



Preface

This section describes the reader, and the organization and conventions contained in this guide.

Who Should Read This Guide

This guide is designed for network managers who are responsible for maintaining the network DNS, DHCP, and TFTP servers. The network manager should be familiar with the following topics:

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



Note

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

How This Guide Is Organized

This guide describes how to become familiar with Network Registrar features so that you can use them to administer network addresses. The major sections of this guide are as follows:

Part 1	Getting Started	
Chapter 1	Deploying Network Registrar	Introduces Network Registrar, its deployment scenarios, and some deployment guidelines.
Chapter 2	Network Registrar Components	Describes the Network Registrar management and protocol components.
Chapter 3	Network Registrar User Interfaces	Describes the Network Registrar local and regional Web user interfaces, and the command line interface (CLI).
Part 2	Local and Regional Administration	
Chapter 4	Configuring Local and Regional Administrators	Describes how to configure the local and regional administrators, and provides administration tutorials.

Chapter 5	Managing the Central Configuration	Describes how to manage the central network configuration from the regional cluster.
Chapter 6	Maintaining Servers	Describes how to maintain the Network Registrar servers.
Chapter 7	Maintaining Databases	Describes how to maintain the Network Registrar databases, including backup and recovery, and utilities.
Part 3	Domain and Zone Administration	
Chapter 8	Managing Zones	Describes how to manage zones
Chapter 9	Managing Resource Records and Hosts	Describes how to manage DNS resource records and create hosts in a zone.
Chapter 10	Setting DNS Attributes	Describes how to set more advanced DNS attributes.
Part 4	Dynamic Host Administration	
Chapter 11	Configuring DHCP Scopes and Policies	Describes how to configure Dynamic Host Configuration Protocol (DHCP) scopes and policies.
Chapter 12	Managing Leases	Describes how to manage DHCP leases.
Chapter 13	Configuring Clients and Client-Classes	Describes how to configure DHCP clients and client-classes.
Chapter 14	Managing Advanced DHCP Properties	Describes how to manage more advanced DHCP server properties.
Chapter 15	Configuring Dynamic DNS Update	Describes how to configure dynamic DNS update between the DNS and DHCP servers.
Chapter 16	Configuring DHCP Failover	Describes how to configure DHCP server failover relationships.
Chapter 17	Using Extension Points	Describes how to use extensions and extension points.
Part 5	Address Management	
Chapter 18	Managing Address Space	Describes how to manage address blocks and subnets.
Chapter 19	Configuring Virtual Private Networks and Subnet Allocation	Describes how to configure DHCP servers to support virtual private networks (VPNs) and subnet allocation for on-demand address pools.
Part 6	Appendices, Glossary, and Index	
Appendix A	Resource Records	Describes the DNS resource records.
Appendix B	DHCP Options	Describes the DHCP options.

Appendix C DHCP Extension Dictionary	Describes the DHCP extension library.
Glossary	Glossary of terms used in Network Registrar.
Index	Index to the guide.

Document Conventions

This guide uses the following documentation conventions:

- User input and controls are indicated in **bold**, such as “enter **1234**” and “click **Modify Scope**.”
- Object attributes are indicated in *italics*, such as “the *failover-safe-period* attribute.”
- Cross-references to chapters or sections of chapter are indicated in [blue](#), such as “see the “[Document Conventions](#)” section on page 33.”
- 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.

Call-outs in the text have the following meaning:



Caution

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



Note

Take note. The description is particularly noteworthy in the context.



Timesaver

Save time. The description can present a timesaver in the context.



Tip

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

Network Registrar Documentation

The Network Registrar version 6.1 documentation set consists of:

- *Release Notes for Cisco CNS Network Registrar, Release 6.1*
- *Cisco CNS Network Registrar Installation Guide*
- *Cisco CNS Network Registrar User's Guide*
- *Cisco CNS Network Registrar CLI Reference*

Obtaining Documentation

Cisco documentation and additional literature are available on Cisco.com. Cisco also provides several ways to obtain technical assistance and other technical resources. These sections explain how to obtain technical information from Cisco Systems.

Cisco.com

You can access the most current Cisco documentation on the World Wide Web at this URL:

<http://www.cisco.com/univercd/home/home.htm>

You can access the Cisco website at this URL:

<http://www.cisco.com>

International Cisco websites can be accessed from this URL:

http://www.cisco.com/public/countries_languages.shtml

Ordering Documentation

You can find instructions for ordering documentation at this URL:

http://www.cisco.com/univercd/cc/td/doc/es_inpk/pdi.htm

You can order Cisco documentation in these ways:

- Registered Cisco.com users (Cisco direct customers) can order Cisco product documentation from the Ordering tool:
<http://www.cisco.com/en/US/partner/ordering/index.shtml>
- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco Systems Corporate Headquarters (California, USA) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

Documentation Feedback

You can submit e-mail comments about technical documentation to bug-doc@cisco.com.

