Installation and Configuration

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

eaPost

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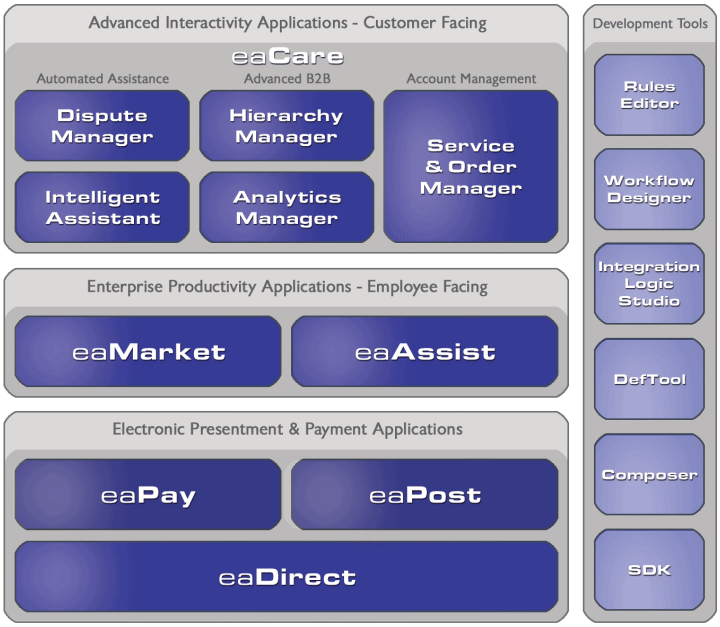
Preface

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.

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 eaPost Command Center screens.
A PDF of this guide	A PDF of this guide is available on the eaPost product CD-ROM.

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

Print Document	Description
eaPost Installation and Configuration Guide: Windows Operating System	How to install and configure eaPost on a Windows system.
Portal Consolidation Production Guide	How to configure and operate the production environment. It describes configuration tasks done after installation.
Data Presentation Production Guide	How to set up and run a live eaDirect application in a J2EE environment.

The eaSuite products eaDirect, eaMarket, eaPay 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

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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.

1 Installation

Installation Overview

Before you can install eaPost, you must install eaDirect and configure the eaDirect database to interact with eaPost (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.

The steps required to implement eaPost are:

1. Install eaDirect along with the required software.

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

2. Install eaPost and configure system wide options.

   Install the eaPost application, first on the database server, then on the application server.

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

3. Configure the eaPost Settings page steps, and create eaPost jobs in the command center. For more information about eaPost settings and jobs, see the *Portal Consolidation Production Guide*.

System Requirements

Confirm that your system meets the minimum recommended hardware and software requirements for installing eaPost, as described in the release notes.

Recommended User and Group Permissions for WebLogic Server

During the installation of WebLogic Server 6.1, you are prompted to specify the user and group permission for the WebLogic Server software distribution.

It is recommended that you use the same default user and group combination when using WebLogic Server with eaPost; however, if you specified a different user and group combination during WebLogic Server installation, you can use the Unix **`chown`** command to set the recommended permissions.

To change user and group permission for WebLogic Server 6.1 files and directories:

1. Change directory to *$WL_HOME* (where *$WL_HOME* is WebLogic Server's default installation directory). For example:

   $ **`cd /export/home/bea`**

2. Switch to *root* user, and recursively change the permissions of the default installation directory and its subdirectories (if different) to the recommended default. The default syntax is:

   ```
   chown -R userid:groupid directory
   ```

   For example:

   # **`chown -R nobody:nobody /export/home/bea`**

2

Setting Up a Database Server for eaPost

Overview

To install and configure eaPost on the database server, you will need to:

1. Install the eaPost database components.

   There are separate scripts for configuring a new Oracle8i database for eaPost and for migrating an existing eaPost database to the new schema.

2. Configure a new Oracle8i database for eaPost.

3. Add the eaPost jobs to the eaDirect database.

4. Enable access to the eaPost database.

User Privileges Required for Installing eaPost Database Server Components

In order to install eaPost and manipulate Oracle files and scripts, you will need *root* and *oracle* administrator privileges. Specifically, you will need *root* privilege to install the eaPost database server components, and *oracle* administrator privilege to run the eaPost database configuration script.

By default, the database files copied to */db/oracle* are assigned the user and group account *oracle:dba*. We recommended that you use the default user and group account to help ensure a successful installation. The Oracle examples in this guide also show the default user and group account *oracle:dba*.

Throughout this installation guide, you will be prompted to switch to the appropriate user privilege when necessary.

Installing eaPost Database Components

The following installation procedure shows how to install the eaPost database server components using the InstallAnywhere GUI.

