This chapter describes preparing to install and installing Resource Manager Essentials 3.1 on a Solaris system. It consists of:

• Product Overview
• Installation Overview
• Preparing to Install Essentials
• Installing Essentials
• Importing Data Manually after Installation
• Removing Essentials

Product Overview

Resource Manager Essentials (Essentials), one of the major components of CiscoWorks2000, enables the deployment, monitoring, and configuration of devices across your network. Essentials is a suite of web-based network management tools integrated into a network desktop that includes a web-server component, web-based tools, and web-browser capability. This product is based on a client/server network architecture that connects multiple web-based clients to a network server.

The Essentials 3.1 CD-ROM contains two installable packages: Essentials and Incremental Device Support (IDS). IDS enables you to download device support from CCO for newly supported devices.
Installation Overview

Table 1-1 is an overview of the Essentials installation. It contains references to more detailed information about each task.

**Table 1-1 Installing Essentials Overview**

<table>
<thead>
<tr>
<th>Task</th>
<th>Steps</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Prepare to install Essentials.</td>
<td>Verify that requirements are met.</td>
<td>“Preparing to Install Essentials” section on page 1-3</td>
</tr>
</tbody>
</table>
| 2. Install Essentials. | a. Mount the CD-ROM.  
b. Run the installation program. | “Performing a New Installation” section on page 1-9  
or  
“Upgrading from a Previous Version” section on page 1-11  
or  
“Reinstalling or Upgrading from the Evaluation Version” section on page 1-15 |
| 3. Troubleshoot the installation. | Analyze installation error messages. | Appendix A, “Troubleshooting the Installation” |
| 4. Perform post-installation tasks. | Configure the system and set up Essentials applications. | Chapter 2, “Preparing to Use Essentials Applications” |
Preparing to Install Essentials

This section describes prerequisites and other factors you should consider before installing Essentials.

Essentials Upgrade Paths

You can upgrade to Essentials 3.1 from Essentials 2.0, 2.1, 2.2, or 3.0. Upgrading directly to Essentials 3.1 from Cisco Resource Manager 1.0 or 1.1 is not supported.

The previous version of Essentials is removed when you install CiscoWorks2000 CD One, but the database is preserved. When you upgrade your server to Essentials 3.1, the preserved database is converted to Essentials 3.1 format.

Server Requirements and Recommendations

This section describes the server requirements and recommendations for CiscoWorks2000 CD One plus Essentials.

Minimum Server Requirements

The minimum system requirements for a CiscoWorks2000 Server running the CD One and Essentials software are shown in Table 1-2.
To verify the amount of available disk space in each of the specified partitions and directories, enter:

```
# df -k directory
```

where `directory` is the partition or directory for which you want to check the available disk space.

### Server Recommendations

Three major considerations can help you select or configure a server system that best meets your needs:

- The number of managed devices to be polled by the Availability application
- The number of syslog messages expected daily
- The number of managed devices expected in the Inventory and Configuration Management applications
Availability is the primary consideration. After that, you can consider syslog messages and managed device expectations and determine your needs accordingly. These factors affect server performance and user report response time.

Table 1-3 shows the recommendations for a server running CiscoWorks2000 CD One and Essentials. These recommendations produce optimal response time when running user reports.

### Client Requirements

The minimum client system requirements for CiscoWorks2000 CD One and Essentials are shown in Table 1-3.

Before you can access Essentials from a client system, the system must be properly configured. For more information about client system requirements and configuring clients, refer to *Installing and Setting Up CiscoWorks2000 CD One on Solaris*.

<table>
<thead>
<tr>
<th>Requirement Type</th>
<th>Minimum Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Software and Hardware</td>
<td>• Client system:</td>
</tr>
<tr>
<td></td>
<td>– IBM PC-compatible computer with 300 MHz Pentium processor running Windows NT 4.0 Workstation or server, Windows 95, or Windows 98.</td>
</tr>
<tr>
<td></td>
<td>– Solaris SPARCstation or Sun Ultra 10 running Solaris 2.5.1 or 2.6.</td>
</tr>
<tr>
<td></td>
<td>– IBM RS/6000 workstation running AIX 4.3.3.</td>
</tr>
<tr>
<td></td>
<td>– HP-UX workstation running HP-UX 10.20 or 11.0.</td>
</tr>
<tr>
<td></td>
<td>• Color monitor with video card set to 256 colors.</td>
</tr>
</tbody>
</table>
**Table 1-3  Client System Requirements Summary (continued)**

