



Preface

This document describes the applications that make up Resource Manager Essentials (RME). It provides instructions for configuring, administering, and operating RME.

The Resource Manager Essentials User Guide is organized as follows:

Chapter	Description
Chapter 1, “Overview of RME”	This chapter gives you an overview of RME.
Chapter 2, “What’s New in this Release”	This chapter provides you with the list of launch points for the various tasks that you can perform with the various RME applications. You can also review the new features provide for this release.
Chapter 3, “Adding and Troubleshooting Devices Using Device Management”	This chapter describes how RME manages devices. Device Management uses the device credentials that are present in Common Services Device and Credentials database. RME allows you to select devices from Device and Credentials database to manage in RME.
Chapter 4, “Managing RME Device Groups Using Group Administration”	This chapter describes how you can group RME devices. RME allows you to define several groups of devices based on a set of criteria and manage the same.
Chapter 5, “Understanding RME Device State Transition”	This chapter describes how device states are transitioned in RME.

Chapter	Description
Chapter 6, “Managing Inventory Collection and Polling Using Inventory”	This chapter describes how to use the Inventory application. Inventory, or the Inventory Collection Service (ICS) and Poller software component of RME, collects inventory data from the network devices and keeps the inventory updated.
Chapter 7, “Generating Reports”	This chapter gives you an overview of the reports framework in RME.
Chapter 8, “Archiving Configurations and Managing Them Using Archive Management”	This chapter describes how to use the Configuration Management application. Configuration Management gives you easy access to the configuration files for all files or Cisco IOS-based Catalyst switches, Content Service Switches, Content Engines, and Cisco routers in your RME inventory.
Chapter 9, “Making and Deploying Configuration Changes Using NetConfig”	This chapter describes how to use the NetConfig application. NetConfig allows you to make configuration changes to your managed network devices whose configurations are archived in the Configuration Archive.
Chapter 10, “Editing and Deploying Configurations Using Config Editor”	This chapter describes how to use the Config Editor application. Config Editor you to edit a configuration file that exists in the configuration archive.
Chapter 11, “Using NetShow Commands”	This chapter describes how to use the NetShow application. NetShow enables you to define show commands within Command Sets and run these commands
Chapter 12, “Managing Software Images Using Software Management”	This chapter describes how to use the Software Management application. To ensure rapid, reliable software upgrades, Software Management automates many steps associated with upgrade planning, scheduling, downloading, and monitoring.
Chapter 13, “Tracking Network Changes Using Change Audit”	This chapter describes how to use the Change Audit application. Change Audit tracks and reports changes made in the network. It allows other RME applications to log change information to a central repository.

Chapter	Description
Chapter 14, “Enabling and Tracking Syslogs Using Syslog Analyzer and Collector”	This chapter describes how to use the Syslog application. Syslog lets you centrally log and track system error messages, exceptions, and other information (such as device configuration changes).
Chapter 15, “Tracking RME Server Changes Using Audit Trail”	This chapter describes how to use the Audit Trail application. Audit Trail tracks and reports changes that the RME administrator makes on the RME server.
Chapter 16, “Checking Bug Status Using Bug Toolkit”	This chapter describes how to use the Bug Toolkit application. Bug Toolkit helps you identify the bugs filed against devices in their network and check the status of the bugs.
Chapter 17, “Working With SmartCase”	This chapter describes how to use the SmartCase application. SmartCase enables you to access Cisco.com from Resource Manager Essentials (RME) to open a Cisco.com case, or to query and update an existing case.
Chapter 18, “Working With Contract Connection”	This chapter describes how to use the Cisco Contract Connection application. Contract Connection lets you verify which of your Cisco devices are covered by a service contract.
Chapter 19, “Using cwcli Commands”	This chapter describes how to use cwcli commands.
Chapter 20, “Enabling Approval and Approving Jobs Using Job Approval”	This chapter describes how job approval can be enabled and used.
Appendix A, “RME Troubleshooting Tips and FAQs”	This chapter describes the troubleshooting tips for all the RME applications.
Appendix B, “Understanding Syslog Formats”	This appendix describes the two file formats supported in RME—Comma-Separated Values (CSV) File and XML Schemas.
Appendix C, “RME Command Reference”	This appendix provides a list of the RME commands.
Appendix D, “Managing Devices When RME Server is Within a NAT Boundary”	This appendix describes Network Address Translation (NAT) support in Resource Manager Essentials and provides details of the tasks you need to perform to enable support.

