Installing the Product Software

Cisco Configuration Engine, 2.0 is a Cisco product designed to configure large numbers of customer-premise network devices in a plug-and-play manner.

System Requirements

- Pentium III or equivalent and above.
- Red Hat Enterprise Linux Enterprise Server 3.0.
- 1 GB RAM.
- 40 GB disk space

Cisco IOS Dependences

Table 1-1 lists Cisco IOS versions with corresponding versions of Cisco Configuration Engine, 2.0 including feature limitations associated with each version.

Table 1-1   *Cisco Configuration Engine, 2.0 and Cisco IOS Dependencies*

Cisco IOS	Configuration Engine	Limitations
12.3	1.3.2 or later	
12.2(11)T	1.2 or later	
12.2(2)T	1.2 or later with no authentication.	Applications are unable to use exec commands or point-to-point messaging.

Installing the Software

The Cisco Configuration Engine, 2.0 software is contained on a CD-ROM that is in the accessory kit.

Step 1   Install the CD-ROM into the disk drive on the host system.

Step 2   Copy the tar file into a new folder where disk space is large enough:

tar xvf *<tarfilename>*

Step 3 Enter the following commands:

cd RPMS

./ce_install.sh

Step 4 After installing the software, log out, then log back in again, or create a new window.

Step 5 Enter the following commands:

cd $CISCO_CE_INSTALL_ROOT/CSCOcnsie/bin/

./setup

Step 6 Go to Chapter 2, "System Configuration" for a description of how to configure your system.

Script Options

The Cisco Configuration Engine, 2.0 image is provided to the user in tar file format. Users should untar the image in a directory. Then, the user should go to that directory and run the **ce_install.sh** command.

In order to support different types of installations and setup, the scripts uses options to differentiate different requirements.

Because Cisco Configuration Engine, 2.0 must share the web infrastructure-related software with bundled Cisco software. The default behavior of the script is defined in the *installRule.<os>.xml* file. This file is located in the same directory where the Cisco Configuration Engine, 2.0 tar file is untarred. The *installRule.<os>.xml* file contains information about:

- Which package for which version should be installed.

- Can a package be shared.

- The behavior of the installation if the package exists or not.

- The methods to install and un-install the package.

The result of the installation is logged under */var/log/CNSCE/install.log*, lists what exactly is being installed into the system. For a successful install, it should be the same as the contents of *installRule.<os>.xml*.

The *installError.xml* file is generated if there is an error during installation. Other files such as those that contain all Cisco Configuration Engine, 2.0 related environmental variables are generated during installation stage including: *global.sh*, *global.csh*, *global.pm*, and *installdata.properties*.

Options for *ce_install.sh*

The installation script, *ce_install.sh*, has the following options:

> **Note** No option indicates default behavior which is described above.

-batch: This option allows non-interactive installation. The installation script reads the default values from *installRule.<os>.xml* file and installs Cisco Configuration Engine, 2.0 based on these settings without query for user input.

-demo: Installs the package without checking system resources except for minimum disk space, which is 650MB.

-**force:** install/uninstall Cisco Configuration Engine, 2.0 without installation or un-installation status check.

Options for Setup Script

The setup script, *setup*, has the following options:

Default option is interactive mode, that prompts the user to provide inputs and store them in a data file. The default value is read from *setupRule.xml* under *${CISCO_CE_INSTALL_ROOT}/CSCOcnsie/bin/*.

The result will put in log file: */var/log/CNSCE/appliance-setup.log*.

-**s:** batch mode which reads all the information it requires for setup without user interaction from the data file: *${CISCO_CE_INSTALL_ROOT}/CSCOcnsie/bin/setupRule.xml*.

The result is put in a log file: */var/log/CNSCE/appliance-setup.log*.

Before running batch mode the first time, you must run the utility script:

$CISCO_CE_HOME/bin/passwdEncryption.pl

This creates encrypted passwords and loads them into **setupRule.xml**. The passwords in XML must be in encrypted text, not plain text.

Uninstall Script

The uninstall script, *ce_uninstall.sh*, is copied into */var/ciscoce/install* directory. This script reads the *installdata.xml* file to do package uninstall:

1. Stop all running Cisco Configuration Engine, 2.0 processes.

2. Remove all database data from BDB.

3. Remove installed database software if it is BDB.

Remove all presence of the installed packages.

Data Migration from Release 1.5 to 2.0

The Data Migration function allows you to upgrade your system to from Release 1.5 to Release 2.0, then populate your directory with the data you established for the prior release.

This is a three-step process:

1. Export data to a remote FTP site.

2. Install Release 2.0 software.

3. Retrieve data from the FTP site and setup the system.

Export Data to a Remote FTP Site

Before exporting the data, it is assumed that your host has already been setup and is up running.

Step 1   Insert the Release 2.0 CD-ROM into the CD drive of your host to be upgraded.

Step 2   To mount the CD-ROM, login as root, then enter the command:

mount /mnt/cdrom

Step 3   Copy and untar the image file, then go to: *RPMS/DataExport*.

Step 4   Issue the data export command:

./dataexport

Tip   Make sure you type the period (**.**) prior to the command.

Step 5   Follow the sequence of prompts to enter information of the FTP site and storage location (absolute pathname including filename).

Following are the prompts of **dataexport**:

Notes

Sample user inputs are shown in **bold** text.

```
Entering Data Export
Type ctrl-c to exit

Enter FTP server (hostname.domainname or IP address): sername.cisco.com
Enter DNS server IP address: 171.69.226.120
Enter username used for FTP server: smith
Enter FTP password: *****
Re-enter FTP password: *****
Enter absolute pathname of data file on FTP server: /users/smith/migration.tar
```

Install Release 2.0 Software

Install the new Cisco Configuration Engine, 2.0 software on the target system.

Run *datamigrate* and Configure the System

Step 1   Log in as **root**.

Step 2   Start data migration with the command:

datamigrate

The script proceeds in three stages:

  1. Acquire information of the FTP server that stores the migration data and retrieve the data.

  2. Start Release 2.0 **Setup** prompts and configure the system.

  3. Populate internal directory storage with retrieved data.

Following are the prompts of **datamigrate**:

Notes

Sample user inputs are shown in bold text.

```
Enter FTP server (hostname.domainname or IP address): sername.cisco.com
Enter username used for FTP server: smith
```

```
Enter FTP password: *****
Re-enter FTP password: *****
Enter absolute pathname of data file on FTP server: /users/smith/migration.tar
```

Synchronize Clocks

The clock (date and time) on your host and the clock on the PC you use to access the Cisco Configuration Engine, 2.0 user interface should be synchronized. This is particularly important when scheduling an update-image job for a future time (refer to the *Cisco Configuration Engine Administrator Guide, 2.0*).

For this operation, the client-side check to ensure you have entered a valid time value is done using the clock on the PC with the browser used to access the Cisco Configuration Engine, 2.0 user interface. Consequently, if your host clock is behind the PC clock, the user interface does not allow the job to be scheduled.

For example, if your host clock read 11:10 while the PC clock read 12:10, the user interface will not allow a job to be scheduled before 12:10. It will issue an error message: **Please input a future time**.

Synchronize Clocks