



# **Installation Guide for Oracle Siebel ePayment Manager**

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# 1

## Preface

### About This Guide

The installation and configuration guides describe how to install eaSuite, configure the third-party platforms that support the eaSuite production environment, and deploy eaSuite J2EE web applications.

This guide describes how to install and configure ePayment Manager. It is intended for IT professionals and other technical personnel responsible for installing, configuring, and maintaining ePayment Manager. It assumes in-depth understanding of and practical experience with system administrator responsibilities, including:

### Operating System Administration Requirements

- Start up and shut down the system
- Log in and out of the system
- Determine software patch/pack levels
- Install software and patches/packs
- Navigate the file system
- Manipulate text files
- Create files and directories
- Change permissions of files and directories
- Use basic network commands
- Transfer files with FTP
- Monitor processes & system resource usage
- Perform system backups and recovery
- Implement system security

If you are unfamiliar with any of these tasks, consult the related documentation for your system requirements.

## Related Documentation

This guide is part of the eaSuite documentation set. For more information about using eaSuite, see the following guides:

Print Document	Description
<i>Installation Guide for Oracle Siebel eStatement Manager</i>	How to install and configure eStatement Manager in a distributed environment.
<i>Deploying and Customizing J2EE Applications Guide for Oracle Siebel eStatement Manager</i>	How to customize J2EE web applications for deployment with eaSuite.
<i>Data Definition (DefTool) Guide for Oracle Siebel eStatement Manager</i>	How to create data extraction and definition rules for an eStatement Manager application with DefTool.
<i>Presentation Design (Composer Guide) for Oracle Siebel eStatement Manager</i>	How to design data presentment for an eStatement Manager application with Composer.
<i>Administration Guide for Oracle Siebel eStatement Manager</i>	How to set up and run a live eStatement Manager application in a J2EE environment.
<i>SDK Guide for Oracle Siebel eStatement Manager</i>	How to work with auditing datastreams, user management frameworks, line item disputes and annotations, custom jobs, content access, and charting.
<i>Reporting Guide for Oracle Siebel eStatement Manager</i>	How to use the Reporting and Analytics Module to create preconfigured telecommunication reports from live and indexed data for various criteria.
<i>Troubleshooting Guide for Oracle Siebel eaSuite</i>	How to initiate the troubleshooting process, identify critical information about what is happening in your system and applications when a problem occurs, and resolve the problem.
<i>Migration Guide for Oracle Siebel eaSuite</i>	How to migrate an existing eStatement Manager database to a newer version.
<i>Oracle eStatement Manager 4.7 Release Notes</i>	This discusses any open issues at the time of release of the application.

# 2 Getting Started

## Preparing Your Platform

Before installing ePayment Manager, verify that your platform is ready:

- 1 Install and test required hardware and software for your platform.
- 2 Define required user and group permissions for your database server and application server.
- 3 Start and test your database server. See your server documentation.
- 4 Start and test your application server. See your server documentation.
- 5 For distributed environments, make sure that you have any required database client software installed on your application server and any other client machines of your database server.

## Overview of the Installation Process

*Configuring your database server requires you to*

- 1 Define database server environment variables.
- 2 Create and configure the eStatement Manager database.
- 3 Connect to your eStatement Manager database before configuring your application server.

## Oracle Siebel ePayment Manager System Requirements

### For the Sun Solaris Operating Environment, BEA WebLogic Server, and Oracle Database

#### OPERATING SYSTEM

- Sun Solaris 10 (for SPARC)
- For Windows-based DefTool and Composer Tools only, either one of these:
  - Windows XP Professional
  - Windows Server 2003 SP1

## HARDWARE

- CD-ROM
- Disk space (database) 2.6 GB
- Disk space (software) 60 MB
- Sun SPARC platform
- Swap space 512 MB per CPU (1 GB recommended)
- RAM 512 MB per CPU (1 GB recommended)

## JAVA/C++

- Sun Studio 11 for SPARC

## SUPPORTED DATABASE SERVERS

- Oracle 10g Release 2 Enterprise Edition
  - Native Oracle Partition Support for Index Tables (Purging)
- Oracle 10g client software (for application server)
- Oracle 10g JDBC driver

## SUPPORTED APPLICATION SERVERS

- BEA WebLogic Server 9.2

## SUPPORTED BROWSERS

- Internet Explorer 6.0, 7.0
- Firefox 2.0
- Netscape 8.1.2

## OPEN SOURCE ITEMS

The following required open source library binaries are not distributed with the product:

- Ant 1.6.5 is required to run the supplied Ant database scripts.
- Hibernate 3.1.3 is required for high performance object/relational persistence and query services.
- c3p0 0.9.0 is required for JDBC3 connection and statement pooling.

## For the Sun Solaris Operating Environment, IBM WebSphere Server, and Oracle Database

## OPERATING SYSTEM

- Sun Solaris 10

- For Windows-based DefTool and Composer Tools only, either one of these:
  - Windows XP Professional
  - Windows Server 2003 SP1

## HARDWARE

- CD-ROM
- Disk space (database) 2.6 GB
- Disk space (software) 60 MB
- Sun SPARC platform
- Swap space 512 MB per CPU (1 GB recommended)
- RAM 512 MB per CPU (1 GB recommended)

## JAVA/C++

- Sun Studio 11 for SPARC

## SUPPORTED DATABASE SERVERS

- Oracle 10g Release 2 Enterprise Edition
  - Native Oracle Partition Support for Index Tables (Purging)
- Oracle 10g client software (for application server)
- Oracle 10g JDBC driver

## SUPPORTED APPLICATION SERVERS

- IBM WebSphere 6.1

## SUPPORTED BROWSERS

- Internet Explorer 6.0, 7.0
- Firefox 2.0
- Netscape 8.1.2

## OPEN SOURCE ITEMS

The following required open source library binaries are not distributed with the product:

- Ant 1.6.5 is required to run the supplied Ant database scripts.
- Hibernate 3.1.3 is required for high performance object/relational persistence and query services.
- c3p0 0.9.0 is required for JDBC3 connection and statement pooling.

