Managing MAC Addresses

This chapter contains the following sections:

About MAC Addresses

The Media Access Control (MAC) address is a unique value that is associated with a network device. Layer 2 ports correlate the MAC address on a packet with the Layer 2 port information for that packet using the MAC address table. A MAC address table is built using the MAC source addresses of the frames received.

In Cisco UCS Director, MAC configuration is supported on the following Cisco network devices:

- Cisco Nexus 1000 Series switches
- Cisco Nexus 3000 Series switches
- Cisco Nexus 5000, 5500, and 5672 Series switches
- Cisco Nexus 6000 Series switches
- Cisco Nexus 7000 Series switches
- Cisco Nexus 9300 and 9500 Series switches

Note For more detailed information about MAC addresses and configuration guidelines for MAC addresses, see the Cisco NX-OS Software Configuration Guides.

Adding a MAC Address to a Switch

Step 1	On the menu bar, choose **Physical** > **Network**.
Step 2	In the **Network** pane, expand the pod.
Step 3	Select the network device that needs to be configured.
Step 4	Click the **MAC Address Table** tab.
Step 5	Click **Create MAC Address**.
Step 6	In the **MAC Address Parameters** dialog box, complete the following fields:

Name	Description
MAC Address field	The MAC address that is added to the switch MAC address table.
VLAN ID Select button	In the **Select** dialog box, choose the VLAN ID number associated with this MAC address.
Select Port Select button	In the **Select** dialog box, choose the LAN port (channel) for this VLAN ID number.
Copy Running configuration to Startup configuration check box	Check this check box to copy the running configuration to the startup configuration.

Step 7	Click **Submit**.

Removing a MAC Address from a Switch

Step 1	On the menu bar, choose **Physical** > **Network**.
Step 2	In the **Network** pane, expand the pod.
Step 3	Select the network device for which you need to delete the MAC address.
Step 4	Click the **MAC Address Table** tab.
Step 5	Choose the MAC address to be deleted.
Step 6	Click **Delete**.
Step 7	In the **MAC Address Parameters** dialog box, complete the following fields:

Name	Description
MAC Address button	The MAC address on the switch that you selected for deletion.

Name	Description
VLAN ID field	The VLAN ID number associated with the MAC address.
Copy Running configuration to Startup configuration check box	Check this check box to copy the running configuration to the startup configuration.

Step 8   Click **Submit**.

Assigning MAC Address to a Port

Step 1   On the menu bar, choose **Physical** > **Network**.

Step 2   In the **Network** pane, expand the pod.

Step 3   Select the network device to be configured.

Step 4   Click the **MAC Address Table** tab.

Step 5   Choose a MAC address to be assigned to a port.

Step 6   Click **Assign MAC Address Port**.

Step 7   In the **MAC Address Parameters** dialog box, complete the following fields:

Name	Description
MAC Address field	The MAC address to be assigned to a port.
Select Port button	Click **Select**. In the **Select** dialog box, choose the LAN port (channel).
Copy Running configuration to Startup configuration check box	Check this check box to copy the running configuration to the startup configuration.

Step 8   Click **Submit**.

Unassigning MAC Address from a Port

Step 1   On the menu bar, choose **Physical** > **Network**.

Step 2   In the **Network** pane, expand the pod.

Step 3   Select the network device to be configured.

Step 4   Click the **MAC Address Table** tab.

Step 5   Click **Unassign MAC Address Port**.

Step 6   In the **MAC Address Parameters** dialog box, complete the following fields:

Name	Description
Select Port button	Click **Select**. In the **Select** dialog box, choose the LAN port (channel).
Copy Running configuration to Startup configuration check box	Check this check box to copy the running configuration to the startup configuration.

Step 7   Click **Submit**.

Configuring the Aging Time for the MAC Address Table

You can configure the amount of time that an entry (the packet source MAC address and port that packet ingresses) remains in the MAC address table.

Step 1   On the menu bar, choose **Physical** > **Network**.

Step 2   In the **Network** pane, expand the pod.

Step 3   Select the network device to be configured.

Step 4   Click the **MAC Address Table Configuration** tab.

Step 5   Click **Configure MAC Address Table**.

Step 6   In the **MAC Address Parameters** dialog box, complete the following fields:

Name	Description
Age Time field	The time from 120 to 918,000 seconds before an entry ages out and is discarded from the MAC address table. The number 0 disables MAC aging. You can use multiples of 5. The default is 300 seconds. If a VLAN is not specified, the aging specification applies to all VLANs.
Copy Running configuration to Startup configuration check box	Check the check box to copy the running configuration to the startup configuration.

Step 7   Click **Submit**.