



Resource Manager Essentials Applications

This chapter lists all the Essentials applications and their tasks that can be accomplished with each of these applications. The applications are:

- Availability
- Change Audit
- Configuration Management
- Contract Connection
- Inventory
- Job Approval
- Software Management
- Syslog Analysis

Table 2-1 lists all the applications and the device credentials required for proper functioning of the applications.

Table 2-1 Applications and the Device Credentials

Application	Telnet Password	Enable Password	SNMP Read Only	SNMP Read / Write
NetConfig	Required	Required	Not required	Not required
NetShow	Required	Required	Not required	Not required
Config Editor	Required	Required	Not required	Not required
ChangeAudit	Not required	Not required	Not required	Not required
Configuration Management (Telnet)	Required	Required	Required	Not required
Configuration Management (TFTP)	Not required	Not required	Required	Required
Device Views	Not required	Not required	Not required	Not required
Inventory	Not required	Not required	Required	Not required
SWIM	Required *	Required *	Required	Required
Syslog	Not required	Not required	Not required	Not required
Availability	Required	Required	Required	Not required

* Required in case of few devices.

Availability

The Availability application lets you monitor the reachability and response time of your network devices. You can view the availability of a selected group of devices, a summary of interface status, reports of reloads (reboots) and unreachable devices, and protocol distribution graphs.

Table 2-2 shows the tasks you can accomplish with the Availability application.

Table 2-2 Availability Manager Tasks

Task	Purpose	Action
Set polling views and options.	Select views to be monitored. You must do this before you can monitor device availability. If your system performance is degraded by availability polling, you can add more CPU, poll fewer devices, or poll less frequently.	Select Resource Manager Essentials > Administration > Availability > Change Polling Options.
Change polling options.	Select default Availability polling option values or to select new values from the drop-down list boxes. The polling options you set, apply to all Availability views.	Select Resource Manager Essentials > Administration > Availability > Change Polling Options.
View the Reachability Dashboard.	View device status for all views set for availability monitoring. The dashboard continuously reports: <ul style="list-style-type: none"> • All views being polled and the number of devices in each view. • Device names of all devices in each view and the time they last responded. 	Select Resource Manager Essentials > Availability > Reachability Dashboard.
Monitor device availability.	Continuously monitor selected devices and access interface availability details.	Select Resource Manager Essentials > Availability > Availability Monitor.
View the Reloads report.	Display the most recent reloads (up to 5) for selected devices. The report shows the reason for each reload and when it occurred.	Select Resource Manager Essentials > Availability > Reloads Report. To view reloads that occurred only within the past 24 hours, select Resource Manager Essentials > 24-Hour Reports > Reloads Report.

Table 2-2 Availability Manager Tasks (continued)

Task	Purpose	Action
View the Stack Decoder Analysis.	<p>Decode and analyze a device's stack dump to enable troubleshooting of devices that reload unexpectedly.</p> <p>An unexpected reload is any reload that is neither initiated by you nor a result of a power-on.</p> <p>The Reloads report applies only to routers running Cisco IOS Release 10.2 or later and is available only for the most recent reload.</p>	<p>Select Resource Manager Essentials > Availability > Reloads Report.</p> <p>In the generated report, click on the unexpected reload.</p>
View the Offline Device report.	<p>Generate a report of managed devices that have not responded to polling for more than a specified period of time (3, 6, 12, 24, 48, or 72 hours).</p>	<p>Select Resource Manager Essentials > Availability > Offline Device Report.</p> <p>To view only devices that have been off line for the past 24 hours, select Resource Manager Essentials > 24-Hour Reports > Offline Device Report.</p>
View the Protocol Distribution graph.	<p>View the distribution of TCP/IP, AppleTalk, IPX, DECnet, VINES, and XNS packets for selected devices in a bar or pie chart. This report shows the Level-3 protocol packet types that are forwarded by the devices.</p>	<p>Select Resource Manager Essentials > Availability > Protocol Distribution Graph.</p>

Change Audit

The Change Audit application lets you track and report network changes. It provides the capability for other Essentials applications to log change information to a central repository, called the Change Audit log.

Table 2-3 shows the tasks that you can accomplish with the Change Audit application.

Table 2-3 Change Audit Tasks

Task	Purpose	Action
View Change Audit logs.	View the two log tables: Change Audit summary and Change Audit details.	<ul style="list-style-type: none"> Select Resource Manager Essentials > 24-Hour Reports > Change Audit Report. Select any report from Resource Manager Essentials > Change Audit.
Delete records from the log.	Delete or schedule deletion of change records from the Change Audit log.	Select Resource Manager Essentials > Administration > Change Audit > Delete Change History.
Convert change records to SNMP traps.	Convert some or all change notifications into SNMP V1 traps and send them to a destination you configure.	Select Resource Manager Essentials > Administration > Change Audit > Administer Trap Generator.
Define an exceptions period.	Specify a period of time when no network changes should occur.	Select Resource Manager Essentials > Administration > Change Audit > Define Exceptions Summary.
Set up filtering options.	Define one or more filter fields to filter report data.	Select Resource Manager Essentials > Change Audit > Search Change Audit.
View changes in an exception period.	Generate a report on changes that occurred in the network during a defined exception.	Select Resource Manager Essentials > Change Audit > Exceptions Summary.

