



Configuring MAC Pools

This chapter includes the following sections:

- [MAC Pools, page 1](#)
- [Configuring a MAC Pool, page 1](#)

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. 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 Manager 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.

Configuring a MAC Pool

Procedure

	Command or Action	Purpose
Step 1	UCS-A# scope org <i>org-name</i>	Enters organization mode for the specified organization. To enter the root organization mode, type / as the <i>org-name</i> .
Step 2	UCS-A /org # create mac-pool <i>mac-pool-name</i>	Creates a MAC pool with the specified name, and enters organization MAC pool mode.
Step 3	UCS-A /org/mac-pool # set descr <i>description</i>	(Optional) Provides a description for the MAC pool.

	Command or Action	Purpose
		Note If your description includes spaces, special characters, or punctuation, you must begin and end your description with quotation marks. The quotation marks will not appear in the description field of any show command output.
Step 4	UCS-A /org/mac-pool # create block <i>first-mac-addr last-mac-addr</i>	Creates a block (range) of MAC addresses, and enters organization MAC pool block mode. You must specify the first and last MAC addresses in the address range using the form <i>nn : nn : nn : nn : nn</i> , with the addresses separated by a space. Note A MAC pool can contain more than one MAC address block. To create multiple MAC address blocks, you must enter multiple create block commands from organization MAC pool mode.
Step 5	UCS-A /org/mac-pool # commit-buffer	Commits the transaction to the system configuration.

The following example creates a MAC pool named pool37, provides a description for the pool, defines a MAC address block by specifying the first and last MAC addresses in the block, and commits the transaction:

```

UCS-A# scope org /
UCS-A /org # create mac-pool pool37
UCS-A /org/mac-pool* # set descr "This is my MAC pool"
UCS-A /org/mac-pool* # create block 00:A0:D7:42:00:01 00:A0:D7:42:01:00
UCS-A /org/mac-pool/block* # commit-buffer
UCS-A /org/mac-pool/block #

```

What to Do Next

Include the MAC pool in a vNIC template.