



Preface

This guide describes configuring Cisco Network Registrar by using the web-based user interface (web UI) and command line interface (CLI).

Who Should Read This Guide

This guide is designed for network managers who are responsible for maintaining the network Domain Name System (DNS), Dynamic Host Configuration Protocol (DHCP), Trivial File Transfer Protocol (TFTP), and Simple Network Management Protocol (SNMP) servers. The network manager should be familiar with the following topics:

- Basic concepts and terminology used in internetworking
- Network topology and protocols

How This Guide Is Organized

This guide describes how to become familiar with Cisco Network Registrar features so that you can use them to administer network addresses. The parts of this guide are described in the following subsections.

Part 1—Getting Started

Part 1 introduces Cisco Network Registrar, describes the management and protocol components, and describes the user interfaces. This part includes the following chapters:

Chapter 1	Cisco Network Registrar Components	Introduces Cisco Network Registrar, its deployment scenarios, and some deployment guidelines.
Chapter 2	Cisco Network Registrar User Interfaces	Describes the Cisco Network Registrar management and protocol components.
Chapter 3	Server Status Dashboard	Describes the Cisco Network Registrar server status dashboard features and functions.
Chapter 4	Deploying Cisco Network Registrar	Describes the Cisco Network Registrar local and regional web UIs and CLIs.

Part 2—Local and Regional Administration

Part 2 describes how to configure administrators, manage the central configuration, and maintain the servers and databases (including backup and recovery). This part includes the following chapters:

Chapter 5	Configuring Administrators	Describes how to configure the local and regional administrators, and provides administration tutorials. It also describes how to manage tenants.
Chapter 6	Managing the Central Configuration	Describes how to manage the central network configuration from the regional cluster.
Chapter 7	Maintaining Servers and Databases	Describes how to maintain the Cisco Network Registrar servers.
Chapter 8	Backup and Recovery	Describes how to back up or recover the databases.

Part 3—Address Management

Part 3 describes how to manage the IP address space and its hierarchy, hosts, Router Interface Configuration (RIC) servers, owners and regions, and reports. This part includes the following chapters:

Chapter 9	Managing Address Space	Describes how to manage address space elements known as address blocks and subnets.
Chapter 10	Managing Hosts	Describes how to manage network hosts.
Chapter 11	Managing Router Interface Configurations	Describes how to manage the RIC server.
Chapter 12	Managing Owners and Regions	Describes how to manage network owners and regions.
Chapter 13	Managing Reports	Describes how to manage American Registry of Internet Numbers (ARIN) and address allocation reports.

Part 4—Domain and Zone Administration

Part 4 describes how to configure DNS servers, zones, resource records, server attributes, and High Availability (HA) servers. This part includes the following chapters:

Chapter 14	Introduction to the Domain Name System	Introduces the Domain Name System (DNS) protocol and its Cisco Network Registrar implementation.
Chapter 15	Managing Zones	Describes how to manage DNS zones.
Chapter 16	Managing Resource Records	Describes how to manage DNS resource records (RRs).

Chapter 17	Managing DNS Server Properties	Describes how to set more advanced DNS server properties.
Chapter 18	Configuring High-Availability DNS Servers	Describes how to configure a High Availability (HA) DNS server.

Part 5—Dynamic Host Administration

Part 5 describes DHCP and how to configure scopes and leases and their several deployments, IPv6 addresses, clients and client-classes, failover, DNS Update, and special processing using extensions. This part includes the following chapters:

Chapter 19	Introduction to Dynamic Host Configuration	Introduces DHCP and its Cisco Network Registrar implementation.
Chapter 20	Configuring Scopes and Networks	Describes how to configure scopes and networks.
Chapter 21	Configuring Policies and Options	Describes how to configure policies and options.
Chapter 22	Managing Leases	Describes how to manage leases.
Chapter 24	Configuring Client-Classes and Clients	Describes how to configure DHCP clients and client-classes.
Chapter 25	Using Expressions	Describes how to use expressions for DHCP processing.
Chapter 26	Managing DHCPv6 Addresses	Describes how to manage the DHCPv6 address space.
Chapter 27	Configuring DHCP Failover	Describes how to configure DHCP failover servers.
Chapter 23	Advanced DHCP Server Properties	Describes how to manage the more advanced DHCP server properties.
Chapter 28	Configuring DNS Update	Describes how to configure DNS Update for DHCP.
Chapter 29	Using Extension Points	Describes how to use extensions for DHCP processing.

Part 6—Virtual Appliance

Part 6 describes virtual appliance and how to configure and manage Cisco Network Registrar virtual appliance. This part includes the following chapters:

Chapter 30	Introduction to Cisco Network Registrar Virtual Appliance	Introduces virtual appliance and its Cisco Network Registrar implementation.
Chapter 31	Managing the Cisco Network Registrar Virtual Appliance	Describes how to manage the Cisco Network Registrar virtual appliance.