Table 2-3 Change Audit Tasks (continued)

Task	Purpose	Action
View all change records.	Generate a report that enables you to view changed data in the Change Audit log.	Select Resource Manager Essentials > Change Audit > All Changes .
View a summary of changes made in the last 24-hours.	Generate a summary of changes made in the past 24 hours from Change Audit log data.	Select Resource Manager Essentials > 24-Hour Reports > Change Audit Report .

Configuration Management

Configuration Management gives you easy access to the configuration files for all file-based or Cisco IOS-based Catalyst switches, FastSwitches, and Cisco routers in the Essentials inventory.

After you import devices into your inventory and they become managed, the configuration files are collected and stored in the configuration archive. When you change the configuration, the archive is alerted and automatically collects the latest configuration information.

Before you can use the configuration archive, you must make sure you have completed all the necessary setup tasks. For information on these tasks, see *Installing and Setting Up Resource Manager Essentials*.

Table 2-4 shows the archive-specific tasks you can accomplish with the Configuration Management application.

Table 2-4 Configuration Management Archive-Specific Tasks

Task	Purpose	Action
Search for configuration files.	Search for configuration files based on device name or text pattern.	<ul style="list-style-type: none"> • Select Resource Manager Essentials > Configuration Management > Search Archive by Device. • Select Resource Manager Essentials > Configuration Management > Search Archive by Pattern.
Create, run, modify, and delete custom reports.	Create and run custom reports that gather device configuration files from the archive for specified devices. You can also modify and delete custom reports.	Select Resource Manager Essentials > Configuration Management > Custom Reports .
Compare device configuration files.	Compare configuration files of two devices or two versions of a single file. Compare the starting and current configurations of a device. Compare the current and the most recently archived configurations of a device.	Select Resource Manager Essentials > Configuration Management > Compare Configurations .
Find out-of-sync configurations.	Determine whether a device's startup and running configurations are synchronized. The two configurations might differ if you change a device configuration after the device is booted.	<ul style="list-style-type: none"> • Select Resource Manager Essentials > Configuration Management > Startup/Running Out of Sync Report <p>or</p> <ul style="list-style-type: none"> • Select Resource Manager Essentials > 24 Hour Reports > Configuration Sync Report.
Move the configuration archive.	Move the configuration archive to a new location.	Select Resource Manager Essentials > Administration > Configuration Management > General Setup , then select the Archive Setup tab.

Table 2-4 Configuration Management Archive-Specific Tasks (continued)

Task	Purpose	Action
Specify criteria for purging the archive.	<p>Specify when to purge configurations from the archive. You can specify two criteria:</p> <ul style="list-style-type: none"> • Age. Configurations older than the specified age are purged. • Maximum number of versions. The oldest configuration is purged when the maximum number is reached. <p>You can also choose not to purge labelled files.</p>	Select Resource Manager Essentials > Administration > Configuration Management > General Setup , then select the Archive Setup tab.
Modify configuration archive retrieval.	Modify how and when the configuration archive retrieves configurations.	Select Resource Manager Essentials > Administration > Configuration Management > General Setup , then select the Change Probe Setup tab.
Change the protocol order used by the configuration archive.	<p>Change the order of the protocols the configuration archive uses to download configurations from devices to the archive.</p> <p>The default order is:</p> <ul style="list-style-type: none"> • TFTP (Trivial File Transport Protocol) • Telnet • RCP (Remote Copy Protocol) 	Select Resource Manager Essentials > Administration > Configuration Management > General Setup , then select the Transport Setup tab.
Update the configuration archive.	<p>Update the archive manually if you make a significant change to a device configuration and want the archive to reflect the changes.</p> <p>The configuration archive retrieves configurations at 12.30 a.m. every Friday by default. It also listens to Syslog messages and fetches the configuration.</p>	Select Resource Manager Essentials > Configuration Management > Update Archive .

Table 2-4 Configuration Management Archive-Specific Tasks (continued)

Task	Purpose	Action
Check the archive status.	Check archive status for the latest attempt to archive a device configuration (running or startup).	Select Resource Manager Essentials > Administration > Configuration Management > Archive Status .
Configure labels.	Select configuration files from different managed devices, group them, and label them as a set. You can also view, modify, and remove configuration labels.	Select Resource Manager Essentials > Administration > Configuration Management > Label Configuration .
Import configurations from CiscoWorks.	Import the latest device configurations from the CiscoWorks Sybase database into the configuration archive. You can import configurations from CiscoWorks versions up to 4.0.	Select Resource Manager Essentials > Administration > Configuration Management > Import from CiscoWorks .
View status of configuration import.	View the import status and the number of devices in each state, after importing configurations from CiscoWorks.	Select Resource Manager Essentials > Administration > Configuration Management > Import from CiscoWorks Status .
Use the cwconfig command at the command line.	Access the configuration archive to update, export, and import configurations on devices and in the archive. For more information about the command syntax and parameters, refer to the cwconfig man page on UNIX systems, by entering: <code>man -M /opt/CSCOpX/man cwconfig</code>	This command cannot be entered from the desktop; use the command line.

