cisco APIC GUI, navigate to the **Apps** tab.

Step 11 Disable and enable the Nexus Dashboard Data Broker app to complete the migration.

Installing Cisco Nexus Dashboard Data Broker as a Service on Cisco APIC from a Server

Use this procedure to install Cisco Nexus Dashboard Data Broker as a service on Cisco APIC from the APIC **Downloads** tab.

Before you begin

You must have administrative credentials to install Cisco Nexus Dashboard Data Broker as a service.

Step 1 On Cisco APIC, navigate to **Admin > Downloads > General**.

Step 2 Click the **Task** icon on the far right of the **Downloads** work pane and select **Add File to APIC**.

The **Add File to APIC** dialog box is displayed.

Step 3 Enter the name of the download file in the **Download Name** field.

Step 4 In the **Protocol** field, choose **Secure Copy** or **HTTP**.

If the Nexus Dashboard Data Broker file was downloaded to a file server use **HTTP**, else select **Secure Copy**.

Step 5 In the **URL** field, enter the path of the image location.

Step 6 Enter your name and password in the **Username** and **Password** fields.

The default **Authentication Type** is **Use Password**.

Step 7 Click **Submit**.

What to do next

After Cisco Nexus Dashboard Data Broker is installed on APIC, it appears under the **Apps** tab. Click the green **Enable** button to enable Cisco Nexus Dashboard Data Broker on APIC. After you enable, Cisco Nexus Dashboard Data Broker is displayed with a blue **Open** button. Click **Open** to get the standard Cisco Nexus Dashboard Data Broker GUI.

Installing Cisco Nexus Dashboard Data Broker as a Service on Cisco Nexus Dashboard

Use this procedure to install and enable Cisco Nexus Dashboard Data Broker on Cisco Nexus Dashboard (ND).

You can also use this procedure if you are migrating from centralized deployment of the Cisco Nexus Dashboard Data Broker to deploying it on ND.

See the [Capacity Planning](#) tool for details about the required cluster size while deploying the data broker on pND/ vND.



Note Nexus Dashboard Data Broker cannot be co-hosted with other Nexus Dashboard services. Ensure that you deploy a dedicated Nexus Dashboard cluster for Nexus Dashboard Data Broker.

Step 1 Log in to Cisco Nexus Dashboard.

Step 2 Navigate to **Services > Service Catalog > App Store**.

The Cisco Nexus Dashboard Data Broker service is available.

Step 3 Click **Install**.

If you have downloaded the Data Broker service on to a remote server or local machine, then, click **Actions > Upload App**. Select the required option and click **Install**.

Step 4 Navigate to **Services > Service Catalog > Installed Services**.

Step 5 Click **Enable**.

The **Enable Nexus Dashboard Data Broker** window is displayed.

Select the required **Deployment Profile** from the drop down list. The options are:

- Small
- Medium
- Large

The resource requirement for the selected deployment profile is displayed.

Resource requirement details for a deployment profile, are as shown in the table below.

Deployment Profile (App Profile)	Cores per node	Memory per node(RAM in GB)	HDD per node (in GB)	No. of NDB Devices
Small	4	4	2	25*
Medium	6	8	2	50*
Large	8	16	2	75*

* Nexus switches with 54 ports.

Step 6 Click **Open**.

The standard Nexus Dashboard Data Broker GUI is displayed. This may take a few minutes.

If you are migrating from centralized deployment to deployment on ND, continue to steps 7 to 12.

Step 7 Copy the `tlsKeyStore` and `tlsTrustStore` files from the previous release's configuration directory into any of the ND nodes (say ND-1 or node-1) using the `scp` command to the path - `/home/rescue-user`

Example: `scp tlsKeyStore rescue-user@x.x.x.x:/home/rescue-user`

Step 8 Login as root user on the ND node on to which the `tls` files were copied (node-1 or ND-1).

Step 9 Navigate to `/home/rescue-user` and run the following commands:

- `kubectl cp tlsKeyStore cisco-ndb/ndbserver-0:/home/app/ndb/configuration`
- `kubectl cp tlsTrustStore cisco-ndb/ndbserver-0:/home/app/ndb/configuration`
- `kubectl cp tlsKeyStore cisco-ndb/ndbserver-1:/home/app/ndb/configuration`
- `kubectl cp tlsTrustStore cisco-ndb/ndbserver-1:/home/app/ndb/configuration`
- `kubectl cp tlsKeyStore cisco-ndb/ndbserver-2:/home/app/ndb/configuration`
- `kubectl cp tlsTrustStore cisco-ndb/ndbserver-2:/home/app/ndb/configuration`