## For the Linux Operating System, Oracle Application Server, and Oracle Database

### OPERATING SYSTEM

- Linux version 2.6.9-22 (Red Hat 3.4.4-2)
- For Windows-based DefTool and Composer Tools only, either one of these:
  - Windows XP Professional
  - Windows Server 2003 SP1

### HARDWARE

- CD-ROM
- Disk space (database) 2.6 GB
- Disk space (software) 60 MB
- Sun SPARC platform
- Swap space 512 MB per CPU (1 GB recommended)
- RAM 512 MB per CPU (1 GB recommended)

### JAVA/C++

- Sun Studio 11 for SPARC

### SUPPORTED DATABASE SERVERS

- Oracle 10g Release 2 Enterprise Edition
  - Native Oracle Partition Support for Index Tables (Purging)
- Oracle 10g client software (for application server)
- Oracle 10g JDBC driver

### SUPPORTED APPLICATION SERVERS

- Oracle Application Server 10g (Release 3)

### SUPPORTED BROWSERS

- Internet Explorer 6.0, 7.0
- Firefox 2.0
- Netscape 8.1.2

### OPEN SOURCE ITEMS

The following required open source library binaries are not distributed with the product:

- Ant 1.6.5 is required to run the supplied Ant database scripts.
- Hibernate 3.1.3 is required for high performance object/relational persistence and query services.

- c3p0 0.9.0 is required for JDBC3 connection and statement pooling.

## For the Microsoft Windows 2003 Operating System, BEA WebLogic Server, and Oracle Database

### OPERATING SYSTEM

- Microsoft Windows Server 2003 SP1
- For Windows-based DefTool and Composer Tools only, either one of these:
  - Windows XP Professional
  - Windows Server 2003 SP1

### HARDWARE

- CD-ROM
- Disk space (database) 2.6 GB
- Disk space (software) 60 MB
- Pentium III or compatible processor
- RAM 512 MB per CPU (1 GB recommended)

### JAVA/C++

- JDK version that comes with the BEA WebLogic Server 9.2
- JRockit JVM (jrockit90\_150\_04) bundles

### SUPPORTED DATABASE SERVERS

- Oracle 10g Release 2 Enterprise Edition
  - Native Oracle Partition Support for Index Tables (Purging)
- Oracle 10g client software (for application server)
- Oracle 10g JDBC driver

### SUPPORTED APPLICATION SERVERS

- BEA WebLogic Server 9.2

### SUPPORTED BROWSERS

- Internet Explorer 6.0, 7.0
- Firefox 2.0
- Netscape 8.1.2

### OPEN SOURCE ITEMS

The following required open source library binaries are not distributed with the product:

- Ant 1.6.5 is required to run the supplied Ant database scripts.
- Hibernate 3.1.3 is required for high performance object/relational persistence and query services.
- c3p0 0.9.0 is required for JDBC3 connection and statement pooling.

# 3 Installing ePayment Manager

This chapter assumes in-depth understanding of and practical experience with system administration responsibilities. Consult your system documentation as necessary.

This chapter provides a step-by-step guide to installing ePayment Manager.

Because this book applies to multiple installation stacks, reference to UNIX means UNIX and any of its derivative operating systems such as Solaris and Linux. Windows users can ignore the few sections or commands in this chapter that are labeled as being specific to UNIX.

## Permissions for Installation (UNIX)

You do not require root privilege on each server to install and uninstall ePayment Manager components. Consult your system administrator for details of user setup.

O/S	Default	Example
<b>Solaris</b>	<b>root:other</b>	<b>edxadmin:edxadmin</b>
<b>Linux</b>	<b>root:other</b>	<b>edxadmin:edxadmin</b>

For your application and database servers, you need the owner (user) and group permissions specified during installation.

Oracle does not recommend administering eStatement Manager with the user and group **nobody:nobody**.

**NOTE:** Client browsers connecting to any eaSuite product must be enabled to run JavaScript. To check whether JavaScript is enabled for:

**NOTE:** **Internet Explorer 6**– Navigate to Internet Options > Security > Internet. Click Custom Level, and under Scripting > Active scripting, select Enable.

**NOTE:** **Netscape 8**– Navigate to Tools > Options > Site Controls. In the Site List tabbed page, select Enable Javascript in the Web Features section.

For the latest software and hardware requirements, see the release notes that came with your distribution.

## Installation Overview

Before you can install the ePayment Manager package, you must install eStatement Manager and configure the eStatement Manager database to interact with ePayment Manager. See *Installation Guide for Oracle Siebel eStatement Manager* for your stack for information about these procedures.

This document assumes that you have the application server and database server on different systems.

# Installing ePayment Manager Database Components

The ePayment Manager application uses the InstallAnywhere installer, which is a graphical cross-platform wizard that installs eaSuite components for any supported platform of eaSuite.

## *To install ePayment Manager database components*

- 1 For UNIX, log in on the database server.
- 2 After you obtain and locate the PAYMENT software installer, run it as follows:
  - a For UNIX (Solaris, Linux, HP-UX or AIX), enter `./Payins.bin` from a command prompt at the directory location where the installer resides.
  - b For Windows, double-click the Payins.exe installer application at the directory location where it resides.
- 3 On the Introduction screen, read the PAYMENT (ePayment Manager) introductory information. Click Next to continue.
- 4 On the License Agreement screen, carefully read the licensing agreement, select the acceptance button, and then click Next.
- 5 On the Enter Serial Number screen, enter your product serial number. Then click Next.
- 6 On the Owner of Web Application Server screen, enter the name of the application server owner (the same one you used when installing eStatement Manager). Then click Next.
- 7 On the Group of Web Application Server screen, enter the name of the group for the application server (the same one you used when installing eStatement Manager). Then click Next.
- 8 On the Choose Install Folder screen, accept the default installation folder or click Choose and enter the directory where you want to install the PAYMENT files and directories. This document refers to that directory as PAYMENT\_HOME. Click the Next button to continue.
- 9 On the Choose Product Features screen, click Database. Then click Next.
- 10 On the Pre-Installation Summary screen, verify that the information is correct, and click Install. To correct any entries, click Previous, and then return here.

At this point, the ePayment Manager database server components are copied to the designated installation folder. A status bar on the bottom of the screen shows each database server component being installed. No user intervention is required.

The Install Complete screen reports a successful installation and the directory that contains the database server components.

- 11 Click Done to exit the installer.
- 12 If the installation fails, determine the cause of the problem and run the InstallAnywhere installer again to reinstall ePayment Manager.

# Installing ePayment Manager in Console Mode (UNIX)

You can choose one of two installation modes to install ePayment Manager with InstallAnywhere:

- GUI Mode (default)
- Console Mode

The installation procedures in this guide describe ePayment Manager being installed using the InstallAnywhere GUI. Console mode for UNIX is an interactive character-based installation in which you are prompted to respond to several installation questions.

## *To install ePayment Manager in console mode for UNIX*

- 1 Navigate to the InstallAnywhere directory for your platform and run the command to invoke InstallAnywhere, using the `-i console` flag. For example:

```
./Payins.bin -i console
```

InstallAnywhere displays the banner:

```
Preparing CONSOLE Mode Installation...
```

- 2 Respond to each prompt to proceed to the next step in the installation. If you want to change something on a previous step, type back.
- 3 A successful installation displays the message:

```
Congratulations! <Application Name and Version> has been successfully installed to:
```

```
/opt/ePayment
```

where `/opt/ePayment` is the ePayment Manager home directory, `PAYMENT_HOME`, that you specified in response to the installation prompts.