Table 2-4 Configuration Management Archive-Specific Tasks (continued)

Task	Purpose	Action
Integrate Cisco Netsys configurations.	Integrate Netsys configuration files into the Essentials configuration archive.	Select Resource Manager Essentials > Administration > Configuration Management > General Setup , then select the Netsys Setup tab.
	View Netsys reports after you integrate the configuration files created by Netsys into the Essentials configuration archive.	Select Resource Manager Essentials > Configuration Management > Netsys Report .
Locate the configuration archive shadow directory.	Access the configuration archive shadow directory, which is an image of the most recent configurations gathered by the configuration archive.	The shadow directories cannot be accessed from the desktop. <ul style="list-style-type: none"> • On Solaris, as root or casuser, enter: /var/adm/CSCOpX/files/archive/shadow • On Windows NT, as admin, enter: C:\program files\CSCOpX/files/archive/shadow

NetConfig Option

Using the NetConfig option, which runs as a separate application in its own window, you can make configuration changes to your managed network devices.

NetConfig uses configuration templates to create the configuration commands run on devices when a NetConfig job runs. There are three types of configuration templates:

- **System-defined:** Provided with NetConfig, these templates simplify the creation of common configuration commands.
- **User-defined:** Created by system administrators, these templates can contain any configuration commands.
- **Adhoc:** Allows you to add any configuration commands to a NetConfig job while you are defining it.

**Caution**

NetConfig does not verify the commands entered in user and adhoc templates. These commands are executed on devices exactly as they appear in the template. If you enter incorrect configuration commands, you could misconfigure or disable the devices on which the job runs.

By default, only network administrators have access to configuration templates. Network administrators can assign template access privileges to the other system users. When you define or edit a job, the configuration templates to which you have access privileges appear in the job definition wizard.

Table 2-5 shows the tasks that can be accomplished with the NetConfig option.

Table 2-5 NetConfig Tasks

Task	Purpose	Action
Define and schedule a NetConfig job.	Define a NetConfig job to make device configuration changes, and schedule it to run.	<ol style="list-style-type: none"> 1. Select Resource Manager Essentials > Configuration Management > NetConfig > Jobs > New Job. or Click New Job button. 2. Complete the job definition wizard.
Browse and edit NetConfig jobs.	Browse the NetConfig jobs that are registered on the system and edit them as necessary.	<ol style="list-style-type: none"> 1. Select Resource Manager Essentials > Configuration Management > NetConfig > Jobs > Job Browser. or Click Job Browser button. 2. Select a job record. 3. Click Edit Job, Copy Job, Remove Job, Stop Job, or Job Details.

Table 2-5 NetConfig Tasks (continued)

Task	Purpose	Action
View a NetConfig job's details.	View detailed information about a registered NetConfig job. You can also edit a job from its detailed view.	<ol style="list-style-type: none"> 1. Select Resource Manager Essentials > Configuration Management > NetConfig > Jobs > Job Browser. or Click Job Browser button. 2. Select a job record. 3. Click Job Details. 4. Click Edit Job, Copy Job, Remove Job, Stop Job, or Print.
Launch Essentials.	Launch Essentials if it is not already running.	<p>Select Resource Manager Essentials > Configuration Management > NetConfig > Tools > Launch RME.</p> <p>or</p> <p>Click Launch RME button.</p>
Create and edit user-defined configuration templates.	Create and edit configuration templates that can contain any configuration commands.	Select Resource Manager Essentials > Configuration Management > NetConfig > Admin > Create/Edit User Templates .
Assign configuration template access privileges to users.	Assign access privileges to the system-defined and user templates on the system.	Select Resource Manager Essentials > Configuration Management > NetConfig > Admin > Assign Template Users .
Set default template policies.	Set the default policies for NetConfig jobs that are defined.	Select Resource Manager Essentials > Configuration Management > NetConfig > Admin > Set Template Policies .

Table 2-5 *NetConfig Tasks (continued)*

Task	Purpose	Action
View online help for the task you are performing.	View the online help for information about the task you are performing.	Select Resource Manager Essentials > Configuration Management > NetConfig > Help > Context-Sensitive Help . or Click Help button.
Use the NetConfig command to make batch configuration changes.	Define and schedule NetConfig jobs from the command line.	Enter the NetConfig command at the command line with the appropriate options and arguments. For more information, refer to the online help and the netconfig man page.

Network Show Commands Option

Essentials ships with a set of default network command sets, which you cannot edit or delete.

Table 2-6 shows the tasks you can accomplish with the Network Show Commands option.

