Configuring MAC Pools

This chapter includes the following sections:

MAC Pools

A MAC pool is a collection of network identities, or MAC addresses, that are unique in their layer 2 environment and are available to be assigned to vNICs on a server. MAC pools created in Cisco UCS Central can be shared between Cisco UCS domains. If you use MAC pools in service profiles, you do not have to manually configure the MAC addresses to be used by the server associated with the service profile.

In a system that implements multi-tenancy, you can use the organizational hierarchy to ensure that MAC pools can only be used by specific applications or business services. Cisco UCS Central uses the name resolution policy to assign MAC addresses from the pool.

To assign a MAC address to a server, you must include the MAC pool in a vNIC policy. The vNIC policy is then included in the service profile assigned to that server.

You can specify your own MAC addresses or use a group of MAC addresses provided by Cisco.

Creating a MAC Pool

Procedure

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

Step 2 In the **Network** tab, expand **Network** > **Pools** > **Root**.
If you want to create or access a pool in a sub-organization, expand **Sub-Organizations** > *Organization_Name*

Step 3 Right-click **MAC Pools** and select **Create MAC Pool**.

Step 4 In the **General** tab of the **Create MAC Pool** dialog box, fill in the following fields:

Name	Description
Name field	The name of the MAC address pool. This name can be between 1 and 32 alphanumeric characters. You cannot use spaces or any special characters other than - (hyphen), _ (underscore), : (colon), and . (period), and you cannot change this name after the object has been saved.
Description field	The user-defined description of the pool. Enter up to 256 characters. You can use any characters or spaces except ` (accent mark), \ (backslash), ^ (carat), " (double quote), = (equal sign), > (greater than), < (less than), and ' (single quote).

Step 5   In the **MAC Blocks** tab of the **Create MAC Pool** dialog box, click **Create a Block of MAC Addresses**.

Step 6   In the **Create a Block of MAC Addresses** dialog box, fill in the following fields:

Name	Description
From field	The first MAC address in the block.
Size field	The number of MAC addresses in the block.

Step 7   Click **OK**.

Step 8   Click **OK**.

       Note   If you plan to create another pool, wait at least 5 seconds.

What to Do Next

Include the MAC pool in a vNIC template.

Deleting a MAC Pool

If you delete a pool, Cisco UCS Central does not reallocate any addresses from that pool that have been assigned to vNICs or vHBAs in Cisco UCS Manager. All assigned addresses from a deleted pool remain with the vNIC or vHBA to which they are assigned until one of the following occurs:

- The associated service profiles are deleted.
- The vNIC or vHBA to which the address is assigned is deleted.
- The vNIC or vHBA is assigned to a different pool.

Procedure

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

Step 2 In the **Network** tab, expand **Network** > **Pools** > **Root**.
If you want to create or access a pool in a sub-organization, expand **Sub-Organizations** > *Organization_Name*

Step 3 Expand the **MAC Pools** node.

Step 4 Right-click the pool you want to delete and select **Delete**.
Note   If you plan to delete another pool, wait at least 5
seconds.

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