DOCUMENTATION GUIDE

Documentation Guide for Cisco Prime Access Registrar, 6.0

The following is a list of the documentation for Cisco Prime AR 6.0. You can access the URLs listed for each document at www.cisco.com on the World Wide Web. We recommend that you refer to the documentation in the following order:

- *Documentation Guide for Cisco Prime Access Registrar, 6.0* (OL-26927-01)

  http://www.cisco.com/en/US/docs/net_mgmt/prime/access_registrar/6.0/roadmap/guide/PrintPDF/ardocgd.html

- *Release Notes for Cisco Prime Access Registrar, 6.0* (OL-26925-01)

  http://www.cisco.com/en/US/docs/net_mgmt/prime/access_registrar/6.0/release/notes/60relnot.html

- *Cisco Prime Access Registrar Installation and Configuration Guide, 6.0* (OL-26926-01)

  http://www.cisco.com/en/US/docs/net_mgmt/prime/access_registrar/6.0/installation/guide/incfg.html

- *Cisco Prime Access Registrar User Guide, 6.0* (OL-26928-01)

http://www.cisco.com/en/US/docs/net_mgmt/prime/access_registrar/6.0/user/guide/users.html

- *Open Source Used In Cisco Prime Access Registrar, 6.0* (OL-26929-01)

  http://www.cisco.com/en/US/docs/net_mgmt/prime/access_registrar/6.0/open_source/Cisco_Prime_Access_Registrar_6.0_Open_Source_Documentation.pdf

1 Release Notes for Cisco Prime Access Registrar, 6.0

The *Release Notes for Cisco Prime Access Registrar, 6.0* contain information about the Cisco Prime AR product including new features, license information, software download instructions, installation instructions, and information about known anomalies in Cisco Prime AR 6.0 software.

2 Cisco Prime Access Registrar Installation and Configuration Guide, 6.0

The *Installing and Configuring Cisco Prime Access Registrar, 6.0* provides information about installing, configuring, and customizing Cisco AR. This guide is intended to be used by experienced network administrators with working knowledge of the Solaris UNIX operating system.

This guide contains the following chapters:

- Chapter 1, "Overview," provides an overview of the installation process and dialog, information about downloading Cisco AR software, and information about Cisco AR licensing.
- Chapter 2, "Installing Cisco Prime Access Registrar 6.0," provides information about installing Cisco Prime AR using CD-ROM or downloaded software.
- Chapter 3, "Uninstalling Cisco Prime Access Registrar," provides information to help you uninstall Cisco Prime AR.
- Chapter 4, "Upgrading Cisco Prime Access Registrar Software," provides information to help you upgrade Cisco Prime AR software.
- Chapter 5, "Configuring Cisco Prime Access Registrar," describes how to configure a site. Cisco AR is very flexible. You can choose to configure it in many different ways. In addition, you can write scripts that can be invoked at different points during the processing of incoming requests and/or outgoing responses.
- Chapter 6, "Customizing Your Configuration," provides an introduction to many of the Cisco AR objects and their properties.

This guide also includes an index.

3 Cisco Prime Access Registrar User Guide, 6.0

The *User Guide for Cisco Prime Access Registrar, 6.0* provides information about how to use Cisco AR. This guide contains the following chapters:

Chapter 1, “Overview,” provides an overview of Cisco Prime AR.

Chapter 2, “Using the aregcmd Commands,” provides information about using **aregcmd** commands.

Chapter 3, “Using the Graphical User Interface,” provides information about using the standalone graphical user interface (GUI) of Cisco Prime AR.

Chapter 4, “Cisco Prime Access Registrar Server Objects,” provides information about Cisco Prime AR server objects.

Chapter 5, “Using the radclient Command,” provides information about using **radclient** commands to test Cisco Prime AR.

Chapter 6, “Configuring Local Authentication and Authorization,” provides information about how to configure local authentication and authorization and helpful examples.

Chapter 7, “RADIUS Accounting,” provides information about RADIUS accounting and how to configure Cisco AR to perform accounting.

Chapter 8, “Diameter,” provides information about how to configure Cisco Prime AR to perform diameter authentication and authorization, and also provides information about Diameter Accounting.

