

# **Configuring Server-Related Pools**

This chapter includes the following sections:

- Configuring Server Pools, page 1
- Configuring UUID Suffix Pools, page 3
- Configuring the Management IP Pool, page 5

# **Configuring Server Pools**

### **Server Pools**

A server pool contains a set of servers. These servers typically share the same characteristics. Those characteristics can be their location in the chassis, or an attribute such as server type, amount of memory, local storage, type of CPU, or local drive configuration. You can manually assign a server to a server pool, or use server pool policies and server pool policy qualifications to automate the assignment.

If your system implements multi-tenancy through organizations, you can designate one or more server pools to be used by a specific organization. For example, a pool that includes all servers with two CPUs could be assigned to the Marketing organization, while all servers with 64 GB memory could be assigned to the Finance organization.

A server pool can include servers from any chassis in the system. A given server can belong to multiple server pools.

## **Creating a Server Pool**

- **Step 1** In the **Navigation** pane, click the **Servers** tab.
- **Step 2** On the Servers tab, expand Servers ➤ Pools.
- **Step 3** Expand the node for the organization where you want to create the pool. If the system does not include multi-tenancy, expand the **root** node.

- **Step 4** Right-click the **Server Pools** node and select **Create Server Pool**.
- Step 5 On the Set Name and Description page of the Create Server Pool wizard, complete the following fields:

Name	Description
Name field	The name of the server pool.
	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	A user-defined description of the server pool.

- Step 6 Click Next.
- **Step 7** On the Add Servers page of the Create Server Pool wizard:
  - a) Select one or more servers from the Available Servers table.
  - b) Click the >> button to add the servers to the server pool.
  - c) When you have added all desired servers to the pool, click Finish.

### **Deleting a Server Pool**

#### **Procedure**

- **Step 1** In the Navigation pane, click the Servers tab.
- **Step 2** On the Servers tab, expand Servers ➤ Pools ➤ Organization\_Name.
- **Step 3** Expand the **Server Pools** node.
- **Step 4** Right-click the pool you want to delete and select **Delete**.
- **Step 5** If Cisco UCS Manager GUI displays a confirmation dialog box, click **Yes**.

### **Adding Servers to a Server Pool**

- **Step 1** In the Navigation pane, click the Servers tab.
- **Step 2** On the Servers tab, expand Servers ➤ Pools ➤ Organization\_Name.
- Step 3 Right-click the pool to which you want to add one or more servers and select Add Servers to Server Pool.
- **Step 4** In the **Add Servers to Server Pool** dialog box, do the following:
  - a) In the **Servers** table, select the servers that you want to add to the server pool. You can use the Shift key or Ctrl key to select multiple entries.

- b) Click the >> button to move those servers to the **Pooled Servers** table and add them to the server pool.
- c) Click OK.

### **Removing Servers from a Server Pool**

#### **Procedure**

- **Step 1** In the Navigation pane, click the Servers tab.
- **Step 2** On the Servers tab, expand Servers ➤ Pools ➤ Organization\_Name.
- Step 3 Right-click the pool from which you want to remove one or more servers and select Add Servers to Server Pool.
- **Step 4** In the **Add Servers to Server Pool** dialog box, do the following:
  - a) In the **Pooled Servers** table, select the servers that you want to remove from the server pool. You can use the Shift key or Ctrl key to select multiple entries.
  - b) Click the << button to move those servers to the Servers table and remove them from the server pool.
  - c) Click OK.

# **Configuring UUID Suffix Pools**

### **UUID Suffix Pools**

A UUID suffix pool is a collection of SMBIOS UUIDs that are available to be assigned to servers. The first number of digits that constitute the prefix of the UUID are fixed. The remaining digits, the UUID suffix, is variable. A UUID suffix pool ensures that these variable values are unique for each server associated with a service profile which uses that particular pool to avoid conflicts.

If you use UUID suffix pools in service profiles, you do not have to manually configure the UUID of the server associated with the service profile.

### **Creating a UUID Suffix Pool**

- **Step 1** In the Navigation pane, click the Servers tab.
- **Step 2** On the Servers tab, expand Servers ➤ Pools.
- **Step 3** Expand the node for the organization where you want to create the pool. If the system does not include multi-tenancy, expand the **root** node.

- **Step 4** Right-click **UUID Suffix Pools** and select **Create UUID Suffix Pool**.
- **Step 5** In the **Define Name and Description** page of the **Create UUID Suffix Pool** wizard, fill in the following fields:

Name	Description
Name field	The name of the UUID pool.
	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 pool.
Prefix field	This can be:
	• derived—The system creates the suffix.
	• other—You specify the desired suffix. If you select this option, Cisco UCS Manager GUI displays a text field where you can enter the desired suffix, in the format XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

- Step 6 In the Add UUID Blocks page of the Create UUID Suffix Pool wizard:
  - a) Click Add.
  - b) In the **Create a Block of UUID Suffixes** page, enter the first UUID suffix in the pool and the number of UUID suffixes to include in the pool.
  - c) Click OK.
  - d) If you want to add another block to the pool, repeat steps a through c.
- **Step 7** Click **Finish** to complete the wizard.

### What to Do Next

Include the UUID suffix pool in a service profile and/or template.

## **Deleting a UUID Suffix Pool**

- **Step 1** In the Navigation pane, click the Servers tab.
- **Step 2** On the Servers tab, expand Servers ➤ Pools ➤ Organization\_Name.
- **Step 3** Expand the **UUID Suffix Pools** node.
- **Step 4** Right-click the pool you want to delete and select **Delete**.
- **Step 5** If Cisco UCS Manager GUI displays a confirmation dialog box, click **Yes**.

# **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 baseboard management controller (BMC) on a server.

Cisco UCS Manager uses the IP addresses in a management IP pool for external access to a server through the following:

- KVM console
- Serial over LAN
- IPMI

## **Creating an IP Address Block in 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.
- 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.

## **Deleting an IP Address Block from the Management IP Pool**

- **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.