<table>
<thead>
<tr>
<th>Requirement Type</th>
<th>Minimum Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory (RAM)</td>
<td>128 MB.</td>
</tr>
</tbody>
</table>
| Browser          | One of the following browsers:  
|                  | • Microsoft Internet Explorer 5.0 or 5.01.  
|                  | Java Virtual Machine (JVM) versions 5.0.0.3.182 or current shipping version.  
|                  | (Windows NT, Windows 95/98)  
|                  | To verify the JVM version, select **View > Java Console**.  
|                  | • Netscape Navigator 4.6.1 or 4.7.  
|                  | (Windows NT, Windows 95/98, Solaris 2.5.1, Solaris 2.6.) |
Supported NMS Environments for Device Import

The Essentials Inventory application can import device information from both local and remote network management systems (NMS).

Table 1-4 and Table 1-5 show the NMSs supported for importing device information into the Essentials inventory. You can import devices remotely from a UNIX system only.

**Table 1-4 Supported NMS Software for Local Device Import**

<table>
<thead>
<tr>
<th>Software</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus Manager</td>
<td>3.0 (ANI)</td>
</tr>
<tr>
<td>Cisco WAN Manager</td>
<td>9.2</td>
</tr>
<tr>
<td>HP OpenView Network Node Manager</td>
<td>5.01 or 6.0</td>
</tr>
<tr>
<td>CiscoWorks</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Table 1-5 Supported NMS Software for Remote Device Import**

<table>
<thead>
<tr>
<th>Software</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus Manager</td>
<td>3.0 (ANI)</td>
</tr>
<tr>
<td>Cisco WAN Manager</td>
<td>9.2</td>
</tr>
<tr>
<td>CiscoWorks</td>
<td>4.0</td>
</tr>
<tr>
<td>CWSI (CiscoWorks for Switched Internetworks)</td>
<td>2.2, 2.3, 2.4</td>
</tr>
<tr>
<td>HP OpenView Network Node Manager</td>
<td>5.01 or 6.0</td>
</tr>
<tr>
<td>NetView</td>
<td>5.1 on AIX</td>
</tr>
</tbody>
</table>

1. You can remotely import device information from UNIX systems only.

For more information, see the “Adding or Importing Inventory Data” section on page 2-10 or refer to the online help.
Supported Netsys Versions

You can integrate the Configuration Management application with the following versions of Cisco Netsys:

- Version 4.2 for UNIX operating systems
- Version 4.0.1 for Windows NT

⚠️ **Caution**

If you plan to upgrade NetSys Integration, before proceeding with an upgrade installation, see the second procedure in the “Upgrading Netsys Integration” section on page 2-32.

For more information, see the “Setting Up Netsys Integration” section on page 2-31 or refer to the online help.

Supported Devices

Essentials 3.1 supports most of the devices supported in previous versions of Essentials plus additional new devices. Device adapter packages for all supported devices are installed when you install Essentials. Information about these devices can be found at http://www.cisco.com/univercd/cc/td/doc/product/rtrmgmt/cw2000/cw2000e/index.htm.

You can download device packages for new devices and find information about new device support from CCO at www.cisco.com.

To see a list of the device packages installed on your server, select **CiscoWorks2000 Server > About CiscoWorks2000 > Applications and Versions**. Click on the Inventory Manager link to see specific device information.
Installing Essentials

This section describes how to perform the following:

- A new installation (no previous version of Essentials installed)
- An upgrade on a system that did have a previous version of Essentials installed
- A reinstallation of Essentials 3.1 or upgrade from an evaluation version of Essentials 3.1

**Note**
You must install CiscoWorks2000 CD One before you can install Essentials. Refer to *Installing and Setting Up CiscoWorks2000 CD One on Solaris.*

Performing a New Installation

This section describes how to perform a new installation. If you are upgrading on a system that had a previous version of Essentials installed, see the “Upgrading from a Previous Version” section on page 1-11. If you are reinstalling Essentials 3.1 or upgrading from an evaluation version of Essentials 3.1, see the “Reinstalling or Upgrading from the Evaluation Version” section on page 1-15.

**Note**
If you want to import data from a previous version of Essentials that resides on a different server, perform the new installation by following the procedure in this section. After installing Essentials, import the data by following the procedure in the “Importing Data Manually after Installation” section on page 1-18.

Running the Installation Program for a New Installation

The Essentials installation takes approximately 30 minutes.

