vNICs

vNIC Templates

Use vNIC templates to define how a vNIC on a server connects to the LAN. You can view all existing vNIC templates on the **Templates** page.

vNIC Redundancy Template Pairs

Creating vNIC template pairs enables you to group vNICs that belong to a specific server. For example, you can create a vNIC template and specify it as the primary template, then create a different vNIC template and specify it as the secondary template. You can link the two templates to create a pair that share attributes that you define in the primary template. The secondary template inherits the attributes from the primary template. If you select **Updating Template**, any changes made to the primary template are propagated to the secondary template in the template pair. You can also modify any non-shared configurations on each individual template in the pair.

When creating the pair, you can assign one template to each fabric. For example you could assign the primary template to fabric A, and the secondary template to fabric B. This eliminates the need to configure vNIC pairs independently using one or more templates. The number of vNIC pairs that can be created using a template pair is only limited by the adapter's maximum capabilities.

The following configurations are shared when using template pairs:

- Network Control Policy

- QoS Policy

- Template Type

- Connection Policies

- VLANs

- MTU

- Statistics Threshold Policy

The following configurations are not shared when using template pairs:

- Fabric ID
- CDN Source
- MAC Pool
- Description
- Pin Group Policy

> **Note** If you plan to use a global vNIC redundancy template pair in a local service profile in Cisco UCS Manager, you cannot assign the vNIC template for the primary and the secondary of the redundancy template pair at the same time. You will need to assign the vNIC template for the primary vNIC and set the peer name for the second vNIC, then modify the second vNIC and manually assign the secondary vNIC template.

Creating or Editing a vNIC Template

> **Note** Global vNICs can be used in local service profiles created in Cisco UCS Manager.

Step 1 In the **Actions** bar, type **Create vNIC Template** and press Enter.

Step 2 In the **vNIC Template** dialog box, click **Basic** and complete the following:
- a) Choose the **Organization** where you want to create the vNIC template.
- b) Enter a **Name** and **Description**.
- c) Choose the **Redundancy Type** to enable vNIC pairing.

  This can be one of the following:

  - **None**—Creates a standard vNIC template without vNIC pairing.
  - **Primary**—Creates the primary vNIC template.
  - **Secondary**—Creates the secondary vNIC template.

- d) Select the options for **Type**, **Fabric ID**, **Fabric Failover** and enter the **MTU**.
- e) Select the **CDN Source**. If you choose to use a user defined name, you must also enter the **User Defined CDN Name**.

Step 3 If you enabled vNIC pairing, click **Peer Redundancy Template** and choose the primary or secondary vNIC template.

Step 4 Click **MAC Address** and select the MAC address.

  If you do not assign a MAC address pool, the system assigns the default.

Step 5 Click **VLANs** and add the VLANs that you want to use for this vNIC template.

  You can click **Search** and specify a VLAN name to filter the results of VLANs displayed. You can search with a partial or full name of the VLAN that you want to select. For example, you can search for *VLAN100* to filter the list of VLANs

with names containing VLAN100. You cannot set multiple native VLANs for a vNIC in a Service Profile. When you click on **Set as Native**, a **Configuration Error** results.

Step 6 Click **VLAN Groups** and specify the VLAN group name and choose the **Organization** you want to create the vNIC template.
The VLAN group is resolved only if the service profile referencing the template is associated. Once the service profile is associated, the VLAN group gets resolved based on the name on the Domain on the associated server.

Step 7 Click **Policies** and assign the policies that you want to use for this vNIC template.

If the policies are not assigned, click on each of the policies. On the right, click the drop-down to display related policies and select the one you want for this vNIC template.

Step 8 Click **Create**.

Default vNIC Behavior Policy

Default vNIC behavior policy allows you to configure how vNICs are created for a service profile. You can choose to create vNICS manually, or you can create them automatically.

You can configure the default vNIC behavior policy to define how vNICs are created. This can be one of the following:

- **None**— does not create default vNICs for a service profile. All vNICs must be explicitly created.

- **HW Inherit**—If a service profile requires vNICs and none have been explicitly defined, creates the required vNICs based on the adapter installed in the server associated with the service profile.

Note If you do not specify a default behavior policy for vNICs, **HW Inherit** is used by default.

Configuring Default vNIC Behavior

If you do not specify a default behavior policy for vNICs, **HWInherit** is used by default.

Step 1 On the menu bar, click **Network**.

Step 2 In the **Navigation** Pane, expand **Network** > **Policies** > **root**.

You can only configure the default vNIC behavior policy in the root organization. You cannot configure the default vNIC behavior policy in a sub-organization.

Step 3 Right-click **Default vNIC Behavior** and choose **Properties**.

Step 4 In the **Properties (Default vNIC Behavior)** dialog box, choose the **Action** and the optional **vNIC Template**.

Step 5 Click **OK**.