Setting the Management IP Address

This chapter includes the following sections:

Management IP Address

Each server in a Cisco UCS instance must have a management IP address assigned to its Cisco Integrated Management Controller (CIMC) or to the service profile associated with the server. Cisco UCS Manager uses this IP address for external access that terminates in the CIMC. This external access can be through one of the following:

- KVM console
- Serial over LAN
- An IPMI tool

The management IP address used to access the CIMC on a server can be one of the following:

- A static IPv4 address assigned directly to the server.
- A static IPv4 address assigned to a service profile. You cannot configure a service profile template with a static IP address.
- An IP address drawn from the management IP address pool and assigned to a service profile or service profile template.

You can assign a management IP address to each CIMC on the server and to the service profile associated with the server. If you do so, you must use different IP addresses for each of them.

Note You cannot assign a static IP address to a server or service profile if that IP address has already been assigned to a server or service profile in the Cisco UCS instance. If you attempt to do so, Cisco UCS Manager warns you that the IP address is already in use and rejects the configuration.

A management IP address that is assigned to a service profile moves with the service profile. If a KVM or SoL session is active when you migrate the service profile to another server, Cisco UCS Manager terminates that session and does not restart it after the migration is completed. You configure this IP address when you create or modify a service profile.

Configuring the Management IP Address on a Blade Server

Configuring a Blade Server to Use a Static IP Address

If this action is greyed out, the server has already been assigned a static IP address.

Procedure

Step 1 In the **Navigation** pane, click the **Equipment** tab.

Step 2 On the **Equipment** tab, expand **Equipment** ➤ **Chassis** ➤ *Chassis Number* ➤ **Servers**.

Step 3 Click the server for which you want to configure an IP address.

Step 4 In the **Work** pane, click the **Inventory** tab.

Step 5 Click the **CIMC** subtab.

Step 6 In the **Actions** area, click **Create/Modify Static Management IP**.

Step 7 In the **Create/Modify Static Management IP** dialog box, complete the following fields:

Field	Description
IP Address	The static IPv4 address to be assigned to the server.
Subnet Mask	The subnet mask for the IP address.
Default Gateway	The default gateway that the IP address should use.

Step 8 Click **OK**.

Configuring a Blade Server to Use the Management IP Pool

If this action is greyed out, the server is already configured to use the management IP pool.

Procedure

Step 1	In the **Navigation** pane, click the **Equipment** tab.
Step 2	On the **Equipment** tab, expand **Equipment ➤ Chassis ➤** *Chassis Number* **➤ Servers**.
Step 3	Click the server that you want to configure to use the management IP pool.
Step 4	In the **Work** pane, click the **Inventory** tab.
Step 5	Click the **CIMC** subtab.
Step 6	In the **Actions** area, click **Use Pooled Management IP**.
Step 7	If Cisco UCS Manager GUI displays a confirmation dialog box, click **Yes**.
Step 8	Click **OK**.

Configuring the Management IP Address on a Rack Server

Configuring a Rack Server to Use a Static IP Address

If this action is greyed out, the server has already been assigned a static IP address.

Procedure

Step 1	In the **Navigation** pane, click the **Equipment** tab.
Step 2	On the **Equipment** tab, expand **Equipment ➤ Rack Mounts ➤ Servers**.
Step 3	Click the server for which you want to configure an IP address.
Step 4	In the **Work** pane, click the **Inventory** tab.
Step 5	Click the **CIMC** subtab.
Step 6	In the **Actions** area, click **Create/Modify Static Management IP**.
Step 7	In the **Create/Modify Static Management IP** dialog box, complete the following fields:

Field	Description
IP Address	The static IPv4 address to be assigned to the server.
Subnet Mask	The subnet mask for the IP address.
Default Gateway	The default gateway that the IP address should use.

Step 8	Click **OK**.

Configuring a Rack Server to Use the Management IP Pool

If this action is greyed out, the server is already configured to use the management IP pool.

Procedure

Step 1 In the **Navigation** pane, click the **Equipment** tab.

Step 2 On the **Equipment** tab, expand **Equipment** ➤ **Rack Mounts** ➤ **Servers**.

