Configuring VN-Link Related Policies

This chapter includes the following sections:

Configuring Dynamic vNIC Connection Policies

Dynamic vNIC Connection Policy

This policy determines how the VN-link connectivity between VMs and dynamic vNICs is configured. This policy is required for Cisco UCS instances that include servers with virtual interface card adapters on which you have installed VMs and configured dynamic vNICs.

Note   If you Vmotion a server that is configured with dynamic vNICs, the dynamic interface used by the vNICs fails and Cisco UCS Manager raises a fault to notify you of that failure.

When the server comes back up, Cisco UCS Manager assigns new dynamic vNICs to the server. If you are monitoring traffic on the dynamic vNIC, you must reconfigure the monitoring source.

Each Dynamic vNIC connection policy must include an adapter policy and designate the number of vNICs that can be configured for any server associated with a service profile that includes the policy.

Creating a Dynamic vNIC Connection Policy

Procedure

Step 1 In the **Navigation** pane, click the **LAN** tab.

Step 2 On the **LAN** tab, expand **LAN ➤ Policies**.

Step 3 Expand the node for the organization where you want to create the policy.
If the system does not include multi-tenancy, expand the **root** node.

Step 4 Right-click the **Dynamic vNIC Connection Policies** node and select **Create Dynamic vNIC Connection Policy**.

Step 5 In the **Create Dynamic vNIC Connection Policy** dialog box, complete the following fields:

Name	Description
Name field	The name of the policy. This name can be between 1 and 16 alphanumeric characters. You cannot use spaces or any special characters, and you cannot change this name after the object has been saved.
Description field	A description of the policy. We recommend including information about where and when the policy should be used. Enter up to 256 characters. You can use any characters or spaces except ^ (carat), \ (backslash), > (greater than), < (less than), ' (single quote), " (double quote), ` (accent mark).
Number of Dynamic vNICs field	The number of dynamic vNICs that this policy affects.
Adapter Policy drop-down list	The adapter profile associated with this policy. The profile must already exist to be included in the drop-down list.
Protection field	vNICs are always protected in Cisco UCS, but this field allows you to to select a prefered fabric, if any. You can choose: • **protected-pref-a**—Cisco UCS attempts to use fabric A, but will fail over to fabric B if necessary • **protected-pref-b**—Cisco UCS attempts to use fabric B, but will fail over to fabric A if necessary • **protected**—Cisco UCS uses whichever fabic is available

Step 6 Click **OK**.

Step 7 If Cisco UCS Manager GUI displays a confirmation dialog box, click **Yes**.

Changing a Dynamic vNIC Connection Policy

Procedure

Step 1 In the **Navigation** pane, click the **LAN** tab.

Step 2 On the **LAN** tab, expand **LAN ➤ Policies**.

Step 3 Expand the node for the organization that contains the policy you want to change.
If the system does not include multi-tenancy, expand the **root** node.

Step 4 Expand the **Dynamic vNIC Connection Policies** node and click the policy that you want to change.

Step 5 In the **Work** pane, click the **General** tab.

Step 6 Change one or more of the following fields:

Name	Description
Description field	A description of the policy. We recommend including information about where and when the policy should be used.
Number of Dynamic vNICs field	The number of dynamic vNICs that this policy affects.
Adapter Policy drop-down list	The adapter profile associated with this policy. The profile must already exist to be included in the drop-down list.

You cannot change the other properties of the policy, such as the **Name** field.

Step 7 Click **Save Changes**.

Step 8 If Cisco UCS Manager GUI displays a confirmation dialog box, click **Yes**.

Deleting a Dynamic vNIC Connection Policy

Procedure

Step 1 In the **Navigation** pane, click the **LAN** tab.

Step 2 On the **LAN** tab, expand **LAN ➤ Policies ➤** *Organization_Name*.

Step 3 Expand the **Dynamic vNIC Connection Policies** node.

Step 4 Right-click the policy you want to delete and select **Delete**.

Step 5 If Cisco UCS Manager GUI displays a confirmation dialog box, click **Yes**.

Configuring the VM Lifecycle Policy

VM Lifecycle Policy

The VM lifecycle policy determines how long Cisco UCS Manager retains offline VMs and offline dynamic vNICs in its database. If a VM or dynamic vNIC remains offline after that period, Cisco UCS Manager deletes the object from its database.

All virtual machines (VMs) on Cisco UCS servers are managed by vCenter. Cisco UCS Manager cannot determine whether an inactive VM is temporarily shutdown, has been deleted, or is in some other state that renders it inaccessible. Therefore, Cisco UCS Manager considers all inactive VMs to be in an offline state.

Cisco UCS Manager considers a dynamic vNIC to be offline when the associated VM is shutdown, or the link between the fabric interconnect and the I/O module fails. On rare occasions, an internal error can also cause Cisco UCS Manager to consider a dynamic vNIC to be offline.

The default VM and dynamic vNIC retention period is 15 minutes. You can set that for any period of time between 1 minute and 7200 minutes (or 5 days).

Note The VMs that Cisco UCS Manager displays are for information and monitoring only. You cannot manage VMs through Cisco UCS Manager. Therefore, when you delete a VM from the Cisco UCS Manager database, you do not delete the VM from the server or from vCenter.

Configuring the VM Lifecycle Policy

Procedure

Step 1 In the **Navigation** pane, click the **VM** tab.

Step 2 On the **VM** tab, expand the **All** node.

Step 3 On the **VM** tab, click **VMWare**.

Step 4 In the **Work** pane, click the **General** tab.

Step 5 In the **Lifecycle Policy** area, complete the following fields:

Name	Description
VM Retention field	The period of time, in minutes, that Cisco UCS Manager retains an offline VM in its database. If a VM remains offline after that period, Cisco UCS Manager deletes the VM from its database. The default VM retention period is 15 minutes. You can configure this for any period of time between 1 minute and 7200 minutes (or 5 days).
vNIC Retention field	The period of time, in minutes, that Cisco UCS Manager retains an offline dynamic vNIC in its database. If a dynamic vNIC remains offline after that period, Cisco UCS Manager deletes the dynamic vNIC from its database.

Name	Description
	The default vNIC retention period is 15 minutes. You can configure this for any period of time between 1 minute and 7200 minutes (or 5 days).

Step 6   Click **Save Changes**.

Viewing Dynamic vNIC Properties in a VM

Before You Begin

The VM must be running.

Procedure

Step 1   In the **Navigation** pane, click the **VM** tab.

Step 2   On the **VM** tab, expand **All ➤ VMWare**.

Step 3   Expand **Virtual Machines**.

Step 4   Expand the virtual machine that contains the dynamic vNIC.

Step 5   Choose the dynamic vNIC.

Step 6   In the **Work** pane, click the **General** tab.
In the **Properties** area, the vNIC properties appear.