Managing IBM Storwize and IBM SAN Volume Controller Storage Accounts

This chapter contains the following sections:

IBM Storwize, IBM Storage Array, and IBM SAN Volume Controller Storage Systems

Cisco UCS Director supports IBM Storwize, IBM Storage Array (IBM Storwize V5000 and IBM Flash System V9000), and IBM SAN Volume Controllers (SVCs). These systems can manage a combination of an internal storage and external storage systems.

- Internal Storage—A collection of drives directly attached to the system that can be of different sizes and use different technologies.

- External Storage—A collection of RAID-protected storage systems that are connected to the system by the storage area network (SAN).

IBM Storwize, IBM Storage Array, and IBM SAN Volume Controller Features

Cisco UCS Director can manage the following IBM Storwize, IBM Storage Array, and IBM SVCs features:

- Internal Drives (Displays the internal drives report only)

- MDisks

- Storage Pools

- Volumes

- Hosts

- File Systems (Supported only in IBM Storwize V7000 Unified)

- File Sets (Supported only in IBM Storwize V7000 Unified)

- Shares (Supported only in IBM Storwize V7000 Unified)

- Quotas (Supported only in IBM Storwize V7000 Unified)

- Snapshots (Supported only in IBM Storwize V7000 Unified)

- Copy Services that includes FlashCopy, Remote Copy, and Consistency Groups for FlashCopy and Remote Copy

Managing IBM Storwize, IBM Storage Array, and IBM SAN Volume Controller Storage Accounts

Cisco UCS Director can manage IBM Storwize, IBM Storage Array, and IBM SVCs system features.

Navigate to **Administration** > **Physical Accounts**, and click the **Physical Accounts** tab to do the following tasks:

- **Refresh**—Refreshes the storage accounts in Cisco UCS Director.

- **Add**—The **Add Account** dialog box allows you to add a storage account of type IBM Storwize, IBM Storage Array, or IBM SVCs.

- **Device Discovery**—The **Discovery Device Wizard** helps you to discover devices or accounts and assign them to a pod.

- **View**—The **View Infrastructure Account** dialog box displays the storage account details.

- **Edit**—The **Edit Account** dialog box displays editable fields to edit a storage account.

- **Delete**—The **Delete Account** dialog box allows you to delete a storage account.

- **Test Connection**—The **Test Connectivity** dialog box displays the Connection Successful message after establishing a connection with IBM Storwize, IBM Storage Array, or IBM SVCs systems.

Adding a Pod

Step 1   On the menu bar, choose **Administration** > **Physical Accounts**.

Step 2   Click the **Pods** tab.

Step 3   Click **Add**.

Step 4   In the **Add Pod** dialog box, complete the following fields:

Name	Description
Name field	A descriptive name for the pod.

Name	Description
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.
Type drop-down list	Choose the type of pod that you want to add. This can be one of the following: • **Flexpod** • **VersaStack** • **Generic** • **ExpressPod Medium** • **VSPEX** • **ExpressPod Small** • **Vblock** The nongeneric pod types accommodate only specific physical and virtual components. A generic pod does not require a specific pod license. You can add any type of physical or virtual component to a generic pod. For more information about bundled pod licenses (FlexPod, Vblock, and VSPEX), which include the necessary individual device licenses to run a pod, see the Cisco UCS Director Installation and Upgrade Guides. **Note** Only VersaStack and Generic pods are supported in the IBM accounts in Cisco UCS Director.
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 the check box to hide the pod if you do not want it to show 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 View.

Step 5   Click **Add**.

What to Do Next

Add one or more accounts to the pod.

Adding an IBM Storwize, IBM Storage Array, or IBM SAN Volume Controller Storage Account

You must create a storage account of type IBM Storwize, IBM Storage Array (IBM Storwize V5000 and IBM Flash System V9000), or IBM SAN Volume Controller to manage storage devices in Cisco UCS Director.

Step 1   On the menu bar, choose **Administration** > **Physical Accounts**.

Step 2   Click the **Physical Accounts** tab.