Part 7—Appendixes, Glossary, and Index

Part 7 includes appendixes that describe DNS RRs, DHCP options, and the DHCP extension dictionary. This part also includes a glossary and an index.

Appendix A	Resource Records	Describes the DNS RRs.
Appendix B	DHCP Options	Describes the DHCP options.
Appendix C	DHCP Extension Dictionary	Describes the DHCP extension dictionary.
Glossary	Glossary	Glossary of terms used in Cisco Network Registrar.
Index	Index	Index to the guide.

Document Conventions

This guide uses the following documentation conventions.

Formatting

This guide uses the following formatting conventions:

- User input and controls are indicated in **bold**; for example, “enter **1234**” and “click **Modify Scope**.”
- Object attributes are indicated in *italics*; for example, “the *failover-safe-period* attribute.”
- Cross-references to chapters or sections of chapters are indicated in [blue](#) type; for example, “see the “[Document Conventions](#)” section on page xxx.”

Navigation and Screens

This guide uses the following navigation and screen display conventions:

- Windows systems use a two-button mouse. To drag and drop an object, click and hold the left mouse button on the object, drag the object to the target location, then release the button.
- Solaris systems use a three-button mouse. To drag and drop an object, click and hold the middle mouse button on the object, drag the object to the target location, then release the button.
- Screen displays can differ slightly from those included in this guide, depending on the system or browser you use.
- Web UI Navigation bar labels can have IPv4 and IPv6 variants depending on the administrator role privileges assigned. To simplify procedural instructions, this *User Guide* uses the most generic versions of the menu bar labels, unless there is a need to be more specific. For example, the **Address Space** menu label might be rendered as **Address Space v4** and **Address Space v6**. The instructions will have the label simply as **Address Space**.

Callouts

Callouts in the text have the following meaning:



Caution

Be careful. The description alerts you to potential data damage or loss.



Note

Take note. The description is particularly noteworthy.



Timesaver

Save time. The description can present a timesaver.



Tip

Consider this helpful hint. The description can present an optimum action to take.

Product Documentation


Note

We sometimes update the electronic documentation after original publication. Therefore, you should also review the documentation on Cisco.com for any updates.

Table 1 describes the product documentation that is available. You can view the marketing and user documents for Cisco Network Registrar at:

<http://www.cisco.com/en/US/products/sw/netmgtsw/ps1982/index.html>.

Table 1 **Product Documentation**

Document Title	Available Formats
<i>User Guide for Cisco Network Registrar 7.2 (This guide)</i>	<ul style="list-style-type: none"> PDF on the product CD-ROM On Cisco.com: http://www.cisco.com/en/US/products/sw/netmgtsw/ps1982/products_user_guide_list.html
<i>Documentation Guide for Cisco Network Registrar 7.2</i>	<ul style="list-style-type: none"> PDF on the product CD-ROM On Cisco.com: http://www.cisco.com/en/US/products/sw/netmgtsw/ps1982/tsd_products_support_general_information.html
<i>Installation Guide for Cisco Network Registrar 7.2</i>	<ul style="list-style-type: none"> PDF on the product CD-ROM On Cisco.com: http://www.cisco.com/en/US/products/sw/netmgtsw/ps1982/prod_installation_guides_list.html
<i>Quick Start Guide for Cisco Network Registrar 7.2</i>	<ul style="list-style-type: none"> PDF on the product CD-ROM On Cisco.com: http://www.cisco.com/en/US/products/sw/netmgtsw/ps1982/prod_installation_guides_list.html
<i>CLI Reference Guide for Cisco Network Registrar 7.2</i>	<ul style="list-style-type: none"> As an HTML document that you can view in your web browser when you install the software. The document is available at Programs > Network Registrar > Registrar CLI Reference Guide. On Cisco.com: http://www.cisco.com/en/US/products/sw/netmgtsw/ps1982/prod_command_reference_list.html
<i>Cisco Network Registrar 7.2 Third Party and Open Source Licenses and Notices</i>	<ul style="list-style-type: none"> PDF on the product CD-ROM On Cisco.com: http://www.cisco.com/en/US/products/sw/netmgtsw/ps1982/prod_release_notes_list.html

Table 1 **Product Documentation (continued)**

Document Title	Available Formats
<i>Release Notes for Cisco Network Registrar 7.2</i>	<ul style="list-style-type: none"> • PDF on the product CD-ROM • On Cisco.com: http://www.cisco.com/en/US/products/sw/netmgts/ps1982/prod_release_notes_list.html
<i>Online Help</i>	Choose Help > Help Contents in the main menu to view the entire help contents

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS version 2.0.