To install eaPost database components:

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

   ```
   # ./Postins.bin
   ```

   A start-up screen appears.
3. On the Introduction screen, read the eaPost introductory information. Then click **Next**.
4. On the License Agreement screen, carefully read and accept the terms of the license agreement (use the scroll bars to move up and down on the screen) by clicking the appropriate radio button. 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 recommended 'owner' is *nobody*). Then click **Next**.
7. On the Group of Web Application Server screen, enter the name of the group for the application server (the recommended group is *nobody*). Then click **Next**.
8. On the Choose Install Folder screen, accept the default installation folder (*/opt/EDCSpost*) or click **Choose** to specify another installation folder. Then click **Next**.
9. On the Choose Product Features screen, click **Database.** Then click **Next**.
10. On the Pre-Installation Summary screen, confirm that the information is accurate. Then click **Install**.

    At this point, the eaPost 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.
12. Click **Done** to exit the installer.

Configuring the Oracle Database for eaPost

To configure a new eaPost Oracle8i database, you must run the *eapost_admin.sh* script.

Run the database install script

1. Log in as the *oracle* user.
2. Set the Oracle SID to the one you will configure for eaPost. For example:

   ```
   ORACLE_SID=epx0
   export ORACLE_SID
   ```

3. Change the directory to the default location where you installed the eaPost files. For example:

   ```
   cd /opt/EDCSpost/db/oracle
   ```

4. Enter the following command at the prompt:

   ```
   ./eapost_admin.sh
   ```

   The edocs eaPost server Administration Main Menu displays an initial set of options.

```
 eaPost Database Installation Administration Menu
 ------------------------------------------------

       [1] Sign in Menu

       [2] Capture Database File Locations

       [3] Install eaPost database



       [Q] Quit

 ------------------------------------------------

Enter Your Selection:
```

Sign in to the database

This installation process assumes the Oracle Optimal Flexible Architecture (OFA) for the database files. When you installed the Oracle8i server software distribution, you should have created at least four mount points (one for the software and three for the database files). See the Oracle8i server installation documentation for more information about OFA and creating mount points.

To sign in to the database:

1. From the Administration screen, select **`Option 1, Sign in Menu`**. The database sign-in screen appears.
2. At each prompt, enter a username, password, and SID for the eaPost Oracle8i database. For example:

```
Enter Database USERNAME: epx_dba
Enter Database PASSWORD: epx
Enter ORACLE_SID: epx0
```

3. After you have entered all the required information, you will return to the main menu.

Capture database file locations

This option specifies the absolute path for the files that make up the eaPost database. The location of these files depends on the type of file structure you are using.

During this session, you will be prompted to define absolute paths (mount points) for the database files.

If you plan to use only one disk location, you can define a single directory path. For example:

```
$ORACLE_HOME/oradata
```

However, if you plan to distribute the software over several disks (for example, to improve performance), you may want to define a group of related subdirectory paths. For example:

Database File	Suggested Mount Point
Redo log file location	**/u01/oradata**
System tablespace file location	**/u02/oradata**
Temporary tablespace file location	**/u03/oradata**
Rollback tablespace file location	**/u04/oradata**
Data tablespace file location	**/u05/oradata**
Index tablespace file location	**/u06/oradata**
Control files location	**/u07/oradata**

To capture database file locations:

1. From the Administration menu, select option 2, **Capture Database File Locations.**
2. At the prompt, enter an absolute path for each group of files:
   - Redo Log files
   - System Tablespace file
   - Temporary Tablespace files
   - Rollback Tablespace file
   - Data Tablespace file

- Index Tablespace file
- Control file

3. For the Redo log file location, a second prompt asks for a second location for log files. This step is recommended, but not required.
4. The script then validates the locations you specified. If the locations are valid, you will see this message:

   ```
   Capture of Database file locations completed.
   ```

   If the locations are not valid, you will return to the main menu. Select option 2, **`Capture Database File Locations`**, and reenter the paths.
5. After you have entered all the required information, the main menu appears.

Install edocs eaPost

- From the Administration menu, select Option 3, **`Install edocs eaPost.`** The Install eaPost Oracle Database screen appears.

```
Install eaPost Oracle Database
 -------------------------------------
 [1] Initialize Database I -  Creation

 [2] Shutdown Database

 [3] Startup Database

 [4] Initialize Database II - Define Dictionary & eaPost DB Layout

 [5] Install Application Database I - Schema Installation

 [6] Install Application Database II - Install PL/SQL Code Base

 [7] View Status Log Directory

 -- ------------------------------------
 [R] & Return to previous menu

SELECT YOUR OPTION:
```

Initialize Database I

This option begins the installation of the physical database.

