Managing NetApp Accounts

This chapter contains the following sections:

- NetApp Storage System Management, on page 1
- Adding a Pod, on page 1
- Adding a NetApp Account, on page 3
- Testing the Connection to a NetApp Account, on page 5
- Verifying the Discovery of a NetApp Account, on page 5
- Requirements for Adding SVMs to Cisco UCS Director, on page 6
- Adding SVMs Directly to Cisco UCS Director, on page 6

NetApp Storage System Management

Cisco UCS Director supports the NetApp storage infrastructure. Cisco UCS Director provides auto-discovery, monitoring, and complete visibility for all NetApp filer components, such as nodes, SVMs, IPspaces, aggregates, and SnapMirrors.

Note You can view the model of a managed NetApp storage system, such as whether the system is FAS or AFF. The **Model** and **Storage Array Type** information is available on several NetApp reports, including the Cluster Summary report, the Nodes report, and the Nodes Summary report.

The reports in Cisco UCS Director enable you to view and identify all NetApp storage systems; for example, a report for a NetApp storage system lists information about the name, type, server IP address, version, model, and storage array type of that managed system.

To manage a NetApp storage system, you need to add a pod and create a NetApp account within that pod.

Adding a Pod

A pod is a logical grouping of physical and virtual components, including one or more physical or virtual accounts, such as an HP account for computing or a NetApp ONTAP account for storage. Typically, a pod represents a single converged infrastructure stack, such as a FlexPod, Vblock, or VSPEX.

Procedure

Step 1 Choose **Administration** > **Physical Accounts**.

Step 2 On the **Physical Accounts** page, click **Pods**.

Step 3 Click **Add**.

Step 4 On the **Add POD** screen, complete the following fields:

Name	Description
Name field	A descriptive name for the pod.
Type drop-down list	Choose the type of pod that you want to add. This can be one of the following supported types: • **VersaStack** • **Virtual SAN Pod** • **ExpressPod Medium** • **FlexPod** • **ExpressPod Small** • **VSPEX** • **HyperFlex** • **Generic** • **Vblock** A generic pod does not require a specific pod license. You can add any type of physical or virtual component to a generic pod. If you choose any type of pod except the generic type, you must have a license for that pod type. In addition, the non-generic pod types accommodate only specific physical and virtual components. For more information about pod licenses, see Cisco UCS Director Install and Upgrade Guides.
Site drop-down list	Choose the site where you want to add the pod. If your environment does not include sites, you can omit this step.
Description field	(Optional) A description of the pod.
Address field	The physical location of the pod. For example, this field could include the city or other internal identification used for the pod.
Hide POD check box	Check this box to hide the pod if you do not want it to display in the **Converged Check View**. You can continue to add or delete accounts from the pod. For example, you can use this check box to ensure that a pod that does not have any physical or virtual elements is not displayed in the **Converged Check View**.

Step 5 Click **Add**.

What to do next

Add one or more accounts to the pod.

Adding a NetApp Account

Before you begin

- Cisco UCS Director uses the Transport Layer Security (TLS) protocol to discover a NetApp device. In NetApp devices, set the TLS option to ON by entering the command: **`options tls.enable on`**. This setting enables Cisco UCS Director to discover NetApp accounts.
- If you do not want to use the Default Pod, create a pod for this NetApp account.
- Manually configure an aggregate on the ONTAP filer before you can use the filer management of Cisco UCS Director.

Procedure

Step 1 Choose **Administration** > **Physical Accounts**.

Step 2 On the **Physical Accounts** page, click **Physical Accounts**.

Step 3 Click **Add**.

Step 4 On the **Add Account** screen, complete the following fields:

Name	Description
Pod drop-down list	Choose the pod to which this account belongs. Allowed pod types are **Default Pod**, **Flex**, and **Generic**.
Category drop-down list	Choose **Storage**. This is the type of infrastructure for the account.
Account Type drop-down list	Choose one of the following account types that you want to use for this account: • **NetApp ONTAP** • **NetApp OnCommand**

Step 5 Click **Submit**.

Step 6 On the second **Add Account** screen, complete the following fields:

Name	Description
Account Name field	A unique name that you assign to this account.

Name	Description
Server Address field	The IP address of the NetApp server. For a cluster configuration, this is the virtual IP address. For an SVM account, this is the IP address of the SVM.
Use Credential Policy check box	Check this box if you want to use a credential policy for this account rather than enter the username and password information manually.
Credential Policy drop-down list	If you checked the **Use Credential Policy** check box, choose the credential policy that you want to use from this drop-down list. This field is displayed only if you choose to use a credential policy.
User ID field	The username that this account will use to access the NetApp server. This username must be a valid account in the NetApp server. This field is not displayed if you chose to use a credential policy.
Password field	The password associated with the username. This field is not displayed if you chose to use a credential policy.
Transport Type drop-down list	Choose one of the following transport types that you want to use for this account: • **http** • **https**
Port field	The port used to access the NetApp account.
Connection Time Out (Seconds) field	The length of time in seconds that Cisco UCS Director will wait to establish a connection to the NetApp device before timing out. The valid values are from 0 to 1800. An empty field or a value of 0 is interpreted as an infinite time out.
Description field	(Optional) A description of this account.
Contact Email field	(Optional) The email address that you can use to contact the administrator or other person responsible for this account.
Location field	(Optional) The location of this account, if any.
Service Provider field	(Optional) The name of the service provider associated with this account, if any.

