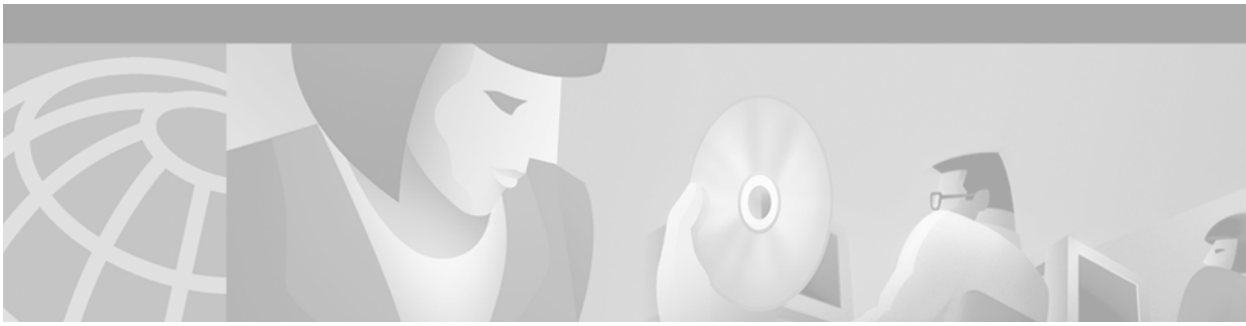


Task 8—Using CiscoWorks 2000 Resource Manager Essentials

About CiscoWorks 2000 RME

Cisco Works 2000 Resource Manager Essentials (CW2000 RME) is an element manager used to routinely manage Cisco equipment.

In this case study, CW2000 RME is used for the following tasks:

- Inspecting syslogs to isolate faults and device problems.
- Sorting syslog messages based on device and date.
- Polling for device and interface status.
- Backing up and restoring Cisco IOS configurations (images and configuration files).

The following installation assumptions are made in this case study:

- CW2000 maintenance release 2 has been installed on a Solaris workstation. RME version 2.2 is available.
- CW2000 is installed on the same Unix workstation as HP OpenView (HPOV).
- CiscoView uses HPOV as a starting point.

Table 33 Related References and Documents

Reference	URL
CiscoWorks 2000 TAC Support Page—Provides links to technical information for implementing, operating, and troubleshooting Cisco Works 2000.	http://www.cisco.com/pcgi-bin/Support/PSP/psp_view.pl?p=Software:CiscoWorks2000
CiscoWorks 2000 Documentation Set—A collection of configuration guides and reference manuals.	http://www.cisco.com/univercd/cc/td/doc/product/rtrmgmt/cw2000/index.htm

Importing Devices from HPOV and Populating the Databases

In this case study, CW2000 RME relies on the automatic-discovery mechanism in HPOV to discover devices in the network. CW2000 RME extracts the following information from the HPOV database after HPOV discovers the devices:

- SNMP community strings
- Device IP addresses
- Device names

Device information is stored in the following database locations:

- For HPOV, /var/opt/OV/share/databases
- For CW2000, /opt/CSCOpx/objects/db/px.db

Note Alternatively, you can use Cisco Works for Switched Internetworking (CWSI) to discover devices instead of using HPOV.

To import the list of devices and SNMP community strings from HPOV into CW2000 RME, follow these steps:

Step 1 Verify that the basic setup for HPOV is working correctly.

Incorrect SNMP community strings prevent polling cycles. For basic verification steps, see the "Task 7—Using HP OpenView to Create the SNMP Framework" section on page 101.

Step 2 From the root directory, verify that the HPOV database daemon is running in the background by entering the **ovstatus ovwdb** command:

```
aurora:/ ->ovstatus ovwdb
 object manager name: ovwdb
 state:               RUNNING
 PID:                 442
 last message:        Initialization complete.
 exit status:         -

aurora:/ ->
```

Note If a daemon is not running, try restarting it by using the commands **ovstop** *daemon-name* and **ovstart** *daemon-name*. If a daemon is still not running, an HPOV license issue may exist. For more information, go to http://www.openview.hp.com

Step 3 From a web browser, log in to CW2000 RME.

Step 4 Click on the **Admin** menu on the left toolbar.