# Installing ePayment Manager Application Server Components

## *To install ePayment Manager application server components*

- 1 For UNIX (Solaris, Linux, HP-UX, or AIX), log in on the database server.
- 2 After you obtain and locate the ePayment Manager software installer, run it as follows:
  - c For UNIX, enter `./Payins.bin` from a command prompt at the directory location where the installer resides.
  - d For Windows, double-click the `Payins.exe` installer application at the directory location where it resides.

- 3 On the Introduction screen, read the PAYMENT introductory information. Click Next to continue.
- 4 On the License Agreement screen, carefully read the licensing agreement, select the acceptance button, and then click Next.
- 5 On the Enter Serial Number screen, enter your product serial number. Then click Next.
- 6 On the Owner of Web Application Server screen, enter the name of the application server owner (the same one you used when installing eStatement Manager). Then click Next.
- 7 On the Group of Web Application Server screen, enter the name of the group for the application server (the same one you used when installing eStatement Manager). Then click Next.
- 8 On the Choose Install Folder screen, accept the default installation folder or click. Choose and enter the directory where you want to install the PAYMENT files and directories. This document refers to that directory as PAYMENT\_HOME. Click the Next button to continue.
- 9 On the Choose Product Features screen, click Application Server. Then click Next.
- 10 On the Pre-Installation Summary screen, verify that the information is correct, and click on Install. To correct any entries, click Previous, and then return here.

At this point, the ePayment Manager application server components are copied to the designated installation folder. A status bar on the bottom of the screen shows each database server component being installed. No user intervention is required.

- 11 If you are asked to specify which version of the application server you are using, do so. The release notes appear inside the installer window.  
  
The Install Complete screen reports a successful installation and the directory that contains the database server components.
- 12 Click Done to exit the installer.
- 13 If the installation fails, determine the cause of the problem and run the installer again to reinstall ePayment Manager.

## Distributed Environments

If you are installing in a distributed environment, be sure that you have installed all ePayment Manager components as follows before proceeding to the database configuration section.

- **Database** components on database server(s)
- **App Server** components on application server(s)
- **Tools** components on a Windows machine (accessible to UNIX servers)
- Database **client software** on application server(s)

# 4 Continuing Installation of the Solaris - WebLogic - Oracle Stack

## How to Proceed

Now proceed to the chapter of continuing installation instructions for your stack of choice.

This chapter continues the installation of ePayment Manager for the Sun Solaris Operating Environment, BEA WebLogic Server, and Oracle Database.

## Configuring Your Database Server

This section assumes in-depth understanding of and practical experience with database administration. Consult your database documentation as necessary.

### Overview

Oracle recommends that you install and configure ePayment Manager in the same top-level directory structure, first on the database server, then the application server.

**TIP:** For distributed environments, ensure that you have any required database client software installed on your application server and any other client machines of your database server.

This section provides instructions for configuring your database server to support a *new* ePayment Manager database. It includes:

- UNIX permissions for your database server

**NOTE:** The installation and configuration examples shown in this guide use default ePayment Manager pathnames, privileges, and permissions. If you choose not to accept the default values, make sure your values are consistent on all servers across your installation of ePayment Manager.

### UNIX Permissions for Your Database Server

Before creating the ePayment Manager database using ANT scripts, verify that the owner and group permissions (**userid:groupid**) of the ePayment Manager database directory, including all subfolders, are set to the **DB Admin user** defined during database installation.

This guide uses the example username and password **edx\_dba:edx** as the owner and group for the eaSuite **database user**. This is the user for your database instance. This guide uses the example database instance name **edx0**.

Oracle recommends that you install ePayment Manager database components with the default owner and group for your platform. After installation, change the user and group ownership of ePayment Manager database server components to that of the **DB Admin user**.

DATABASE	DB ADMIN USER	DB USER
Oracle	oracle:dba	edx_dba:edx

**CAUTION:** The **DB Admin** user has special privileges on Oracle. For details on owner and group permissions for your database server, please consult the database documentation for your platform.

If your database administrator uses custom user and group permissions, you can reset these permissions with the **chown** command.

#### *To reset user and group permissions for Oracle*

- 1 Recursively change the user and group permissions of your **ePayment Manager home** directory and all subdirectories to the **ePayment Manager instance owner**.

```
chown -R edxadmi n:edxadmi n /opt/ePayment
```

- 2 Recursively change the user and group permissions of your **ePayment Manager database home** directory and all subdirectories to the **database instance owner**.

```
chown -R oracle:dba /<PAYMENT_HOME>/db
```

## Configuring the ePayment Manager Database

You can use ANT build scripts to create and configure the ePayment Manager database. Before running ANT, do the following:

- 1 Install/Upgrade your database server software as necessary.
- 2 Make a full backup of your current database.

Check the database product *Release Notes* for disk space requirements and confirm that you have sufficient disk space on your database server. Insufficient disk space can cause database configuration to fail.

Install Apache ant version 1.6.5 or higher. This software can be downloaded from <http://ant.apache.org/>. The installation directions can be found on that site as well

Set ANT\_HOME and JAVA\_HOME environment variable.

Configure ANT *property files* as described in following sections.

## Configuring payuser.properties

This step in setting up the database server is to edit the properties file that controls the ePayment Manager production database ant installation. This file resides under \$PAYMENT\_HOME/db/oracle.

**CAUTION:** When creating an Oracle database, limit its name to eight characters. Defining or entering an Oracle SID with more than eight characters causes Oracle database configuration to fail.

The following example for payusr.properties shows sample values for you to replace with the appropriate usernames, passwords, and SID settings:

```
DB_SID=EDX0
DB_USERNAME=edx_dba
DB_PASSWORD=edx
```

## Configuring a New ePayment Manager Database

### *To configure a new ePayment Manager database*

- 1 For UNIX, switch user to the DB admin user. Oracle requires the administrative user in order to create files. For example.

```
$ su - oracle
```

- 2 Change the directory to your ePayment Manager database home directory. For example:

```
cd <PAYMENT_HOME>/db/oracle
```

- 3 You can use an ant target that automates the payment installation process. The install-new target creates a new payment schema on an existing easuite database instance (DB\_SID) that is specified in the properties file:

```
ant install-new
```

- 4 Check the following log files for any errors:

- create\_objects.log
- compile\_sproc.log
- data\_import.log

- 5 If you wish to manually run each install step, then start the ant script with the command:

```
ant
```

The main menu appears:

```
main:
```

```
[echo] Install payment database
```

```
[echo] [1]. Install Application Database I
```

```
[echo] [2]. Install Application Database I I
[echo] [3]. Initial Data Population
[echo] [0]. Quit
[input] Enter your selection (1, 2, 3, q, 0)
```

- 6 Select option 1, Install Application Database I. This option creates database tables, views, and indexes.