Step 7 Click **Add**.

Cisco UCS Director tests the connection to the NetApp storage system. If that test is successful, it adds the NetApp account and discovers all infrastructure elements in the storage system that are associated with that account, including the server's information, slots, processors, memory, and NICs. This discovery process and inventory collection cycle takes a few minutes to complete.

The polling interval configured in **System Tasks** on **Administration** > **System** specifies the frequency of inventory collection. For more information about configuring the polling interval, see the Cisco UCS Director Network Devices Management Guide.

Testing the Connection to a NetApp Account

You can test the connection after you add an account to a pod.

Procedure

Step 1 Choose **Administration** > **Physical Accounts**.

Step 2 On the **Physical Accounts** page, click **Physical Accounts**.

Step 3 Choose the account for which you want to test the connection.

Step 4 Click **Test Connection**.

Step 5 After the connection test is complete, click **Close**.

What to do next

If the connection fails, verify the configuration of the account, including the username and password. If those items are correct, determine whether there is a network connectivity problem.

Verifying the Discovery of a NetApp Account

After you add a NetApp account to Cisco UCS Director, you can verify that the account is properly added and its relevant data has been collected. It can take few minutes to complete auto-discovery and populate the data.

Procedure

Step 1 Choose **Physical** > **Storage**.

Step 2 On the **Storage** page, choose the pod that includes the NetApp account that you want to verify.

Note
The left column tree structure lists nodes for **Sites**, **Unassigned Pods**, and **Multi-Domain Managers**. When you expand a Sites node, all the pods for that site node are displayed. When you expand an Unassigned Pods node, all the pods that are not assigned to any site are displayed. When you expand the Multi-Domain Managers node, all multi-domain manager account types that you added to Cisco UCS Director are displayed.

Step 3 Click **Storage Accounts**.

Step 4 Click the row with the account that you want to verify and click **View Details**.

Cisco UCS Director displays the components of the NetApp server at the filer level for both ONTAP and OnCommand account types. To view the components of the filer, choose the filer and click **View Details**.

Requirements for Adding SVMs to Cisco UCS Director

After provisioning a SVM, you can directly add the SVM to Cisco UCS Director. Before you add a SVM, consider the following requirements:

- **User Account:** Use the default vsadmin account or any other user account created on the SVM. To use the default vsadmin account, unlock the vsadmin account and provide a password.
- **Access:** Enable access to the ontapi application for the selected user account. Also provide vsadmin role to the user account so that Cisco UCS Director performs the necessary read and write actions on the SVM.

  The following example shows the role and access levels necessary to add a SVM.

```
a05-cluster::> security login show -SVM Goldfinger -username vsuser

SVM: Goldfinger

UserName        Application     Authentication Method     Role Name        Acct Locked
-------         ------------    ---------------------     ---------        -----------
mynewuser         ontapi          password                  vsadmin            no
```

- **Management LIF:** Associate a management LIF with the SVM. Set the LIF type to data and the data protocol to none.

Adding SVMs Directly to Cisco UCS Director

Procedure

Step 1 Choose **Administration** > **Physical Accounts**.

Step 2 On the **Physical Accounts** page, click **Physical Accounts**.

Step 3 Click **Add**.

Step 4 On the **Add Account** screen, complete the following fields:

Name	Description
Pod drop-down list	Choose **Default Pod**.
Category drop-down list	Choose **Storage**. This is the type of infrastructure for the account.
Account Type drop-down list	Choose the **NetApp ONTAP** account.

Step 5 Click **Submit**.

Step 6 On the second **Add Account** screen, complete the following fields:

Name	Description
Account Name field	A unique name that you assign to this account.
Server Address field	The IP address of the SVM.
Use Credential Policy check box	Check this box if you want to use a credential policy for this account rather than enter the username and password information manually.
Credential Policy drop-down list	If you checked the **Use Credential Policy** check box, choose the credential policy that you want to use from this drop-down list. This field is displayed only if you choose to use a credential policy.
User ID field	The username that this account will use to access the NetApp server. This username must be a valid account in the NetApp server. This field is not displayed if you chose to use a credential policy.
Password field	The password associated with the username. This field is not displayed if you chose to use a credential policy.
Transport Type drop-down list	Choose one of the following transport types that you want to use for this account: • **http** • **https**
Port field	The port used to access the NetApp account.
Connection Time Out (Seconds) field	The length of time in seconds that Cisco UCS Director will wait to establish a connection to the NetApp device before timing out. The valid values are from 0 to 1800. An empty field or a value of 0 is interpreted as an infinite time out.
Description field	(Optional) A description of this account.
Contact Email field	(Optional) The email address that you can use to contact the administrator or other person responsible for this account.
Location field	(Optional) The location of this account, in any.
Service Provider field	(Optional) The name of the service provider associated with this account, if any.

Step 7 Click **Add**.