Table 2-6 *Network Show Commands Tasks*

Task	Purpose	Action
Create a network show command set.	Create, edit, and delete a logical group of custom commands for a user or a set of users.	Select Resource Manager Essentials > Administration > Configuration Management > Network Show > Define Command Set .
Assign users to the network show command set.	Specify which user or set of users can run network show commands.	Select Resource Manager Essentials > Administration > Configuration Management > Network Show > Assign Users .

Table 2-6 Network Show Commands Tasks (continued)

Task	Purpose	Action
Execute a network show command set immediately.	Run network show commands on one or more devices.	Select Resource Manager Essentials > Configuration Management > Network Show Commands > Immediate Execution .
Define a batch report.	Create a batch report containing command sets and remote console commands that can be run on a set of devices to generate a report. You can also modify or delete existing reports.	Select Resource Manager Essentials > Configuration Management > Network Show Commands > Batch Reports > Define Reports .
Schedule a batch report.	Schedule reports in batches and generate these batch reports at a specified time.	Select Resource Manager Essentials > Configuration Management > Network Show Commands > Batch Reports > Schedule Reports .
View report output.	View the output of a batch report.	Select Resource Manager Essentials > Configuration Management > Network Show Commands > Batch Reports > View Report Output .
Browse network show jobs.	Browse the network show jobs that are registered on the system and view job details. You can also edit or delete jobs.	<ol style="list-style-type: none"> 1. Select Resource Manager Essentials > Configuration Management > Network Show Commands > Batch Reports > Job Browser. 2. Select a job record. 3. Click Edit Job, Stop Job, Remove Job, Copy Job, or Job Details.

Table 2-6 Network Show Commands Tasks (continued)

Task	Purpose	Action
Set job policies.	Each network show job has properties that define how the job runs. You can configure a default policy for these properties that apply to all future jobs.	Select Resource Manager Essentials > Configuration Management > Network Show Commands > Batch Reports > Set Job Policies .
Use the cwconfig netshowbatch command.	Define and schedule reports, comprising multiple network show command sets to be run against a set of devices.	Enter cwconfig netshowbatch command at the command line. For more information, refer to the online help and the cwconfig netshowbatch man page.

Config Editor Option

You can edit configuration files stored in the configuration archive and download files to devices, using the Config Editor option. This option runs as a separate application in its own window.

Table 2-7 shows the tasks you can accomplish with the Config Editor option.

Table 2-7 Config Editor Tasks

Task	Purpose	Action
Edit configuration files from the archives.	Check out a file from the archive, and edit it.	Select Resource Manager Essentials > Configuration Management > Config Editor > File > Open .
Schedule download jobs.	Define and schedule a download job.	Select Resource Manager Essentials > Configuration Management > Config Editor > File > Download .
Print configuration files.	Print a configuration file.	Select Resource Manager Essentials > Configuration Management > Config Editor > File > Print .

Table 2-7 Config Editor Tasks (continued)

Task	Purpose	Action
Configure job policies.	Configure a default policy for job properties that applies to all future jobs. You can also specify if the property can be configured by other users.	Select Resource Manager Essentials > Configuration Management > Config Editor > Edit > Set Job Policies .
Set up editing preferences.	Set up your editing preferences. Config Editor remembers your preferred mode even across different invocations of the application. After you open a file in a specific mode, you can view it only in that mode until you unlock it.	Select Resource Manager Essentials > Configuration Management > Config Editor > Edit > Preferences .
View changes.	View the changes to the checked-out file. Essentials compares the current file with the checked-out version.	Select Resource Manager Essentials > Configuration Management > Config Editor > Tools > Show Changes Made .
Compare versions of the configuration files.	Compare the current file with any version in the configuration archive.	Select Resource Manager Essentials > Configuration Management > Config Editor > Tools > Compare .
Enter comment lines.	Enter comment lines while editing a configuration file.	Select Resource Manager Essentials > Configuration Management > Config Editor > Tools > Insert Comment Line .
List checked out files.	View a list of files checked out by all users.	Select Resource Manager Essentials > Configuration Management > Config Editor > Tools > List Checked Out Files .

Table 2-7 Config Editor Tasks (continued)

Task	Purpose	Action
Browse and edit Config Editor jobs.	Browse the Config Editor jobs that are registered on the system and edit them as necessary.	<ol style="list-style-type: none"> 1. Select Resource Manager Essentials > Configuration Management > Config Editor > Tools > Job Browser. 2. Select a job record. 3. Click Edit Job, Copy Job, Remove Job, Stop Job, or Job Details.
View job details.	View detailed information about a registered Config Editor job. You can also edit a job from its detailed view.	<ol style="list-style-type: none"> 1. Select Resource Manager Essentials > Configuration Management > Config Editor > Tools > Job Browser. 2. Select a job record. 3. Click Job Details. 4. Click Edit Job, Copy Job, Remove Job, Stop Job, or Print Job.

**Note**

Do not launch NetConfig and ConfigEditor from the same browser.

Contract Connection

Contract Connection lets you verify which of your Cisco IOS devices are covered by a service contract. Contract Connection uses Inventory Manager, Cisco Connection Online (CCO), and Contract Agent, Cisco's internal tracking service, to provide the status of your service coverage.

