



Chapter 3 HP-UX Installation

This chapter provides instructions to install, uninstall, and re-install the ClearCommerce Engine on the HP-UX operating system.

Installing the ClearCommerce Engine

Note: The installation procedures refer to primary and secondary installations. A primary installation refers to the initial installation of the Engine. If you have a cluster configuration, you can install multiple instances of the Engine. Any installation performed after the initial installation is referred to as a secondary installation or instance.

To install the ClearCommerce Engine:

Note: If you are upgrading a previously installed instance of the ClearCommerce Engine, go to “Upgrading to the ClearCommerce Engine 4.1.3” on page 51.

- 1 Ensure that your system conforms to the requirements described in “Planning Your System Architecture” on page 1.
- 2 If you are installing multiple instances of the Engine, ensure that you understand the requirements described in “Cluster Configuration” on page 8.
- 3 Ensure that you have performed all the necessary pre-installation requirements as described in “Pre-Installation Configuration” on page 9.
- 4 Configure the Oracle database server instance (SID).

- 5 Create a database instance, with a dedicated user (hereafter called the *database user* in this procedure). Ensure the database user has permission to create, execute, update, and delete Data Definition Language (DDL) tables.

Important: Your database must be empty when you are performing a new installation of the ClearCommerce Engine.

Installing on the Database Server

- 6 Log in to the Database server as an Administrator.
- 7 Copy the following files from the ClearCommerce Engine Installation CD to a temp directory.

`cdpath/PreInstall/CcxOraTableSpace.sql`

`cdpath/PreInstall/CcxOra.sql`

`cdpath/PreInstall/CcxOraArchive.sql`

where *cdpath* is the path to the CD-ROM drive.

- 8 Make the following edits to `CcxOraTableSpace.sql`:
 - Database paths
 - Tablespace sizes (as necessary)
- 9 Use SQL Plus to run the scripts you copied to the temp directory.

Notes:

- In SQL Plus, run `CcxOraTableSpace.sql` as **system**.
- In SQL Plus, run `CcxOra.sql` and `CcxOraArchive.sql` as **database user**.
- At each prompt in this procedure, you can press Enter to accept the value in brackets (for example, [**default value**]).

Installing the ClearCommerce Engine

- 10 Log in to the ClearCommerce Engine server as **root**.
- 11 If this is a primary installation, **go to step 13**.
Otherwise, **go to the next step** to copy the encryption key to the secondary system. This must be performed *before* beginning the installation process on a secondary system.
- 12 Copy the following file from the primary system to the <basedir> of the secondary system.

`CCEbasedirectory/cfg/CCEkey.dat`

where *CCEbasedirectory* is the target directory for the ClearCommerce Engine on the secondary system.

- 13** To install the ClearCommerce Engine, type the following command:

```
cd cdpath
./install.sh engine
where cdpath is the path to the CD-ROM.
```

After some system output, the following is displayed:

```
Enter administrator account username:
```

- 14** Type a user ID to access the System Administrator Tool.

The following is displayed:

```
Enter administrator account password:
```

- 15** Type a password to access the System Administrator Tool.

The following is displayed:

```
Confirm administrator account password:
```

- 16** Type the same password you entered in the previous step.

The following is displayed:

```
Enter log file [/var/log/CcxEngine.log]:
```

- 17** Type a name and location for the engine log file, or press **Enter** to make it /var/log/CcxEngine.log.

The engine log level is set to the highest setting. See the *System Administrator Guide* for information on the Engine log file.

The following is displayed:

```
Enter the path to the Oracle home directory
[/databases/oracle/u01/product/8.1.5]:
```

- 18** Type the path to your Oracle home directory.

The following is displayed:

```
Enter the database server instance (SID) [DATABASE]:
```

- 19** Type the Oracle SID, or press **Enter** to accept the default as the Oracle SID.

The following is displayed:

```
Enter database user id:
```

- 20** Type the user ID for the database user:

The following is displayed:

```
Enter database user password:
```

- 21** Type the password for the database user.

The following is displayed:

```
Confirm database user password:
```

22 Type the same password for the database user.

23 If this is a primary installation, **go to step 25**.

Otherwise, **go to the next step**.

