CHAPTER 7

Installing and Upgrading RME

This chapter describes the tasks that you must perform to install Resource Manager Essentials (RME) 4.1.1. It also describes upgrading and migrating older versions of RME to RME 4.1.1 on a Windows system. The following are the major sections in this chapter:

Performing a Fresh Installation of RME

This section describes how to perform a fresh installation of RME 4.1:

Installation Notes

Before you begin your installation, note the following:

- You must install Common Services 3.1.1 before you can install RME 4.1.1.
- The installation program install RME 4.1.1 in the same location as Common Services directory (By default, *SystemDrive*:\Program Files\CSCOpx). This location is referred to as *NMSROOT* in this document.

  Where, *SystemDrive* is the Windows operating system installed directory.
- Restart the system after installing CiscoWorks Common Services and before installing RME 4.1.1. The Common Services installation might fail if you do not restart your system.
- Run the installation from a local DVD or a local hard drive to avoid errors due to network inconsistencies.
- Close all applications before running installation. Do not run any other programs while installation is in progress.

- If you are running virus scanner or mail client while installing Common Services, the installation might take longer to complete.
- You can press click **Cancel** at any time to end the installation. However, any changes to your system will not be undone. For example, if any new files were installed or if they were any changes to the system files, you need to manually cleanup the installation directories.

Note We recommend that you do not terminate the installation which is in process.

- The Common Services installation takes approximately 30 minutes.

  If you running the installation from a remote DVD drive or a remote hard drive, the installation time will vary based on your network connection.

Caution Do not change the system time after installing Common Services. Such changes may affect the working of some time-dependent features.

Installation Modes

You can install RME 4.1 either using Typical or Custom mode:

- If you choose the Typical installation mode, the Common Services database password is randomly generated for you. You can view the password at the end of installation.

  See Performing a Fresh Installation—Typical
- If you choose the Custom installation mode, you will be prompted to enter the Common Services database password.

  Use a minimum of five characters and a maximum of 15 characters. Do not start the password with a number and do not insert spaces between characters.

  This password is also used while restoring or troubleshooting the RME database.

  See Performing a Fresh Installation—Custom

Performing a Fresh Installation—Typical

To install RME using the Typical mode:

Step 1 Log in as the local administrator on the system on which you installed Common Services.

Step 2 Insert the Security Manager 3.2.1 DVD into the drive.

If autorun is enabled, the installer opens automatically. If autorun is not enabled, open the rme4_1 folder, double-click **setup.exe**, and then click **Yes** to confirm that you are installing RME.

Step 3 If the WMI service is up and running, the following message appears when installation starts:

```
Windows Management Instrumentation (WMI) is running. This locks processes and impedes
installation. To avoid WMI conflicts, this Setup program will stop and immediately restart
the WMI service.
```

Click **Yes** to continue. The Welcome window appears.

Step 4 Click **Next** to continue.

The Software License Agreement window appears.

Step 5 Click **Yes** to accept the license agreement and proceed with the installation.

The Licensing Information dialog box appears.

Step 6 Do either of the following:

- If you have a license file for CiscoWorks, select the Licence File Location radio button, and browse to the file location.
- If you do not have a license, enter the serial number and the Product Identification Number (PIN) from the product package.
- For an evaluation copy of Resource Manager Essentials 4.1, licensing details are not required. Select the **Evaluation only** radio button to get an evaluation copy of RME 4.1.1.

Note A message appears at the end of the installation prompting you to obtain a valid license key from Cisco.com within 90 days.

Step 7 Click **Next** to continue.

The Setup Type dialog box appears displaying two installation modes, Typical installation and Custom installation.

Step 8 Select **Typical** from the Setup dialog box and click **Next**.

The following message appears only if you have configured Common Services in ACS mode (**Common Services > Server > Security > AAA Mode Setup**):

```
The application that you are installing requires new tasks to be
registered with ACS. If you have already registered this application
with ACS from another server, you do not need to register it again.
However if you re-register the application, you will lose any custom
roles that you had created earlier for this application in ACS.
```

Step 9 Do one of the following:

- If you click **Yes**, RME 4.1 gets register with ACS server.
- If you click **No**, RME 4.1 does not register with ACS server.

  After the installation, you can register RME 4.1 with ACS server, using the script, *AcsRegCli.pl*:

  *NMSROOT***bin\perl** *NMSROOT***bin\AcsRegCli.pl -register rme**

  For example:

  *C:\Program Files\CSCOpx***bin\perl C:\Program Files\CSCOpx\bin\AcsRegCli.pl -register rme**
- If you click **Cancel**, RME 4.1 installation is aborted.

