

Configuring Named VLANs

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Named VLANs

A named VLAN creates a connection to a specific external LAN. The VLAN isolates traffic to that external LAN, including broadcast traffic.

The name that you assign to a VLAN ID adds a layer of abstraction that allows you to globally update all servers associated with service profiles that use the named VLAN. You do not need to reconfigure the servers individually to maintain communication with the external LAN.

You can create more than one named VLAN with the same VLAN ID. For example, if servers that host business services for HR and Finance need to access the same external LAN, you can create VLANs named HR and Finance with the same VLAN ID. Then, if the network is reconfigured and Finance is assigned to a different LAN, you only have to change the VLAN ID for the named VLAN for Finance.

In a cluster configuration, you can configure a named VLAN to be accessible only to one fabric interconnect or to both fabric interconnects.

Creating a Named VLAN

In a Cisco UCS instance with two fabric interconnects, you can create a named VLAN that is accessible to both fabric interconnects or to only one fabric interconnect.



Important

You cannot create VLANs with IDs from 3968 to 4047. This range of VLAN IDs is reserved. The VLAN name is case sensitive.

Procedure

- **Step 1** In the Navigation pane, click the LAN tab.
- Step 2 On the LAN tab, click the LAN node.
- **Step 3** In the Work pane, click the VLANs tab.
- Step 4 On the icon bar to the right of the table, click +.

 If the + icon is disabled, click an entry in the table to enable it.

Step 5 In the Create VLAN dialog box, complete the following fields:

Name	Description
VLAN Name/Prefix field	For a single VLAN, this is the VLAN name. For a range of VLANs, this is the prefix that the system uses for each VLAN name.
	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.
Configuration options	You can select:
	• Common/Global—The VLANs apply to both fabrics and use the same configuration parameters in both cases
	• Fabric A—The VLANs only apply to fabric A.
	• Fabric B—The VLAN only apply to fabric B.
	 Both Fabrics Configured Differently—The VLANs apply to both fabrics but you can specify different VLAN IDs for each fabric.
VLAN IDs field	To create one VLAN, enter a single numeric ID. To create multiple VLANs, enter individual IDs or ranges of IDs separated by commas. A VLAN ID can:
	• Be between 1 to 3967
	• Be between 4049 to 4093
	Overlap with other VLAN IDs already defined on the system
	For example, to create six VLANs with the IDs 4, 22, 40, 41, 42, and 43, you would enter 4, 22, 40-43.
	Important The VLAN IDs from 3968 to 4048 are reserved. You cannot specify an ID within this range.
Check Overlap button	Click this button to determine whether the VLAN ID overlaps with any other IDs on the system.

Step 6 Click OK.

Cisco UCS Manager adds the VLAN to one of the following ${\bf VLANs}$ nodes:

- The LAN Cloud ➤ VLANs node for a VLAN accessible to both fabric interconnects.
- The *Fabric_Interconnect_Name* ➤ VLANs node for a VLAN accessible to only one fabric interconnect.

Deleting a Named VLAN

If Cisco UCS Manager includes a named VLAN with the same VLAN ID as the one you delete, the VLAN is not removed from the fabric interconnect configuration until all named VLANs with that ID are deleted.

Procedure

- **Step 1** In the **Navigation** pane, click the **LAN** tab.
- **Step 2** On the LAN tab, click the LAN node.
- Step 3 In the Work pane, click the VLANs tab.
- **Step 4** Click one of the following subtabs, depending upon what type of VLAN you want to delete:

Subtab	Description
All	Displays all VLANs in the Cisco UCS instance.
Dual Mode	Displays the VLANs that are accessible to both fabric interconnects.
Fabric A	Displays the VLANs that are accessible to only fabric interconnect A.
Fabric B	Displays the VLANs that are accessible to only fabric interconnect B.

- **Step 5** In the table, click the VLAN you want to delete. You can use the Shift key or Ctrl key to select multiple entries.
- **Step 6** Right-click the highlighted VLAN or VLANs and select **Delete**.
- **Step 7** If Cisco UCS Manager GUI displays a confirmation dialog box, click **Yes**.

Deleting a Named VLAN