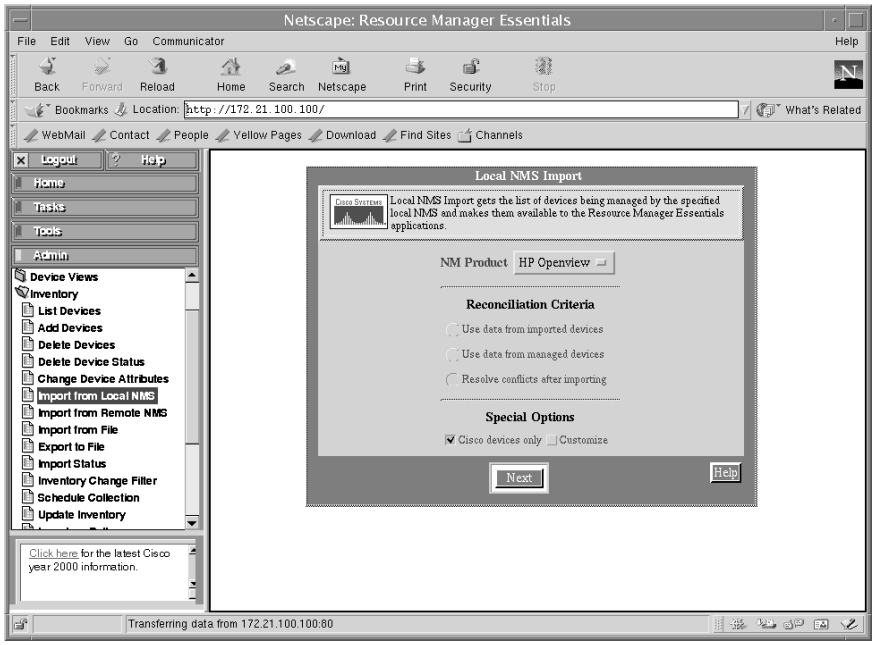
Step 5 Select **Inventory**: **Import from Local NMS**.

Step 6 In the Import from Local NMS screen:

- Select **HP Openview** from the NM Product rectangular-shaped menu.
- Choose **Resolve conflicts after importing**.
- Choose **Cisco devices only**.

The SNMP community strings are automatically set during the import operation.

Figure 33 Devices Imported from HP OpenView



Step 7 Click **Next**.

The devices are imported and a status summary appears.

Step 8 Click **Update** until you see all the devices classified as managed devices.

A constant pending or conflicting state indicates a problem that requires resolution:

- Inspect the details of the device.
- Verify that the SNMP community strings are correct.

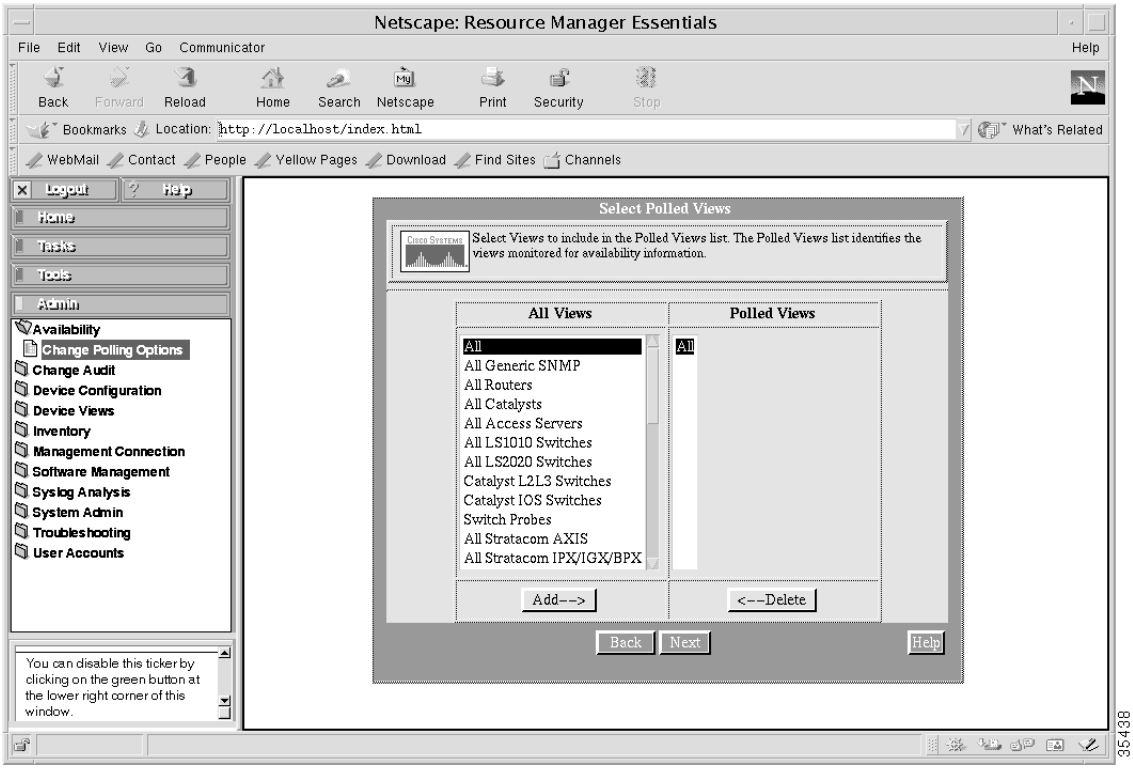
Verifying that Device Polling is Turned On

