



Managing Life Cycles

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Note You must be logged in to the appliance before you can run any of the following procedures.

Managing VM Power Settings

Step 1 Click **Virtual > Compute**.

Step 2 Choose the cloud name.

Step 3 To bring up VM actions, choose the **VMs** tab and right click a VM (wait for the timer to cycle).

Step 4 Choose an action and the **VM Task** dialog box opens. Complete the last two fields:

Name	Description
VM Name display-only field	The name of the VM that is the subject of the action.
Power Off display-only field	The task to power off the VM.
Power On display-only field	The task to power on the VM.
Suspend display-only field display-only field	The task to put the VM in a suspended state.
Shutdown Guest display-only field	The task to shut down the guest OS on the VM.
Standby display-only field	The task to move the VM into a standby state.
Reset display-only field	The task to perform a hard reset of the VM.

Name	Description
Reboot display-only field	The task to perform a soft reboot of the VM.
Comments field	The comments.
Schedule Action radio button	The task to power on a VM now or at a specific date and time.

Step 5 Click Proceed.

Resizing a VM

Step 1 Click **Virtual > Compute**.

Step 2 Choose the cloud name.

Step 3 Choose the **VMs** tab.

Step 4 Click the **Power OFF** button on the toolbar and the VM Task dialog box appears.

Step 5 Choose **Execute Now** and enter any comments.

Step 6 Click **Proceed**.

Step 7 Click the **Resize VM** button on the toolbar and the **Resize VM** dialog box appears. Complete the following fields:

Name	Description
VM Name display-only field	The name of the VM.
Current Allocated CPU display-only field	The current CPU on the VM.
Current Allocated Memory (GB) display-only field	Displays the current memory on the VM.
New CPU Count drop-down list	Choose the CPU required.
New Memory drop-down list	Choose the memory required.

Step 8 Click **Resize**.

Managing VM Snapshots

This topic covers five tasks:

- **Create Snapshot**—You can create a snapshot of all the VM's resources in their current state, or you can revert back to a particular snapshot.
- **Revert Snapshot**—If the VM crashes or malfunctions (OS becomes corrupt) you can revert back to the most recent snapshot of the VM, which brings the VM back up and running. In the case where there are multiple snapshots for a VM, you can revert to a specific snapshot.
- **Mark Golden Snapshot**—You can mark a specific snapshot for a VM as a Golden Snapshot. This feature protects the snapshot from accidental deletion.
- **Delete a Snapshot**—You can delete a snapshot if required. If you delete a Golden Snapshot you must first unmark it before it can be deleted.
- **Delete All Snapshots**—You can delete all snapshots for a VM. However, you cannot delete all snapshots if there are golden snapshots. You must first unmark the Golden Snapshot and then delete all snapshots.

Creating VM Snapshots

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- Step 1** Click **Virtual > Compute**.
- Step 2** Choose the cloud name.
- Step 3** Choose the **VMs** tab.
- Step 4** Choose a VM and click the down arrow button on the right side of the toolbar.
- Step 5** From the drop-down list, choose **Create Snapshot** and the **Create Virtual Machine Snapshot** dialog box appears. Complete the following action fields:

Name	Description
Snapshot Name field	The snapshot name.
Snapshot Description field	The snapshot description.
Snapshot Memory check box	Check the check box to include VM memory
Quiesce Guest File System check box	Check the check box to take the snapshot in quiesce mode. Note Quiescing a file system is a process of bringing the on-disk data of a physical or virtual computer into a state suitable for backups. This process may include operations such as flushing buffers from the operating systems in-memory cache to disk or other higher-level application-specific tasks. To use this option, VMware tools must be installed on the VM.

- Step 6** Click **Proceed**.
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Reverting to a Snapshot

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- Step 1** Click **Virtual > Compute**.
- Step 2** Choose the cloud name.