You can press Ctrl-C at any time to end the installation. However, any changes to your system (for example, installation of new files or changes to system files) will not be undone.
The installation program installs Essentials in the same location as CD One (/opt/CSCOpx by default) and starts CiscoWorks2000.

**Step 1**

As root, mount the Essentials CD-ROM using either of the following methods:

- Mount the CD-ROM on the CiscoWorks2000 Server system.
- Mount the CD-ROM on a remote Solaris system, then access the CD-ROM from the CiscoWorks2000 Server system.

See Appendix A, “Mounting and Unmounting the CD-ROM” for detailed mounting instructions.

**Step 2**

Start the installation program.

- For a local installation, enter:
  
  ```
  # cd /cdrom/cdrom0/
  # ./setup.sh
  ```

- For a remote installation, enter:
  
  ```
  # cd remotedir
  # ./setup.sh
  ```

  where `remotedir` is the remote location where the CD-ROM is mounted.

The installation program checks for required patches and other dependencies and displays:

1) Resource Manager Essentials
2) Resource Manager Essentials Incremental Device Support
3) All of the above

Select one of the items using its number or enter q to quit [q]

**Note**

Option 3 is the most likely choice for new installations of Essentials 3.1. If you try to install only one of the components without the other already on your machine, the installation fails.
Step 3  Enter 3 and press **Return**. The installation program checks dependencies and system requirements.

- If there is not enough disk space to install Essentials and IDS, the installation program displays an error message and stops.
- If the minimum requirements are not met, the installation program displays an error message and continues with the installation.

The installation finishes without displaying more questions, and the system prompt appears.

Step 4 Unmount and eject the CD-ROM. For details, see Appendix B, “Mounting and Unmounting the CD-ROM.”

If you had any errors, check the installation log file `/var/tmp/ciscoinstall.log`. For other troubleshooting information, see Appendix A, “Troubleshooting the Installation.”

### Upgrading from a Previous Version

This section describes how to install Essentials if you had Essentials 2.0, 2.1, 2.2 or 3.0 installed on the server and you want to upgrade to Essentials 3.1.

When you install CiscoWorks2000 CD One on a system that has a previous version of Essentials, the installation program removes the previous version and saves its database. The default location for the saved database is `/CW2000/OldData`. When you install Essentials 3.1, the installation program converts the saved database to Essentials 3.1 format. The original database also remains on the system until you remove it.

**Note**

If you chose not to remove the previous version of Essentials when you installed CiscoWorks2000 CD One and installed CD One on a clean system, follow the installation procedure in the “Performing a New Installation” section on page 1-9. Then import your existing data into Essentials 3.1 following the procedure in the “Importing Data Manually after Installation” section on page 1-18.
When performing an upgrade, it is important to install both the new IDS and Essentials. Installing Essentials 3.1 without the new IDS might yield unpredictable results.

Upgrading your CiscoWorks2000 Server to Essentials 3.1 involves the following major steps:

1. Save your data to a backup file before you perform the upgrade; if your installation fails, you can retrieve this saved data.
2. Run the Essentials installation program to install the new version and convert the database to Essentials 3.1 format.
3. Back up the converted database to create a backup compatible with Essentials 3.1.

Caution The database backup and restore options for one version of Essentials are not supported by other versions. When upgrading your server, follow the installation procedures in this section to convert and import your database.

Back up your previous database

To back up your database:

Step 1 Access the CiscoWorks2000 desktop and log in. For information, see the “Accessing the Server” section on page 2-6 and the “Logging In” section on page 2-7.

Step 3 Enter the pathname of the target directory. It is recommended that you use a different directory from the directory where Essentials is located, for example, /rme/backups.

Step 4 To begin the backup, click **Finish**. This process could take some time to complete.

For more information, see the online help.

**Running the Installation Program for an Upgrade**

The Essentials installation takes approximately 30 minutes.

You can press **Ctrl-C** at any time to end the installation. However, any changes to your system (for example, installation of new files or changes to system files) will not be undone.

The installation program installs Essentials in the same location as CD One (/opt/CSCOpx by default) and starts CiscoWorks2000.

---

**Step 1** Run a backup database of your old data in case the installation fails.

**Step 2** As root, mount the Essentials CD-ROM using either of the following methods:

- Mount the CD-ROM on the CiscoWorks2000 Server system.
- Mount the CD-ROM on a remote Solaris system, then access the CD-ROM from the CiscoWorks2000 Server system.

