



Installation and Configuration

**Sun Solaris Operating Environment™ Software
and the BEA WebLogic® Server**

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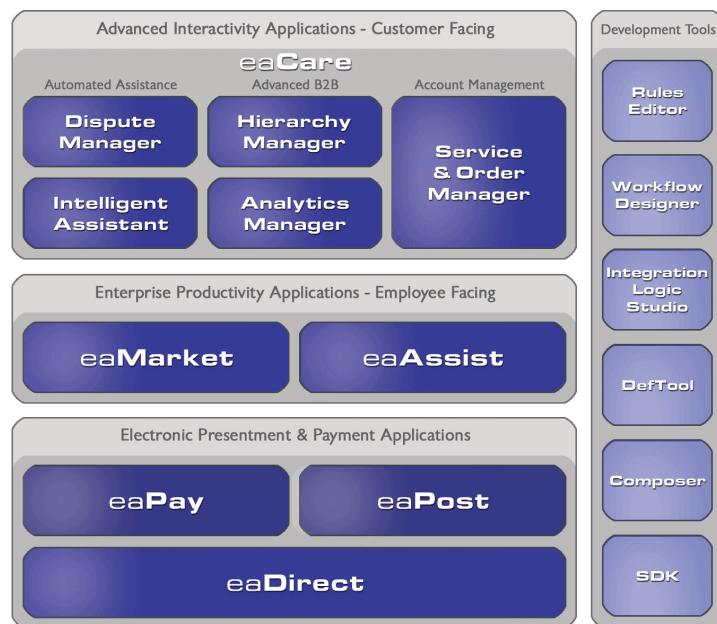
Preface

About Customer Self-Service and eaSuite™

edocs has developed the industry's most comprehensive software and services for deploying Customer Self-Service solutions. **eaSuite™** combines electronic presentment and payment (EPP), order management, knowledge management, personalization and application integration technologies to create an integrated, natural starting point for all customer service issues. eaSuite's unique architecture leverages and preserves existing infrastructure and data, and offers unparalleled scalability for the most demanding applications. With deployments across the healthcare, financial services, energy, retail, and communications industries, and the public sector, eaSuite powers some of the world's largest and most demanding customer self-service applications. eaSuite is a standards-based, feature rich, and highly scalable platform, that delivers the lowest total cost of ownership of any self-service solution available.

eaSuite is comprised of four product families:

- Electronic Presentment and Payment (EPP) Applications
- Advanced Interactivity Applications
- Enterprise Productivity Applications
- Development Tools



Electronic Presentment and Payment (EPP) Applications are the foundation of edocs' Customer Self-Service solution. They provide the core integration infrastructure between organizations' backend transactional systems and end users, as well as rich e-billing, e-invoicing and e-statement functionality. Designed to meet the rigorous demands of the most technologically advanced organizations, these applications power Customer Self-Service by managing transactional data and by enabling payments and account distribution.

eaDirect™ is the core infrastructure of enterprise Customer Self-Service solutions for organizations large and small with special emphasis on meeting the needs of organizations with large numbers of customers, high data volumes and extensive integration with systems and business processes across the enterprise. Organizations use eaDirect with its data access layer, composition engine, and security, enrollment and logging framework to power complex Customer Self-Service applications.

eaPay™ is the electronic payment solution that decreases payment processing costs, accelerates receivables and improves operational efficiency. eaPay is a complete payment scheduling and warehousing system with real-time and batch connections to payment gateways for Automated Clearing House (ACH) and credit card payments, and payments via various payment processing service providers.

eaPost® is the account content distribution system that handles all the complexities of enrollment, authentication and secure distribution of summary account information to any endpoint, while also bringing customers back the organization's Website to manage and control their self-service experience.

