

# Storage

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## **Storage Arrays**

This tab displays information about storage arrays.

The following table describes the fields that appear on SAN > Storage > Storage Arrays.

| Field       | Description  |
|-------------|--|
| storageName | Specifies the storage name.  |
|             | Click on the <b>storageName</b> to view the <b>Storage Enclosure</b> details.<br>For more information on the tabs displayed, refer to storageName<br>Enclosure, on page 1. |
| WWN         | Specifies the world wide name (WWN) of the storage device.   |
|             | Only storage array PWWN that are discovered via fabric discovery<br>are displayed. However, storage array may have more ports than<br>specified here.                      |

#### storageName Enclosure

Click on the storageName item to view the detailed information about each storage array.

The details of a Storage Array depends on the type of array discovered, and the provider's adherence to the SMI-S standards. Click of the array to load the inventory page, starting with a summary tab, and other context specific tabs based on the type of array.

The following tabs provide relevant information:

Summary

This table provides information about the provider. Storage array **Serial Number**, **Storage type** and **Number of Physical Disks** in the array are also displayed.

• Components

This tab lists all the components in the Storage.

Click on the component Name to view total storage capacity, usage details, and physical disks details.

• Pools

This tab lists all the pools, their status and Raw capacity. Click on POOL Name to view the pool details.

• LUNs

This tab lists all the LUNs in the storage array. It provides LUN ID, WWN, Status, and Capacity details for each LUN. Click on LUN Name to view further details about each LUN. You can also view the Host LUN Access information in the LUN Detail view.

Host Port PWWN, Host Interface, Zoning, and Storage Interface values in Host LUN Access table is displayed only if the host accessing this LUN is a part of the NDFC discovered fabric.

• Host

This tab lists all the hosts in the selected storage. It provides the **Host name**, **Node WWN**, and **WWN** details for each host in the Storage array. Click on a **Host Name** to view details about the host. You can view the relevant details on the **LUNs** tab and **Ports** tab within the **Host Detail** view.

**Host Interface**, **Zoning**, and **Storage Interface** values in **LUNs Tab > Host LUN Access** table is displayed only if the host accessing this LUN is part of the NDFC discovered fabric.

**Fabric** and **Host Interface** values in **Host Ports** table is displayed only if **Host Port WWN** is part of the NDFC discovered fabric.

• Processors

This tab lists all the Processors and their Status. It also shows the number of adapters for each processor. Click on a **Processor Name** to view the details.

• Ports

This tab lists all the Ports within the Storage array. Click on Port Name to view details about the port.

Host Interface, Zoning, and Storage Interface values in the Host LUN Access table is displayed only if Host accessing the LUN in LUN ID column is part of the NDFC discovered fabric.

## **Storage SMI-S Provider**

This tab displays the SMI-S provider information.

The following table describes the fields that appear on **SAN > Storage > Storage SMIS Provider**.

| Field              | Description                                |  |
|--------------------|--|--|
| Vendor             | Specifies the vendor.                      |  |
|                    | Cisco NDFC supports the following vendors: |  |
|                    | • EMC                                      |  |
|                    | • NetApp                                   |  |
|                    | • IBM                                      |  |
|                    | • HDS                                      |  |
|                    | • PureStorage                              |  |
|                    | • HP                                       |  |
|                    | • Other                                    |  |
| Provider URL       | Specifies SMI-S provider URL.              |  |
| Nume Queen         |  |  |
|                    | Specifies name space.                      |  |
| Interop Name Space | Specifies interop name space.              |  |
| Port               | Specifies the port.                        |  |
| Status             | Specifies the status.                      |  |
| Secure             | Specifies if it is a secure connection.    |  |
| Discovery Status   | Specifies the discovery status.            |  |
| Last Updated Time  | Specifies the last updated time.           |  |

The following table describes the action items, in the **Actions** menu drop-down list, that appear on **SAN** > **Storage** > **Storage** SMIS Provider.

| Action Item         | Description   |  |  |
|---------------------|---|--|--|
| Add Provider        | Adds an SMI-S provider. For instructions, refer to<br>Adding SMI-S Provider, on page 4.   |  |  |
| Edit Provider       | Select a provider from the table and choose <b>Edit</b><br><b>Provider</b> to update the provider information.  |  |  |
| Delete Provider     | Select a provider from the table and choose <b>Delete</b><br><b>Provider</b> to delete the provider.  |  |  |
| Rediscover Provider | Select a provider from the table and choose<br><b>Rediscover Provider</b> to scan for any changes. This<br>triggers the discovery cycle outside its normal periodic<br>polling. |  |  |

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| Action Item    | Description   |
|----------------|---|
| Purge Provider | Select a provider from the table and choose <b>Purge</b><br><b>Provider</b> to purge the provider information. This<br>removes elements no longer present from discovery. |

### **Adding SMI-S Provider**

To add an SMI-S provider from the Cisco Nexus Dashboard Fabric Controller Web UI, perform the following steps:

|  | Procedur  | e   |  |  |
|--|---|---|--|--|
|  | Choose S  | AN > Storage > Storage SMIS Provider.   |  |  |
|  | The Stor  | age SMIS Provider tab is displayed.   |  |  |
|  | Click the   | Click the Actions menu drop-down list and click Add Provider.   |  |  |
|  | The Add   | SMI-S window is displayed.  |  |  |
|  | Use the drop-down to select a Vendor.                 |   |  |  |
| All the supported vendors are available in the drop-dow<br>through a 'best effort' handler using the <b>Other</b> vendor |   | pported vendors are available in the drop-down list. More SMI-S storage vendors are discovered 'best effort' handler using the <b>Other</b> vendor option in the drop-down.   |  |  |
|  | Note  | A minimum of one valid Nexus Dashboard Fabric Controller license must be provisioned before adding the data sources for SMI-S storage discovery.  |  |  |
|  | Specify the SMI-S Server IP, User Name, and Password. |   |  |  |
|  | Specify the Name Space and Interop Name Space.        |   |  |  |
|  | By defaul   | t, the <b>Port</b> number is prepopulated.  |  |  |
|  | If you sel  | ect the Secure checkbox, then the default secure port number is populated.  |  |  |
|  | When usi<br>see the El<br>SSLClien<br>service.        | ng the <b>Secure</b> mode with EMC, the default setting is mutual authentication. For more information, MC documentation about adding an SSL certificate to their trust store. Also, you can set tAuthentication value to <i>None</i> in the <i>Security_Settings.xml</i> configuration file and restart the ECOM |  |  |
|  | Click Ad  | d.  |  |  |
|  | The crede<br>fails, you                               | entials are validated and the storage discovery starts if the credentials is valid. If the credentials check will be prompted to enter valid credentials.   |  |  |