Contract Connection provides details on:

- A list of contracts from the Contract Agent
- Managed Cisco IOS devices from the Essentials package database

To view contract status, however, you must have login privileges to the CCO web site and a CCO profile that enables access to the Contract Agent.

Table 2-8 shows the task you can accomplish with the Contract Connection application.

Table 2-8 Contract Connection Task

Task	Purpose	Action
Check the status of a contract.	Check which of your Cisco IOS managed devices are covered by a service contract and review contract details.	Select Resource Manager Essentials > Contract Connection > Check Contract Status .

Device Views

Several Essentials applications use device views. Creating a view using the Device Views application enables you to run reports for specific devices based on common attributes or user-defined characteristics.

Table 2-9 shows the tasks that you can accomplish with the Device Views application.

Table 2-9 Device Views Tasks

Task	Purpose	Action
Add static views.	Create views to monitor a specific group of devices in your network inventory.	Select Resource Manager Essentials > Administration > Device Views > Add Static Views .
Add dynamic views.	Create views to monitor devices with common attributes, such as device type. Any new managed device added to inventory that fits the listed attributes is automatically incorporated into the dynamic view.	Select Resource Manager Essentials > Administration > Device Views > Add Dynamic Views .
Change static views.	Modify static views.	Select Resource Manager Essentials > Administration > Device Views > Change Static Views .
Delete views.	Delete any views you have created.	Select Resource Manager Essentials > Administration > Device Views > Delete Views .

Table 2-9 *Device Views Tasks (continued)*

Task	Purpose	Action
Browse dynamic views.	Determine which devices belong to the dynamic views.	Select Resource Manager Essentials > Administration > Device Views > Browse Dynamic Views.
Browse device membership.	Determine which views a device belongs to.	Select Resource Manager Essentials > Administration > Device Views > Browse Device Membership.

Inventory

The Inventory application lets you:

- Import devices from databases or files.
- Export device information to files.
- Add, delete, change, and list devices in your network inventory.
- Schedule polling and collection to update your network inventory.
- Display reports and graphs of your hardware and software inventory and create Inventory custom reports.
- Check and change device attributes.
- Display a Year 2000 compliance report.
- Change system-wide configuration for SNMP, SMTP, proxy and rcp settings.
- Allow other network management systems to manipulate Essentials devices.

Table 2-10 shows the tasks you can accomplish with the Inventory application.

Table 2-10 Inventory Manager Tasks

Task	Purpose	Action
List managed devices.	Determine whether a particular device is managed by displaying devices that have inventory data.	Select Resource Manager Essentials > Administration > Inventory > List Devices .
Add devices.	Add devices individually by specifying basic device information for each.	Select Resource Manager Essentials > Administration > Inventory > Add Devices .
Import devices from a file.	Import devices in bulk from a comma separated values (CSV) file or a device integration file (DIF) instead of adding them individually.	Select Resource Manager Essentials > Administration > Inventory > Import from File .
Import device data from a local host.	<p>Import device data from a supported network management system (NMS) database residing on the local host.</p> <p>Device import supports these NMS databases:</p> <ul style="list-style-type: none"> • HP OpenView (Windows NT, Solaris, and HP-UX only) • Cisco WAN Manager (Solaris only) • Tivoli NetView (Windows NT and AIX only) • CiscoWorks (Solaris, HP-UX and AIX only) 	Select Resource Manager Essentials > Administration > Inventory > Import from Local NMS .

Table 2-10 Inventory Manager Tasks (continued)

Task	Purpose	Action
Import device data from a remote host.	<p>Import device data from a supported NMS database residing on a remote host.</p> <p>Device import supports these NMS databases:</p> <ul style="list-style-type: none"> • CiscoWorks for Switched Internetworks (CWSI) • HP OpenView • Cisco WAN Manager (Solaris only) • CiscoWorks • Tivoli NetView (running on remote AIX hosts only) 	Select Resource Manager Essentials > Administration > Inventory > Import from Remote NMS.
Check status of import from local host, remote host, or file.	Determine whether a device import was successful and rectify the import if the device remains unmanaged.	Select Resource Manager Essentials > Administration > Inventory > Import Status.
Delete managed devices.	Delete managed devices, including all the related device information, that you no longer track.	Select Resource Manager Essentials > Administration > Inventory > Delete Devices.
View status of deleted devices.	View the status of deleted devices and see which ones are in a suspended state.	Select Resource Manager Essentials > Administration > Inventory > Delete Device Status.