The following is displayed:

```
Checking for configuration index...
data exists.
```

```
Configuration index 0 already exists...
Enter configuration index [0]:
```

24 Type a configuration index for this installation. The system checks to see if the configuration index already exists.

```
Checking for configuration index...
```

If the configuration index does not exist, the following is displayed. Go to step 28.

```
data not found.
```

If the configuration index does exist, the following is displayed. Go to step 28.

```
data exists.
Configuration index [n] already exists...
Enter configuration index [n]:
```

where n is the configuration index you entered.

Note: In a cluster configuration, multiple instances of the Engine must have a unique configuration index, unless you are implementing failover capability, provided by third-party software. The prompt for a configuration index is displayed only once.

25 The following is displayed:

```
Enter random seed for global encryption key:
```

26 Type a minimum of 16 random characters as an encryption seed that the system will use to create a system encryption key.

The following is displayed:

```
Generating key file
/usr/local/clearcommerce/cfg/CCEkey ... done.
You should archive a copy of this file in a secure
location. Press enter to continue ...
```

27 Press **Enter**.

28 The following is displayed:

```
Running dbconfig to validate and set database
parameters ... done.
```

```
Enter the email address for server manager
notifications:
```

29 Type the e-mail address that the UNIX Server Manager will use for system notices. The e-mail address of your system administrator is a good choice.

The following is displayed:

```
Gathering information to generate engine certificate:
```

30 At the following prompts, type information the installation program will use to create a digital certificate. The actual information you type, even random information, will not affect the functionality of the ClearCommerce Engine, but for future upgrades it is important that you record the information you type. See the *System Administrator Guide* for information on digital certificates.

```
Full name:
Organization:
Department:
Locality:
State:
Country:
E-mail address:
```

The following is displayed if this is a primary installation:

```
Using configuration from /tmp/template.cnf
Generating a 1024 bit RSA private key
.....++++++
.....++++++
writing new private key to
'/usr/local/clearcommerce/cfg/CCE.pem'
-----
```

*If FraudAnalyzer has been configured for the currently installing configuration index, the following is displayed. **Go to step 32.***

```
Checking for FraudAnalyzer configuration index...
data exists.
```

If FraudAnalyzer has not yet been configured for the currently installing configuration index, the following is displayed:

```
Checking for FraudAnalyzer configuration index...
data not found.
```

```
This installation program includes FraudAnalyzer, a
separately-licensed component of the ClearCommerce
Engine that provides neural network fraud risk
scoring. Use of FraudAnalyzer is governed by license
agreement with ClearCommerce Corporation. Do you wish
to install FraudAnalyzer? (y/[n]):
```

31 Type **y** to install the ClearCommerce Engine with FraudAnalyzer

Type **n** to install the ClearCommerce Engine without FraudAnalyzer

The system seeds the database, taking several minutes to complete:

Note: The script `CcxOdbcUsStateTax.sql` will take 10 to 30 minutes to complete, depending on the speed of your system.

After the database is seeded the following is displayed:

```
Database seeding complete.
```

Installing the ClearCommerce Engine User Interface

32 Log in to the Secure Web server, place the ClearCommerce Engine Installation CD in the CD-ROM drive, and type the following command:

```
cd cdpath
./install.sh ui
```

where cdpath is the path to the CD-ROM.

After some system output, the following is displayed:

```
Enter location of the secure web server html-docs
directory [/usr/local/html-secure/trident/html-
docs]:
```

33 Type the location of the Secure Web server HTML document root directory.

The following is displayed:

```
Enter location of the secure web server cgi-bin
directory [/usr/local/netscape/cgi-bin]:
```

34 Type the location of the Secure Web server executable directory.

35 If you installed the ClearCommerce Engine User Interface in the same directory in which you installed the ClearCommerce Engine and, **go to step 39.**

Otherwise, **go the next step.**

- 36** The following is displayed only if you installed the ClearCommerce Engine User Interface in a directory separate from the ClearCommerce Engine and this is a primary installation:

Enter random seed for global encryption key:

- 37** Type a minimum of 16 random characters as an encryption seed that the system will use to create a system encryption key.

The following is displayed:

```
Generating key file /usr/clearcommerce/cfg/CCEkey ...
done.
```

```
You should archive a copy of this file in a secure
location.
```

```
Press enter to continue ...
```

- 38** Press **Enter**.

