

Monitoring and Reports

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Viewing the Summary Report

The summary page displays a wide array of Tabular, Graphical, and Map reports to help the administrator manage system inventory. These reports are helpful for performing lifecycle actions on the inventory.

The administrator can configure settings to display only the required information for a given item. Each report is displayed as a widget, and can be hidden by customizing.

- **Step 1** On the menu bar, choose **Virtual** > **Compute**.
- **Step 2** Expand the Clouds and choose the SCVMM cloud. You can view tabular and graphical summaries for the following:

Report	Description
Overview	Displays the cloud types, last status message, last polled time, server IP address, product name, product version, total VMs, and active VMs.
New VMs	Displays the new VMs for today, last 24 hours, and last hour.

Report	Description
Deleted VMs	Displays the deleted VMs for today, last 24 hours, and last hour.
VMs Active vs. Inactive	Displays the number of active and inactive VMs in the cloud.
Trend: Snapshot File Size	Displays the snapshot file size in the last 24 hours, week, or month.
Memory	Displays the total memory capacity, provisioned, and reserved.
CPU	Displays the total CPU capacity, provisioned, and reserved.
Disk	Displays the total disk capacity, provisioned, and reserved.
Trend: Number of VMs	Displays the number of total and active VMs in the last 24 hours, week, or month.
Trend: VM Additions & Deletions	Displays the VMs added and deleted in the last 24 hours, week, or month.
Trend: Number of Host Nodes	Displays the total nodes, active nodes, and total CPU sockets.
Number of Events by Severity	Displays the number of minor, major, and critical events in the last 24 hours, week, or month.

Monitoring Inventory

The cloud dashboard displays complete SCVMM cloud-level infrastructure information. You can monitor inventory using this dashboard. There are various tabs you can view for a selected cloud.



Note

Remember to always click **Refresh** to see all updates to the physical infrastructure.

- **Step 1** On the menu bar, choose **Virtual** > **Compute**.
- **Step 2** Expand the clouds and choose the SCVMM cloud. You can view the following inventory information:

Tab	Description
Polling	Displays the start time, collection type, status, message, and end time. The polling interval depends upon the cloud polling interval set in administration system parameters.
	You can also click Request Inventory Collection to view an on-demand inventory.
vDCs	Displays information about the vDCs associated with the account, including the group, type, lock state, total VMs, active VMs, number of custom categories, status, and tag. The catalog item can become invalid when image, template, approver, or policies used in the catalog no longer exist.
	Clicking View Details that appears when you choose a vDC provides additional information of vDC. The additional information includes summary, VMs, events, static IP assignment (Static IP assignment is not applicable for Hyper-V), deleted VMs, VM action requests, vDC compliance on VMs, and more reports.
VM Action Requests	Displays the VM ID, action ID, user name, comments, and scheduled time of the action requests.
Events	Displays information about all events related to the account, including severity, event time, user, event ID, event type, event code, description, instance name, host name, VM type, and parent node.
VMs	Displays the list of VMs in the account. Provides actions to assign VM to users and user group, configure lease time, stack view, access VM credentials, and launch VM client.
	Clicking View Details that appears when you choose a VM provides additional information of VM. The additional information includes details, service request details, snapshots, VM action requests, events, disks, vNICs, VM network connectivity, and more reports.
Clusters	Displays the information of clusters that include the cluster name, total memory (GB), effective memory (GB), total CPU (GHz), effective CPU (GHz), CPU cores, effective hosts, hosts, validation status, and host group.
	Clicking View Details that appears when you choose a cluster provides additional information of cluster. The additional information includes summary, host node, cluster shared volumes, file shares, available storage, virtual switches, VMs, events, cluster network connectivity, and service request details.