Create Objects:

```
[echo] Start drop_payment_objects.sql execution..
[echo] drop_payment_objects.sql execution is completed..
[echo] Start create_payment_objects.sql execution..
[echo] create_payment_objects.sql execution is completed..
```

- 7 Check create\_objects.log for any errors. Ignore the following error messages at the start of this log file:

```
ORA-00942: table or view does not exist - drop table statement
ORA-02289: sequence does not exist - drop sequence statement
ORA-01418: specified index does not exist - drop index statement
```

- 8 Select option 2, Install Application Database II. This option compiles stored procedures to support database processing.

Compile SP:

```
[echo] Compiling packages..
```

- 9 Check the compile\_sproc.log for any errors.

- 10 Select option 3, Initial Data Population to populate the initial payment module data.

Populate Data:

```
[echo] Start initial_payment_data.sql execution..
[echo] initial_payment_data.sql execution is completed..
```

- 11 Check data\_import.log for any errors.

## Migrating an Existing ePayment Manager Database

To migrate an existing ePayment Manager database to a newer version, you run the database setup with ANT build scripts. For details of migration, see *Migration Guide for Oracle Siebel eaSuite*.

# Configuring the WebLogic Application Server

This section assumes in-depth understanding of and practical experience with application server administration. Consult WebLogic Server documentation at <http://bea.com> as necessary.

## Overview

You must start your WebLogic Server instance and bring up the Administrative Console before you begin this section.

**NOTE:** If you cannot bring up the WebLogic Console, you will be unable to proceed with configuring your application server for ePayment Manager.

Oracle recommends that you install and configure ePayment Manager in the same top-level directory structure, first on the database server, then the application server.

If you have not already installed database server components and configured the database server for ePayment Manager, do so now.

The default command-line startup shell scripts are fine for an inactive production environment where there are no running jobs. However, the startup process will stop immediately if you enter a **Ctrl+C** (often used to force a hard shutdown of the server) in the startup directory, or if you close the terminal session. This can damage your configuration file. Oracle recommends using the web console and/or the SHUTDOWN command to ensure a graceful shutdown.

To start WebLogic in an active ePayment Manager production environment, Oracle recommends that you use the **nohup** command to ignore hang-ups. This will leave the server running in the background even if you end your terminal session or try to force a hard shutdown, providing a more stable production environment.

## Capturing Your Environment for ePayment Manager

### Updating the ePayment and eStatement Configuration Files

*To update the ePayment Manager and eStatement Manager configuration files*

- 1 Log on as the WebLogic server owner, and change your working directory to `$PAYMENT_HOME/config`, for example:  

```
cd /opt/eaSuite/ePayment/config
```
- 2 If you are not using the default eStatement and ePayment directories, then edit the `edx_payment.config` file, and correct the entry that defines `PAYMENT_HOME`.

- 3 Copy the updated `edx_payment.config` file under `$PAYMENT_HOME/config` to `$EDX_HOME/config`, where `EDX_HOME` is the eStatement Manager home directory.

# 5

## Continuing Installation of the Solaris – WebSphere - Oracle Stack

### Updating the eStatement EAR files

You must update the ear-eStatement.ear file for ePayment Manager. ePayment Manager installs a file called ear-payment.ear, which you must merge into the ear-eStatement.ear file.

#### *To update the eStatement Manager ear files*

- 1 Make a backup copy of the original ear-eStatement.ear.
- 2 Edit \$PAYMENT\_HOME/bin/merge\_payment\_wl.sh to update the locations for the home and source directories, if needed. Also set JAVA\_HOME in the script or in your shell.
- 3 Run the edited shell script.

The batch file creates a new ear-eStatement.ear file in the \$PAYMENT\_HOME/J2EEApps/weblogic directory.

### Deploying the ePayment Manager Application

The ePayment Manager application requires that you redeploy the eStatement Manager EAR because the latter was updated in the previous step. You must also deploy a sample payment application. You can deploy either the Simple (single-DDN) or Complex (multiple-DDN) application for testing purposes. Also deploy your site application as created by Oracle Professional Services or by your development team.

#### *To deploy eStatement Manager and ePayment Manager*

- 1 Select Deployments and click Install.
- 2 Browse to the location of your EAR file, select it, and click Next.
- 3 Select **Install this deployment as an application**, and click Next.
- 4 Leave the default settings in the Optional Settings page, and click Finish.
- 5 After activating the changes, select the newly deployed EAR file in the Summary of Deployments page and start it.

## How to Proceed

Proceed to Chapter 8, “Packaging the Hibernate and C3PO Libraries.”

This chapter continues the installation of ePayment Manager for the Sun Solaris Operating Environment, IBM WebSphere Server, and Oracle Database.

# Configuring Your Database Server

This section assumes in-depth understanding of and practical experience with database administration. Consult your database documentation as necessary.

## Overview

Oracle recommends that you install and configure ePayment Manager in the same top-level directory structure, first on the database server, then the application server.

**TIP:** For distributed environments, ensure that you have any required database client software installed on your application server and any other client machines of your database server.

This section provides instructions for configuring your database server to support a *new* ePayment Manager database. It includes:

- UNIX permissions for your database server

**NOTE:** The installation and configuration examples shown in this guide use default ePayment Manager pathnames, privileges, and permissions. If you choose not to accept the default values, make sure your values are consistent on all servers across your installation of ePayment Manager.

## UNIX Permissions for Your Database Server

Before creating the ePayment Manager database using ANT scripts, verify that the owner and group permissions (`userid:groupid`) of the ePayment Manager database directory, including all subfolders, are set to the **DB Admin user** defined during database installation.

This guide uses the example username and password `edx_dba:edx` as the owner and group for the eSuite **database user**. This is the user for your database instance. This guide uses the example database instance name `edx0`.

Oracle recommends that you install ePayment Manager database components with the default owner and group for your platform. After installation, change the user and group ownership of ePayment Manager database server components to that of the **DB Admin user**.

DATABASE	DB ADMIN USER	DB USER
Oracle	oracle:dba	edx_dba:edx

**CAUTION:** The **DB Admin** user has special privileges on Oracle. For details on owner and group permissions for your database server, please consult the database documentation for your platform.

If your database administrator uses custom user and group permissions, you can reset these permissions with the `chown` command.

