



DATA SHEET

CISCOWORKS RESOURCE MANAGER ESSENTIALS 3.5

Resource Manager Essentials (RME) 3.5 is the cornerstone application of the CiscoWorks family of network management solutions. LMS, RWAN and VMS all build on the intelligent facilities in RME that provide lifecycle management of Cisco network devices. Designed to reduce human error and eliminate many of the manual tasks associated with maintaining a network, RME helps make Cisco networks the most manageable and available in the world.

RESOURCE MANAGER ESSENTIALS 3.5

RME 3.5 is a suite of tools for simplifying the administration of a Cisco network. These components include:

- Inventory Manager
- Device Configuration Manager
- Software Image Manager
- Change Audit Service
- Availability Manager
- Syslog Analyzer
- Cisco Management Connection
- Cisco Connection Online (CCO) Service Tools

RME Features Include

The basic purpose of RME is to simplify network operations and to dramatically simplify efficiency. RME can automate software updates and configuration changes, reduce human error, and track all devices and changes in the network.

Features include:

- Quickly builds a complete network inventory of Cisco devices
- Monitors and reports on hardware, configuration, and inventory changes
- Manages and deploys configuration changes and software image updates to multiple devices
- Simplifies monitoring and troubleshooting of critical local-area network (LAN) and wide-area network (WAN) resources
- Secure communication between the client browser and the server via Secure Sockets Layer (SSL) protocol.
- Secure upload/download of device configurations from server device via Secure Shell (SSH).

Inventory Manager—*Builds and maintains an up-to-date hardware and software inventory*

Inventory Manager provides an up-to-date inventory database of Cisco devices, from the Cisco 700 series Integrated Services Digital Network (ISDN) routers to the high-end CSS 11000, GSR 12400, and ESR 10000 series switches. The inventory database provides detailed inventory information on device attributes, such as chassis type, interfaces, software version, memory, Flash characteristics, and more. Inventory Manager provides a wide range of reporting capabilities from high-level summary reports to detailed device-level reporting.

Inventory Manager provides:

- Up-to-date inventory of all Cisco devices in the network, including support for Cisco CallManager, the VPN 3000 Concentrator (VPN c3000), CSS 11000, GSR 12400, and ESR 10000
- Hardware and software summary information as well as detailed reports for groups of devices, including device name, chassis type, memory, Flash, software version, interface, stack modules, and other detailed hardware and software characteristics
- Device import from Cisco WAN Manager as well as CWSI Campus 2.x, and Campus Manager 3.2, HP OpenView, Tivoli NetView, or from a flat file
- Capacity planning information by identifying the total number of free and used slots in many Cisco devices
- Multiservice port report on the number and location of Catalyst® switches that are multiservice port-enabled
- Device credentials (password information) that can be exchanged via Extended Markup Language (XML) with other management applications
- Ability to select VPN as a device grouping for report generation
- CLI command to extract Detailed Device Inventory information in XML format.
- Ability for Administrators to Title (ex Location, Owner etc.) the User Defined Fields. Inventory reports would reflect these titles.

Device Configuration Manager—*Maintains an active archive and simplifies deployment of configuration changes to multiple devices*

Device Configuration Manager consists of several sub-components: Configuration Archive, NetConfig, ConfigEditor & NetShow Applications.

Configuration Archive Benefits:

- Maintains an up-to-date archive by automatically identifying and storing changes to configuration files
- Supports configuration file searching to simplify locating specific device configurations and configuration attributes
- Identifies differences between the running and startup configurations
- Significant performance improvement over previous version (RME 3.4)
- Ability to choose a device and its version of configuration and download it to the device from the Config Archive application
- CLI command to extract Running Configuration of devices in XML format.

NetConfig

- Provides a wizard-based approach to simplify and reduce the complexities and time associated with rolling out global changes in the network
- NetConfig application allows configuration changes to be performed against multiple switches or routers in the network; changes can be downloaded immediately or run as scheduled operations
- Cisco-provided templates simplify the configuration change process for Simple Network Management Protocol (SNMP) community, Terminal Access Controller Access Control System (TACACS), enable, syslog, SNMP trap destinations, Cisco Discovery Protocol (CDP), Domain Name System (DNS) and many others
- Flexibility in pushing command-line interface (CLI) changes out to the network via user-defined templates that are published to an authorized user or group of users for execution
- Support for downloading/uploading of device configurations Secure Shell (SSH) protocol (functionality also available in ConfigEditor & NetShow)
- Support for configuration management for devices across Network Address Translators (NAT) boundaries
- Support for Interactive IOS, CAT-OS and FastSwitch commands.
- Significant performance enhancements—up to X% faster than previous versions. (RME 3.4)
- Ability for operators to specify Username & Password for devices selected for the job, during job creation (functionality also available in ConfigEditor & NetShow)
- New Templates to Enable SSH & IPSec on devices

ConfigEditor

- ConfigEditor application provides a powerful Web-based editing facility for modifying and downloading configuration changes

NetShow

- Provides a simplified Web-based show command interface, allowing show commands to be run against multiple switches or routers to enhance and simplify network troubleshooting
- Batch interface to show commands, enabling multiple show commands to be run against a group of device as a scheduled operation

Software Image Manager—*Simplifies and speeds software image analysis and deployment*

Software Image Manager greatly simplifies the version management and routine deployment of software updates to Cisco routers and switches through wizard-assisted planning, scheduling, downloading, and monitoring of software updates. Software Image Manager automates the many time-consuming steps required to upgrade software images while reducing the error-prone complexities of the upgrade process. Built-in links to CCO correlate the Cisco online information about software patches with Cisco IOS and Catalyst software deployed in the network, highlighting related tech notes. New planning tools, also linked to CCO, find system requirements and send notification when hardware upgrades (Boot ROM, Flash RAM) are needed to support proposed software image updates.