Chapter 9, “Extensible Authentication Protocols,” provides information about Cisco AR support of EAP authentication methods.

Chapter 10, “Using WiMAX in Cisco Prime Access Registrar,” provides information about Cisco Prime AR support for the WiMAX feature.

Chapter 11, “Using Extension Points,” provides information about how to use Cisco AR scripting to customize your RADIUS server.

Chapter 12, “Using Replication,” provides information about how to use the replication feature.

Chapter 13, “Using On-Demand Address Pools,” provides information about using On-Demand Address Pools.

Chapter 14, “Using Identity Caching,” provides information about using the Identity Caching feature.

Chapter 15, “Using Trusted ID Authorization with SESM,” describes how to use Cisco AR with SESM, and how to configure Cisco AR to use the Trusted ID feature.

Chapter 16, “Using Prepaid Billing,” provides information about how to use the Cisco AR prepaid billing feature.

Chapter 17, “Using Cisco Prime Access Registrar Server Features,” provides information about using Cisco Prime AR features.

Chapter 18, “Directing RADIUS Requests,” provides information about using the Cisco Prime AR Policy Engine.

Chapter 19, “Wireless Support,” provides information about Cisco Prime AR support for wireless features.

Chapter 20, “Using LDAP,” provides information about using an LDAP remote server with Cisco Prime AR.

Chapter 21, “Using Open Database Connectivity,” provides information about a new type of RemoteServer object and a new service to support ODBC.

Chapter 22, “SIGTRAN-M3UA Service,” provides information about SIGTRAN-M3UA remote server and its service to support EAP-AKA/EAP-SIM authentication.

Chapter 23, “Using SNMP”, provides information about the SNMP MIB and Transport offered by Cisco Prime AR.

Chapter 24, “Enforcement of TPS Licensing,” provides information on enforcing rules for the new licencing model—transactions per second (TPS).

Chapter 25, “Backing Up the Database,” describes the Cisco AR shadow backup facility, which ensures a consistent snapshot of Cisco AR’s database for backup purposes.

Chapter 26, “Using the REX Accounting Script,” describes how to use the REX Accounting scripts.

Chapter 27, “Logging Syslog Messages,” provides information about logging messages via syslog and centralized error reporting for Cisco Prime AR.

Chapter 28, “Troubleshooting Cisco Prime Access Registrar,” provides information about techniques used when troubleshooting Cisco Prime AR and highlights common problems.

Appendix A, “Cisco Prime Access Registrar Tcl and REX Dictionaries,” describes the Tcl and REX dictionaries that are used when writing incoming or outgoing scripts for use with Cisco Prime AR.

Appendix B, “Environment Dictionary,” describes the environment variables the scripts use to communicate with Cisco AR or to communicate with other scripts.

Appendix C, “RADIUS Attributes,” lists the RFC 2865 RADIUS attributes with their names and values.

This guide also includes an index.

4 Open Source Used In Cisco Prime Access Registrar, 6.0

The *Open Source Used In Cisco Prime Access Registrar, 6.0* provides the licenses and notices for open source software used in Cisco Prime AR.

5 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 at this URL:

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

You can access the Cisco website at this URL:

http://www.cisco.com

You can access international Cisco websites at this URL:

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

6 Documentation Feedback

You can send 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.

7 Cisco Product Security Overview

Cisco provides a free online Security Vulnerability Policy portal at this URL:

http://www.cisco.com/en/US/products/products_security_vulnerability_policy.html

From this site, you can perform these tasks:

- Report security vulnerabilities in Cisco products.
- Obtain assistance with security incidents that involve Cisco products.
- Register to receive security information from Cisco.