- Step 3** Choose the **VMs** tab.
 - Step 4** Choose a VM and click the down arrow button on the right side of the toolbar.
 - Step 5** From the drop-down list, choose **Revert Snapshot** and the **Revert Snapshot Task** dialog box appears.
 - Step 6** Choose a snapshot from the list by checking the check box adjacent to the snapshot name.
 - Step 7** Click **Proceed**.
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Marking a Golden Snapshot

- Step 1** Click **Virtual > Compute**.
 - Step 2** Choose the cloud name.
 - Step 3** Choose the **VMs** tab.
 - Step 4** Choose a VM and click the down arrow button on the right side of the toolbar.
 - Step 5** From the drop-down list, choose **Mark Golden Snapshot** and the **Mark Golden Snapshot Task** dialog box appears.
 - Step 6** Choose a snapshot from the list by checking the check box adjacent to the snapshot name.
 - Step 7** Check the **Mark as Golden Snapshot** check box.
 - Step 8** Click **Proceed**.
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Deleting a Snapshot

- Step 1** Click **Virtual > Compute**.
 - Step 2** Choose the cloud name.
 - Step 3** Choose the **VMs** tab.
 - Step 4** Choose a VM and click the down arrow button on the right side of the toolbar.
 - Step 5** From the drop-down list, choose **Delete Snapshot** and the **Delete Snapshot Task** dialog box appears.
 - Step 6** Choose a snapshot from the list by checking the check box adjacent to the snapshot name.
 - Step 7** Check the **Delete Children** check box.
 - Step 8** Click **Proceed**.
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Deleting All Snapshots

- Step 1** Click **Virtual > Compute**.
- Step 2** Choose the cloud name.
- Step 3** Choose the **VMs** tab.

- Step 4** Choose a VM and click the down arrow button on the right side of the toolbar.
- Step 5** From the drop-down list, choose **Delete All Snapshots** and the **VM Snapshot Task** dialog box appears.
- Step 6** Enter an optional comment.
- Step 7** Click **Proceed**.
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Managing Other VM Actions

The other VM action menus can be brought up by right clicking on a VM for an shortened menu, or for a complete menu, by highlighting a VM and clicking on the down arrow at the right side of the toolbar.

Other VM actions are as follows:

- **View VM Details**—You can access individual VMs to view details such as summary reports, vNICs, disks, snapshots, and so on.
- **Stack View**—You can view stacks of information about a particular VM including OS, hypervisor, and infrastructure information.
- **Delete a VM**—You can delete a VM from the list. Only a powered-off VM can be deleted.
- **Create a VM Disk**—You can add an additional disk with a custom size to a VM.
- **Delete a VM Disk**—You can delete a disk.
- **Add vNICs**—You can add multiple vNICs to a VM. You also have the option to add or replace a vNIC in a VM. The options for vNICs depends upon the network policy mapped to the vDC that is associated to the VM.
- **Launch VM Client**—You can set up either web access, remote desktop, or VNC console preferences to a VM.
- **Assign VM**—You can assign a VM to a group or vDC and modify the category of the VM. You can set the provisioning time, termination time, and label for a VM.
- **Access VM Credentials**—You can access a VM's login credentials when it is set up for web or remote desktop access, but only if the administrator provides the privileges in the catalog from which the VM is provisioned.
- **Inventory Collection Request for VM**—You can choose a VM and request for on-demand inventory collection for that VM.

Viewing VM Details

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- Step 1** Click **Virtual > Compute**.
- Step 2** Choose the cloud name.
- Step 3** Choose the **VMs** tab.
- Step 4** Choose a VM from the list.
- Step 5** Click the **View Details** button on the toolbar.
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Using Stack View

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- Step 1** Click **Virtual > Compute**.
 - Step 2** Choose the cloud name.
 - Step 3** Choose the **VMs** tab.
 - Step 4** Click the **Stack View** button on the toolbar.
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Deleting a VM

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- Step 1** Click **Virtual > Compute**.
 - Step 2** Choose the cloud name.
 - Step 3** Choose the **VMs** tab.
 - Step 4** Choose a VM and click the down arrow button on the right side of the toolbar.
 - Step 5** From the drop-down list, choose **Delete VM** and the **VM Task** dialog box appears.
 - Step 6** Enter an optional comment and schedule the action to execute now or later.
 - Note** If you choose **Execute Later**, you must specify a time.
 - Step 7** Click **Proceed**.
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Creating a VM Disk

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- Step 1** Click **Virtual > Compute**.
 - Step 2** Choose the cloud name.
 - Step 3** Choose the **VMs** tab.
 - Step 4** Choose a VM and click the down arrow button on the right side of the toolbar.
 - Step 5** From the drop-down list, choose **Create VM Disk** and the **Create VM Disk** dialog box appears. Complete the following fields:

Name	Description
VM Name display-only field	The name of the VM.
New Disk Size (GB) field	The disk size for the VM in GB.
Choose a disk type drop-down list	Choose the disk label.