### *To reset user and group permissions for Oracle*

- 1 Recursively change the user and group permissions of your **ePayment Manager home** directory and all subdirectories to the **ePayment Manager instance owner**.

```
chown -R edxadmi n: edxadmi n /opt/ePayment
```

- 2 Recursively change the user and group permissions of your **ePayment Manager database home** directory and all subdirectories to the **database instance owner**.

```
chown -R oracle:dba /<PAYMENT_HOME>/db
```

## Configuring the ePayment Manager Database

You can use ANT build scripts to create and configure the ePayment Manager database. Before running `ant`, do the following:

- 1 Install/Upgrade your database server software as necessary.
- 2 Make a full backup of your current database.

Check the database product *Release Notes* for disk space requirements and confirm that you have sufficient disk space on your database server. Insufficient disk space can cause database configuration to fail.

Install Apache ant version 1.6.5 or higher. This software can be downloaded from <http://ant.apache.org/>. The installation directions can be found on that site as well

Set ANT\_HOME and JAVA\_HOME environment variable

Configure ANT *property files* as described in following sections.

### Configuring payuser.properties

This step in setting up the database server is to edit the properties file that controls the ePayment Manager production database ant installation. This file resides under `$PAYMENT_HOME/db/oracle`.

**CAUTION:** When creating an Oracle database, limit its name to eight characters. Defining or entering an Oracle SID with more than eight characters causes Oracle database configuration to fail.

The following example for `payusr.properties` shows sample values for you to replace with the appropriate usernames, passwords, and SID settings:

```
DB_SID=EDX0
```

```
DB_USERNAME=edx_dba
```

```
DB_PASSWORD=edx
```

### Configuring a New ePayment Manager Database

*To configure a new ePayment Manager database*

- 1 For UNIX, switch user to the DB admin user. Oracle requires the administrative user in order to create files. For example.

```
$ su - oracle
```

- 2 Change the directory to your ePayment Manager database home directory. For example:

```
cd <PAYMENT_HOME>/db/oracle
```

- 3 You can use an ant target that automates the payment installation process. The install-new target creates a new payment schema on an existing easuite database instance (DB\_SID) that is specified in the properties file:

```
ant install-new
```

- 4 Check the following log files for any errors:

- create\_objects.log
- compile\_sproc.log
- data\_import.log

- 5 If you wish to manually run each install step, then start the ant script with the command:

```
ant
```

The main menu appears:

```
main:
```

```
[echo] Install payment database
[echo] [1]. Install Application Database I
[echo] [2]. Install Application Database II
[echo] [3]. Initial Data Population
[echo] [Q]. Quit
[input] Enter your selection (1, 2, 3, q, Q)
```

- 6 Select option 1, Install Application Database I. This option creates database tables, views, and indexes.

```
Create Objects:
```

```
[echo] Start drop_payment_objects.sql execution..
[echo] drop_payment_objects.sql execution is completed..
[echo] Start create_payment_objects.sql execution..
[echo] create_payment_objects.sql execution is completed..
```

- 7 Check create\_objects.log for any errors. Ignore the following error messages at the start of this log file:

```
ORA-00942: table or view does not exist - drop table statement
ORA-02289: sequence does not exist - drop sequence statement
ORA-01418: specified index does not exist - drop index statement
```

- 8 Select option 2, Install Application Database II. This option compiles stored procedures to support database processing.

```
Compile SP:
```

```
[echo] Compiling packages. .
```

9 Check the compile\_sproc.log for any errors.

10 Select option 3, Initial Data Population to populate the initial payment module data.

Populate Data:

```
[echo] Start initial_payment_data.sql execution. .
```

```
[echo] initial_payment_data.sql execution is completed. .
```

11 Check data\_import.log for any errors.

## Migrating an Existing ePayment Manager Database

To migrate an existing ePayment Manager database to a newer version, you run the database setup with ANT build scripts. For details of migration, see *Migration Guide for Oracle Siebel eaSuite*.

# Configuring the WebSphere Application Server

This section assumes in-depth understanding of and practical experience with WebSphere Enterprise Server. Consult your WebSphere documentation as necessary.

## Overview

Oracle recommends that you install and configure ePayment Manager in the same top-level directory structure, first on the database server, then the application server.

If you have not already installed database server components and configured the database server for ePayment Manager, do so now.

**TIP:** For distributed environments, ensure that you have any required **database client software** installed on your application server and any other client machines of your database server.

**CAUTION:** The installation and configuration examples shown in this guide use default ePayment Manager pathnames, privileges, and permissions. If you choose not to accept the default values, make sure that your values are consistent on all servers across your installation of ePayment Manager.

## Capturing Your Environment for ePayment Manager

### Updating the ePayment and eStatement Configuration Files

*To update the ePayment Manager and eStatement Manager configuration files*

1 Log on as the WebSphere server owner, and change your working directory to \$PAYMENT\_HOME/config, for example:

```
cd /opt/eaSuite/ePayment/config
```

- 2 If you are not using the default eStatement and ePayment directories, then edit the `edx_payment.config` file, and correct the entry that defines `PAYMENT_HOME`.
- 3 Copy the updated `edx_payment.config` file under `$PAYMENT_HOME/config` to `$EDX_HOME/config`, where `EDX_HOME` is the eStatement Manager home directory.

## Updating the eStatement EAR files

You must update the `ear-eStatement.ear` file for ePayment Manager. ePayment Manager installs a file called `ear-payment.ear`, which you must merge into the `ear-eStatement.ear` file.

### *To update the eStatement Manager ear files*

- 1 Make a backup copy of the original `ear-eStatement.ear`.
- 2 Edit `$PAYMENT_HOME/bin/merge_payment_ws.sh` to update the locations for the home and source directories, if needed. Also set `JAVA_HOME` in the script or in your shell.
- 3 Run the edited shell script.

The batch file creates a new `ear-eStatement.ear` file in the `$PAYMENT_HOME/J2EEApps/websphere` directory.

## Adding Required Library Paths

### *To add required library paths for ePayment Manager*

- 1 Navigate to Servers>Application servers > server1.
- 2 Select Process Definition > Java Virtual Machine under Server Infrastructure > Java and Process Management.
- 3 Add the required .jar files and directory to the class path:
  - `PAYMENT_HOME/lib/jsse.jar`
  - `PAYMENT_HOME/lib/jcert.jar`
  - `PAYMENT_HOME/lib/jnet.jar`

Example:

```
/opt/ePayment/jsse.jar  
/opt/ePayment/jcert.jar  
/opt/ePayment/jnet.jar
```

Please ensure that the files above listed exist in `$PAYMENT_HOME/lib` directory where `$PAYMENT_HOME` is your ePayment Manager installation directory.