Advanced Interactivity Applications are a comprehensive set of advanced customer-facing self-service capabilities that enable the full range of business and consumer customer service activities. These sophisticated modules have the flexibility to completely customize the Customer Self-Service solution to meet vertical industry and specific company requirements.

eaCare™ consists of a rich set of sophisticated self-service modules – Dispute Manager, Intelligent Assistant, Hierarchy Manager, Analytics Manager, and Service and Order Manager - for automated assistance, advanced business-to-business applications and account management. These capabilities come together to create a web self-service dashboard for customers to access all service offerings from a single, easy-to-use interface. eaCare’s modularity accelerates time to market with components that can be deployed incrementally in a phased approach.

Enterprise Productivity Applications are employee-facing solutions that empower customer service representatives, sales agents, account managers, marketing managers, broker-dealers and channel partners within an organization and external partner organizations to facilitate self-service and to support assisted service. Employees leverage edocs’ Customer Self-Service solution to deliver customer service, access information, create and deploy marketing and customer service content, and perform activities for the benefit of customers.

eaAssist™ reduces interaction costs and increases customer satisfaction by enabling enterprise agents – customer service representatives (CSRs), sales agents, broker-dealers and others – to efficiently access critical account data and service-related information to effectively service customers. Through its browser interface designed especially for the enterprise agent, eaAssist enables agents to take advantage of customer-facing online capabilities to provide better service by more efficiently resolving customer account inquiries at the point of customer contact.

eaMarket™ is the personalization, campaign and content management solution that enables organizations to increase revenue and improve customer satisfaction by weaving personalized marketing and customer service messages throughout the Customer Self-Service experience. The transactional account data that provides the foundation for a Customer Self-Service solution – such as transaction activity, service or usage charges, current task and prior service history – bring valuable insight into customers and can help optimize personalized marketing and customer service campaigns. eaMarket leverages that data to present relevant marketing and customer service messages to customers.

edocs’ **Development Tools** are visual development environments for designing and configuring edocs’ Customer Self-Service solutions. The Configuration Tools encompass data and rules management, workflow authoring, systems integration, and a software development kit that makes it easy to create customer and employee-facing self-service applications leveraging eaSuite.

About eaPay

eaPay™ is the electronic payment solution that decreases payment processing costs, accelerates receivables and improves operational efficiency. eaPay is a complete payment scheduling and warehousing system with real-time and batch connections to payment gateways for Automated Clearing House (ACH) and credit card payments, and payments via various payment processing service providers.

eaPay Benefits

- Decreases payment processing costs and improves efficiency by providing complete electronic payment flexibility and low cost payment options to automate the payment process.
- Accelerates receivables and decreases float by automating payments online.
- Increases satisfaction and reduces customer support costs by allowing customers to easily and conveniently make payments on their accounts at the organization's Website.
- Minimizes IT costs by eliminating "hard wired" links to payment providers and having to support changing/emerging standards.
- Integrates with accounts receivables systems to automate electronic payment remittance postings.

eaPay Key Features

- Connections to payment networks
Real-time and batch interfaces to ACH, Credit Card, and proprietary networks, using a cartridge based approach that yields complete payment flexibility.
- Advanced warehousing and scheduling
Full payment warehousing to manage all of the scheduling, transaction, and business logic. Make one-time instant payments, schedule future payments, set up recurring and "auto-pay" payments, utilize threshold functionality, and cancel/change payments.
Supports ACH Notification of Changes (NOC), ACH addenda records, and multiple billers in one ACH file. Demand deposit account (DDA) verification before a payment is submitted via pre-notes.
Once eaPay retrieves an invoice from eaDirect, it keeps it in the payment database. That allows customers to view invoices to make payments and view payment history.
- Integration with your existing infrastructure
Updates Accounts Receivables systems with remittance info and supports reconciliation processes. Includes XML based API's for integration into backend systems.
- Front-end GUI's
Includes fully functional front-end web pages, which can also be used as templates, enabling you to fully brand and customize your front-end interface.
Account history and access to details of past payments, providing an integrated view of all transactions, regardless of payment type or who initiated them
Payment reminders and a variety of customizable email templates available to the administrator as well as the end-user. Examples of email notification include enrollment status, recurring payment scheduling, and bill payment status.