A current list of security advisories and notices for Cisco products is available at this URL:

http://www.cisco.com/go/psirt

If you prefer to see advisories and notices as they are updated in real time, you can access a Product Security Incident Response Team Really Simple Syndication (PSIRT RSS) feed from this URL:

http://www.cisco.com/en/US/products/products_psirt_rss_feed.html

Reporting Security Problems in Cisco Products

Cisco is committed to delivering secure products. We test our products internally before we release them, and we strive to correct all vulnerabilities quickly. If you think that you might have identified a vulnerability in a Cisco product, contact PSIRT:

- Emergencies—security-alert@cisco.com
- Nonemergencies—psirt@cisco.com

Tip We encourage you to use Pretty Good Privacy (PGP) or a compatible product to encrypt any sensitive information that you send to Cisco. PSIRT can work from encrypted information that is compatible with PGP versions 2.*x* through 8.*x*. Never use a revoked or an expired encryption key. The correct public key to use in your correspondence with PSIRT is the one that has the most recent creation date in this public key server list:

http://pgp.mit.edu:11371/pks/lookup?search=psirt%40cisco.com&op=index&exact=on

In an emergency, you can also reach PSIRT by telephone:

- 1 877 228-7302
- 1 408 525-6532

Obtaining Technical Assistance

For all customers, partners, resellers, and distributors who hold valid Cisco service contracts, Cisco Technical Support provides 24-hour-a-day, award-winning technical assistance. The Cisco Technical Support Website on Cisco.com features extensive online support resources. In addition, Cisco Technical Assistance Center (TAC) engineers provide telephone support. If you do not hold a valid Cisco service contract, contact your reseller.

Cisco Technical Support Website

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

http://www.cisco.com/techsupport

Access to all tools on the Cisco Technical Support Website requires a Cisco.com user ID and password. If you have a valid service contract but do not have a user ID or password, you can register at this URL:

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

Note Use the Cisco Product Identification (CPI) tool to locate your product serial number before submitting a web or phone request for service. You can access the CPI tool from the Cisco Technical Support Website by clicking the **Tools & Resources** link under Documentation & Tools. Choose **Cisco Product Identification Tool** from the Alphabetical Index drop-down list, or click the **Cisco Product Identification Tool** link under Alerts & RMAs. The CPI tool offers three search options: by product ID or model name; by tree view; or for certain products, by copying and pasting **show** command output. Search results show an illustration of your product with the serial number label location highlighted. Locate the serial number label on your product and record the information before placing a service call.

Submitting a Service Request

Using the online TAC Service Request Tool is the fastest way to open S3 and S4 service requests. (S3 and S4 service requests are those in which your network is minimally impaired or for which you require product information.) After you describe your situation, the TAC Service Request Tool provides recommended solutions. If your issue is not resolved using the recommended resources, your service request is assigned to a Cisco TAC engineer. The TAC Service Request Tool is located at this URL:

http://www.cisco.com/techsupport/servicerequest

For S1 or S2 service requests or if you do not have Internet access, contact the Cisco TAC by telephone. (S1 or S2 service requests are those in which your production network is down or severely degraded.) Cisco TAC engineers are assigned immediately to S1 and S2 service requests to help keep your business operations running smoothly.

To open a service request 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 list of Cisco TAC contacts, go to this URL:

http://www.cisco.com/techsupport/contacts

Definitions of Service Request Severity

To ensure that all service requests are reported in a standard format, Cisco has established severity definitions.

Severity 1 (S1)—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.

Severity 2 (S2)—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.

Severity 3 (S3)—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.

Severity 4 (S4)—You require information or assistance with Cisco product capabilities, installation, or configuration. There is little or no effect on your business operations.

8 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. Visit Cisco Marketplace, the company store, at this URL:

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

- *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 at this URL:

  http://www.ciscopress.com

- *Packet* magazine is the Cisco Systems technical user magazine for maximizing Internet and networking investments. Each quarter, Packet delivers coverage of the latest industry trends, technology breakthroughs, and Cisco products and solutions, as well as network deployment and troubleshooting tips, configuration examples, customer case studies, certification and training information, and links to scores of in-depth online resources. You can access Packet magazine at this URL:

  http://www.cisco.com/packet

- *iQ Magazine* is the quarterly publication from Cisco Systems designed to help growing companies learn how they can use technology to increase revenue, streamline their business, and expand services. The publication identifies the challenges facing these companies and the technologies to help solve them, using real-world case studies and business strategies to help readers make sound technology investment decisions.
- *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
- World-class networking training is available from Cisco. You can view current offerings at this URL:

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

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Cisco Systems, Inc.
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Singapore

Europe Headquarters
Cisco Systems International BV
Amsterdam, The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at **www.cisco.com/go/offices**.

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