You can submit comments by using the response card (if present) behind the front cover of your document or by writing to the following address:

Cisco Systems
Attn: Customer Document Ordering
170 West Tasman Drive
San Jose, CA 95134-9883

We appreciate your comments.

Obtaining Technical Assistance

For all customers, partners, resellers, and distributors who hold valid Cisco service contracts, the Cisco Technical Assistance Center (TAC) provides 24-hour-a-day, award-winning technical support services, online and over the phone. Cisco.com features the Cisco TAC website as an online starting point for technical assistance. If you do not hold a valid Cisco service contract, please contact your reseller.

Cisco TAC Website

The Cisco TAC website provides online documents and tools for troubleshooting and resolving technical issues with Cisco products and technologies. The Cisco TAC website is available 24 hours a day, 365 days a year. The Cisco TAC website is located at this URL:

<http://www.cisco.com/tac>

Accessing all the tools on the Cisco TAC website requires a Cisco.com user ID and password. If you have a valid service contract but do not have a login ID or password, register at this URL:

<http://tools.cisco.com/RPF/register/register.do>

Opening a TAC Case

Using the online TAC Case Open Tool is the fastest way to open P3 and P4 cases. (P3 and P4 cases are those in which your network is minimally impaired or for which you require product information.) After you describe your situation, the TAC Case Open Tool automatically recommends resources for an immediate solution. If your issue is not resolved using the recommended resources, your case will be assigned to a Cisco TAC engineer. The online TAC Case Open Tool is located at this URL:

<http://www.cisco.com/tac/caseopen>

For P1 or P2 cases (P1 and P2 cases are those in which your production network is down or severely degraded) or if you do not have Internet access, contact Cisco TAC by telephone. Cisco TAC engineers are assigned immediately to P1 and P2 cases to help keep your business operations running smoothly.

To open a case by telephone, use one of the following numbers:

Asia-Pacific: +61 2 8446 7411 (Australia: 1 800 805 227)

EMEA: +32 2 704 55 55

USA: 1 800 553-2447

For a complete listing of Cisco TAC contacts, go to this URL:

<http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml>

TAC Case Priority Definitions

To ensure that all cases are reported in a standard format, Cisco has established case priority definitions.

Priority 1 (P1)—Your network is “down” or there is a critical impact to your business operations. You and Cisco will commit all necessary resources around the clock to resolve the situation.

Priority 2 (P2)—Operation of an existing network is severely degraded, or significant aspects of your business operation are negatively affected by inadequate performance of Cisco products. You and Cisco will commit full-time resources during normal business hours to resolve the situation.

Priority 3 (P3)—Operational performance of your network is impaired, but most business operations remain functional. You and Cisco will commit resources during normal business hours to restore service to satisfactory levels.

Priority 4 (P4)—You require information or assistance with Cisco product capabilities, installation, or configuration. There is little or no effect on your business operations.

Obtaining Additional Publications and Information

Information about Cisco products, technologies, and network solutions is available from various online and printed sources.

- Cisco Marketplace provides a variety of Cisco books, reference guides, and logo merchandise. Go to this URL to visit the company store:

<http://www.cisco.com/go/marketplace/>

- The Cisco *Product Catalog* describes the networking products offered by Cisco Systems, as well as ordering and customer support services. Access the Cisco Product Catalog at this URL:

<http://cisco.com/univercd/cc/td/doc/pcat/>

- *Cisco Press* publishes a wide range of general networking, training and certification titles. Both new and experienced users will benefit from these publications. For current Cisco Press titles and other information, go to Cisco Press online at this URL:

<http://www.ciscopress.com>

- *Packet* magazine is the Cisco quarterly publication that provides the latest networking trends, technology breakthroughs, and Cisco products and solutions to help industry professionals get the most from their networking investment. Included are networking deployment and troubleshooting tips, configuration examples, customer case studies, tutorials and training, certification information, and links to numerous in-depth online resources. You can access Packet magazine at this URL:

<http://www.cisco.com/packet>

- *iQ Magazine* is the Cisco bimonthly publication that delivers the latest information about Internet business strategies for executives. You can access iQ Magazine at this URL:

<http://www.cisco.com/go/iqmagazine>

- *Internet Protocol Journal* is a quarterly journal published by Cisco Systems for engineering professionals involved in designing, developing, and operating public and private internets and intranets. You can access the Internet Protocol Journal at this URL:

<http://www.cisco.com/ipj>

- Training—Cisco offers world-class networking training. Current offerings in network training are listed at this URL:

<http://www.cisco.com/en/US/learning/index.html>