- Easy to use administration tools:
 - Web-based configuration
 - Integration with the eaDirect™ Command Center
 - Customer information management
 - Monitor system activities and generate reports
- Database optimization for high-performance and scalability
- Rich SDK enables you to fully extend the solution, including API's for two-way access and customizable front-end screens, jobs, and processes

About This Guide

This guide is intended for System Administrators and anyone who is responsible for the daily operation and supervision of an eaDirect environment. This Guide **does not** describe general UNIX system administration and other tasks such as:

- How to navigate the Sun Solaris system
- How to manipulate text files using various UNIX commands
- How to create files and directories
- How to use standard UNIX networking commands
- How to use standard UNIX text editors such as the vi text editor
- How to create UNIX groups and users using standard UNIX system administration tools and command line methods
- How to perform general installation and system administration tasks for third-party software that works with eaPost

To obtain information about these tasks and others, consult the UNIX system administration documentation.

Related Documentation

Online Help for command center functions, and a PDF version of this guide are also available.

Online	How to Access
Help	Select Help from eaPay command center screens.
A PDF of this guide	A PDF of this guide is available on the eaPay product CD-ROM.

This guide is part of the eaPay documentation set. For more information about implementing your eaPay application, see one of the following guides:

Print Document	Description
<i>Payment Production Guide</i>	How to configure and operate the production environment. It describes configuration tasks done after installation.
<i>Data Presentation Production Guide</i>	How to set up and run a live eaDirect application in a J2EE environment.
<i>Customizing and Extending eaPay</i>	Contains information about developing eaPay applications, and extending the functionality of eaPay command center jobs.
<i>Deploying and Customizing J2EE Applications</i>	How to customize J2EE web applications for deployment with the eaSuite.

The eaSuite products eaDirect, eaPost, eaMarket, and eaAssist provide their own documentation.

Obtaining edocs Software and Documentation

You can download edocs software and documentation directly from Customer Central at <https://support.edocs.com>. After you log in, click on the Downloads button on the left. When the next page appears, you will see a table displaying all of the available downloads. To search for specific items, select the Version and/or Category and click the Search Downloads button. If you download software, an email from edocs Technical Support will automatically be sent to you (the registered owner) with your license key information.

If you received an edocs product installation CD, load it on your system and navigate from its root directory to the folder where the software installer resides for your operating system. You can run the installer from that location, or you can copy it to your file system and run it from there. The product documentation included with your CD is in the Documentation folder located in the root directory. The license key information for the products on the CD is included with the package materials shipped with the CD.

If You Need Help

Technical support is available to customers who have valid maintenance and support contracts with edocs. Technical support engineers can help you install, configure, and maintain your edocs application.

edocs provides global Technical Support services from the following Support Centers:

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London, United Kingdom
Mon-Fri 9:00am – 5:00 GMT
Telephone: +44 20 8956 2673

Asia Pac Rim Support Center

Melbourne, Australia
Mon-Fri 9:00am – 5:00pm AU
Telephone: +61 3 9909 7301

Customer Central

<https://support.edocs.com>

Email Support

<mailto:support@edocs.com>

When you report a problem, please be prepared to provide us the following information:

- What is your name and role in your organization?
- What is your company's name?
- What is your phone number and best times to call you?
- What is your e-mail address?
- In which edocs product did a problem occur?
- What is your Operating System version?
- What were you doing when the problem occurred?
- How did the system respond to the error?
- If the system generated a screen message, please send us that screen message.
- If the system wrote information to a log file, please send us that log file.

If the system crashed or hung, please tell us.



Preparing to Install eaPay

Installation Overview

Before you can install the payment package, you must install eaDirect and configure the eaDirect database to interact with eaPay (see the *Installing and Configuring eaDirect Guide* for information about these procedures).