See Appendix B, “Mounting and Unmounting the CD-ROM” for instructions.

**Step 3** Start the installation program.

- For a local installation, enter:

  ```
  # cd /cdrom/cdrom0/
  # ./setup.sh
  ```

- For a remote installation, enter:

  ```
  # cd remotedir
  # ./setup.sh
  ```

  where **remotedir** is the remote location where the CD-ROM is mounted.
The installation program checks for required patches and other dependencies and displays:

1) Resource Manager Essentials
2) Resource Manager Essentials Incremental Device Support
3) All of the above
Select one of the items using its number or enter q to quit [q]

**Note**  Option 3 is the most likely choice for an upgrade. If you try to install only one of the components without the other already on your machine, the installation fails. You would use option 2, IDS alone, only if at a later time you receive a new version of IDS.

**Step 4**  Enter an option number and press **Return**. The installation program checks dependencies and system requirements.

- If there is not enough disk space to install Essentials and IDS, the installation program displays an error message and stops.
- If the minimum recommended requirements are not met, the installation program displays an error message and continues installing.

The installation proceeds without displaying more questions and the system prompt appears.

**Step 5**  Unmount and eject the CD-ROM. For instructions, see Appendix B, “Mounting and Unmounting the CD-ROM.”

If you had any errors, check the installation log file /var/tmp/ciscointall.log. For other troubleshooting information, see Appendix A, “Troubleshooting the Installation.”
Backing Up the Converted Database

If the Essentials installation was successful, back up your newly converted database. This creates a backup compatible with Essentials 3.1 in case you have a problem and need to restore your database. This also prevents overwriting your database by restoring a database backup from the previous version of Essentials.

---

**Step 1**  
Access the CiscoWorks2000 desktop and log in. For information, see the “Accessing the Server” section on page 2-6 and the “Logging In” section on page 2-7.

**Step 2**  
Select **CiscoWorks2000 Server > Administration > Database Management > Back Up Data Now**. The Back Up Data Now dialog box appears.

**Step 3**  
Enter the pathname of the target directory. It is recommended that you use a different directory from the directory where Essentials is located, for example, /rme/backups.

**Step 4**  
To begin the backup, click **Finish**. This process could take some time to complete.

---

For more information, see the online help.

Reinstalling or Upgrading from the Evaluation Version

This section explains how to reinstall Essentials 3.1 or upgrade from an evaluation version of Essentials 3.1.

---

**Note**  
If you have installed a version of Incremental Device Support (IDS) that is newer than the version on the Essentials 3.1 CD-ROM, the installation program will not overwrite the newer version.

---

The installation program detects that you have already installed Essentials 3.1. Your existing database is not affected by the reinstallation; however, you should back up the database before installing to prevent any possible loss of data. Your CiscoWorks2000 Server system configuration is also preserved.
Reinstalling Essentials 3.1 involves the following major steps:

1. Backing up the database, following the procedure in the next section.
2. Running the installation program, following the procedure in the “Running the Installation Program to Reinstall” section on page 1-16.

**Backing Up Your Previous Database**

To back up your database:

---

**Step 1** Access the CiscoWorks2000 desktop and log in. For information, see the “Accessing the Server” section on page 2-6 and the “Logging In” section on page 2-7.

**Step 2** Select **CiscoWorks2000 Server > Administration > Database Management > Back Up Data Now**. The Back Up Data Now dialog box appears.

**Step 3** Enter the pathname of the target directory. It is recommended that you use a different directory from the directory where Essentials is located, for example, /rme/backups.

**Step 4** To begin the backup, click **Finish**. This process could take some time to complete.

---

For more information, see the online help.

**Running the Installation Program to Reinstall**

The Essentials installation takes approximately 30 minutes.

You can press **Ctrl-C** at any time to end the installation. However, any changes to your system (for example, installation of new files or changes to system files) will not be undone.
The installation program installs Essentials in the same location as CD One (/opt/CSCOpx by default) and starts CiscoWorks2000.

**Step 1**

As root, mount the Essentials CD-ROM using either of the following methods:

- Mount the CD-ROM on the CiscoWorks2000 Server system.
- Mount the CD-ROM on a remote Solaris system, then access the CD-ROM from the CiscoWorks2000 Server system.

See Appendix B, “Mounting and Unmounting the CD-ROM” for detailed mounting instructions.

**Step 2**

Start the installation program.

