



# Configuring Port Profiles

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## Port Profiles

Port profiles contain the properties and settings used to configure virtual interfaces in Cisco UCS for VN-Link in hardware. The port profiles are created and administered in Cisco UCS Manager. There is no clear visibility into the properties of a port profile from VMware vCenter.

In VMware vCenter, a port profile is represented as a port group. Cisco UCS Manager pushes the port profile names to vCenter, which displays the names as port groups. None of the specific networking properties or settings in the port profile are visible in VMware vCenter.

After a port profile is created, assigned to, and actively used by one or more DVSEs, any changes made to the networking properties of the port profile in Cisco UCS Manager are immediately applied to those DVSEs.

You must configure at least one port profile client for a port profile, if you want Cisco UCS Manager to push the port profile to VMware vCenter.

# Port Profile Clients

The port profile client determines the DVSES to which a port profile is applied. By default, the port profile client specifies that the associated port profile applies to all DVSES in the vCenter. However, you can configure the client to apply the port profile to all DVSES in a specific datacenter or datacenter folder, or only to one DVS.

## Creating a Port Profile

### Procedure

- Step 1** In the **Navigation** pane, click the **VM** tab.
- Step 2** On the **VM** tab, expand **All ► VMWare**.
- Step 3** Right-click the **Port Profiles** node and choose **Create Port Profile**.
- Step 4** In the **Create Port Profile** dialog box, complete the following fields:

Name	Description
<b>Name</b> field	The user-defined name for the port profile.  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.
<b>QoS Policy</b> drop-down list	The quality of service policy associated with this port profile.
<b>Network Control Policy</b> drop-down list	The network control policy associated with this port profile.
<b>Max Ports</b> field	The maximum number of ports that can be associated with this port profile. The default is 64 ports.  The maximum number of ports that can be associated with a single distributed virtual switch (DVS) is 4096. If the DVS has only one associated port profile, that port profile can be configured with up to 4096 ports. However, if the DVS has more than one associated port profile, the total number of ports associated with all of those port profiles combined cannot exceed 4096.
<b>Pin Group</b> drop-down list	The pin group associated with this port profile.

- Step 5** In the **VLANs** area, complete the following fields:

Name	Description
<b>Select</b> column	Check the check box in this column for each VLAN you want to use.
<b>Name</b> column	The name of the VLAN.

Name	Description
<b>Native VLAN</b> column	To designate one of the VLANs as the native VLAN, click the radio button in this column.

**Step 6** Click **Finish**.

## Modifying the VLANs in a Port Profile

### Procedure

- Step 1** In the **Navigation** pane, click the **VM** tab.
- Step 2** On the **VM** tab, expand **All ► VMWare ► Port Profiles**.
- Step 3** Right-click the port profile for which you want to modify the VLANs and choose **Modify VLANs**.
- Step 4** In the **Modify VLANs** dialog box, change one or more of the following:

Name	Description
<b>Select</b> column	Check the check box in this column for each VLAN you want to use.
<b>Name</b> column	The name of the VLAN.
<b>Native VLAN</b> column	To designate one of the VLANs as the native VLAN, click the radio button in this column.
<b>Create VLAN</b> link	Click this link if you want to create a VLAN.

**Step 5** Click **OK**.

## Changing the Native VLAN for a Port Profile

### Procedure

- Step 1** In the **Navigation** pane, click the **VM** tab.
- Step 2** On the **VM** tab, expand **All ► VMWare ► Port Profiles**.
- Step 3** Right-click the port profile for which you want to change the native VLAN and choose **Modify VLANs**.
- Step 4** In the **Modify VLANs** dialog box, do the following:
- In the **Native VLAN** column, click the radio button in the row for the VLAN that you want to become the native VLAN.