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

1. The steps required to implement online bill payment are:

2. Install eaDirect along with the required software.

See the *eaDirect Installation and Configuration Guide* for more information about installing eaDirect.

3. Install eaPay and configure system wide options.

Install the eaPay application, first on the database server, then on the application server. Then follow the Post-Installation instructions to complete the installation.

If you are upgrading from a previous release, please see the section *Upgrading eaPay*.

4. Configure a payment gateway for online check and/or credit card processing.

5. Enroll customers for online bill viewing and payment.

6. Set up eaPay jobs to process payments and optionally send reminders.

See the *eaPay Production Guide* for information about configuring a payment gateway, enrolling customers and other operational issues.

System Prerequisites

Before installing eaPay, eaDirect must be installed, along with its required software components. For information about eaDirect and its requirements, see the *eaDirect Installation and Configuration Guide*.



Caution

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

IE - Under Internet Options, on the Advanced tab, under Microsoft VM, make sure that "JIT Compiler for virtual machine enabled" is checked.

Netscape - Under Edit, then Preferences, click on **Advanced**, and make sure "Enable Javascript" is checked.

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

2

Installation for WebLogic

The following steps provide an overview of how to install and configure eaPay on the WebLogic Application server. Before you begin, verify that the Database Server is started.

1. Install for eaPay on the database server
2. Run the database creation script
3. Install eaPay on the application server
4. Configure WebLogic for eaPay
5. Choose the enrollment model, as described in the *Post Installation Configuration* section on page 21.

Installing eaPay on the Database Server

Follow the steps below to install eaPay on the database server. Before you do, verify that the database server is started.

To Install the eaPay Database Components:

1. Log in as the root user on the database server.
2. After you obtain and locate the eaPay software installer as described in the Preface of this guide, you can run it as follows:

Enter `./Payins.bin` from a command prompt at the directory location where the installer resides.
3. On the Introduction screen, read the eaDirect 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. It is stapled to the inside front cover of this guide (if your serial number has been misplaced, contact edocs Technical Support). 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 eaDirect). 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 eaDirect). 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 eaPay files and directories. This document refers to that directory as \$EAPAY_HOME, and the examples given use /opt/EDCSpay. 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 on **Install**. To correct any entries, click **Previous**, and then return here.

At this point, the eaPay 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.
11. The Install Complete screen reports a successful installation and the directory that contains the database server components. Click **Done** to exit the installer.

If the installation fails, determine the cause of the problem and run InstallAnywhere again to reinstall eaPay. If you need to contact edocs Technical Support, see the section *If You Need Help*.

To Run the Database Creation Script:

1. Log on as the Oracle user. For example:

```
su - oracle
```
2. You may have to set the environment variable for the Oracle SID to the eaDirect Oracle database instance before starting *sqlplus*. For example:

```
export ORACLE_SID=edx0
```
3. Change your working directory to the *db/oracle* directory under *\$EAPAY_HOME*. For example:

```
cd /opt/EDCSpay/db/oracle
```
4. Run *sqlplus* and login as the eaDirect database user.

```
sqlplus  
sqlplus edx_dba/edx@edx.db
```
5. Run the database creation script. For example:

```
@create_payment_db.sql
```

This script creates the payment tables and indexes, and adds payment information to some eaDirect tables. You may see some error messages about non-existent indexes, which you can ignore.

Installing eaPay on the Application Server

Follow the steps below to install eaPay on the Application server. Before you do, verify that the Database Server is started.

- Install the package for eaPay
- Update the eaPay and eaDirect configuration files
- Deploy the eaPay EAR file(s)
- Choose the enrollment model



When installing eaDirect and eaPay, be sure to check that the eaDirect and eaPay directories use the Unix owner that matches the WebLogic owner. For a new installation, root is acceptable. But, if there are existing WebLogic applications, an owner will have already been assigned.

Note that the *db* and *db/oracle* sub-directories should be owned by the oracle user and group, usually oracle:oinstall or oracle:dba.

