

# **System Monitoring and Reporting**

This chapter contains the following sections:

- Dashboard, on page 1
- Summary, on page 3
- Inventory Management, on page 4
- Resource Pools, on page 4
- Clusters, on page 5
- Images, on page 5
- Host Nodes, on page 6
- Virtual Machines (VMs), on page 7
- Topology, on page 8
- Assessment, on page 8
- Reports, on page 9

# Dashboard

In Cisco UCS Director, you can enable the **Dashboard** option in the user interface. On the **Dashboard** screen, you can add important, or frequently accessed report widgets. If you have enabled the **Dashboard** option, then this is the first window that you see when you log in to the user interface. After enabling the **Dashboard**, you can create additional dashboards, and delete them when you no longer need them. For more information, see Creating Additional Dashboards, on page 2 and Deleting a Dashboard, on page 2.

## **Enabling the Dashboard**

### Procedure

- **Step 1** On the header, click the user icon, and choose **Edit My Profile**.
- **Step 2** On the **Edit My Profile** screen, scroll down to the **Dashboard** section.
- Step 3 Check Enable Dashboard.
- Step 4 Click Save.

When you log out and log in, the first screen that you see is the Dashboard.

**Step 5** Click **Close** to view the Dashboard immediately.

#### What to do next

If there are no widgets on the Dashboard, you can access any summary report in the user interface, and select **Add to Dashboard**.

### **Creating Additional Dashboards**

### Before you begin

You should have enabled the **Dashboard** in the user interface.

### Procedure

Step 1	Log into Cisco UCS Director user interface.
	The default <b>Dashboard</b> screen is displayed.
Step 2	Click the down arrow displayed next to the default dashboard name and choose Create Dashboard.
Step 3	Enter the name of the dashboard.
Step 4	Click Submit.

### **Deleting a Dashboard**

You cannot delete the default dashboard.

### Procedure

Step 1	Log into Cisco UCS Director user interface. The default <b>Dashboard</b> screen is displayed.
Step 2	Click the drop-down list to view the list of dashboards that you have created.
Step 3	Click the <b>X</b> mark displayed next to the dashboard name.
Step 4	Confirm that you want to delete the dashboard.

## **Adding Report Widgets**

### Before you begin

You must be logged in to the appliance to complete this task.

	Procedure
Step 1	Choose the desired option and navigate to the summary report you want to add to your dashboard.
	For example, if you want to add a VM-related summary report, choose <b>Virtual</b> > <b>Compute</b> and then click <b>Summary</b> .
Step 2 Step 3	On the <b>Summary</b> screen, scroll down to the report that you want to add to your dashboard. In the upper right corner of the report, click <b>Settings</b> and then choose <b>Add to Dashboard</b> .

## **Refreshing Widget Data**

After enabling the **Dashboard** option, you can set a refresh interval to the widgets on this page. Automatic refresh can occur at intervals from a minimum of 5 minutes to a maximum of 60 minutes.

The Automatic Refresh button on the dashboard should be set to ON to configure the interval.

# **Summary**

The **Summary** screen allows you to manage system inventory. It gives you access to a wide array of tabular, graphical, and map reports, and also helps in managing inventory lifecycle actions.

Each report is displayed as a widget. Reports can be hidden through customization.

## Viewing Virtual Machine, Cloud, and System Summary Information

#### Procedure

Step 1	Choose Virtual > Compute.
Step 2	On the <b>Compute</b> page, click <b>Summary</b> .
	All information is displayed in the form of tables, graphs, and charts.

## **Customizing Summary Report Widgets**

### Procedure

Step 1	Choose Virtual > Compute.
Step 2	On the <b>Compute</b> page, click <b>Summary</b> .
Step 3	Click the reports drop-down icon to display the available reports.
Step 4	Click and drag a widget onto the <b>Dashboard</b> .

**Step 5** From the **Show more reports** drop-down list, check the name of the report that you want to add.

# **Inventory Management**

You can monitor the system inventory using the **Dashboard**. The **Dashboard** displays the entire system level infrastructure information for administrative management.

### **Accessing System Inventory Details**

#### Procedure

Step 1	Choose <b>Virtual</b> > <b>Compute</b> .		
Step 2	On the <b>Compute</b> page, choose the cloud.		
Step 3	Choose any of the options to view detailed information.		
	Following is a list of some of the report options visible for each cloud:		
	• Summary		
	• Polling		
	• VDCs		
	• Clusters		
	• Host Nodes		
	Resource Pools		
	• VMs		
	VM Action Requests		
	• Events		

- Assessment
- Application Categories
- Data Centers
- SRM Sites

# **Resource Pools**

The **Resource Pools** screen shows resource details at the host node level. These details include the CPU configured reservation, CPU limit, CPU used, and memory used.

### **Accessing Resource Details**

### Procedure

Step 1	Choose Virtual > Compute.
Step 2	On the <b>Compute</b> page, choose the cloud.
Step 3	On the <b>Compute</b> page, click <b>Resource Pools</b> .

All the resource pools for the selected cloud are displayed. You can select a resource pool and click **View Details** to view detailed information of each resource pool.

# **Clusters**

If a pod includes clusters, then the **Clusters** screen displays all the cluster-related information.

