



Managing HyperFlex Pods

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Reports for HyperFlex Pods

Cisco UCS Director provides several different kinds of reports that you can use to view the current status of a pod and its components or to see how the pod or its component have performed over time. All of these reports can be manually refreshed for real-time data and exported to PDF, CSV, or XLS format for you to share with others.

The available reports include:

- Summary reports for comparison data and other information about the pod or its components. These reports display in bar, pie, and tabular chart widgets on **Summary** tabs.
- Tabular reports for detailed information about specific components. These reports display in tabs.
- Trend graphs for information about the performance of pod resources over time. These reports display in tabs.
- Stack views for a graphical bar view of the infrastructure in a VM. These reports display in a pop-up window.
- More reports include top 5 reports and other reports for detailed information about high-performing pod resources. These reports display in tabs. You can customize some of these reports.

Summary Reports

Summary reports allow you to view the status of your HyperFlex pods and to manage inventory lifecycle actions for the pods and their components. Each report is displayed as a widget on a **Summary** tab at the pod level and the cluster level.

You can customize your **Summary** tabs to hide one or more reports. You can export the content of these reports in PDF, CSV, or XLS format. You can also add some or all of these reports to your Cisco UCS Director dashboard for quick access.

The summary reports for a HyperFlex pod include the following in graphical and tabular formats:

- Storage capacity of the pod
- Cluster nodes in active vs maintenance/failed state
- Active VMs vs inactive VMs
- Summary of the pod components, including software versions and cluster status
- ESXi host versions

For more information about summary reports and reporting in Cisco UCS Director, see the [Cisco UCS Director Administration Guide](#).

Tabular Reports

Tabular reports provide the status of the components in a HyperFlex pod. You can export the data from any tabular report in PDF, CSV, or XLS format. If you have scheduled inventory collection, the status is updated regularly. Otherwise, you can click **Refresh** on the tabular report to get real-time status.

You can access tabular reports on any tab after you choose the HyperFlex pod. Reports are available for the following components:

- Clusters
 - ESXi hosts
 - VM templates
 - HX servers
- Controller nodes
- Datastores
- Disks
- VMs

For some components, such as clusters, you can click on a row in the tabular report and access more detailed information through **View Details**.

Stack Views for VMs

Stack views provide information about a HyperFlex VM in a graphical format, including the compute, network, and storage configuration and resources available to that VM.

The stack view data includes:

	Compute	Network	Storage
OS	OS installed on the VM	OS installed on the VM	OS installed on the VM
VM	VM name	VM name	VM name
		Network adapter and port	Virtual disk
Hypervisor	Hypervisor version, IP address, and cluster	Hypervisor version, IP address, and cluster	Hypervisor version, IP address, and cluster
		Port group and VLAN	Datastore
		VSwitch	
Infrastructure	Server where the VM is located		HyperFlex storage cluster where the VM is located

To access the stack view, choose the VM on the **VMs** tab and then click **Stack View**.

Inventory Collection

When you add a HyperFlex pod, Cisco UCS Director discovers and collects the inventory of that pod. You can view the collected inventory and the status of the HyperFlex pod and its components in the summary reports and on the report pages. This status can be updated on a regular schedule through system tasks and manually by component.

Scheduled Refresh of Inventory Collection Through System Tasks

The HyperFlex system tasks allow you to schedule inventory collection for each HyperFlex pod. Depending on your business needs, you can set the same schedule for all HyperFlex pods or you can set a different schedule for some pods. You can specify the number of hours or minutes to automatically run the inventory collection and update the status of the HyperFlex pod.

For more information about scheduling system tasks, see the [Cisco UCS Director Administration Guide](#).

Manual Refresh of Inventory Collection

Even if you have scheduled inventory collection with system tasks, you can manually perform an inventory collection for a HyperFlex pod or its components. For example, you can manually refresh the inventory and status in the following ways:

- **Refresh** button—Updates the data in summary reports and tabular reports. This action is available for a HyperFlex pod and its components, such as clusters, controller nodes, datastores, disks, and VMs.
- **Inventory Collection** button—Performs an inventory collection for a component of a pod. This action is available for individual components, such as a VM, an ESXi host, or an HX server.

HyperFlex Clusters

A HyperFlex (HX) cluster is a group of Cisco HX-Series Servers. Each Cisco HX-Series Server in the cluster is referred to as a node or host. You can use Cisco UCS Director to view and manage the following components of your HX clusters:

- ESXi hosts
- VM templates
- HX servers

ESXi Hosts

Cisco UCS Director supports all ESXi host operations on HyperFlex as it does for converged infrastructure, such as FlexPod. In addition, it supports the following additional ESXi host operations for HyperFlex only:

- Enter Maintenance Mode
- Exit Maintenance Mode
- Reboot Host
- Collect Inventory

Managing ESXi Hosts on a HyperFlex Pod

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- Step 1** On the menu bar, choose **HyperConverged > HyperFlex**.
- Step 2** In the **Navigation** pane, choose the HyperFlex pod with the ESXi hosts that you want to manage.
- Step 3** Click the **Clusters** tab.
- Step 4** Choose the cluster where the ESXi hosts are located and click **View Details**.
- Step 5** Click the **ESXi Hosts** tab.
- Step 6** Choose an ESXi host and click one of the following:
- **Enter Maintenance Mode**
 - **Exit Maintenance Mode**
 - **Reboot Host**

- **Collect Inventory**

Moving ESXi Hosts into and out of ESXi Maintenance Mode

See the [Cisco HyperFlex Systems Administration Guide](#) for information about ESXi maintenance mode for ESXi hosts on HyperFlex.