To install the eaPay Application Components:

1. Log on as the root user on the application server.
2. After you obtain and locate the eaPay software installer as described in the Preface of this guide, you can run it as follows:

Enter `./Payins.bin` from a command prompt at the directory location where the installer resides.
3. On the Introduction screen, read the eaDirect 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. It is stapled to the inside front cover of this guide (if your serial number has been misplaced, contact edocs Technical Support). 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 eaDirect). 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 eaDirect). 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 eaPay files and directories. This document refers to that directory as \$EAPAY_HOME, and the examples given use `/opt/EDCSpay`. Click the **Next** button to continue.
9. On the Choose Product Features screen, select **App Server** and then the **Next** button to begin the installation of eaPay.

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 eaPay application server components are copied to the designated installation folder. A status bar on the bottom of the screen shows each application server component being installed. No user intervention is required.

11. The Install Complete screen reports a successful installation and the directory that contains the database server components. Click **Done** to exit the installer.

If the installation fails, determine the cause of the problem and run InstallAnywhere again to reinstall eaPay. If you need to contact edocs Technical Support, see the section *If You Need Help*.

To Update the eaPay and eaDirect Configuration Files:

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

```
cd /opt/EDCSpay/config
```
2. Edit the `edx_payment.config` file, and correct the entry that defines `EAPAY_HOME`, if necessary.
3. Copy the updated `edx_payment.config` file to `$EDX_HOME/config`.

To Update the eaDirect EAR Files:

The `ear-eadirect.ear` file must be updated for eaPay. eaPay installs a file called `ear-eapay.ear`, which must be merged into the `ear-eadirect.ear` file.

Before you start, please make a backup copy of the original `ear-eadirect.ear`.

1. Edit `$EAPAY_HOME/bin/merge_eapay_wl.sh` to update the locations for the home and source directories, if needed.
2. Run the edited shell script.
3. The batch file creates a new `ear-eadirect.ear` file in the `$EAPAY_HOME/J2EEApps/weblogic` directory.

To Deploy the eaPay EAR Files:

eaPay requires that the eaDirect EAR be re-deployed, since it 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. You will also want to deploy your site's application, as created by edocs Professional Services, or by your development team.

The following steps describe how to deploy an EAR file.

1. Make sure the WebLogic server is running. If it is not running, start it. For example:
`./startWebLogic.sh`
2. Open a URL to the WebLogic console.
3. Select **Mydomain**, then **Deployments**, then **Applications**, and click on **Install New Application**.
4. Browse to a copy of the *ear-eadirect.ear* file for eaPay. If you are using a browser from a different system than the Solaris system that the files are on, you will have to copy the EAR from *\$EAPAY_HOME/J2EEApps/weblogic* on the Unix host to the system where you are running the browser. Then click **Upload**. WebLogic will upload the *ear-eadirect.ear* file, install it over the existing *ear-eadirect.ear* file, and (usually) re-deploy the EAR file and its components.

Tip

You should check to make sure all the EJB and WAR Deployments under the *ear-eadirect* application in WebLogic properly deployed. If not, check **Deployed**, and click on **Apply**. Also, check that the Targets tab for each EJB deployment shows that the server is chosen. If not, move the server into the Chosen column, and click **Apply**.

5. Restart the WebLogic server by stopping it, and then restarting as described in step 1.

The eaPay sample applications are located in
\$EAPAY_HOME/Samples/J2EEApps/weblogic.

JTA Timeout Configuration

If `pmtCheckSubmit` will process a large number of checks, the JTA timeout value in WebLogic must be increased to keep the connection open long enough to process all the checks. For every 1500 checks to be processed, the timeout value should be increased by 30 seconds.

The JTA timeout value allows the system to recover a "lost" transaction. Your application code should handle commit and rollback of database transactions. But, if there is a programming error such that transactions are not committed or rolled back, a timeout provides a way for the application server to release those transactions.

The default timeout (30 seconds) is fine for web-based transactions, but it is too small for batch based transactions.