The installation program checks dependencies and system requirements.

The System Requirements window appears. If the system requirements do not confirm to the specification, the **Next** button will be disabled.

Step 10 Click **Next**.

The Daemons Restart Option window appears.

Step 11 Click either **Yes** to restart CiscoWorks daemons.

The Summary window appears.

Step 12 Click **Show Details**, to view all settings including those selected automatically.

A Security Alert dialog box appears.

Step 13 Click **Yes** to view details.

The summary details view displays the randomly generated Essentials database password in clear text. The Summary window displays installation details.

Note Memorize your password displayed on the console. We recommend you do not write it down.

Step 14 Click **Install**.

The Setup screen appears, displaying installation progress while files are copied and applications are configured.

The following message appears:

```
To ensure that you retain the latest device support, please install the latest Device
Packages from CCO @http://www.cisco.com/cgi-bin/tablebuild.pl/cw2000-rme
Please refer to the Installation and Setup Guide for details.
```

Step 15 Click **OK**.

The Setup Complete dialog box appears.

Step 16 Click **Finish**.

If you had any errors during installation, check the installation log in the directory on the drive where the operating system is installed. Each installation creates a new log file.

For example, the Common Services installation creates *SystemDrive*:\Ciscoworks_install_yyyymmdd_hhmmss.log. If you request for assistance, the Technical Assistance Center (TAC) might ask you to send them the installation log.

Performing a Fresh Installation—Custom

To install RME using the Custom mode:

Step 1 Log in as the local administrator on the system on which you installed Common Services.

Step 2 Insert the Security Manager 3.2.1 DVD into the drive.

If autorun is enabled, the installer opens automatically. If autorun is not enabled, open the rme4_1 folder, double-click **setup.exe**, and then click **Yes** to confirm that you are installing RME.

Step 3 If the WMI service is up and running, the following message appears when installation starts:

```
Windows Management Instrumentation (WMI) is running. This locks processes and impedes
installation. To avoid WMI conflicts, this Setup program will stop and immediately restart
the WMI service.
```

Click **Yes** to continue. The Welcome window appears.

Step 4 Click **Next** to continue.

The Software License Agreement window appears.

Step 5 Click **Accept** to accept the license agreement and proceed with the installation.

The Licensing Information dialog box appears.

Step 6 Do either of the following:

- If you have a license file for CiscoWorks, select the Licence File Location radio button, and browse to the file location.
- If you do not have a license, enter the serial number and the Product Identification Number (PIN) from the product package.
- For an evaluation copy of Resource Manager Essentials 4.1, licensing details are not required. Select the **Evaluation only** radio button to get an evaluation copy of RME 4.1.1.

Note A message appears at the end of the installation prompting you to obtain a valid license key from Cisco.com within 90 days.

Step 7 Click **Next** to continue.

The Setup Type dialog box appears displaying two installation modes, Typical installation and Custom installation.

Step 8 Select **Custom** from the Setup dialog box and click **Next**.

The following message appears only if you have configured Common Services in ACS mode (**Common Services > Server > Security > AAA Mode Setup**):

```
The application that you are installing requires new tasks to be
registered with ACS. If you have already registered this application
with ACS from another server, you do not need to register it again.
However if you re-register the application, you will lose any custom
roles that you had created earlier for this application in ACS.
```

Step 9 Do one of the following:

- If you click **Yes**, RME 4.1 gets register with ACS server.
- If you click **No**, RME 4.1 does not register with ACS server.

  After the installation, you can register RME 4.1 with ACS server, using the script, *AcsRegCli.pl*:

  NMSROOT`\bin\perl` *NMSROOT*`\bin\AcsRegCli.pl -register rme`

  For example:

  C:\Program Files\CSCOpx`\bin\perl C:\Program Files\CSCOpx\bin\AcsRegCli.pl -register rme`
- If you click **Cancel**, RME 4.1 installation is aborted.

The Change Essentials Database Password window appears.

Use a minimum of five characters and a maximum of 15 characters. Do not start the password with a number and do not insert spaces between characters:

Step 10 Do either of the following:

- To create a new password:
  - Enter a password of minimum five characters in the Password field.
  - Re-enter the password in the Confirm Password field.
- To let Common Services generate a random password for you, leave the Password field and the Confirm Password field blank.

Note If you enter a password with less than five characters, RME automatically generates a random password.