## Deploying the ePayment Manager Application

The ePayment Manager application requires that you redeploy the eStatement Manager EAR because the latter was updated in the previous step. You must also deploy a sample payment application. You can deploy either the Simple (single-DDN) or Complex (multiple-DDN) application for testing purposes. Also deploy your site application as created by Oracle Professional Services or by your development team.

## How to Proceed

Proceed to Chapter 8, “Packaging the Hibernate and C3PO Libraries.”



# 6 Continuing Installation of the Linux – Oracle - Oracle Stack

This chapter continues the installation of ePayment Manager for the Linux Operating System, Oracle Application Server, and Oracle Database.

## Preparing to Configure Your Database Server

This section assumes in-depth understanding of and practical experience with database administration. Consult your database documentation as necessary. For distributed environments, make sure you have any required database client software installed on your application server and any other client machines of your database server.

### Overview

Oracle recommends that you install and configure ePayment Manager in the same top-level directory structure, first on the database server, then the application server.

This section provides initial instructions for configuring your database server to support a **new** ePayment Manager database. It includes:

- Linux permissions for your database server

**CAUTION:** The installation and configuration examples shown in this guide use default ePayment Manager pathnames, privileges, and permissions. If you choose not to accept the default values, make sure that your values are consistent on all servers across your installation of ePayment Manager.

### Linux Permissions for Your Database Server

Before creating the ePayment Manager database using ANT build scripts, verify that the owner and group permissions (userid:groupid) of the eStatement Manager database directory, including all subfolders, are set to the DB Admin user defined during database installation.

This guide uses the example username and password `edx_dba:edx` as the owner and group for the Oracle database user. This is the user for your database instance. This guide also uses the example database instance name `edx0`.

Oracle recommends that you install ePayment Manager database components with the default owner and group for your platform. After installation, change the user and group ownership of ePayment Manager database server components to that of the DB Admin user.

DATABASE	DB ADMIN USER	DB USER
Oracle	Oracle:dba	edx_dba:edx

**CAUTION:** The **DB Admin** user has special privileges on Oracle. For details on owner and group permissions for your database server, please consult the database documentation for your platform.

If your database administrator uses custom user and group permissions, then you can reset these permissions with the **chown** command.

#### *To reset user and group permissions for Oracle*

- 1 Recursively change the user and group permissions of your PAYMENT\_HOME directory and all subdirectories to the ePayment Manager instance owner.  

```
chown -R edxadmi n:edxadmi n /opt/eaSui te/ePayment
```
- 2 Recursively change the user and group permissions of your PAYMENT\_HOME database directory and all subdirectories to the database instance owner.  

```
chown -R oracl e:dba /opt/eaSui te/ePayment/db
```

**TIP:** Verify the owner information in any profile files used by the database server owner and application server owner. See your server documentation for details.

Developers and system administrators need to be familiar with how to stop and start a database server and an active ePayment Manager database instance for your platform.

For details on starting and stopping your database server and instances, please consult the database documentation for your platform.

## Configuring the ePayment Manager Database

You can use ANT build scripts to create and configure the ePayment Manager database. Before running `ant`, do the following:

- 1 Install/Upgrade your database server software as necessary.
- 2 Make a full backup of your current database.

Check the database product *Release Notes* for disk space requirements and confirm that you have sufficient disk space on your database server. Insufficient disk space can cause database configuration to fail.

Install Apache ant version 1.6.5 or higher. You can download this software from <http://ant.apache.org/>. The installation directions are on that site as well.

Set ANT\_HOME and JAVA\_HOME environment variable

Configure ANT *property files*, as described in following sections.

### Configuring `payuser.properties`

This step in setting up the database server is to edit the properties file that controls the ePayment Manager production database ant installation. This file resides under `$PAYMENT_HOME/db/oracle`.

**CAUTION:** When creating an Oracle database, limit its name to eight characters. Defining or entering an Oracle SID with more than eight characters causes Oracle database configuration to fail.

The following example for `payusr.properties` shows sample values for you to replace with the appropriate usernames, passwords, and SID settings:

```
DB_SID=EDXO
DB_USERNAME=edx_dba
DB_PASSWORD=edx
```

## Configuring a New ePayment Manager Database

### *To configure a new ePayment Manager database*

- 1 Switch user to the DB admin user. Oracle requires the administrative user in order to create files. For example.

```
$ su - oracle
```

- 2 Change the directory to your ePayment Manager database home directory. For example:

```
cd <PAYMENT_HOME>/db/oracle
```

- 3 You can use an ant target that automates the payment installation process. The `install-new` target creates a new payment schema on an existing `easuite` database instance (`DB_SID`) that is specified in the properties file:

```
ant install-new
```

- 4 Check the following log files for any errors:

- `create_objects.log`
- `compile_sproc.log`
- `data_import.log`

- 5 If you wish to manually run each install step, then start the ant script with the command:

```
ant
```

The main menu appears:

```
main:
    [echo] Install payment database
    [echo] [1]. Install Application Database I
    [echo] [2]. Install Application Database II
    [echo] [3]. Initial Data Population
    [echo] [Q]. Quit
    [input] Enter your selection (1, 2, 3, q, Q)
```

- 6 Select option 1, Install Application Database I. This option creates database tables, views, and indexes.

Create Objects:

```
[echo] Start drop_payment_objects.sql execution. .  
[echo] drop_payment_objects.sql execution is completed. .  
[echo] Start create_payment_objects.sql execution. .  
[echo] create_payment_objects.sql execution is completed. .
```

- 7 Check create\_objects.log for any errors. Ignore the following error messages at the start of this log file:

```
ORA-00942: table or view does not exist - drop table statement  
ORA-02289: sequence does not exist - drop sequence statement  
ORA-01418: specified index does not exist - drop index statement
```

- 8 Select option 2, Install Application Database II. This option compiles stored procedures to support database processing.

Compile SP:

```
[echo] Compiling packages. .
```

- 9 Check the compile\_sproc.log for any errors.
- 10 Select option 3, Initial Data Population to populate the initial payment module data.

Populate Data:

```
[echo] Start initial_payment_data.sql execution. .  
[echo] initial_payment_data.sql execution is completed. .
```

- 11 Check data\_import.log for any errors.

## Migrating an Existing ePayment Manager Database

To migrate an existing ePayment Manager database to a newer version, you run the database setup with ANT build scripts. For details of migration, see *Migration Guide for Oracle Siebel eaSuite*.

# Configuring the Oracle Application Server

This section assumes in-depth understanding of and practical experience with application server administration. It is designed for experienced Oracle Application Server administrators and primarily presents only the steps and settings specific to eaSuite applications.

## Overview

See Oracle 10g R3 Application Server documentation for detailed step-by-step instructions for Java resource configuration, performance, and tuning. You must also consult your application server administrator for settings that may be specific to your configuration.