Table 2-10 Inventory Manager Tasks (continued)

Task	Purpose	Action
Change device attributes.	Change these device attributes on selected devices: <ul style="list-style-type: none"> • SNMP read and write community strings • Telnet passwords • TACACS usernames and passwords • Enable TACACS usernames and passwords • Enable secret passwords • Local usernames and passwords • User fields • Device serial numbers 	Select Resource Manager Essentials > Administration > Inventory > Change Device Attributes .
Export devices to a file.	Export your device and device access information to an output file in CSV or DIF format.	Select Resource Manager Essentials > Administration > Inventory > Export to File .
Create and view inventory custom reports.	Create a customized report that gathers all or any of this information about specified devices: <ul style="list-style-type: none"> • IP address • User field • RAM size • Flash size • Port count • Hardware version • Card type • Serial number • SAA information 	Select Resource Manager Essentials > Administration > Inventory > Custom Reports . To view a previously-created report, select Resource Manager Essentials > Inventory > Custom Reports .

Table 2-10 Inventory Manager Tasks (continued)

Task	Purpose	Action
Define filters for change reports.	Define filters that determine what data is displayed in your inventory change reports.	Select Resource Manager Essentials > Administration > Inventory > Inventory Change Filter .
Schedule inventory collection.	Schedule polling and collection to update your network inventory.	Select Resource Manager Essentials > Administration > Inventory > Schedule Collection .
Run inventory collection.	Run inventory collection as a one-time event for specific devices.	Select Resource Manager Essentials > Administration > Inventory > Update Inventory .
Schedule device polling.	Schedule periodic polling of managed devices. Since the poller uses fewer network resources, you should schedule inventory polling to run more frequently than inventory collection.	Select Resource Manager Essentials > Administration > Inventory > Inventory Poller .
Run an inventory 24-hour report.	Determine what inventory changes were made in the last 24 hours.	Select Resource Manager Essentials > 24-Hour Reports > Inventory Change Report .
View a hardware report.	View user-specified hardware information for each device.	Select Resource Manager Essentials > Inventory > Hardware Report .
View a software report.	View user-specified software information for each device.	Select Resource Manager Essentials > Inventory > Software Report .
View information about devices.	View detailed hardware, software, chassis, and interface information for multiple devices.	Select Resource Manager Essentials > Inventory > Detailed Device Report .
View a device Y2K compliance report.	View which managed devices are compliant to the year 2000. Compliance is determined by device type and software version.	Select Resource Manager Essentials > Inventory > Year 2000 Report .

Table 2-10 Inventory Manager Tasks (continued)

Task	Purpose	Action
View device information within device classes.	View a bar chart of the distribution of all managed devices among the recognized device classes.	Select Resource Manager Essentials > Inventory > Hardware Summary Graph .
View the software versions in each device class.	View a bar chart of the distribution of the major and minor software versions running on your selected devices in each device class.	Select Resource Manager Essentials > Inventory > Software Version Graph .
View device information in each device class.	View a bar chart showing the distribution of your selected devices in each device class.	Select Resource Manager Essentials > Inventory > Chassis Summary Graph .
View a summary of chassis slots.	View the total number of selected devices and the number of devices with free slots for each device class that supports capacity planning.	Select Resource Manager Essentials > Inventory > Chassis Slot Summary .
View the chassis slot details.	View the total slots, available slots, location, and userfield information for each device.	Select Resource Manager Essentials > Inventory > Chassis Slot Details .
View details on multiservice ports.	Check the switch multiservice ports, which support voice traffic, to make sure the power supply is adequate for the number of multiservice modules installed in each switch.	Select Resource Manager Essentials > Inventory > MultiService Port Details .
Verify community strings, usernames, and passwords.	Ensure that the database used to store the community strings and passwords remains synchronized with the actual devices. Detect errors made when devices were added or imported.	Select Resource Manager Essentials > Administration > Inventory > Check Device Attributes .

Table 2-10 Inventory Manager Tasks (continued)

Task	Purpose	Action
View attribute check results.	View the results of updated device attributes.	Select Resource Manager Essentials > Administration > Inventory > View Check Results .
View historical data.	View all historical data associated with scheduled inventory collection. It shows the last run, duration, devices scanned, and average scan time.	Select Resource Manager Essentials > Inventory > Scan History .

System Configuration

System Configuration lets you configure system-wide information on the CiscoWorks2000 server. In this way, you can centrally locate information that is used by more than one Essentials application.



Note

Network administrators should set this information carefully. If they introduce errors, users may not be able to log in.

Table 2-11 shows the tasks that you can accomplish with System Configuration.

Table 2-11 System Configuration Tasks

Task	Purpose	Action
Set up a proxy URL.	Enable applications to connect to CCO. If the server access to the outside world is controlled through a proxy server, this must be configured.	Select Resource Manager Essentials > Administration > System Configuration , then select the Proxy tab.
Define SNMP timeouts and retries.	Specifies the time for timeouts and the number of retries to use when querying devices for inventory collection.	Select Resource Manager Essentials > Administration > System Configuration , then select the SNMP tab.

Table 2-11 System Configuration Tasks (continued)

Task	Purpose	Action
Define the SMTP server name.	Add and modify command-line instructions to be run automatically whenever Syslog Analysis receives a specific message type.	Select Resource Manager Essentials > Administration > System Configuration , then select the SMTP tab.
Define RCP usernames.	Specify the username used to authenticate RCP transfers between the devices and the server for remote operations.	Select Resource Manager Essentials > Administration > System Configuration , then select the RCP tab.