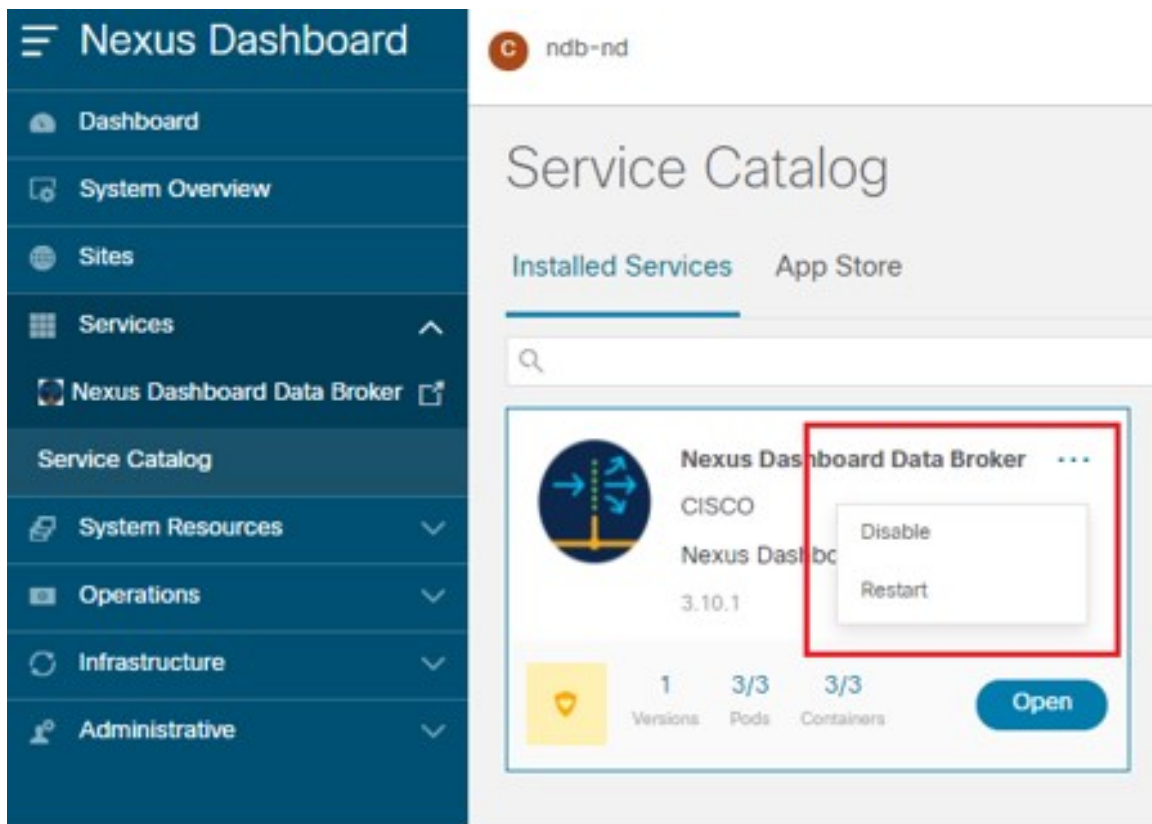
Step 10 On the Nexus Dashboard Data Broker GUI, navigate to **Administration > Backup/ Restore > Actions > Restore Locally**.

For the detailed procedure about backing up the configuration file, see [Taking Backup of the Configuration File](#) , on [page 7](#).

Note To reconfigure the device during the upgrade, select the **Restore** option (by checking the check-box) during configuration upload.

Step 11 On the Cisco ND GUI, navigate to the **Services** tab.

Step 12 Disable and enable the Nexus Dashboard Data Broker app to complete the migration.



Note If the backed up configuration has an APIC which is also connected as a site to ND, ensure that the APIC site is reachable, and connected to ND for Nexus Dashboard Data Broker to be able to connect to the APIC site via ND.

Guidelines and Limitations

The following are the guidelines and limitations for Cisco Nexus Dashboard Data Broker as a service on Cisco APIC/ Nexus Dashboard:

- A minimum of a 3-node APIC/ND cluster is required for installing NDDB as an app on ND or APIC.
- No separate log in is required (single sign-on). You will be directed to the Nexus Dashboard Data Broker GUI.
- Host APIC is discovered automatically and you need not add it again.

The APIC on which the Nexus Dashboard Data Broker service is being installed is automatically discovered, and is displayed on Nexus Dashboard Data Broker's Span Devices screen, after the Nexus Dashboard Data Broker service is enabled.

- To restart the Nexus Dashboard Data Broker service, **Disable** the service on APIC/ ND and, then **Enable** it again. For ND, you can also use the **Restart** option.

- Nexus Dashboard Data Broker uses the host's (APIC/ ND) RBAC.
- Root users of APIC/ ND can modify the Nexus Dashboard Data Broker `config.ini` file.
- Users can download the audit log by downloading the configuration (backup locally option).
(Only for Nexus Dashboard Data Broker on APIC) Nexus Dashboard Data Broker logs need to be downloaded from APIC tech support logs page.
- TLS between browser and Nexus Dashboard Data Broker is not applicable while it is deployed as a service. TLS between Nexus Dashboard Data Broker controller and the NDB devices will have the same steps and the user (with root permissions) needs to copy the tls files in to all containers in the directory. The directory paths are:

`/home/app/local-data/configuration` for APIC; `/home/app/ndb/configuration/` for ND.

For details, see the *Managing TLS* chapter of the *Cisco Nexus Dashboard Data Broker Configuration Guide*.

Taking Backup of the Configuration File

Use this procedure, for taking backup of the configuration file, before migrating from centralized deployment to deployment on ND.

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| Step 1 | Log in to the Nexus Dashboard Data Broker GUI. |
| Step 2 | Navigate to Administration > Backup/Restore > Actions > Backup Locally .
The default name of the zip file is <code>configuration_startup.zip</code> . |
| Step 3 | Stop the current Nexus Dashboard Data Broker instance using the <code>/runndb.sh -stop</code> command. |
| Step 4 | If TLS certification is enabled between the Nexus Dashboard Data Broker server and NX-OS switch, copy the <code>tlsTrustStore</code> and <code>tlsKeyStore</code> files into the containers of the app in the configuration directory from the old ndb configuration directory. |
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