CHAPTER 1

Introducing the Setup Web UI

The local cluster Network Registrar web UI, provides a setup environment in Basic user mode. The setup is in the form of a series of interview pages, very much like a wizard, based only on the selections you make.

Setup Functions

The setup pages provide these functions:

- User password change
- Dynamic host configuration:
  - Enable the Dynamic Host Configuration (DHCP) service
  - Set up DHCP failover between two servers
  - Set up classes of service
  - Choose the server logging mode
  - Enable Simple Network Management Protocol (SNMP) traps
- Domain names and hosts:
  - Enable the Domain Name System (DNS) service
  - Set up High-Availability (HA) DNS servers
  - Set up zone distributions to coordinate primary and secondary servers
  - Enable queries to root servers for a caching server
  - Manage forward and reverse zones
  - Configure access controls
  - Enable SNMP traps
- DNS Update for dynamic hosts
- Simple Network Management Protocol (SNMP) trap recipients
- Trivial File Transport Protocol (TFTP) server

Setup Features and Navigation

The setup pages:

- Takes you out of Basic and Advanced user modes and into special Setup mode. Basic and Advanced modes are for more specialized configuration after you set up the environment using the setup interview. These modes (and the server concepts) are described in detail in the *User Guide for Cisco Network Registrar*.
- Include a Set up this Server page where you can enable and disable functions and which is the point of departure for all enabled function pages.
- Include **<<Back**, **Next>>**, and **Finish** buttons on pages so that you can step through sequentially, except that the **<<Back** button is not on the Set up this Server page and both **<<Back** and **Next>>** buttons are not on the Setup Interview Tasks page. The **Finish** button takes you directly to the Setup Interview Tasks page.

Caution Do not use the **Back** and **Forward** buttons of your browser to navigate through the setup process. Using the **Back** and **Forward** buttons of the browser can cause erratic failures.

- Includes the **Next>>** button that opens further pages depending on the criteria you set. For example, if the DNS server is enabled, but the server is not indicated as primary, the setup pages bypass the High-Availability (HA) DNS server, zone distribution, and forward and backward zone configuration pages.
- Provide the **Services**, **DHCP**, **DNS**, **DNS Update**, **Traps**, and **Finish** tabs so that you can access functions despite their enabled or disabled status on the Set up this Server page. However, if a function is disabled on the Set up this Server page, the function appears disabled on its setup page. You can change the status on the particular setup page, which resets the status on the Set up this Server page.
- Is sometimes transactional and sometimes not. In some cases (such as with creating clusters and keys), writes to the database occur immediately when you enter a value. In other cases, writes to the database occur only when you click **Next>>** or **Finish**.
- Keep track of database writes and summarizes them on a report page when you click **Finish**.
- Provide initial selection defaults, and persist changes to the next setup. (For subsequent setups, the previously configured values become the new defaults.)

Configuration Options

The sample configuration shown in this guide is based on the typical use cases described in the following sections.

Mixed DHCP and DNS Scenarios

You can set up Network Registrar for a mixed DHCP and DNS configuration with different numbers of machines.

One-Machine Mixed Configuration

Configure both DHCP and DNS servers on a single machine, initially enabling the servers as primaries, and enabling the TFTP server and SNMP traps. Then configure at least one forward zone and corresponding reverse zone, at least one scope, and DNS Update.

Two-Machine Mixed Configuration

A mixed DHCP configuration on two machines offers a few alternatives:

- Configure one machine as primary DHCP and DNS servers, and the second machine as a secondary DNS server. Then configure a zone distribution and DNS access controls on the first machine and optionally access controls on the second machine.
- Configure one machine as DHCP and DNS main servers and the second machine as DHCP and DNS backup servers. Perform minimal configuration on the backup machine (changing the password, enabling DHCP and DNS, and selecting partner backup roles). On the main machine, build the configuration, creating server pairs and scheduling synchronization tasks with the backup machine.
- Configure one machine as a DHCP server and the second machine as a DNS primary, then configure either machine with DNS Update and push the configuration to the other machine.

Three-Machine Mixed Configuration

A mixed configuration on three machines offers a few additional alternatives:

- Configure one machine as a DHCP server, the second machine as a DNS primary, and the third machine as a DNS secondary. Optionally revisit the machines to make the DHCP main the DNS backup, and make the DNS main the DHCP backup.
- Configure one machine as DHCP failover and DNS High-Availability (HA) main servers, the second machine as DHCP failover and DNS HA backup servers, and the third machine as a DNS secondary server.

Four-Machine Mixed Configuration

A mixed configuration on four machines can include:

- DHCP and DNS main and backup pairs, with the first machine as a DHCP main, the second machine as a DHCP backup, the third machine as a DNS main configured with DNS Update, and the fourth machine as a DNS backup.
- An add-on to the three-machine scenario, with the first machine as a DHCP main, the second machine as a DNS main, the third machine as DHCP and DNS backups, and the fourth machine as a DNS secondary.

DHCP-Only Scenarios

A DHCP-only configuration can be on a single machine or two machines.

One-Machine DHCP Configuration

Initially configure just DHCP, skip the class-of-service and failover options, and revisit the setup to enable class-of-service and policy options.

Two-Machine DHCP Configuration

Configure the first machine as a DHCP main and the second machine as a backup, with minimal backup configuration (changing password, enabling DHCP, and selecting the backup role), and set up the first machine with failover load balancing, optionally scheduling failover synchronization tasks.

DNS-Only Scenarios

A DNS-only configuration can be on one, two, or three machines.

One-Machine DNS Configuration

Initially configure just DNS as a primary, secondary, or caching server.

Two-Machine DNS Configuration

Configure the first machine as a DNS primary and the second machine as a secondary, or the first machine as a main primary and the second machine as a backup primary.

Three-Machine DNS Configuration

Configure the first machine as a DNS main primary, the second machine as a backup primary, and the third machine as a secondary server.