Job Approval

Job Approval is used by other applications to require that a job be approved before it can run. Job Approval sends job requests via e-mail to the users on a job's approver list. If none of the approvers approves the job by its scheduled run time, or if an approver rejects the job, the job is moved to the rejected state and will not run.

When Job Approval is enabled, applications that use it require that the user do the following for each job that is scheduled:

- Assign one or more approver lists to the job
- Schedule the job to run in the future, rather than immediately

Table 2-12 shows the tasks that can be accomplished with the Job Approval application.

Table 2-12 Job Approval Tasks

Task	Purpose	Action
Approve or reject jobs.	Approve or reject a job for which you are an approver.	Select Resource Manager Essentials > Administration > Job Approval > Approve or Reject Jobs .
Set up Job Approval.	Enable or disable the application.	Select Resource Manager Essentials > Administration > Job Approval > Edit Preferences .

Table 2-12 Job Approval Tasks (continued)

Task	Purpose	Action
Create an approver list.	Create a new approver list.	Select Resource Manager Essentials > Administration > Job Approval > Create Approver List .
Edit an approver list.	Edit an existing approver list.	Select Resource Manager Essentials > Administration > Job Approval > Edit Approver List .
Enable jobs	Enable all imported RME jobs.	Select Resource Manager Essentials > Administration > Job Approval > Enable Jobs .

Software Management

The Software Management application automates the steps associated with upgrade planning, scheduling, downloading software images, and monitoring your network.

Table 2-13 shows the tasks you can accomplish with the Software Management application.

Table 2-13 Software Management Tasks

Task	Purpose	Action
Set up your software management preferences.	Specify information such as history page size, the directory where images are stored, the pathname of the user-supplied script to run before and after each device software upgrade.	Select Resource Manager Essentials > Administration > Software Management > Edit Preferences .

Table 2-13 Software Management Tasks (continued)

Task	Purpose	Action
Add images to the library.	Import images from all Software Management-supported devices in your network into the software image library.	Select Resource Manager Essentials > Software Management > Library > Add Images .
	Download images from CCO into the software image library.	
	Add images from a device to the software image library.	
	Add images from a filesystem to the software image library.	
Browse the library.	Generate a report of all the images in the software image library. You can also delete images from the image library and edit image attributes.	Select Resource Manager Essentials > Software Management > Library > Browse Images .
	Search the library.	
Search the library.	Generate a report of a subset of images in the software image library, based on details such as, device type, image type, and version. You can also delete images from the image library and edit image attributes.	Select Resource Manager Essentials > Software Management > Library > Search for Images .
View a synchronization report.	Generate a synchronization report to determine which Software Management-supported devices are running software images not in the software image library.	Select Resource Manager Essentials > Software Management > Library > Synchronization Report .
Schedule a synchronization job.	Specify the date, time, and frequency of a synchronization job.	Select Resource Manager Essentials > Administration > Software Management > Schedule Synchronization Job .
	Cancel a scheduled synchronization job.	
Create approver lists.	Specify who can approve the various tasks necessary during a software upgrade.	Select Resource Manager Essentials > Administration > Job Approval > Create Approver List .

Table 2-13 Software Management Tasks (continued)

Task	Purpose	Action
Edit or delete approver lists.	Edit and delete the list specifying who can approve tasks during a software upgrade.	Select Resource Manager Essentials > Administration > Job Approval > Edit Approver List .
Schedule image upgrade jobs.	Schedule device upgrades with the selected images.	Select Resource Manager Essentials > Software Management > Distribution > Distribute Images .
	After you schedule and complete the image upgrade job, you can undo the upgrade and roll back to the previous image.	Select Resource Manager Essentials > Software Management > Job Management > Browse Jobs .
Plan an upgrade from CCO.	Determine the impact to and prerequisites for a new software deployment using images that reside in CCO.	Select Resource Manager Essentials > Software Management > Distribution > CCO Upgrade Analysis .
Plan an upgrade from the library.	Determine the impact to and prerequisites for a new software deployment using images in your software library.	Select Resource Manager Essentials > Software Management > Distribution > Library Upgrade Analysis .
Review scheduled jobs or undo an upgrade.	Review, modify, or remove schedule jobs. You can also retry failed jobs and undo completed image upgrade jobs.	Select Resource Manager Essentials > Software Management > Job Management > Browse Jobs .
View consolidated job information.	View a report of device upgrade results for selected jobs.	Select Resource Manager Essentials > Software Management > Job Management > Consolidated Job Report .
View recent software upgrade results.	Generate a report summarizing the most recent device software upgrade results stored in the history database.	Select Resource Manager Essentials > 24-Hour Reports > Software Upgrade Report .
Mail or copy log files.	Mail or copy log files if requested to do so by Cisco Support after you report abnormal Software Management behavior. Delete unnecessary log files after mailing or copying them.	Select Resource Manager Essentials > Software Management > Job Management > Mail or Copy Log File .