## **Accessing Clusters**

### Procedure

Step 1	Choose	Virtual >	Compute.
--------	--------	-----------	----------

**Step 2** On the **Compute** page, choose the cloud.

**Step 3** On the **Compute** page, click **Clusters**.

All clusters available in the selected cloud accounts are displayed. You can select a specific cluster, and click **View Details**.

# Images

The **Images** screen displays all available image IDs and their details. These images include guest OS, CPU, memory, and storage provisioned. You can use these image IDs to provision new virtual machines (VMs). If you are a group administrator, or an MSP administrator, then the **Images** screen displays images that have been assigned to your group.

If you select a specific VMware cloud account, and click **Images**, you can assign images to groups or to individual users. Images assigned to a particular group or user are displayed when administrators of the relevant group log in to the system.

## **Accessing Images**

#### Procedure

Step 1	Choose Virtual > Compute.
Step 2	On the <b>Compute</b> page, choose the cloud.
Step 3	On the <b>Compute</b> page, click <b>Images</b> .

A list of images associated with the selected clouds is displayed. You can select a specific image and click **View Details**.

## **Assigning VM Images to Users or Groups**

As an administrator, you can assign specific VM images to users or groups. The assignments filter the images that are displayed when you perform VM provisioning tasks, such as creating catalogs.

#### Procedure

Choose Virtual > Compute.	
On the <b>Compute</b> page, choose the cloud.	
On the <b>Compute</b> page, click <b>Images</b> .	
Click the row with the image that you w	ant to assign to a group.
Click Assign Image to Group.	
On the Assign Image to Group screen, expand the Group ID field, and check the names of the groups to	
which you want to assign the image.	
which you want to assign the image.	
which you want to assign the image. To assign an image to individual users, c	omplete the following fields:

# **Host Nodes**

The **Host Nodes** screen displays all physical host nodes that are available in the infrastructure. The screen lists details such as the ESX/ESXi version installed, active VMs, and power status.

## **Accessing Host Nodes**

### Before you begin

You must be logged in to the appliance to complete this task.

#### Procedure

Step 1	Choose Virtual > Compute.
Step 2	On the <b>Compute</b> page, click <b>Host Nodes</b> .
Step 3	Click the row with the host node that you want view, and click <b>View Details</b> .

# Virtual Machines (VMs)

The VMs screen displays all the VMs and VM-specific details for the chosen cloud.

### **Accessing VMs**

### Procedure

Step 1	On the menu bar, choose <b>Virtual</b> > <b>Compute</b> .
Step 2	On the <b>Compute</b> page, click <b>VMs</b> .

All virtual machines for all cloud accounts are displayed. You can perform additional tasks on these VMs such as launching VM client or powering off VMs. For more information, see Managing VM Actions.

## Accessing Group Level VMs

### Procedure

Step 1	Choose Organizations > Virtual Resources.
Step 2	On the Virtual Resources page, choose the user group.
Step 3	On the Virtual Resources page, click VMs.

All virtual machines for the selected group are displayed. You can perform additional tasks on these VMs such as launching VM client or powering off VMs. For more information, see Managing VM Actions.

# Topology

The **Topology** screen displays VMware cloud topology. There are four view mode types: Hierarchical, Concentric, Circular, and Force Directed. Depending on the mode, you can adjust the item spacing, distance, radius, rigidity, and force distance.

## Accessing Topology Types

### Before you begin

You must be logged in to the appliance to complete this task.

#### Procedure

Step 1	Choose Vir	tual > Compute.	
Step 2	On the <b>Compute</b> page, choose the cloud.		
Step 3	On the <b>Compute</b> page, click <b>Topology</b> .		
Step 4	Choose Ho	stnode-Datastore Topology or Hostnode-VM Topology.	
Step 5	Click <b>View Connectivity</b> . The topology appears in a new window.		
	Note	Not all of the topology types are displayed.	

## Assessment

The **Assessment** screen displays assessment reports such as cloud readiness, and virtualization best practices for a cloud account.

### **Accessing Assessments**

### Before you begin

You must be logged in to the appliance to complete this task.

### Procedure

Step 1	Choose Virtual > Compute.
Step 2	On the <b>Compute</b> page, choose the cloud.
Step 3	On the <b>Compute</b> page, click <b>Assessment</b> .

**Step 4** From the drop-down list, choose a report type to filter the report.

# Reports

Cisco UCS Director can help you monitor virtual infrastructure and system resources. It displays a wide variety of reports that provide insight into how the system is performing

Following are the types of reports:

- Tabular reports for system information, including overview, host nodes, new VMs, and deleted VMs.
- Bar and pie graph comparisons, including VMs active versus inactive, and CPU provisioned versus capacity.
- Trend graphs about system resources, including CPU trends, memory trends, and VM additions and deletions.
- Other reports include Top 5 reports at the group, VDC, host node, and VM levels. The Top 5 reports focus on groups with the highest number of VMs, groups with the greatest CPU usage, VDCs with the highest number of VMs, and host nodes with the greatest CPU usage.
- Map reports, displaying the system resource information in the form of heat maps or color-coded maps.

Additional trend reports are available for certain accounts (for example: KVM accounts). Trend reports display data over a selected time frame.

## **Accessing Reports**

### Procedure

Step 1	Choose Virtual > Compute.
Step 2	On the <b>Compute</b> page, choose the cloud.
Step 3	Click the name of the report that you want to view (Map, Top 5, or More Reports).