To configure the JTA Timeout setting:

1. Enter the URL to log on to the WebLogic console
2. Click on the **mydomain** in the left window
3. Click on the JTA tab, and a screen similar to the following will appear:

The image shows a software configuration window with a yellow background. At the top, there are two tabs: 'Configuration' (active) and 'Notes'. Below these are four sub-tabs: 'General', 'JTA' (selected), 'Logging', and 'Applications'. The 'JTA' tab contains several configuration fields:

- Timeout Seconds:** A text box containing '30' followed by the word 'seconds'.
- Abandon Timeout Seconds:** A text box containing '86400' followed by the word 'seconds'.
- Before Completion Iteration Limit:** A text box containing '10'.
- Max Transactions:** A text box containing '10000'.
- Max Unique Name Statistics:** A text box containing '1000'.
- Forget Heuristics:** A checkbox that is checked, followed by the text 'Forget Heuristics'.

4. Change the Timeout Seconds field to the multiple of 30 seconds that you require, and click the **Apply** button.

3

Post Installation Configuration

Choosing the Enrollment Model

The *eaPay Production Guide* describes the options for storing and retrieving enrollment information for eaDirect and eaPay. Please read that section before following these directions.

The User Enrollment Model

eaPay supports both single DDN and multiple DDN payments using two WAR files. *war-eapay-simple.war* handles single DDN access, and *war-eapay-complex.war* handles multiple DDN access.

The Payment Account Enrollment Model

eaPay Settings for each gateway has a field that determines which class to use when storing and retrieving payment information. The field name is `Implementation of IPaymentAccountUserAccessor`, and the available option is *com.edocs.payment.payenroll.payacct.SSOPaymentAccountAccessor*, for when eaPay user information is stored in a table separate from the CDA tables (default eaPay enrollment).

Changing the Enrollment Model

The eaPay Default enrollment model supports single-DDN per user by default. The following sections describe how to switch from the default enrollment model to the other enrollment models.

To Switch to Multiple-DDN

1. Change the eaPay Settings, by logging onto the Command Center and choosing **Settings**, then **eaPay Settings**.
2. Create or update the application you wish to switch. For the `Implementation of IUserAccountAccessor` parameter, select *com.edocs.payment.payenroll.usracct.JNDIMultipleDDNUserAccountAccessor*

3. Click the **Update** button.
4. On the application server, use the URL prefix `eaPayComplex` to access `eaPay`, which accesses `war-eapay-complex.war`.

Preparing for a System Failure

The database for `eaPay` should be backed-up regularly, for example nightly, to maximize the recovery effort in the event of a system failure. For example, if the `eaPay` Database Server failed for some reason, the database administrator could restore from the latest backed-up version. A failure to the `eaPay` Database Server also requires that the database administrator restart the `eaPay` services in order to reestablish the database connection pool.

`eaPay` will automatically handle single transaction failures by rolling back to the transaction's original state. This happens because each `eaPay` operation is handled within its own transaction context.

4

Upgrading from 3.4

Upgrading eaPay

To upgrade eaPay from version 3.4 to 4.1, perform the following tasks:

- Remove eaPay 3.4
- Remove eaDirect 3.4
- Install eaDirect 4.1
- Install eaPay 4.1
- Upgrade eaPay Settings and job parameters on the application server
- Run the database creation script on the database server

To Upgrade the Application Server:

Follow the steps below to upgrade eaPay on the Application server. Before you do, verify that the Database Server is running.

1. Log in as the root user on the application server.
2. Run this procedure on both the database and application server.
3. Run `$EAPAY_HOME/Uninstall/Uninstall_eaPay`. For example:

```
cd /opt/EDCSpay/Uninstall
./Uninstall_eaPay
```
4. Remove any directories not removed by the uninstall procedure. Be sure to save any files that you modified that you may want later. Manually remove any files not removed by the uninstaller, but make sure you back up any files modified by you or edocs Professional Services.
5. Run `$EDX_HOME/Uninstall/Uninstall_eaDirect`. For example:

```
cd /opt/EDCSbd/Uninstall
./Uninstall_eaDirect
```
6. Remove any directories not removed by the uninstall procedure. Be sure to save any files that you modified that you may want later. Manually remove any files not removed by the uninstaller, but make sure you back up any files modified by you or edocs Professional Services.