You can view your password in clear text in the Security dialog box (Step 14).

Step 11 Click **Next**.

The installation program checks dependencies and system requirements.

The System Requirements window appears.

Step 12 Click **Next**.

The Daemons Restart Option window appears.

Step 13 Click either **Yes** to restart CiscoWorks daemons.

The Summary window appears.

Step 14 Click **Show Details** to view all settings including those selected automatically.

A Security Alert dialog appears.

Step 15 Click **Yes** to view details.

The Summary Details view displays the password in clear text. The Summary window displays installation details.

Step 16 Click **Next**.

The Setup screen appears, displaying installation progress while files are copied and applications are configured.

The following message appears:

```
To ensure that you retain the latest device support, please install the latest Device
Packages from CCO @http://www.cisco.com/cgi-bin/tablebuild.pl/cw2000-rme
Please refer to the Installation and Setup Guide for details.
```

Step 17 Click **OK**.

The Setup Complete dialog box appears.

Step 18 Click **Finish**.

If you had any errors during installation, check the installation log in the directory on the drive where the operating system is installed. Each installation creates a new log file.

For example, the Common Services installation creates *SystemDrive*:\Ciscoworks_install_yyyymmdd_hhmmss.log. If you request for assistance, the Technical Assistance Center (TAC) might ask you to send them the installation log.

Defining Upgrade and Migration for RME 4.0.5

This section provides overview information on upgrade and migration process topics:

- Defining RME Upgrade
- Defining RME Migration

Defining RME Upgrade

Upgrade involves overwriting the existing RME version with the new RME version. For versions prior to RME 4.0.3, you need to install RME 4.0.3 before upgrading to RME 4.1.

You can migrate using either of these methods:

- Local upgrade—Installing RME 4.1 on top of RME (4.0.3 or 4.0.5) on the same machine.

Or

- Remote upgrade—Restoring the data of a version lower than 4.1 on a machine that has 4.1 freshly installed.

Defining RME Migration

Migration involves migrating data from an older version of RME to a newer version of RME. The steps for migration include:

1. Backing up the older version of RME data.
2. Installing the newer version of RME.
3. Restoring the backed up data.

You can migrate using either of these methods:

- Local migration—Installing RME 4.1 on top of RME 4.0.3 or RME 4.0.5 on the same machine.

Or

- Remote migration—Restoring the data of a version lower than 4.1 on a machine that has 4.1 freshly installed.

Upgrade From RME 4.0.x to RME 4.1

You can upgrade from any of the previous versions of RME to RME 4.1. This section consists of:

- Local Upgrade From RME 4.0.3, or 4.0.5 to RME 4.1
- Restoring the RME 4.0.x Backup Data

Local Upgrade From RME 4.0.3, or 4.0.5 to RME 4.1

Table 7-1 provides an overview of the local upgrade procedure when upgrading from RME 4.0.3, or 4.0.5 to RME 4.1.

Important Local Upgrade Notes

During local upgrade from RME 4.0.3 or RME 4.0.5 to RME 4.1,

- You have to provide the RME 4.1 license (which can be obtained with the purchase of LMS 3.0) even if you have a licensed copy of RME 4.0.3 or 4.0.5.
- If you have a evaluation copy of RME 4.0.3 after upgrading to RME 4.1, if you want to update your evaluation license to a valid RME 4.1 license, follow the instructions on how to obtain and install the license file in the *User Guide for CiscoWorks Common Services 3.1* at the following URL: http://www.cisco.com/en/US/docs/net_mgmt/ciscoworks_common_services_software/3.1/user/guide/admin.html#wp386416.
- If you have configured for ACS login module, all of the ACS settings are retained after Local and Remote upgrade.

Table 7-1 Procedure for Local Upgrade from RME 4.0.3 or 4.0.5 to RME 4.1

	Task	Reference
Step 1	Log in as administrator to the machine where RME 4.0.3 or 4.0.5 is installed	—
Step 2	Back up your RME 4.0.3 or RME 4.0.5 data.	Backing Up Your RME 4.0.x Data, page 7-9
Step 3	Install RME 4.1.1 from the Security Manager 3.2.1 DVD.	—
Step 4	Restore RME 4.0.3 or RME 4.0.5 data.	You need not run any scripts to migrate data. All necessary data is migrated to RME 4.1 during the upgrade.

Remote Upgrade From RME 4.0.3 or 4.0.5 to RME 4.1

Table 7-2 provides an overview of the remote upgrade procedure when upgrading from RME 4.0.3, or 4.0.5 to RME 4.1.