Start your Application Server instance and bring up the Administrative Console before you begin this section.

## Capturing Your Environment for ePayment

The ear-eStatement.ear file must be updated for ePayment. ePayment installs a file called ear-payment.ear, which must be merged into the ear-eStatement.ear file.

### *To update the eStatement Manager ear files*

- 1 Make a backup copy of the original ear-eStatement.ear.
- 2 Edit \$PAYMENT\_HOME/bin/oracleAS/merge\_payment\_oas.sh or merge\_payment\_oas.bat to update the locations for the home and source directories, if needed. Also set JAVA\_HOME in the script or in your shell/console.
- 3 Run the edited shell script.

The batch file creates a new ear-eStatement.ear file in the \$PAYMENT\_HOME/J2EEApps/oracleAS directory.

## Deploying the ePayment Manager Application

The ePayment Manager application requires that you redeploy the eStatement Manager EAR because the latter was updated in the previous step. You must also deploy a sample payment application. You can deploy either the Simple (single-DDN) or Complex (multiple-DDN) application for testing purposes. Also deploy your site application as created by Oracle Professional Services or by your development team.

Depending on requirements, it is possible to install any number of different ear files, but use the following guidelines. They help you to remove JNDI cross-references between applications, which references Oracle Application Server 10g R3 does not support.

### *To deploy the eStatement Manager application (merged with ear-payment.ear to add ePayment Manager functionality) and the paymentComplex application*

- 1 Deploy the paymentComplex application.
- 2 Deploy the eStatement (Manager) application, which is merged with ePayment EAR to add ePayment Manager functionality, and select the paymentComplex application as a parent of the eStatement application.
- 3 Use the jndi name of the data source that is in the paymentComplex application to create DDNs instead of edx/ejb/EdocsDataSource.

For example, use `edx/eaPayComplex/ejb/EdocsDataSource` as a Datasource name instead of `edx/ejb/EdocsDataSource`, when DDNs are created.

*To deploy the eStatement Manager application (merged with ear-payment.ear to add ePayment Manager functionality) and the paymentComplex application and the Sample application as well*

- 1 Deploy the paymentComplex application, selecting “default” as the parent application.
- 2 Deploy the Sample application, selecting the paymentComplex application as the parent.
- 3 Deploy the eStatement (Manager) application, which is merged with ear-payment.ear to add ePayment Manager functionality. In doing so, select the Sample application as a parent of the eStatement application.
- 4 Use the jndi name of the data source that is in the Sample application or that is in the paymentComplex application to create DDNs instead of `edx/ejb/EdocsDataSource`.

For example, use `edx/Sample/ejb/EdocsDataSource` as a Datasource name instead of `edx/ejb/EdocsDataSource`, when DDNs are created.

## How to Proceed

Proceed to Chapter 8, “Packaging the Hibernate and C3PO Libraries.”

# 7

## Continuing Installation of the Microsoft – WebLogic - Oracle Stack

This chapter continues the installation of ePayment Manager for the Microsoft Windows 2003 Operating System, BEA WebLogic Server, and Oracle Database.

### Configuring the ePayment Manager Database

You can use ANT build scripts to create and configure the ePayment Manager database. Before running ant, do the following:

- 1 Install/Upgrade your database server software as necessary.
- 2 Make a full backup of your current database.

Check the database product *Release Notes* for disk space requirements and confirm that you have sufficient disk space on your database server. Insufficient disk space can cause database configuration to fail.

Install Apache ant version 1.6.5 or higher. This software can be downloaded from <http://ant.apache.org/>. The installation directions can be found on that site as well

Set ANT\_HOME and JAVA\_HOME environment variable

Configure ANT *property files* as described in following sections.

### Configuring payuser.properties

This step in setting up the database server is to edit the properties file that controls the ePayment Manager production database ant installation. This file resides under \$PAYMENT\_HOME/db/oracle.

**CAUTION:** When creating an Oracle database, limit its name to eight characters. Defining or entering an Oracle SID with more than eight characters causes Oracle database configuration to fail.

The following example for payusr.properties shows sample values for you to replace with the appropriate usernames, passwords, and SID settings:

```
DB_SID=EDX0
DB_USERNAME=edx_dba
DB_PASSWORD=edx
```

## Configuring a New ePayment Manager Database

### *To configure a new ePayment Manager database*

- 1 Change the directory to your ePayment Manager database home directory. For example:

```
cd <PAYMENT_HOME>\db\oracl e
```

- 2 You can use an ant target that automates the payment installation process. The install-new target creates a new payment schema on an existing easuite database instance (DB\_SID) that is specified in the properties file:

```
ant i nstal l -new
```

- 3 Check the following log files for any errors:

- create\_objects.log
- compile\_sproc.log
- data\_import.log

- 4 If you wish to manually run each install step, then start the ant script with the command:

```
ant
```

The main menu appears:

```
mai n:
```

```
[echo] Instal l payment database
[echo] [1]. Instal l Applicati on Database I
[echo] [2]. Instal l Applicati on Database II
[echo] [3]. Ini ti al Data Popul ati on
[echo] [Q]. Qui t
[i nput] Enter your selecti on (1, 2, 3, q, Q)
```

- 5 Select option 1, Install Application Database I. This option creates database tables, views, and indexes.

```
Create Objects:
```

```
[echo] Start drop_payment_obj ects. sql executi on. .
[echo] drop_payment_obj ects. sql executi on is complet ed. .
[echo] Start create_payment_obj ects. sql executi on. .
[echo] create_payment_obj ects. sql executi on is complet ed. .
```

- 6 Check create\_objects.log for any errors. Ignore the following error messages at the start of this log file:

```
ORA-00942: table or view does not exist - drop table statement
ORA-02289: sequence does not exist - drop sequence statement
```

ORA-01418: specified index does not exist - drop index statement

- 7 Select option 2, Install Application Database II. This option compiles stored procedures to support database processing.

Compile SP:

```
[echo] Compiling packages..
```

- 8 Check the compile\_sproc.log for any errors.
- 9 Select option 3, Initial Data Population to populate the initial payment module data.

Populate Data:

```
[echo] Start initial_payment_data.sql execution..
```

```
[echo] initial_payment_data.sql execution is completed..
```

- 10 Check data\_import.log for any errors.

## Migrating an Existing ePayment Manager Database

To migrate an existing ePayment Manager database to a newer version, you run the database setup with ANT build scripts. For details of migration, see *Migration Guide for Oracle Siebel eaSuite*.

# Configuring the WebLogic Application Server

This section assumes in-depth understanding of and practical experience with application server administration. Consult WebLogic Server documentation as necessary.