Audience

This document provides descriptions and scenarios for system administrators, network managers, and other users who might or might not be familiar with RME. Many of the tools described are accessible to system administrators only.

Conventions

This document uses the following conventions:

Item	Convention
Commands and keywords	boldface font
Variables for which you supply values	<i>italic</i> font
Displayed session and system information	screen font
Information you enter	boldface screen font
Variables you enter	<i>italic screen</i> font
Menu items and button names	boldface font
Selecting a menu item in paragraphs	Option > Network Preferences
Selecting a menu item in tables	Option > Network Preferences



Note

Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the publication.



Caution

Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.

Product Documentations

The following product documentation is available:

**Note**

Although every effort has been made to validate the accuracy of the information in the printed and electronic documentation, you should also review the Resource Manager Essentials documentation on Cisco.com for any updates.

Release Notes for Resource Manager Essentials

- Release Notes for Resource Manager Essentials on Solaris, Software Release 4.0.3.
- Release Notes for Resource Manager Essentials on Windows, Software Release 4.0.3.

These documents are available in the following formats:

- As hard copies with your product.
- PDF on the Resource Manager Essentials CD-ROM.
- On Cisco.com at http://www.cisco.com/univercd/cc/td/doc/product/rtrmgmt/cw2000/cw2000e/e_4_x/4_0_3/index.htm

Installation Guide for Resource Manager Essentials

- Installation and Setup Guide for Resource Manager Essentials on Solaris, Software Release 4.0.3.
- Installation and Setup Guide for Resource Manager Essentials on Windows, Software Release 4.0.3.

These document are available in the following formats:

- PDF on the Resource Manager Essentials CD-ROM.
- On Cisco.com at http://www.cisco.com/univercd/cc/td/doc/product/rtrmgmt/cw2000/cw2000e/e_4_x/4_0_3/index.htm
- Printed document available by order.
 - DOC-7817222—Installation and Setup Guide for Resource Manager Essentials on Solaris, Software Release 4.0.3.

- DOC-7817223—Installation and Setup Guide for Resource Manager Essentials on Windows, Software Release 4.0.3.

User Guide for Resource Manager Essentials

This document is available in the following formats:

- PDF on the Resource Manager Essentials CD-ROM.
- From the Resource Manager Essentials online help.
- On Cisco.com at http://www.cisco.com/univercd/cc/td/doc/product/rtrmgmt/cw2000/cw2000e/e_4_x/4_0_3/index.htm
- Printed document available by order (DOC-7817221).

Supported Devices Table

- Supported Devices for Resource Manager Essentials 4.0.3
- Supported Devices for Software Management Application
- Supported Devices for Configuration Management Application

These documents are available on Cisco.com at

http://www.cisco.com/univercd/cc/td/doc/product/rtrmgmt/cw2000/cw2000e/e_4_x/4_0_3/index.htm

Context-Sensitive Online Help for Resource Manager Essentials

You can access the online help by selecting an option from the navigation tree, then click **Help** (extreme right corner of your browser window).

The entire User Guide can be viewed in the Adobe Portable Document Format (PDF) from within the Online Help. To view the PDF, Adobe Acrobat 6.0 or later is required.

The RME device package support for RME 4.0 is available at install time. You can access the device package help from the Online help.

Step 1 Select an option from RME desktop and click **Help**.

The Help launches in a separate browser window.

Step 2 Click **Main** at the extreme right corner of the page.