Table 2-13 Software Management Tasks (continued)

Task	Purpose	Action
Browse history.	Generate a summary of device software upgrades stored in the history database.	Select Resource Manager Essentials > Software Management > History > Browse History.
Search history by device.	Generate a summary of software upgrades for selected devices.	Select Resource Manager Essentials > Software Management > History > Search History by Device.
Search history by user.	Generate a summary of software upgrades performed by a particular user.	Select Resource Manager Essentials > Software Management > History > Search History by User.
Browse bugs.	Compare images running on software management supported devices in your network with the images on CCO and report catastrophic and severe bugs specific to your network. Identify devices running deferred software images.	Select Resource Manager Essentials > Software Management > Bug Reports > Browse Bugs.
Schedule a Browse Bugs job.	Specify the date, time, and frequency of a Browse Bugs job. Cancel a scheduled Browse Bugs job.	Select Resource Manager Essentials > Administration > Software Management > Schedule Browse Bugs Job.
Browse bugs by device.	Generate a summary of software image bugs for a group of devices.	Select Resource Manager Essentials > Software Management > Bug Report > Browse Bugs by Device.
Locate devices by bugs.	Search for known bugs that could affect the devices on your network.	Select Resource Manager Essentials > Software Management > Bug Report > Locate Devices by Bugs.
Update upgrade information.	Update the source for upgrade knowledge base files. The source can be either CCO or a local file.	Select Resource Manager Essentials > Administration > Software Management > Update Upgrade Info.

Syslog Analysis

The Syslog Analysis application lets you centrally log and track system error messages, exceptions, and other information, such as device configuration changes. Use logged error message data to analyze router and network performance.

Before you can use Syslog Analysis, you must configure your routers and switches to forward messages either to the Essentials server directly or to a system on which you have installed a Syslog Analyzer collector.

The collector filters and forwards the messages to the Essentials server. Refer to the online help for information on configuring network devices for Syslog Analysis and for installing a remote Syslog Analyzer collector.

Table 2-14 shows the tasks you can accomplish with the Syslog Analysis application.

Table 2-14 Syslog Analysis Tasks

Task	Purpose	Action
Set up data storage options.	Configure how long to store data, the maximum number of messages to store, and the message source. Be sure to restart your machine for the Message Source changes to take effect.	Select Resource Manager Essentials > Administration > Syslog Analysis > Change Storage Options.
Define custom reports.	Select the message types you want reported or change existing reports. Modify the standard reports provided with Essentials or delete reports you no longer use. You can also enable 24-hour reporting.	Select Resource Manager Essentials > Administration > Syslog Analysis > Define Custom Reports.

Table 2-14 Syslog Analysis Tasks (continued)

Task	Purpose	Action
Define automated actions.	Add and modify command-line instructions to be executed automatically whenever Syslog Analyzer receives a specific message type. Modify existing actions and delete actions you no longer use. You can also enable or disable actions.	Select Resource Manager Essentials > Administration > Syslog Analysis > Define Automated Action.
Define message filters.	Exclude messages you do not want reported. You can also enable or disable filtering.	Select Resource Manager Essentials > Administration > Syslog Analysis > Define Message Filter.
View status.	View the status of your Syslog Collector. You can view the status of the local and all the remote collectors that have been configured to use the Essentials server as the forwarding server.	Select Resource Manager Essentials > Administration > Syslog Analysis > Syslog Collector Status.
Change your URL.	Link your message reports to a customized web page. You can do this only if you know basic CGI programming.	Select Resource Manager Essentials > Administration > Syslog Analysis > Change User URL.
Generate a severity level summary.	Generate summaries of messages about selected devices sorted by severity level.	Select Resource Manager Essentials > Syslog Analysis > Severity Level Summary.
Generate a standard report.	Generate a system message report for a device or a set of devices. You can generate the report for the current date, or for any date in the previous week, or for all dates. You can include all the messages, or choose the severity level or alert type for which the report should be generated.	Select Resource Manager Essentials > Syslog Analysis > Standard Reports.

Table 2-14 Syslog Analysis Tasks (continued)

Task	Purpose	Action
Generate a custom report.	Generate a full custom syslog report. You can select a report from the custom syslog reports that are defined in Administration.	Select Resource Manager Essentials > Syslog Analysis > Custom Reports .
	Generate a summary custom syslog report. You can see a summary of the various reports.	Select Resource Manager Essentials > Syslog Analysis > Custom Report Summary .
Generate a report for unmanaged devices.	Generate a syslog information report on all unmanaged devices in your network.	Select Resource Manager Essentials > Syslog Analysis > Unexpected Device Report .
Capture syslog messages.	Capture syslog messages generating from MCS servers running WF application.	Select Resource Manager Essentials > Syslog Analysis > WorkFlow Report .
Generate a 24-hour syslog report.	Generate a report for the past 24 hours. The report can be a custom report created by a system administrator or a default report.	Select Resource Manager Essentials > 24-Hour Reports > Syslog Messages .