## Overview

Oracle recommends that you install and configure ePayment Manager in the same top-level directory structure, first on the database server, then the application server.

If you have not already installed database server components and configured the database server for ePayment Manager, do so now.

**CAUTION:** For distributed environments, ensure that you have any required **database client software** installed on your application server and any other client machines of your database server.

This section provides instructions for configuring WebLogic Server to support ePayment Manager.

## Capturing Your Environment for ePayment Manager

### Updating the ePayment and eStatement Configuration Files

*To update the ePayment Manager and eStatement Manager configuration files*

- 1 Log on as the WebLogic server owner, and change your working directory to \$PAYMENT\_HOME/config, for example:  

```
cd \eaSuite\Payment\config
```
- 2 If you are not using the default eStatement and ePayment directories, then edit the edx\_payment.config file, and correct the entry that defines PAYMENT\_HOME.
- 3 Copy the updated edx\_payment.config file under \$PAYMENT\_HOME/config to \$EDX\_HOME/config, where EDX\_HOME is the eStatement Manager home directory.

## Deploying the ePayment Manager Application

After configuring your WebLogic server, you can deploy the ePayment Manager EAR file to that server.

*To deploy the ePayment Manager application*

- 1 Select Deployments and click Install.
- 2 Browse to the location of your EAR file, select it, and click Next.
- 3 Select **Install this deployment as an application**, and click Next.
- 4 Leave the default settings in the Optional Settings page, and click Finish.
- 5 After activating the changes, select the newly deployed EAR file in the Summary of Deployments page and start it.

## How to Proceed

Proceed to Chapter 8, “Packaging the Hibernate and C3PO Libraries.”

# 8

## Packaging the Hibernate and C3PO Libraries

This chapter covers the packaging of the Hibernate and C3PO third-party libraries.

### Prerequisites to Packaging

You must have installed:

- At least one of the following eaSuite 4.7 components:
  - eStatement Manager
  - ePayment Manager
  - eaAssist
- JDK 1.5
- Ant 1.6.5 or later

### Configuring the Environment for Packaging

Assure that Ant and Java paths are properly set. Configure the environment for them as follows:

- For UNIX (Solaris, Linux):

```
ANT_HOME=/opt/apache-ant-1.6.5
JAVA_HOME=/opt/jdk1.5.0_04
export ANT_HOME
export JAVA_HOME
PATH=$JAVA_HOME/bin:$ANT_HOME/bin:$PATH
Export PATH
```
- For Windows:

```
Set ANT_HOME=C:/apache-ant-1.6.5
Set JAVA_HOME= C:/jdk1.5.0_04
Set PATH=%JAVA_HOME%/bin;%ANT_HOME%/bin;%PATH%
```

## Downloading and Installing the Third-Party Libraries

Download the following required third-party libraries:

- Hibernate 3.1.3
- C3PO 0.9.0

The following table shows the library names and installation instructions for the UNIX and Windows platforms:

JAR File Name (Linked to the download site)	OS	File Name after downloading	Tool/Commands to install
<a href="#">hibernate-3.1.3.jar</a>	UNIX (Solaris, Linux)	hibernate-3.1.3.tar.gz	gzip -d hibernate-3.1.3.tar.gz tar -xvf hibernate-3.1.3.tar
<a href="#">hibernate-3.1.3.jar</a>	Windows	hibernate-3.1.3.zip	Use Winzip
<a href="#">c3p0-0.9.0.jar</a>	UNIX (Solaris, Linux)	c3p0-0.9.0.bin.gz	gzip -d c3p0-0.9.0.bin.gz tar -xvf c3p0-0.9.0.bin
<a href="#">c3p0-0.9.0.jar</a>	Windows	c3p0-0.9.0.bin.zip	Use Winzip

Install these libraries on a server that eaSuite 4.7 application server components can access. Set proper permissions to these libraries in order to package them with the eaSuite product. The next section describes packaging.

## Packaging ePayment Manager

When defining paths for the Windows platform in the package.properties files, use one of the following standards:

- 1 Use a forward slash as in

```
EDX_HOME=C:/eStatement
```

- 2 Use two backslashes for each single backslash in the path as in

```
EDX_HOME=C:\\eStatement
```

For the UNIX platforms (Solaris, Linux), use the UNIX standard when defining paths as in:

```
EDX_HOME=/opt/eStatement
```

### To package ePayment Manager

- 1 Edit the PAYMENT\_HOME/pkgUtil/package.properties property file located in PAYMENT\_HOME/pkgUtil as shown in the following table:

Property Name	Value
EDX_HOME	C:/eStatement
HIBERNATE_JARFILE_LOC	C:/eStatement/hibernate-3.1
C3P_JARFILE_LOC	C:/eStatement/c3p0-0.9.0/lib

- a Set PAYMENT\_HOME to the ePayment Manager home.
- b Set the property value HIBERNATE\_JARFILE\_LOC to the Hibernate installation location. If you downloaded the hibernate jar file some other way, then provide up to the folder location where hibernate3.jar resides. For example, to set the location of the hibernate3.jar file, do the following:

```
HI BERNATE_JARFI LE_LOC=C: /hi bernate-3. 1
```

- c Set the property value C3P\_JARFILE\_LOC to the location where the c3p0-0.9.0.jar file resides. For example, to set the c3p0-0.9.0.jar file location, do the following:

```
C3P_JARFI LE_LOC=C: /c3p0-0. 9. 0/i i b
```

- 2 Navigate to PAYMENT\_HOME/pkgUtil and invoke Ant without arguments. For example,

```
cd /opt/ePayment/pkgUtil
ant
```

The Ant script completes the repackaging task and displays a message of success.

## Failure Recovery

Several reasons exist for getting a BUILD FAILED message during Ant execution:

- Incorrect package.properties file:
  - PRODUCT\_HOME is incorrect.

For example, for ePayment Manager a valid path entry like the following must exist:

```
PAYMENT_HOME=/opt/ePayment
```

Setting an invalid path or property name causes an error, as in the following assignment:

```
EDX_HOME=/opt/ePayment
```
  - Either HIBERNATE\_JARFILE\_LOC or C3P\_JARFILE\_LOC is incorrect.
  - Either the property HIBERNATE\_JARFILE\_LOC or the property C3P\_JARFILE\_LOC is not defined at all.
- Unavailability of JAR files in the specified locations.

- Incorrect JAR file names. The expected jar files are hibernate3.jar and c3p0-0.9.0.jar.

**NOTE:** You may get a BUILD SUCCESSFUL message without causing any repackaging if you remove the PRODUCT\_HOME property from the package.properties file.

- System crash during the Ant execution
- Lack of free disk space

To recover from any of these issues, correct them and re-invoke the Ant target. No manual removal of partially built components or temporary directories is required.