The Help window is refreshed and you see these nodes in the left navigation pane:

- CiscoWorks Common Services
- Resource Manager Essentials

Step 3 Expand the Resource Manager Essentials node.

The following leaf and node appear in the left navigation pane:

- RME User Guide (leaf)
- Device Packages (node)

Step 4 Expand the Device Packages node to view the help for device packages.

Related Documentation

Resource Manager Essentials 4.0.3 runs on Common Services 3.0.3 (Includes CiscoView 6.1.2).

The following related documentation is available in the HTML and PDF formats on Cisco.com at

http://www.cisco.com/en/US/products/sw/cscowork/ps3996/tsd_products_support_series_home.html

- Release Notes for Common Services 3.0.3 (Includes CiscoView 6.1.2) on Solaris.
- Release Notes for Common Services 3.0.3 (Includes CiscoView 6.1.2) on Windows.
- Installation and Setup Guide for Common Services 3.0.3 (Includes CiscoView 6.1.2) on Solaris.
- Installation and Setup Guide for Common Services 3.0.3 (Includes CiscoView 6.1.2) on Windows.
- User Guide for Common Services 3.0.3.

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/techsupport>

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

Product Documentation DVD

Cisco documentation and additional literature are available in the Product Documentation DVD package, which may have shipped with your product. The Product Documentation DVD is updated regularly and may be more current than printed documentation.

The Product Documentation DVD is a comprehensive library of technical product documentation on portable media. The DVD enables you to access multiple versions of hardware and software installation, configuration, and command guides for Cisco products and to view technical documentation in HTML. With the DVD, you have access to the same documentation that is found on the Cisco website without being connected to the Internet. Certain products also have .pdf versions of the documentation available.

The Product Documentation DVD is available as a single unit or as a subscription. Registered Cisco.com users (Cisco direct customers) can order a Product Documentation DVD (product number DOC-DOCDVD=) from Cisco Marketplace at this URL:

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

Ordering Documentation

Beginning June 30, 2005, registered Cisco.com users may order Cisco documentation at the Product Documentation Store in the Cisco Marketplace at this URL:

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

Nonregistered Cisco.com users can order technical documentation from 8:00 a.m. to 5:00 p.m. (0800 to 1700) PDT by calling 1 866 463-3487 in the United States and Canada, or elsewhere by calling 011 408 519-5055. You can also order documentation by e-mail at tech-doc-store-mkpl@external.cisco.com or by fax at 1 408 519-5001 in the United States and Canada, or elsewhere at 011 408 519-5001.

Documentation Feedback

You can rate and provide feedback about Cisco technical documents by completing the online feedback form that appears with the technical documents on Cisco.com.

You can send comments about Cisco 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.

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

An emergency is either a condition in which a system is under active attack or a condition for which a severe and urgent security vulnerability should be reported. All other conditions are considered nonemergencies.

- Nonemergencies—psirt@cisco.com

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

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

**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 linked in the Contact Summary section of the Security Vulnerability Policy page at this URL:

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

The link on this page has the current PGP key ID in use.

Obtaining Technical Assistance

Cisco Technical Support provides 24-hour-a-day award-winning technical assistance. The Cisco Technical Support & Documentation website on Cisco.com features extensive online support resources. In addition, if you have a valid Cisco service contract, Cisco Technical Assistance Center (TAC) engineers provide telephone support. If you do not have a valid Cisco service contract, contact your reseller.

Cisco Technical Support & Documentation Website

The Cisco Technical Support & Documentation 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, at this URL:

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

Access to all tools on the Cisco Technical Support & Documentation 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 & Documentation 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 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 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.

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, documentation, 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>

- Networking products offered by Cisco Systems, as well as customer support services, can be obtained at this URL:

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

- Networking Professionals Connection is an interactive website for networking professionals to share questions, suggestions, and information about networking products and technologies with Cisco experts and other networking professionals. Join a discussion at this URL:

<http://www.cisco.com/discuss/networking>

- 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>