Managing Routers and Router Interfaces

This chapter explains how to add and edit routers and router interfaces in Cisco Prime Network Registrar.

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Adding Routers

Local Advanced and Regional Advanced Web UI

Procedure

Step 1 From the **Deploy** menu, choose **Router List** (in regional web UI) or **Routers** (in local web UI) under the **Router Configuration** submenu. This opens the List/Add Routers page.

Step 2 Click the **Add Routers** icon. This opens the Add Router page.

Step 3 On the Add Router dialog box, add the router based on data from its administrator:

a) Give the router a distinguishing name in the name field.
b) Enter the router description in the description field.
c) Enter the router IP address in the address field.
d) Enter the management interface address for the router in the address field.
e) Enter the IPv6 management interface address for the router in the ip6address field.
f) Choose a owner and region.

Step 4 Click **Add Router**.

CLI Commands

Add a router using **router** *name* **create** *address* [*attribute=value*]. The address can be either IPv4 or IPv6.

For example:

```
nrcmd> router router-1 create 192.168.121.121
```

Editing Routers

Editing routers involves modifying some of the router attributes.

Local Advanced and Regional Advanced Web UI

Click the router name in the Router Tree pane or Router List pane on the left. In the Edit Router page, you can enter values for the different attributes. Additionally, you can use the **Unset** checkbox also to disable the attributes. Make your changes, then click **Save**.

CLI Commands

Edit a router attribute using **router** *name* **set** *attribute=value* [*attribute=value* ...]. For example:

```
nrcmd> router router-1 set owner=owner-1
```

Viewing and Editing the Router Interfaces

Editing a router interface involves modifying some of its attributes.

Local Advanced and Regional Advanced Web UI

If you click the **Interfaces** tab associated with the router on the List/Add Routers page, the list of related cable or Ethernet interfaces appears. Both from this page and the Router Tree pane on the left, you can click the interface name to edit it. The Interfaces tab also contains the option to delete the interface (click the **Delete** icon corresponding to the interface). Editing the interface also includes an additional attribute **Unset** function. You can add, edit, or delete interfaces for virtual routers without restrictions. A vpn-id that qualifies the addresses, subnets, and prefixes for the router interface can also be selected in the Edit Router Interface page.

Note Modifying a router interface is done as a delete and then an add of the router interface.

CLI Commands

Edit a router interface attribute using **router-interface** *name* **set** *attribute=value*. For example:

```
nrcmd> router-interface Ethernet1/0 set ip-helper=192.168.121.122
```

Changeable Router Interface Attributes

If you are editing the attributes of the router interface, you can change the following attributes:

- Name
- MAC address
- Description
- Address of the primary subnet address on the interface
- Addresses of the secondary subnets on the interface
- Address of any IP helper (DHCP relay agent) for the interface
- Address of any cable helper of the DHCP server to accept unicast packets for the interface
- Link associated with the router interface
- IPv6 address of the router interface
- IPv6 DHCP relay destination addresses configured for the interface

Bundling Interfaces

An interface bundle provides load balancing among the router interfaces. When you define a bundle, all the participating interfaces in the bundle must have the same bundle identifier (ID), which is the name of the interface specified as the primary.

If you want to use bundling, the following attributes are in the Interface Bundling Settings section of the Edit Router Interface page, or set them using the **router-interface** command in the CLI:

- *bundle-id*—Interface bundle identifier, the name of the primary interface. All participating interfaces in the bundle must have the same bundle ID.
- *is-primary*—This interface is the primary interface in the bundle.

Pushing and Reclaiming Subnets for Routers

You can push subnets to, and reclaim subnets from, a router interface (see the *"Reclaiming Subnets" section in Cisco Prime Network Registrar 11.1 DHCP User Guide*). When you push or reclaim a subnet with a virtual router, all primary and secondary relationships that are set for the router interface are also set for the related subnets and scopes.