**Note**

Cisco UCS Director supports only ESXi maintenance mode for ESXi hosts on HyperFlex. Cisco UCS Director does not support Cisco HX maintenance mode. To use Cisco HX maintenance, right-click on the ESXi host in VMware vCenter and follow the prompts.

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- Step 1** On the menu bar, choose **HyperConverged > HyperFlex**.
- Step 2** In the **Navigation** pane, choose the HyperFlex pod where you want to provision the VMs.
- Step 3** Click the **Clusters** tab.
- Step 4** Choose the cluster where you want to provision the VMs and click **View Details**.
- Step 5** Click the **ESXi Hosts** tab.
- Step 6** Choose the ESXi host that you want to move into or out of maintenance mode and click one of the following:
- **Enter Maintenance Mode**
 - **Exit Maintenance Mode**
- Step 7** If you chose to enter maintenance mode, complete the following fields in the **Enter Maintenance Mode** dialog box:
- From the **Maintenance Mode** drop-down list, choose one of the following:
 - **Ensure accessibility** -- This is the default host maintenance mode. All accessible virtual machines on the host remain accessible when the host is either powered off or removed from the cluster. Partial data migration is performed.
 - **Full data migration** -- This host maintenance mode consumes the most time and resources. VMware moves all data to other hosts in the cluster and fixes availability compliance for the affected components in the cluster. This option can be used to permanently migrate a host. The host cannot enter maintenance mode if a virtual machine object has data on the host, and is not accessible and cannot be fully migrated. When migrating data from the last host in the cluster, you must make sure that you migrate the virtual machines to another datastore, and then put the host in maintenance mode.
 - **No data migration** -- This host maintenance mode does not migrate any data from the host. If the host is powered off or removed from the cluster, some virtual machines may become inaccessible.
 - Check **Remove from vCenter** if you want to remove the host from VMware vCenter.
 - Click **Submit**.
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Managing HX Servers

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- Step 1** On the menu bar, choose **HyperConverged > HyperFlex**.
- Step 2** in the **Navigation** pane, choose the HyperFlex pod where you want to manage the HX servers.
- Step 3** Click the **Clusters** tab.
- Step 4** Choose the cluster where the HX servers are located and click **View Details**.
- Step 5** Click the **HX Servers** tab.
- Step 6** Choose the HX server that you want to manage and click one of the following:
- **Power ON**
 - **Power OFF**
 - **Reset**
 - **Launch KVM Console**
 - **KVM Direct Access**
 - **Request Inventory Collection**
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Managing Datastores

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- Step 1** On the menu bar, choose **HyperConverged > HyperFlex**.
- Step 2** in the **Navigation** pane, choose the HyperFlex pod where you want to manage the datastores.
- Step 3** Click the **Clusters** tab.
- Step 4** Choose the cluster where the datastores are located and click **View Details**.
- Step 5** Click the **Datastores** tab.
- Step 6** Choose the datastore that you want to manage and click one of the following:
- **Create**
 - **Delete**
 - **Edit**
 - **Mount**
 - **Unmount**

You can also click **View Details** on the datastore to access additional information and service request details for that datastore.

Managing VMs

- Step 1** On the menu bar, choose **HyperConverged > HyperFlex**.
- Step 2** in the **Navigation** pane, choose the HyperFlex pod with the VMs that you want to manage.
- Step 3** Click the **VMs** tab.
- Step 4** Choose the cluster where the VMs are located and click **View Details**.
- Step 5** Click the **VMs** tab.
- Step 6** Choose the VM that you want to manage and click one of the following options:
Some of these options are available only if you click the drop-down list on the right of the menu bar.
- **Access VM Credentials**
 - **Launch VM Client**
 - **Assign VM**
 - **Configure Lease Time**
 - **Resize VM**
 - **Power ON**
 - **Power OFF**
 - **Delete VM**
 - **Suspend**
 - **Shutdown Guest**
 - **Standby**
 - **Reset**
 - **Reboot**
 - **Create Snapshot**
 - **Mount ISO Image**
 - **Revert Snapshot**
 - **Mark Golden Snapshot**
 - **Delete Snapshot**
 - **Delete All Snapshots**
 - **VM Disk Resize**

- **Inventory Collection**
- **Create VM Disk**
- **Delete VM Disk**
- **Add vNICs**
- **Delete vNICs**
- **Configure VNC**
- **Unconfigure VNC**
- **Test VNC**
- **Clone**
- **VM Resync**
- **Move VM to VDC**
- **Migrate VM**
- **Clone VM as Image**
- **Convert VM as Image**
- **Enable/Disable VMRC Console Access**
- **Assign VMs to VDC**

You can also click **View Details** on the VM to access trend reports and details about service requests, VM action requests, events, VM snapshots, vNICs, disks, CD ROMs, VM access data, and linked clone VMs.

For detailed information about features and actions related to VMware VMs in Cisco UCS Director, see the [Cisco UCS Director VMware vSphere Management Guide](#).