To verify that polling is enabled or to alter any polling settings, follow these steps.

Step 1 From the **Admin** menu, click on **Availability**: **Change Polling Options**.

Step 2 In the Select Polled Views screen, select **All Views** and **All Polled Views**.

Figure 34 Polling Setup



Step 3 Click **Next**.

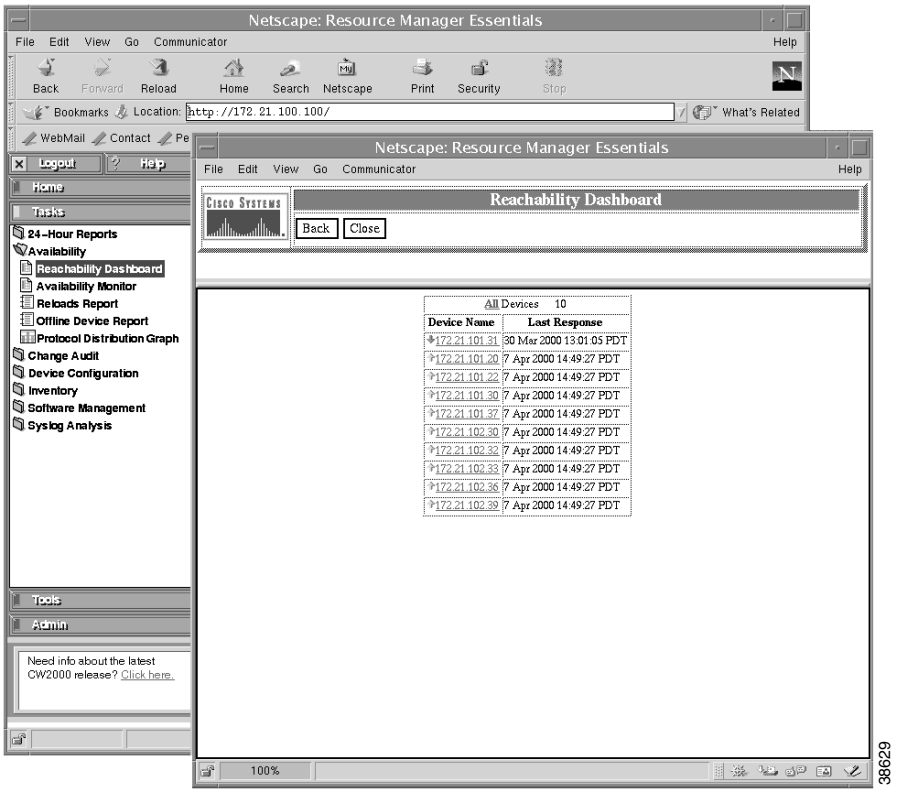
Step 4 To accept the default settings, click **Finish**.

Polling the Devices

To inspect the status and availability of the devices, follow these steps.

Step 1 From the **Tasks** menu, click on **Availability: Reachability Dashboard**.