Step 3   Click **Add**.

Step 4   In the **Add Account** dialog box, complete the following fields:

Name	Description
Pod drop-down list	Choose the pod to which the storage account has to be added. For example, VersaStack.
Category drop-down list	Choose **Storage**. This is the type of infrastructure for the storage accounts
Account Type drop-down list	Choose an account of type IBM Storwize, IBM Storage Array (IBM Storwize V5000 and IBM Flash System V9000), or IBM SAN Volume Controller.

Step 5   Click **Submit**.

Step 6   In the **Add Account** dialog box, complete the following fields:

Name	Description
Pod	The pod to which the storage account is added.
Account Type	The storage account of type IBM Storwize, IBM Storage Array, or IBM SAN Volume Controller.
Account Name field	A unique name that you want to assign to this account.
Description field	A description for this account.
IBM Storage Management Address field	The IP address of the IBM Storwize, IBM Storage Array, or IBM SAN Volume Controller storage system.
User Name field	A user name assigned to access and establish connectivity with the IBM Storwize, IBM Storage Array, or IBM SAN Volume Controller storage system.

Name	Description
Password field	A password assigned to access and establish connectivity with the IBM Storwize, IBM Storage Array, or IBM SAN Volume Controller storage system.
Protocol drop-down list	The protocol that is used to access IBM Storwize, IBM Storage Array, or IBM SAN Volume Controller storage system. By default, it is **ssh**.
Port field	By default, the port number displayed is 22.
Contact field	An e-mail address of the administrator or the person to contact for this account.
Location filed	The location for this account.

Step 7   Click **Submit**.

Note   To view the MDisks report, you should be a Security Administrator or Administrator of the IBM Storwize, IBM Storage Array, or IBM SAN Volume Controller account.

What to Do Next

Choose an account of type IBM Storwize, IBM Storage Array, or IBM SAN Volume Controller and click **Test Connection** that connects to the appropriate storage system. The **Test Connectivity** dialog box should display the Connection Successful message.

IBM Storwize, IBM Storage Array, and IBM SAN Volume Controller Storage System Reports

Cisco UCS Director user interface displays the following reports that helps you to manage IBM Storwize, IBM Storage Array, and IBM SVCs systems:

- Summary of IBM Storwize and IBM Storage array accounts

- IBM Storwize Features: Internal Drives, MDisks, Storage Pools, Volumes, Hosts, File Systems, File Sets. File Shares, Quotas, Snapshots, Snapshot Rules, Remote Copy, Remote Copy Consistency Groups, FlashCopy, FlashCopy Consistency Groups, and Flashcopy Mappings

- System Hardware

- FC ports

- Node Canisters

- System Tasks

Managing System Tasks for IBM Storwize, IBM Storage Array, and IBM SAN Volume Controller Storage Accounts

When you add a storage account of type IBM Storwize, IBM Storage Array, or IBM SAN Volume Controller, a new system task (inventory collector) is created for each storage account in the IBM Storage Tasks folder. For removing the data from the database table of removed accounts in Cisco UCS Director, an IBM Storwize Account Cleanup task is also made available. The system task connects to IBM Storwize, IBM Storage Array, or IBM SAN Volume Controller, collects an inventory of the system, and persists data in the Cisco UCS Director database. This collector adds to the system scheduler so that it can be called periodically as per the frequency configured in the collector (for example, one hour).

System Task is used not only for collecting inventory data from the storage devices, but also used.

For more information on how to manage system tasks in Cisco UCS Director, see the latest *Cisco UCS Director Administration Guide.*

To manage the system tasks of storage accounts, you can use the **System Tasks** tab in **Administration** > **System**.

- **Manage Task**—The **Manage Task** dialog box allows you to enable inventory collection for the selected storage account at specified intervals with respect to the system task policy or disable inventory collection.

- **Run Now**—The **Run Now** dialog box allows you to run the selected system task (inventory collection) and update the storage account information in Cisco UCS Director irrespective of the frequency configured in the collector.