The following is displayed:

```
* Ask task succeeded. ===== 07/10/02 12:43:52 CDT END
swask SESSION (non-interactive) Install Completed
```

- 39** Archive the following files:

```
CCEbasedirectory/cfg/CCE.pem
```

```
CCEbasedirectory/cfg/CCEkey
```

```
UIbasedirectory/cfg/CCEkey
```

where CCEbasedirectory is the directory where you chose to install the ClearCommerce Engine and UIbasedirectory is the directory where you chose to install the ClearCommerce Engine UI.

Important: If these files are deleted or damaged you will not be able to access your data unless you have archived copies of the files.

- 40** Use the following command to start the Server Manager:

```
srvadmin start srvmgrd
```

Caution: The shell script runs in the background. Be sure to cd out of the mounted CD directory so that the running program does not lock up the drive.

- 41** To display all the files created on the ClearCommerce Engine server and Secure Web server, type the following commands:

```
find `cat /etc/clearcommerce` -type f
```

Note: Use the grave key (accent mark) to type this symbol: ` (usually the key above the Tab key). Do not use the single quotation mark key.

Important: The `salestax.txt` file installed with this release is not the latest version. To get the latest version, do the following:

42 Contact ClearCommerce Technical Support for the current update of the sales tax file.

43 Use the procedure in the *System Administrator Guide* for information on updating the table.

- 44** See Chapter 5, “Adding and Configuring a Payment Processor” on page 97 for information on installing and configuring a payment processor.
- 45** See Chapter 7, “Configuring and Testing Your Installation” on page 118 for information about testing the ClearCommerce Engine’s ability to successfully process transactions internally.
- 46** The Engine log level is set to the highest setting by the ClearCommerce Engine Installation program. The level should be changed after successfully installing because it will cause the Engine log to continuously and quickly grow even if you are running only a small number of transactions per month. See “Resetting the Engine Logging Level” on page 123 for information about changing the Engine log level.

Upgrading to the ClearCommerce Engine 4.1.3

Note: For optimal performance, upgrade your Java API package to the latest version when upgrading your version of the ClearCommerce Engine. Refer to the *ClearCommerce Engine API Reference and Guide* for Java API installation instructions.

To upgrade the ClearCommerce Engine:

You must have ClearCommerce Engine 4.1 or later installed to use this upgrade.

- 1 Ensure that your system conforms to the requirements described in “Planning Your System Architecture” on page 1.
- 2 If you are upgrading multiple instances of the Engine, ensure that you understand the requirements described in “Cluster Configuration” on page 8.
- 3 Ensure that you have performed all the necessary pre-installation requirements as described in “Pre-Installation Configuration” on page 9.

Important: The ClearCommerce Engine supports the 8-bit character set WE8ISO8859P1. If Oracle is your database, you need to switch to the WE8ISO8859P1 character set to support non-US data (for example, addresses outside of the US). If you have ClearCommerce Engine 4.1 or later installed, and have modified the Digital Receipt templates, you need to perform the following:

- a Export the email_template table to a file on disk or other external storage.
- 2 Test that the export has been completed correctly by importing the file back to a test database.

- 3 Change the database Oracle character set to WE8ISO8859P1.
Set the NLS_LANG variable to the appropriate value, for example for U.S. it would be the following:

```
NLS_LANG to AMERICAN_AMERICA.WE8ISO8859P1
```

- 4 Import the file back into the changed database.

Upgrading the Database Schema

- 5 Log in to the Database server as an Administrator with permissions to create tablespaces.

Important: Before beginning any database upgrade processes, perform a backup of your data.

- 6** Copy the appropriate file from the ClearCommerce Engine Installation CD, to a temp directory.

```
cdpath/Upgrade/U410-412/CcxOraU410to412.sql
cdpath/Upbrade/U412-413/CcxOraU412to413.sql
```

where cdpath is the path to the CD-ROM drive.

- 7** Use SQL Plus to run the script you copied to the temp directory.

Note: At each prompt in this procedure, you can press **Enter** to accept the value in brackets (for example, [**default value**]).

Upgrading the ClearCommerce Engine

- 8** Log in to the ClearCommerce Engine server as **root**.