Figure 35 The Status of the Devices

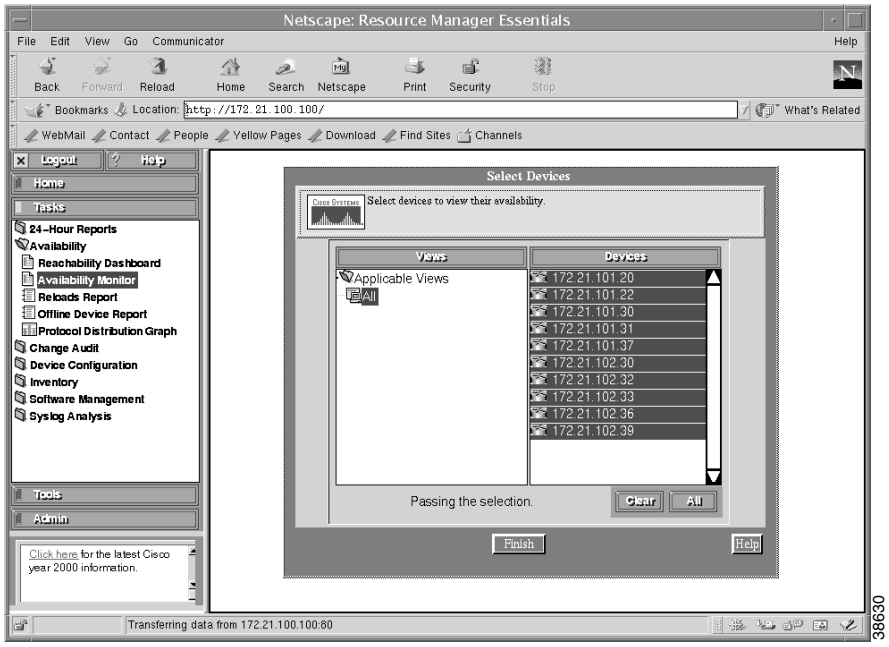


Step 2 Click a device to become familiar with the different management elements. Green arrows indicate devices that are up. Red arrows indicate devices that are down.

Step 3 To turn on continuous availability monitoring and reporting, go to the **Tasks** menu. Click on **Availability**: **Availability Monitor**.

Step 4 Select **All** in the Views window.

Figure 36 Devices Listed in the Availability Monitor



Step 5 Select one or more devices.

Step 6 Click **Finish**.

Step 7 Inspect the available elements for the devices.

Backing up Cisco IOS Configurations

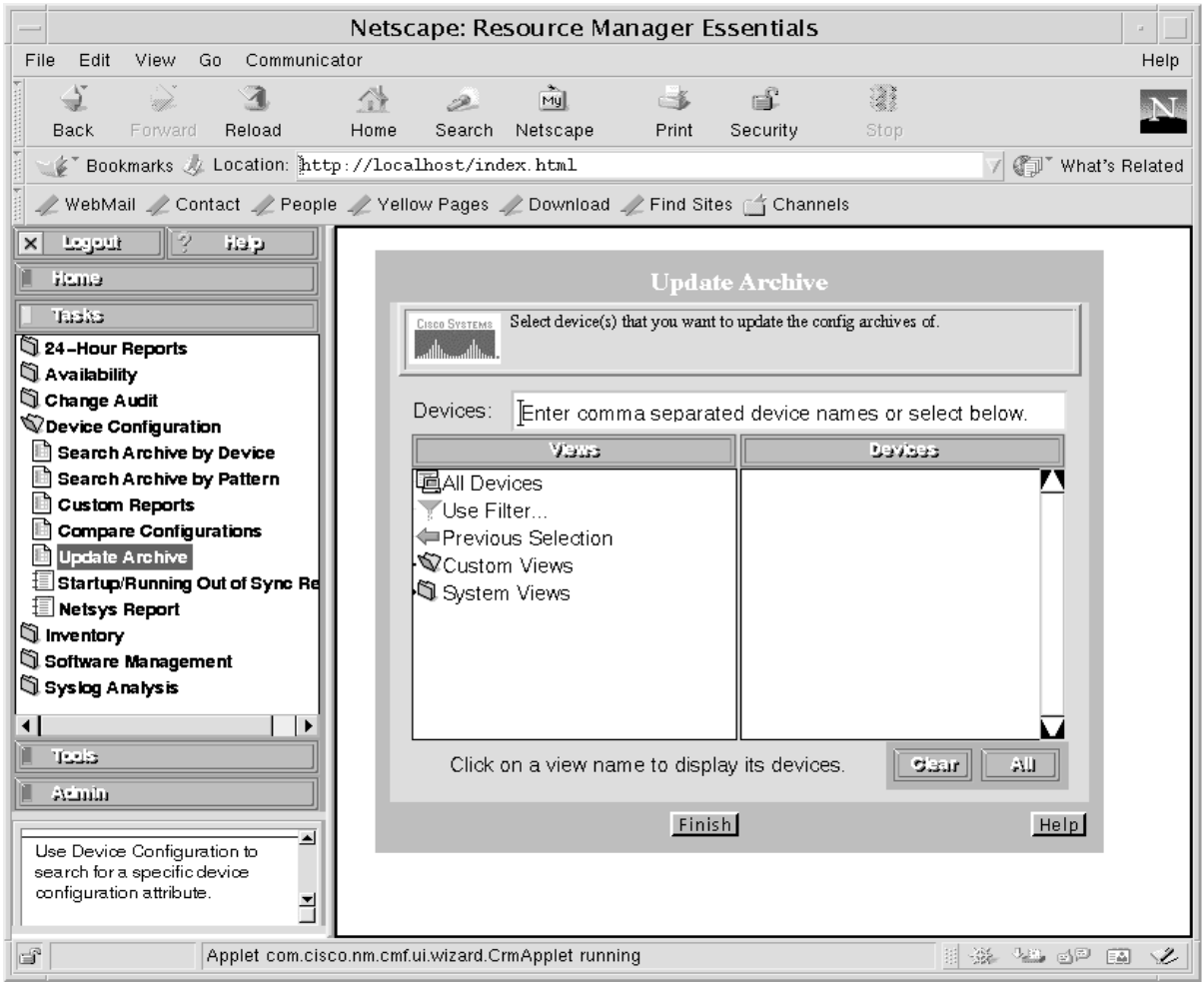
Having quick access to archived configuration files reduces network downtime when problems occur.