7. Install eaDirect 4.1. For information about installing eaDirect, see the *eaDirect Installation and Configuration Guide*.
8. Install eaPay using the steps described in Chapter 2.
9. Follow the instructions from the section *To Update the eaPay Configuration File* and *To Update the eaDirect EAR Files*.
10. When upgrading to a new version of eaPay, you must migrate your J2EE and Web applications to accommodate the changes in the new version. The sample applications provided with each version of eaPay provide examples of how to use the current features of eaPay. Your site must update the components in your application, and you must re-deploy your application.

You must also update your application to work with the new sample application. To accomplish that:

- Merge your custom code into the sample application (eaPaySimple or eaPayComplex), and rename it. For more information about how to do this, see the *Customizing and Deploying Applications* document.
- Re-deploy your custom application, as described in *To Deploy the eaPay EAR Files*.

See the release notes for information about new features in 4.1.

See the *Customizing and Extending eaPay* and *Deploying and Customizing J2EE Applications* documents for information about the components that make up the J2EE and Web applications, and the procedures for recreating EAR and WAR files.

11. You must reconfigure your payment gateways and eaPay jobs in the Command Center to accommodate new settings. See the *eaPay Release Notes* for information about eaPay Settings and eaPay job parameters.

To Upgrade the Database Server:

Follow the steps below to upgrade eaPay on the database server. Before you do, verify that the database server is running.

1. Log on as the root user on the database server.
2. Remove eaPay 3.4 by running `$EAPAY_HOME/Uninstall/Uninstall_eaPay`. For example:

```
cd /opt/EDCSpay/Uninstall
./Uninstall_eaPay
```
3. Remove any directories not removed by the uninstall procedure. Be sure to save any files that have been modified by you or edocs Professional Services, and DO NOT remove the database.
4. Remove eaDirect 3.4 by changing the working directory to `$EDX_HOME/Uninstall` and running the eaDirect uninstall tool. For example:

```
cd /opt/EDCSbd/Uninstall
./Uninstall_eaDirect
```
5. Remove any files not removed by InstallAnywhere, but make sure you back up any files modified by edocs Professional Services, and DO NOT remove the database.
6. Install eaDirect 4.1. For information about installing eaDirect, see the *eaDirect Installation and Configuration Guide*.
7. Install eaPay using the steps described in Chapter 2, *Installation*.

If the installation fails, after determining the cause of the problem you can run the InstallAnyWhere tool again to reinstall eaPay.

Removing the eaPay Database

Follow the steps below to remove the eaPay database tables and indexes. The process involves running an SQL script as the Oracle user in SQL Plus. You should be aware that this procedure **completely** removes the payment database elements and should be used with care.

To remove the database for the eaPay:

1. Log in as the Oracle user.
2. Change your working directory to *\$EAPAY_HOME/db/oracle*.
3. Start an **sqlplus** session on the eaPay database server.
4. Remove payment tables and stored procedures by running:
`@drop_payment_db.sql`
5. You should see the following message after running each stored procedure:
`PL/SQL procedure successfully completed.`

Uninstalling the Application

When uninstalling the eaPay, you must remove eaPay from each server that you installed it on.



If you wish to remove the eaPay database tables and indexes, you must do that before removing the eaPay database package.

Run this procedure on both the database and application server.

1. Run *\$EAPAY_HOME/Uninstall/Uninstall_eaPay*. For example:
`cd /opt/EDCSpay/Uninstall`
`./Uninstall_eaPay`
2. Remove any directories not removed by the uninstall procedure. Be sure to save any files that you modified that you may want later.