Tab	Description
Host Nodes	Displays the host node, cluster name, product name, product version, host OS, host OS version, active VMs, total VMs, power status, VMRC state, PRO state, and host group of the cloud, and the SCVMM cloud to which it is assigned.
	Clicking View Details that appears when you choose a host node provides additional information of host node. The additional information includes summary, service requests, VMs, events, deleted VMs, host volumes, file shares, physical disks report, host network topology, and more reports.
Deleted VMs	Displays the details of the deleted VMs. When you choose a VM and click View Details , you get deleted VM details, service request details, snapshots, VM action requests, events, disks, vNICs, VM network connectivity, and more reports.
Images	Displays the image name, parent node, guest OS, integration services, memory (MB), number of CPUs, and last updated time.
	Note Administrators can provision new VMs from these images.
	Choose an image and click View Details to view the disk and vNICs details of the image.
Library Servers	Displays a list of library servers in the cloud.
	Choose a library server and click View Details to view the information about stored VMs, stored disks, ISOs, and library shares of the library server.
Host Groups	Displays the host group, account, parent host group, root status, inherit network settings, and the SCVMM cloud to which it is assigned,
	Choose a host group and click View Details to view the summary, logical units, storage pools, MAC address pools, logical network definitions, and service request details of the host group.
Jobs	Displays the history for the SCVMM jobs queue in the last 2 hours.
Run As Accounts	Displays the credentials that a user enters for any process as a Run As account. A Run As account is a container for a set of stored credentials.

Tab	Description
Custom Resources	Displays a list of custom resource package which is simply a folder in the SCVMM library with a .cr extension. This folder contains all the files required by your script, and the script itself. The script is executed in this folder as its working directory once it is all copied over to the machine.
Topology	Choose a topology type and click View Connectivity to view topology in the hierarchical, concentric, circular, or force directed view mode and adjust factors such as item spacing, distance, radius, rigidity, and force distance.
Top 5 Reports	Displays reports on the top five VMs, hosts, and vDCs in several categories, including memory usage, CPU usage, and disk usage.
Map Reports	Displays reports as maps, including a CPU utilization map, VM density, inactive VMs, and storage usage.
More Reports	Provides tabular, trending, and instant reports on VMs, CPUs, events, snapshot file size, CPU usage, and disk.

Viewing the Storage Report

- **Step 1** On the menu bar, choose **Virtual** > **Storage**.
- **Step 2** Expand the Clouds and choose the SCVMM cloud. You can view the storage details in the following tabs:

Tab	Description
Summary	Displays the overview of datastore, local storage information, NTFS (SAN), and Server Message Block (SMB) in the tabular format. Displays the following graphs:
	Used storage per storage type
	Total capacity per storage type
	Trend: Storage capacity, used, and free (last week)
	Trend: Storage free by storage type (last week)
	Trend: Storage used by storage type (last week)
	Total capacity used by storage type (last week)
	Free storage per storage type
DataStore Capacity Report	Displays the datastore capacity report. Choose a report and click View Details to view more details about the report. The report includes summary, VM Disks, hosts, top five reports, service request details, and more.
File Server Report	Displays the file server report. Choose a report and click View Details to view the file shares report and service request details.
Storage Array Report	Displays the storage array report. Choose a report and click View Details to view the storage pools report and service request details.
Storage Provider Report	Displays the storage provider report with the status. Choose a report and click View Details to view the service request details.
Storage Classifications Report	Displays the storage classification name, account name, description, accessibility, if enabled, and the SCVMM cloud to which it is assigned. Choose a report and click View Details to view the storage pools report and service request details.
Map Reports	Displays storage usage reports as maps. Click the Show Labels check box to view the report label.
More Reports	Provides tabular, trending, and instant reports on storage provider, storage capacity, and storage usage reports.

Performance Reports

Cisco UCS Director monitors the virtual infrastructure and system resources by displaying a wise array of tabular, graphical, and map reports.

These reports help you understanding system details and provide insight into how the system is performing. Reports provide the following types of information:

- Tabular Reports—System information, such as overview, host nodes, new VMs, and deleted VMs.
- Bar and Pie Graphs—Comparisons, such as active vs. inactive VMs, provisioned vs. capacity CPU, and so on.
- Trend Graphs—System resources, such as CPU trend, memory trend, and VM additions and deletions.
- **Top five Reports**—Groups with the most VMs, vDCs with the most VMs, vDCs with the most CPU usage, vDCs with the most memory usage, and vDCs with the most disk usage.
- Map Reports—Heat maps and color-coded maps, such as CPU utilization map, VM density, inactive VMs, and storage usage.

Viewing Performance Reports

- Step 1 On the menu bar, choose Virtual > Compute.
- **Step 2** Expand the clouds and choose the SCVMM cloud.
- **Step 3** In the **Summary** tab, view the various types of reports.