Note You can only back up managed devices.

To back up the Cisco IOS start-up configuration files for devices within the network, follow these steps:

Step 1 From the **Tasks** menu, select **Device Configuration**: **Update Archive**.

Figure 37 The Update Archive Screen



Step 2 Select **All Devices**.

Step 3 Select one or more devices from the list that appears.

Step 4 Click **Finish**.

The Cisco IOS start-up configuration file is copied from the router to the Unix workstation.

Using CiscoView

CiscoView is a GUI-based device management software application that lets you access dynamic status, statistics, and comprehensive configuration information for Cisco products.

To inspect device-specific characteristics on different Cisco devices, follow these steps:

Step 1 From the top-level map in HPOV, select a device.

Step 2 Go to **Monitor**: **CiscoView**.

Step 3 Select and view different system components.

Figure 38 Card Positions in the Cisco AS5800 Dial Shelf

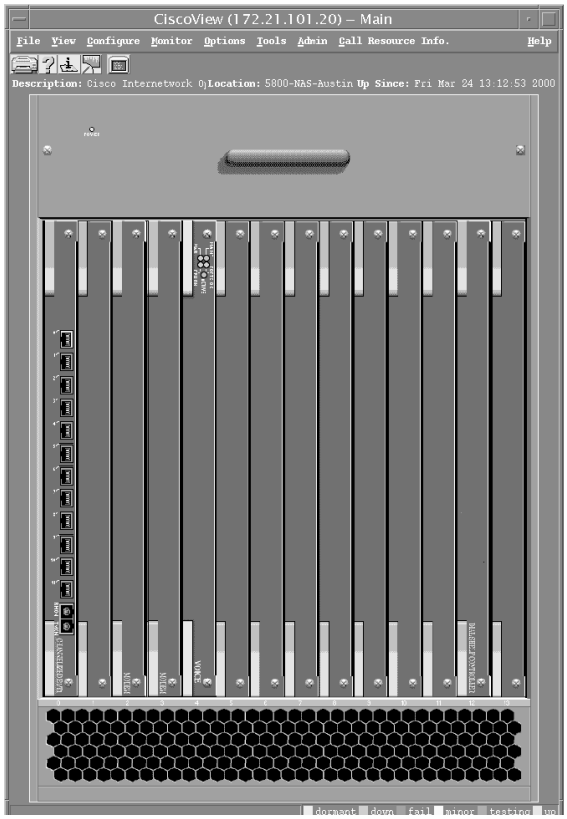


Figure 39 Available Modems in the Cisco AS5800 Dial Shelf