Name	Description
Choose Datastore drop-down list	Choose a datastore. Note The datastore choices that are available depends upon the storage policy that is associated to the VM (VM's vDC).
Thin Provision check box	Check the check box to add a thin provisioned disk to the VM. Note Thin provisioning enables dynamic allocation of physical storage capacity to increase VM storage utilization.

Step 6 Click **Create**.

Deleting a VM Disk

Step 1 Click **Virtual > Compute**.

Step 2 Choose the cloud name

Step 3 Choose the **VMs** tab.

Step 4 Choose a VM and click the down arrow button on the right side of the toolbar.

Step 5 From the drop-down list, choose **Delete VM Disk** and the **Delete VM Disk** dialog box appears.

Step 6 Choose the disk name from the drop-down list.

Step 7 Click **Delete**.

Adding vNICs

Step 1 Click **Virtual > Compute**.

Step 2 Choose the cloud name.

Step 3 Choose the **VMs** tab.

Step 4 Choose a VM and click the down arrow button on the right side of the toolbar.

Step 5 From the drop-down list, choose **Add vNICs** and the **Add VM vNICs** page appears.

Step 6 From the **Operation** drop-down list, choose **Add**.

Note This operation is not allowed if the additional vNIC limit configured in the network policy is exceeded.

- Step 7** Click the **Add (+)** button on the toolbar and the **Add Entry to VM Networks** dialog box appears. Complete the following fields:

Name	Description
NIC Alias drop-down list	Choose a NIC alias from the list.
Port Group Type display-only drop-down list	Choose a port group from the list.
Port Group Name drop-down list	Choose a port group name from the list.
Adapter Type display-only drop-down list	The adapter type. The choice is available only if the NIC alias does not have Copy Adapter Type from Template chosen in the network policy.
DHCP display-only check box	The check box is checked if the IP is assigned using DHCP.
Static IP Pool field	The static IP address pool.
Network Mask field	The network mask.
Gateway IP Address field	The gateway IP address.

Note The **NIC Alias**, **Port Group Name**, **Adapter Type**, **DHCP**, and **Static IP Pool** choices depend upon the settings in the network policies that are associated with the VM (VM's vDC). For more information about multiple NIC network policies, see Chapter 6 “[Managing Policies](#)”.

Note The VM is powered off to perform this action. The VM will be powered on once the action is completed.

- Step 8** Click **Submit**.

Replacing a vNIC

- Step 1** Click **Virtual > Compute**.
- Step 2** Choose the cloud name.
- Step 3** Choose the **VMs** tab.
- Step 4** Choose a VM and click the down arrow button on the right side of the toolbar.
- Step 5** From the drop-down list, choose **Add vNIC** and the **Add VM vNICs** dialog box appears.
- Step 6** From the **Operation** drop-down list, choose **Replace**.

Step 7 Choose a vNIC and the **Add vNIC** dialog box appears. Complete the following fields:

Name	Description
NIC Alias drop-down list	Choose a NIC alias. Only the vNICs configured in the network policy are visible here.
Port Group Name drop-down list	Choose a port group.
Adapter Type drop-down list	Choose the adapter type. The choice is available only if the choice of the NIC alias does not have Copy Adapter Type from Template chosen in the network policy.
DHCP check box	Check the check box if you want the IP assigned using DHCP.
Static IP Pool field	The static IP address pool.
Network Mask field	The network mask.
Gateway IP Address field	The gateway IP address.

Step 8 Click **Submit**.

Note The **Replace** operation removes all the existing vNICs from the VM and replaces them with the vNICs that were added. This operation is not allowed if the additional vNIC limit configured in the Network Policy is exceeded.

Note The **NIC Alias**, **Port Group Name**, **Adapter Type**, **DHCP**, and **Static IP Pool** choices depend upon the settings in **Network Policy** that is associated to the VM (VM's vDC). For more information about multiple NIC network policies, see Chapter 6 "[Managing Policies](#)".

Note The VM is powered off to perform this action. The VM is powered on once the action is completed.

Deleting vNICs

Step 1 Click **Virtual > Compute**.

Step 2 Choose the cloud name.

Step 3 Choose the **VMs** tab.

Step 4 Choose a VM and click the down arrow button on the right side of the toolbar.

Step 5 From the drop-down list, choose **Delete vNICs** and the **Delete VM vNICs** dialog box appears.