Table 7-2 Procedure for Remote Upgrade from RME 4.0.3 or 4.0.5

	Task	Reference
Step 1	Log in as administrator to the machine where RME 4.0.3 or 4.0.5 is installed	—
Step 2	Back up your RME 4.0.3 or RME 4.0.5 data.	Backing Up Your RME 4.0.x Data, page 7-9
Step 3	Log in as administrator on the machine where you want to install RME 4.1.	—
Step 4	Verify that your operating system is supported by RME 4.1.	See the "Prerequisites" chapter in *Installing and Getting Started With CiscoWorks LAN Management Solution 3.0*.
Step 5	Install RME 4.1 from the Security Manager 3.2.1 DVD.	—
Step 6	Transfer the RME 4.0.3 or 4.0.5 backup data to the RME 4.1 machine.	—
Step 7	Restore RME 4.0.3 or RME 4.0.5 data.	Restoring the RME 4.0.x Backup Data, page 7-9

Backing Up and Restoring RME Data to RME 4.1

Data from the previous versions of RME, can be backed up and restored to a system, that has RME 4.1 installed. This section consists of:

- Backing Up Your RME 4.0.x Data
- Restoring the RME 4.0.x Backup Data

Backing Up Your RME 4.0.x Data

You can back up data either using CLI or GUI.

Backing Up RME 4.0.x Data Using CLI

To back up using CLI, enter:

NMSROOT`\bin\perl` *NMSROOT*`\bin\backup.pl` *BKP num_generations*

For example:

```
D:\Program Files\CSCOpx\bin\perl D:\Program Files\CSCOpx\bin\backup.pl
D:\ciscoworks\rmebackupdata 2
```

where,

- *NMSROOT* is the CiscoWorks installed directory.
- *BKP*—Backup directory, the data will be stored in the directories BKP/0, BKP/1, and BKP/2 etc., where BKP/n stores the data of the (n+1)th generation.
- *num_generations*—Maximum backup generations to be kept in the backup directory

For more information, see *Common Services 3.0.5 online help*.

Backing Up RME 4.0.x Data Using GUI

To back up RME 4.0.x, select **Common Services > Server > Admin > Backup**.

Click **Help** for more information.

Restoring the RME 4.0.x Backup Data

We recommend that you do not cancel migration while it is running. This is to avoid errors. To restore the data:

Step 1 Log in as the local administrator on the system on which you installed Common Services 4.1.

Step 2 Shut down the Daemon Manager. To do this, enter:

```
net stop crmdmgtd
```

Step 3 Run the command:

NMSROOT`\bin\perl` *NMSROOT*`\bin\restorebackup.pl -d` *backup location* `-gen` *version* `-t` *tempbackup dir*

For example:

```
D:\Program Files\CSCOpx\bin\perl
D:\Program Files\CSCOpx\bin\restorebackup.pl
-d D:\ciscoworks\rmebackupdata -gen 2 -t D:\temp
```

where

- *NMSROOT* is the CiscoWorks installation directory
- `-d` *backup location* is the location where RME 4.0.x backup data is available. This is mandatory.

- **-gen** *version* is the version to be migrated to RME 4.1. By default, it will restore the latest backup data. If generations 1 through 5 exist, then 5 will be the latest. This is optional.
- **-t** *tempbackup dir* is used to extract files from the backup into a temporary location. These files are used by the Restore Backup script. This will be deleted after the data restoration is complete. This is optional. By default, the Restore Backup script uses *NMSROOT*/tempbackupdata directory.

The migration script checks the details of the applications installed in the system and applications in the backup archive.

You are prompted to migrate syslog information. The following message appears:

```
Do you want to migrate syslogs [y / n]? Enter y to continue.
```

If you wish to migrate syslog information, choose **Y**, otherwise choose N.

You are prompted to collect inventory data. The following message appears:

```
Do you want to collect Inventory [y/n]?
```

If you wish to collect inventory information during migration, choose **Y**, otherwise choose **N**.

We recommend that you do not perform Inventory collection during migration. This is because it takes a long time to complete inventory data collection.It depends on number of devices, network speed and device response time.

Step 4 Schedule inventory collection after migration using the user interface. From the CiscoWorks homepage, select **RME > Devices > Inventory**.

Step 5 Start Daemon Manager after the migration is completed. To do this, enter:

```
net start crmdmgtd
```

You have migrated to RME 4.1.1.