



## Preface

---

This guide describes configuring Cisco Prime 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 Prime 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 Prime Network Registrar, describes the management and protocol components, and describes the user interfaces. This part includes the following chapters:

- |                           |   |   |
|---------------------------|---|---|
| <a href="#">Chapter 1</a> | <a href="#">Cisco Prime Network Registrar Components</a>      | Introduces Cisco Prime Network Registrar, its deployment scenarios, and some deployment guidelines. |
| <a href="#">Chapter 2</a> | <a href="#">Cisco Prime Network Registrar User Interfaces</a> | Describes the Cisco Prime Network Registrar management and protocol components.                     |

Chapter 3	Server Status Dashboard	Describes the Cisco Prime Network Registrar server status dashboard features and functions.
Chapter 4	Deploying Cisco Prime Network Registrar	Describes the Cisco Prime 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 Prime 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	<a href="#">Introduction to the Domain Name System</a>	Introduces the Domain Name System (DNS) protocol and its Cisco Prime Network Registrar implementation.
Chapter 15	<a href="#">Managing Zones</a>	Describes how to manage DNS zones.
Chapter 16	<a href="#">Managing Resource Records</a>	Describes how to manage DNS resource records (RRs).
Chapter 17	<a href="#">Managing Authoritative DNS Server Properties</a>	Describes how to set advanced Authoritative DNS server properties.
Chapter 18	<a href="#">Managing Caching DNS Server Properties</a>	Describes how to set more advanced Caching DNS server properties.
Chapter 19	<a href="#">Configuring High-Availability DNS Servers</a>	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 20	<a href="#">Introduction to Dynamic Host Configuration</a>	Introduces DHCP and its Cisco Prime Network Registrar implementation.
Chapter 21	<a href="#">Configuring Scopes and Networks</a>	Describes how to configure scopes and networks.
Chapter 22	<a href="#">Configuring Policies and Options</a>	Describes how to configure policies and options.
Chapter 23	<a href="#">Managing Leases</a>	Describes how to manage leases.
Chapter 25	<a href="#">Configuring Client-Classes and Clients</a>	Describes how to configure DHCP clients and client-classes.
Chapter 26	<a href="#">Using Expressions</a>	Describes how to use expressions for DHCP processing.
Chapter 27	<a href="#">Managing DHCPv6 Addresses</a>	Describes how to manage the DHCPv6 address space.
Chapter 28	<a href="#">Configuring DHCP Failover</a>	Describes how to configure DHCP failover servers.
Chapter 24	<a href="#">Advanced DHCP Server Properties</a>	Describes how to manage the more advanced DHCP server properties.

Chapter 29	Configuring DNS Update	Describes how to configure DNS Update for DHCP.
Chapter 30	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 Prime Network Registrar virtual appliance. This part includes the following chapters:

Chapter 31	Introduction to Cisco Prime Network Registrar Virtual Appliance	Introduces virtual appliance and its Cisco Prime Network Registrar implementation.
Chapter 32	Managing the Cisco Prime Network Registrar Virtual Appliance	Describes how to manage the Cisco Prime 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 Prime 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 xxxii.”

## 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 **IP v4** and **IP 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.

You can view the marketing and user documents for Cisco Prime Network Registrar at:  
[http://www.cisco.com/en/US/products/ps11808/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/ps11808/tsd_products_support_series_home.html)

The following document gives you the list of user documents for Cisco Prime Network Registrar 8.1:  
[http://preview.cisco.com/en/US/docs/net\\_mgmt/prime/network\\_registrar/8.1/doc\\_overview/guide/CPN\\_R\\_8\\_1\\_Doc\\_Guide.html](http://preview.cisco.com/en/US/docs/net_mgmt/prime/network_registrar/8.1/doc_overview/guide/CPN_R_8_1_Doc_Guide.html)

## 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 an RSS feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service. Cisco currently supports RSS Version 2.0.