Before an update is initiated, the prerequisites of a new image are validated against the target switch or router's inventory data to help ensure a successful upgrade. When multiple devices are being updated, Software Image Manager synchronizes download tasks and allows the user to monitor the progress of the job. Scheduled jobs are controlled through a signoff process, enabling managers to authorize a technician's activities before initiating each upgrade task. RME 3.5 includes the ability to analyze software upgrades for a wide range of Cisco routers and switches thereby greatly simplifying and reducing the time required to determine the impact of a software upgrade.

Software Image Manager benefits:

- Provides software update analysis reports showing prerequisites and impacts of proposed updates
- Reduces from hours to minutes the mean time to deploy router or switch software images
- Distributes single or multiple images to devices in a single deployment operation
- Support for software image management for devices across Network Address Translators (NAT) boundaries
- Performs network image software audits and software library synchronization
- Uses CCO to report on software defects and available patches that affect devices and images in your network
- Contains enhanced Web-proxy support for improved CCO connectivity
- Provides robust software upgrade analysis for Cisco devices
- Two new workflow models added to the Software Image Management Application
 - Ability for users to select an image, appropriate devices, followed by job scheduling. This new workflow reduces the amount of time it takes to create a job (especially if the image to be deployed is known), by eliminating the "Image Recommendation" phase.
 - This new workflow allows users to optimize bandwidth utilization by storing the image to be deployed on a router's flash and "instructing" the devices retrieve the image from the router.

Change Audit Service—*Displays comprehensive reports of software, hardware, and configuration changes*

Change Audit is a central point where users can view network changes. Summary information is easily displayed, showing the types of changes made, by whom and when, and whether the changes were made from a Telnet or console CLI or from a CiscoWorks application. Further, the nature of the changes is identified quickly through detailed reports (cards added/removed, memory changes, configuration changes, and so on). In organizations with policies defining when changes should be made to the network, Change Audit provides an exception summary, highlighting changes made outside the approved time window.

Change Audit benefits:

- Provides a comprehensive audit of network changes reported chronologically
- Records who changed what, when, and how
- Offers change report filtering using simple or complex sort criteria
- Identifies network changes made during critical network operational times

Availability Manager—*Highlights critical devices and their ability to respond*

Availability Manager's "reachability dashboard" quickly determines the operational status of critical routers and switches. From the availability monitor you can drill down on a particular device to view historical details about its response time, availability, reloads, protocols, and interface status.

Availability Manager benefits:

- Provides reports summarizing when critical devices went offline or reloaded
- Displays individual device drill-down views of reachability and availability history
- Offers graphical reports of device response time trends
- Features browser-accessible status reports of router and switch availability over time
- Provides connectivity to CCOs Stack Decoder to simplify reload failure troubleshooting
- Displays summaries of the protocols to which a device can respond (UDP, TCP, HTTP, TFTP, TELNET, SNMP) through the connectivity tool

Syslog Analyzer—*Isolates network error conditions and suggests probable causes*

Syslog Analyzer filters syslog messages logged by Cisco switches, routers, access servers, and Cisco IOS firewalls, displaying explanations of probable causes and recommended actions. It leverages embedded Cisco IOS technology to provide detailed device information. Its reports are based on user-defined filters that highlight specific errors or severity conditions and help identify when specific events occurred (such as a link-down or a device reboot). Syslog Analyzer allows syslog messages to be linked to customized information, such as Web-based administrative tips or to launch a Common Gateway Interface (CGI) script to take corrective actions.

Syslog Analyzer benefits:

- Speeds troubleshooting by displaying critical error patterns over time
- Summarizes syslog events by severity or user criteria for switches, routers, and Cisco IOS and PIX firewalls
- Supports selective filtering of remote syslog collectors, allowing only wanted messages to be sent to the RME server
- Separates unwanted messages with user-definable filters or scripts through local and remote filtering
- Launches user-defined scripts or links to a Web page for related information based on specific syslog messages
- New option to store messages that are scheduled to be purged from the database in a flat file.

SERVER, CLIENT AND BROWSER SYSTEM REQUIREMENTS

The server, client and web browser system requirements can be found in the Product Overview documents for the Routed WAN and LAN Management solutions, and on Cisco's main on-line documentation site, under each CiscoWorks2000 solution. Please refer to these and other Product Installation documentation for more detailed information on setting up and configuring these solutions.

Supported Cisco Devices

http://www.cisco.com/en/US/products/sw/cscowork/ps2073/products_device_support_tables_list.html

Supported Cisco IOS Versions

http://www.cisco.com/en/US/products/sw/cscowork/ps2073/products_device_support_tables_list.html

AVAILABILITY

RME is an integral part of several CiscoWorks solutions and is not sold as an individual product.



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