Step 6 Click the **Select** button and the **Select Items** dialog box appears.

Step 7 Choose **Check All**, **Check None**, or check the check box adjacent to the vNIC to delete.

Step 8 Click **Select**.

Launching the VM Client

- Step 1** Click **Virtual > Compute**.
 - Step 2** Choose the cloud name.
 - Step 3** Choose the **VMs** tab.
 - Step 4** Choose a VM.
 - Step 5** Click the **Launch VM Client** button on the toolbar and the **Launch Client** dialog box appears.
 - Step 6** From the drop-down list, choose an **Access Scheme**. You can choose **Remote Desktop**, **Web Access**, or **VNC Console**.
 - Note** The VNC console is an Ajax-based console that has access to a VM. The console page can be launched by using any standalone web browser. It does not require a dedicated browser plug-in and it provides full VM control capabilities.
 - Step 7** Choose one of the options and click **Proceed**.
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Enabling the VNC Console on a VM

- Step 1** Click **Virtual > Compute**.
 - Step 2** Choose the cloud name.
 - Step 3** Choose the **VMs** tab.
 - Step 4** Choose a VM and click the down arrow button on the right side of the toolbar.
 - Step 5** From the drop-down list, choose **Configure VNC**.
 - Step 6** Click **Submit**.
 - Step 7** Click **OK**.
 - Note** Cisco UCS Director automatically configures VNC console access to a VM when the request is submitted.
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Accessing the VNC Console Window for a VM

- Step 1** Click **Virtual > Compute**.
- Step 2** Choose the cloud name.
- Step 3** Choose the **VMs** tab.
- Step 4** Choose a VM.
- Step 5** Click the **Launch VM Client** button on the toolbar and the **Launch Client** dialog box appears.
- Step 6** From the drop-down list, choose **VNC Console** as the **Access Schema**.
- Step 7** Click **Proceed**.

- Note** The ESX/ESXi server's VNC ports (from 5900 to 5964) must be open on the hypervisor for a VMs VNC console access.
- Note** Cisco UCS Director provides automatic configuration of the VNC console for a VM. To configure, you must open the required ports on the hypervisor.
- Note** Hypervisors with ESX 4.X and ESXi 5.0 versions are supported to configure VNC console access.

Assigning a VM

- Step 1** Click **Virtual > Compute**.
- Step 2** Choose the cloud name.
- Step 3** Choose the **VMs** tab.
- Step 4** Choose a VM.
- Step 5** Click the **Assign VM** button on the toolbar and the **Assign VM** dialog box appears. Complete the following fields:

Name	Description
VM Name display-only field	The name of the VM.
User Group drop-down list	Choose the user group.
vDC drop-down list	Choose the vDC.
Category drop-down list	Choose the category for the VM.
VM User Label field	The VM label if required.
Set Provision Time check box	Check the check box to set a specific provisioning time for the VM.
Provision Date/Time calendar, drop-down lists, radio buttons	The VM's provisioning date and time. ¹ There are calendars for the Date , drop-down lists for the Time (hour and minute), and radio buttons for AM or PM .
Set Termination Time check box	Check the check box to set a specific termination time for the VM.
Termination Date/Time calendar, drop-down lists, radio buttons	The VM's termination date and time. ² There are calendars for the Date , drop-down lists for the Time (hour and minute), and radio buttons for AM or PM .
Comments field	The comments if required.

1. This option appears when **Set Provision Time** is checked.
2. This option appears when **Set Termination Time** is checked.

- Step 6** Click **Assign**.

About VM Credentials

The VM's web or remote access login credentials can only be viewed if the administrator provides the necessary privileges in the **Catalog** from which the VM is provisioned.

Viewing VM Credentials

- Step 1** Click **Virtual > Compute**.
 - Step 2** Choose the cloud name.
 - Step 3** Choose the **VMs** tab.
 - Step 4** Choose a VM.
 - Step 5** Click the **Access VM Credentials** button on the toolbar.
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Using the Inventory Collection Request for a VM

- Step 1** Click **Virtual > Compute**.
 - Step 2** Choose the cloud name.
 - Step 3** Choose the **VMs** tab.
 - Step 4** Choose a VM and click the down arrow button on the right side of the toolbar.
 - Step 5** From the drop-down list, choose **Inventory Collection**.
 - Step 6** Click **Submit**.
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