- 9** Use the following command to stop the Server Manager:

```
srvadmin stop srvmgrd
```

- 10** Type the following command:

```
cd cdpath
./install.sh engine
```

where cdpath is the path to the CD-ROM.

- 11** After some system output, the following is displayed:

```
Would you like to upgrade to ClearCommerce Engine
4.1.2? ([y]/n)
```

- 12** Type **y** or press **Enter** to install the ClearCommerce Engine.

Type **n** to quit the upgrade.

*If you typed **y** and the system detects that the ClearCommerce Engine is installed on the system, the following is displayed. **Go to step 13.***

```
Checking for configuration index...
Data exists.
```

*If you typed **y** and the system does not detect that the ClearCommerce Engine is installed on the system, the following is displayed:*

```
Checking for configuration index...
Data not found.
```

- 13** Type the configuration index for this upgrade.

Note: For this release, 0 is the only acceptable value.

*If the configuration index exists, the following is displayed. **Go to step 14.***

```
Checking for configuration index...
Data exists.
```

If the configuration index does not exist, the following is displayed:

After some system output, the following is displayed:

```
Checking for configuration index...
Data not found.
Configuration index must exist for an upgrade to seed
correctly.
Enter configuration index[0]:
```

Note: For this release, 0 is the only acceptable value. This prompt is displayed until configuration index is entered.

14 The system checks to see if FraudAnalyzer is installed.

*If the system detects that FraudAnalyzer is an installed component for the currently upgrading configuration index, the following is displayed. **Go to step 16***

```
Checking for FraudAnalyzer configuration index.
Data exists.
Checking for FraudAnalyzer data...
Data exists.
```

```
Checking for configuration index upgrade data...
Data exists.
Seeding database - Upgrade (may take several minutes
to complete)
```

If the system detects that FraudAnalyzer is not an installed component for the currently upgrading configuration index, the following is displayed:

```
This installation program includes FraudAnalyzer, a
separately-licensed component of the ClearCommerce
Engine that provides neural network fraud risk
scoring. Use of FraudAnalyzer is governed by license
agreement with ClearCommerce Corporation.
```

```
Do you wish to install FraudAnalyzer? (y/[n]):
```

15 Type **y** to upgrade the ClearCommerce Engine with FraudAnalyzer.

Type **n** or press **Enter** to upgrade the ClearCommerce Engine without FraudAnalyzer.

The system seeds the database, taking several minutes to complete:

Note: The script CcxOdbcUsStateTax.sql will take 5 to 10 minutes complete.

After the database is seeded the following is displayed:

```
Database seeding complete.
```

Upgrading the ClearCommerce Engine User Interface

- 16** Place the ClearCommerce Engine Installation CD in the CD-ROM drive of the Secure Web server, and type the following command at the Secure Web server:

```
cd cdpath
./install.sh ui
where cdpath is the path to the CD-ROM.
```

After some system output, the following is displayed:

```
Would you like to upgrade to ClearCommerce Engine
4.1.3? ([y]/n)
```

- 17** Type **y** or press **Enter** to upgrade the ClearCommerce Engine User Interface. Type **n** to quit the upgrade.

When the following is displayed, the upgrade is complete:

```
* Ask task succeeded.
```

- 18** Use the following command to start the Server Manager:

```
srvadmin start srvmgrd
```

Caution: The shell script runs in the background. Be sure to cd out of the mounted CD directory so that the running program does not lock up the drive.

- 19** See Chapter 6, “Upgrading Digital Receipt Templates” on page 107 for information about upgrading your Digital Receipt templates.

Uninstalling ClearCommerce Engine

To uninstall the ClearCommerce Engine from your system:

- 1** Type the following command on the ClearCommerce Engine and the ClearCommerce Engine User Interface:

```
swremove CCE
```
- 2** Contact a database administrator to remove the ClearCommerce Engine database tables from the Database server.

Re-Installing the ClearCommerce Engine

To re-install the ClearCommerce Engine:

- 1 Uninstall the ClearCommerce Engine as described in the procedure “Uninstalling ClearCommerce Engine”.
- 2 Install the ClearCommerce Engine as described in the procedure “Installing the ClearCommerce Engine” on page 43.