Step 3 Click the server that you want to configure to use the management IP pool.

Step 4 In the **Work** pane, click the **Inventory** tab.

Step 5 Click the **CIMC** subtab.

Step 6 In the **Actions** area, click **Use Pooled Management IP**.

Step 7 If Cisco UCS Manager GUI displays a confirmation dialog box, click **Yes**.

Step 8 Click **OK**.

Setting the Management IP Address on a Service Profile

Procedure

Step 1 In the **Navigation** pane, click the **Servers** tab.

Step 2 On the **Servers** tab, expand **Servers** ➤ **Service Profiles**.

Step 3 Expand the node for the organization that contains the service profile for which you want to set the management IP address.
If the system does not include multi-tenancy, expand the **root** node.

Step 4 Click the service profile for which you want to set the management IP address.

Step 5 In the **Work** pane, click the **General** tab.

Step 6 Expand the **Management IP Address** area.

Step 7 In the **Management IP Address Policy** field, click one of the following radio buttons:

- **none**—No management IP address is assigned to the service profile. The management IP address is set based on the CIMC management IP address settings on the server.

- **static**—A static management IP address is assigned to the service profile, based on the information entered in this area.

- **pooled**—A management IP address is assigned to the service profile from the management IP address pool.

Step 8 If you selected **static**, complete the following fields:

Field	Description
IP Address	The static IPv4 address to be assigned to the service profile
Subnet Mask	The subnet mask for the IP address.
Default Gateway	The default gateway that the IP address should use.

Step 9 Click **Save Changes**.

Setting the Management IP Address on a Service Profile Template

Procedure

Step 1 In the **Navigation** pane, click the **Servers** tab.

Step 2 On the **Servers** tab, expand **Servers ➤ Service Profile Templates**.

Step 3 Expand the node for the organization that contains the service profile template for which you want to set the management IP address.
If the system does not include multi-tenancy, expand the **root** node.

Step 4 Click the service profile template for which you want to set the management IP address.

Step 5 In the **Work** pane, click the **General** tab.

Step 6 Expand the **Management IP Address** area.

Step 7 In the **Management IP Address Policy** field, click one of the following radio buttons:

- **none**—No management IP address is assigned to the service profile. The management IP address is set based on the CIMC management IP address settings on the server.

- **pooled**—A management IP address is assigned to the service profile from the management IP address pool.

Step 8 Click **Save Changes**.

Configuring the Management IP Pool

Management IP Pool

The management IP pool is a collection of external IP addresses. Cisco UCS Manager reserves each block of IP addresses in the management IP pool for external access that terminates in the CIMC on a server.

You can configure service profiles and service profile templates to use IP addresses from the management IP pool. You cannot configure servers to use the management IP pool.

Note The management IP pool must not contain any IP addresses that have been assigned as static IP addresses for a server or service profile.

Creating an IP Address Block in the Management IP Pool

The management IP pool must not contain any IP addresses that have been assigned as static IP addresses for a server or service profile.

Procedure

Step 1 In the **Navigation** pane, click the **Admin** tab.

Step 2 In the **Admin** tab, expand **All ➤ Communication Services**.

Step 3 Right-click **Management IP Pool (ext-mgmt)** and select **Create Block of IP Addresses**.

Step 4 In the **Create a Block of IP Addresses** dialog box, complete the following fields:

Name	Description
From field	The first IP address in the block.
Size field	The number of IP addresses in the pool.
Subnet Mask field	The subnet mask associated with the IP addresses in the block.
Default Gateway field	The default gateway associated with the IP addresses in the block.

Step 5 Click **OK**.

What to Do Next

Configure one or more service profiles or service profile templates to obtain the CIMC IP address from the management IP pool.

Deleting an IP Address Block from the Management IP Pool

Procedure

Step 1   In the **Navigation** pane, click the **Admin** tab.

Step 2   In the **Admin** tab, expand **All ➤ Communication Services ➤ Management IP Pool (ext-mgmt)**.

Step 3   Right-click the IP address block that you want to delete and select **Delete**.

Step 4   If Cisco UCS Manager GUI displays a confirmation dialog box, click **Yes**.