- For a local installation, enter:
  ```
  # cd /cdrom/cdrom0/
  # ./setup.sh
  ```

- For a remote installation, enter:
  ```
  # cd remotedir
  # ./setup.sh
  ```

  where `remotedir` is the remote location where the CD-ROM is mounted.

The installation program displays:

1) Resource Manager Essentials
2) Resource Manager Essentials Incremental Device Support
3) All of the above
Select one of the items using its number or enter q to quit [q]

**Step 3**

Enter 3 to reinstall all components, and press Return.

---

**Note**

If you have installed a newer version of IDS since installing Essentials 3.1 the first time, enter 1 instead. The installation program fails if you attempt to overwrite a newer version of IDS with an older version.

The installation program checks dependencies and system requirements and displays:

CiscoWorks2000 has been detected on your system, are you sure you want to reinstall (y/n) [n]
Step 4 Enter y to continue.

The installation program checks dependencies and system requirements.

- If there is not enough disk space to install Essentials plus IDS, and you have below Service Pack 5, the installation program displays an error message and stops.
- If the minimum recommended requirements are not met, the installation program displays an error message.

The installation proceeds without displaying more questions, and the system prompt appears.

Step 5 Unmount and eject the CD-ROM. For instructions, see Appendix B, “Mounting and Unmounting the CD-ROM.”

If you had any errors, check the installation log file /var/tmp/ciscoinstall.log. For other troubleshooting information, see Appendix A, “Troubleshooting the Installation.”

Importing Data Manually after Installation

This section describes how to import data manually from Essentials 2.2 or earlier. If you are upgrading from Essentials 3.0 to version 3.1, you do not need to change the format of your data or import data manually. You might need to import manually if:

- You performed a new installation of Essentials 3.1 but have data from Essentials 2.2 or earlier that is installed on a different system.
- You performed an upgrade from Essentials 2.2 or earlier to version 3.1 but there was not enough disk space to convert and import the saved older version’s data in the default location.
Note

The following procedure does not remove the original database.

Step 1  Install CiscoWorks2000 CD One and Essentials.

Step 2  Log in as root on the CiscoWorks2000 Server system on which you installed Essentials 3.1.

Step 3  To give the CiscoWorks2000 database access to the older Essentials data, do one of the following:
   • Mount the directory containing the older Essentials data.
   • Copy the saved older Essentials data to the CiscoWorks2000 Server.

Step 4  Enter:

```
# cd /opt/CSCOpx/conf/bg2rigel/scripts
# ./bg2rigel.pl -I path rme
```

where `path` is the pathname of the directory in which the older Essentials data resides.

Removing Essentials

The uninstallation program removes files and settings. Uninstallation allows you to remove only Essentials or remove CiscoWorks2000 CD One as well. To remove CD One, you must remove Essentials as well.

Before removing Essentials, you must first remove any applications that depend on Essentials. These are the applications for which installing Essentials is a prerequisite.
Caution

You must use the Essentials uninstall program to remove the product. If you try to remove Essentials manually, you can damage your system. Uninstalling the Essentials software removes IDS and the database as well.

Uninstallation takes about 30 minutes.

Note

The Software Management application stores images that are not removed by the Essentials uninstallation procedure. If you want to permanently remove Essentials, you must manually remove these files from /opt/CSCOpx/files/sw_images.

Step 1

Enter the following commands as root to start the uninstall program:

```bash
# cd /
# /opt/CSCOpx/bin/uninstall.sh
```

where /opt/CSCOpx is the default installation directory. If you specified a different directory when you installed CD One, substitute the name of that directory.

The following prompt appears:

1) CD One (including Integration Utility)
2) Resource Manager Essentials
3) All of the above
Select one of the items using its number or enter q to quit [q]

Note

You cannot uninstall CD One without uninstalling Essentials.

Step 2

Enter 2 or 3 and press Return. The following prompt appears:

Are you sure you want to uninstall CiscoWorks2000 (y/n)? [n]
Step 3  Press **Return** to remove your selections.

Ignore all messages that ask if you want to remove packages. The installation program does not accept input to these questions.

When the uninstallation program finishes, the following message appears:

`All files were deleted successfully.`

When you remove CD One or Essentials, the uninstallation program removes changes made to the `/etc/services` file. The `/etc` directory *still* contains all system file changes. The uninstallation messages are written to the `/var/tmp/ciscouninstall.log` file.

To reinstall Essentials, follow the instructions in the “Reinstalling or Upgrading from the Evaluation Version” section on page 1-15.