- b) Click **OK**.
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## Adding a VLAN to a Port Profile

### Procedure

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- Step 1** In the **Navigation** pane, click the **VM** tab.
- Step 2** On the **VM** tab, expand **All > VMWare > Port Profiles**.
- Step 3** Right-click the port profile to which you want to add a VLAN and choose **Modify VLANs**.
- Step 4** In the **Modify VLANs** dialog box, do the following:
- In the **Select** column, check the check box in the row for the VLAN that you want to add to the port profile.
  - (Optional) If you want this VLAN to be the native VLAN, click the radio button in the **Native VLAN** column.
  - Click **OK**.
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## Removing a VLAN from a Port Profile

### Procedure

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- Step 1** In the **Navigation** pane, click the **VM** tab.
- Step 2** On the **VM** tab, expand **All > VMWare > Port Profiles**.
- Step 3** Right-click the port profile from which you want to remove a VLAN and choose **Modify VLANs**.
- Step 4** In the **Modify VLANs** dialog box, do the following:
- In the **Select** column, uncheck the check box in the row for the VLAN that you want to remove from the port profile.
  - (Optional) If the VLAN was the native VLAN, click the radio button in the **Native VLAN** column for a different VLAN associated with the port profile to make that the native VLAN.
  - Click **OK**.
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## Deleting a Port Profile

You cannot delete a port profile if a VM is actively using that port profile.

### Procedure

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- Step 1** In the **Navigation** pane, click the **VM** tab.
- Step 2** On the **VM** tab, expand **All > VMWare > Port Profiles**.
- Step 3** Right-click the port profile you want to delete and choose **Delete**.
- Step 4** If Cisco UCS Manager GUI displays a confirmation dialog box, click **Yes**.
- Step 5** Click **OK**.  
Cisco UCS Manager deletes the port profile and all associated port profile clients.
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## Creating a Profile Client

### Procedure

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- Step 1** In the **Navigation** pane, click the **VM** tab.
- Step 2** On the **VM** tab, expand **All > VMWare > Port Profiles**.
- Step 3** Right-click the port profile for which you want to create a profile client and choose **Create Profile Client**.
- Step 4** In the **Create Profile Client** dialog box, complete the following fields:

Name	Description
<b>Name</b> field	The user-defined name for the profile client.  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.
<b>Description</b> field	The user-defined description of the client.
<b>Datacenter</b> drop-down list	Select a Datacenter from the drop-down list or select <b>All</b> if this profile client applies to all Datacenters.
<b>Folder</b> drop-down list	Select a folder from the drop-down list or select <b>All</b> if this profile client applies to all folders.
<b>Distributed Virtual Switch</b> drop-down list	Select a virtual switch from the drop-down list or select <b>All</b> if this profile client applies to all virtual switches.

- Step 5** Click **OK**.
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# Modifying a Profile Client

## Procedure

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- Step 1** In the **Navigation** pane, click the **VM** tab.
- Step 2** On the **VM** tab, expand **All > VMWare > Port Profiles**.
- Step 3** Click the port profile for which you want to modify the profile client.
- Step 4** In the **Work** pane, click the **Profile Clients** tab.
- Step 5** Right-click the profile client you want to modify and choose **Show Navigator**.
- Step 6** In the Navigator for the profile client, change the values for one or more of the following fields:

Name	Description
<b>Name</b> field	The user-defined name for the profile client.
<b>Description</b> field	The user-defined description of the client.
<b>Datacenter</b> field	A regular expression used to select the appropriate Datacenter.
<b>Folder</b> field	A regular expression used to select the appropriate Datacenter folder.
<b>Distributed Virtual Switch</b> field	A regular expression used to select the appropriate virtual switch.

- Step 7** Click **OK**.
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# Deleting a Profile Client

You cannot delete a port profile client if a VM is actively using the port profile with which the client is associated.

## Procedure

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- Step 1** In the **Navigation** pane, click the **VM** tab.
- Step 2** On the **VM** tab, expand **All > VMWare > Port Profiles**.
- Step 3** Click the port profile from which you want to delete a profile client.
- Step 4** In the **Work** pane, click the **Profile Clients** tab.
- Step 5** Right-click the profile client you want to delete and choose **Delete**.
- Step 6** If Cisco UCS Manager GUI displays a confirmation dialog box, click **Yes**.
- Step 7** Click **Save Changes**.
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