Viewing Network Reports

- **Step 1** On the menu bar, choose **Virtual** > **Network**.
- **Step 2** Expand the Clouds and choose the SCVMM cloud. You can view the storage details in the following tabs:

Tab	Description
Summary	Displays an overview of virtual networks information.
Network Inventory Report	Displays the host node, VLAN supported, virtual networks, physical network adapters, and host power state information.

Tab	Description
Host Network Adapters Report	Displays the host node, name, connection name, network location, logical networks, physical address, IP address, status, VLAN mode, VLAN IDs, virtual network, and description information.
VM Network Adapters Report	Displays the ID, VM name, host name, name, adapter type, access, physical address, enable state, VLAN ID, MAC address, logical network, VM network, VM subnet, and virtual network information.
Logical Networks Report	Displays the name, description, network virtualization enabled, private LAN enabled, use GRE, isolated sites, network entity access, virtual switch extension manager, and the SCVMM cloud to which it is assigned.
Logical Switches Report	Displays the account name, name, description, uplink mode, minimum bandwidth mode, SRIOV enabled, and virtual switch extensions information.
MAC Address Pools Report	Displays the name, description, starting MAC address, ending MAC address, available addresses, unassigned addresses, total addresses, host groups, and supported virtualization platforms information.
Static IP Address Pools Report	Displays the account name, name, description, subnet, VLAN ID, starting IP address, ending IP address, if it is a multicast pool, DNS servers, default gateway, WINS servers, logical network definition, and VM subnet information
Port Classifications Report	Displays the name, description, logical switch, SCVMM cloud, and tag information.
Virtual Network Adapter Port Profiles Report	Displays the name, description, minimum bandwidth weight, absolute minimum bandwidth (Mbps), absolute maximum bandwidth, allow teaming, allow MAC address spoofing, allow IEEE priority tagging, enable DHCP guard, enable VMQ, enable IPsec offload, enable SR-IOV, network entity access type, and virtual switch extensions information.
Uplink Port Profiles Report	Displays the name, description, load balancing algorithm, teaming mode, network virtualization enabled, logical network definitions, network entity access type, and virtual switch extensions information.

Tab	Description
Network Services Report	Displays the account, name, connection string, manufacturer, model, run as account, and provider information.
Virtual Switches Report	Displays the host node, name, network type, highly available, network optimization available, virtual DHCP enabled, description, and tag information.
VM Networks Report	Displays the name, description, logical network, isolation type, GRE enabled, PVLAN enabled, network entity access type, and tag information.

Cloudsense Reports

CloudSense Analytics in Cisco UCS Director provide visibility into the infrastructure resources utilization, critical performance metrics across the IT infrastructure stack, and capacity in real time. CloudSense significantly improves capacity trending, forecasting, reporting, and planning of virtual and cloud infrastructures.

You can generate the following reports for Hyper-V accounts with CloudSense:

- Hyper-V cloud utilization summary report
- VM activity report by group
- VM performance summary
- Virtual infrastructure and assets report

Generating a Report

Before You Begin

You must be signed into the appliance before completing this task.

- **Step 1** On the menu bar, choose **CloudSense** > **Reports**.
- **Step 2** From the left panel, choose the report.
- Step 3 Click Generate Report.
- **Step 4** In the **Generate Report** dialog box, complete the following fields:

Name	Description
Context drop-down list	Select the group that you want to generate the report for.
	Note If you are an administrator, then this drop-down list displays all the groups for which you have administrative privileges. For example, if you are an MSP administrator, then this drop-down list displays all the customer groups that you manage. This list does not display any other groups.
Report Label field	You can provide a label for the report to distinguish it from the other reports that you generate.

Step 5 Click Submit.

The report is generated in the system. This generated report is accessible only to you and to users in the groups that you manage. For example, if you are an MSP administrator, then this generated report is not visible to other MSP administrators or groups.

Generating an Assessment

Before You Begin

You must be signed into the appliance before completing this task.

- **Step 1** On the menu bar, choose **CloudSense** > **Assessments**.
- Step 2 Click Virtual Infrastructure Assessment Report.
- Step 3 Click Generate Report.

This step generates a new instant report in either HTML or PDF format.