To initialize the database (part I):

1. Select Option 1, **`Initialize Database I`**. This step does not require user input. When the process is complete, you will return to the Install eaPost Oracle Database screen.
2. Select Option 2, **`Shut Down Database`**. Wait for the process to complete and return you to the Install eaPost Oracle Database screen.

3. Select Option 3, **`Start Up Database.`** Wait for the process to complete and return you to the Install eaPost Oracle Database screen.

   These options let you perform a quick test on the database you just defined. The Shutdown Database and Startup Database options must be executed in succession.

4. When the process is complete, the Install eaPost Oracle Database screen appears.

Initialize Database II

These utility scripts define the data dictionary for the new database and create a stored procedure for the tablespaces and rollback segment data files required by eaPost. The stored procedure also contains the absolute paths defined in Option 2, `Capture Database File Locations.`

To initialize the database (Part II):

1. Select Option 4, **`Initialize Database II.`** No user input is required for this option.
2. Wait for the process to complete. This might take several minutes. During this process, status messages indicate that the utility scripts and the stored procedure are executing. A final message indicates whether the processing was successful.
3. When the process is complete, the Install eaPost Oracle Database screen appears.

Install Application Database I

This option creates the eaPost database tables and indexes using the SQL script *create_tables.sql*.

To install the Application Database I:

1. Select **`Option 5, Install Application Database I - Schema Installation`**.
2. No user input is required for this option. The “error” messages displayed during this step are part of the process and can be ignored.
3. When the process is complete, the Install eaPost Oracle Database screen appears.

Install Application Database II

This option compiles the application-defined stored procedures. These stored procedures constitute the database processing for eaPost.

To install the application database (part II):

1. Select **`Option 6, Install Application Database II.`**
2. No user input is required for this option. Wait for the process to complete. This might take several minutes. During this process, status messages indicate that the individual program modules are compiling. A final message indicates whether the processing was successful.
3. Select **`Return to Previous Menu`**. The eaPost server Administration Main Menu appears.

Adding eaPost Jobs to eaDirect

You must run a shell script to add the eaPost jobs to the eaDirect command center.

1. Log in as the **`oracle`** user.
2. Set the ORACLE SID to the eaDirect SID. For example:

   ```
   ORACLE_SID=edx0
   export ORACLE_SID
   ```

3. Change the working directory to the *$EPX_HOME/db/oracle* directory. For example:

   ```
   cd /opt/EDCSpost/db/oracle
   ```

4. Run the eaPost job installation script, providing the eaDirect database username and password as arguments. For example:

   ```
   ./install_task.sh edx_dba edx
   ```

Enabling Access to the eaPost Database

The final step in configuring a new eaPost Oracle8i database is to edit the *tnsnames.ora* and *listener.ora* files to ensure proper access to the database.

If you are upgrading your existing eaPost database, this information may already exist. You should still confirm that the required code exists in the *tnsnames.ora* and *listener.ora* file.

To enable access to the eaPost database:

1. Log in as the **`oracle`** user.
2. Change directory to the *$ORACLE_HOME/network/admin* directory. For example:

   ```
   cd /export/home/oracle/product/9.2.0/network/admin
   ```

3. Add the following lines to the file *tnsnames.ora* (or confirm that they exist):

```
epx.db =
 (DESCRIPTION =
 (ADDRESS_LIST =
 (ADDRESS = (PROTOCOL=TCP)(HOST=<your_database_server>)(PORT =
1521))
 )
 (CONNECT_DATA = (SID = epx0))
 )
```

   Be sure to substitute the name of your database server for **your_database_server**.

4. Save and close the *tnsnames.ora* file.

5. Add the following lines to the file *listener.ora* (or confirm that they exist):

```
  (SID_DESC =
    (SID_NAME = epx0)
    (ORACLE_HOME = /export/home/oracle/product/9.2.0)
  )
  )
```

6. Save and close the *listener.ora* file.

Troubleshooting Your Database Configuration

At some point during the eaPost Oracle8i configuration process, you might encounter problems. Although you may be able to troubleshoot the process using the error messages displayed, you may still have to quit the session and run the configuration script again. This results in the loss of any information you had entered.

If terminating and restarting the session is your only option, you must first do a manual cleanup of the partially configured database.

Recovering from a Failed Database Configuration

If you have to abort the database creation and configuration procedure, or if it fails to create and configure the database, do the following steps before running the database tool again.

To clean up a partially configured database:

1. Use the **Shutdown Database** option to shut down any database that has been created.

2. Change directory to the $ORACLE_BASE/*admin* directory. For example:

   cd /export/home/oracle/admin

3. Remove any directories whose name matches the *oracle* SID defined in the Setting User and Database Identification Menu option, for example, **`epx0`**.

4. Change directory to the **`$ORACLE_HOME/dbs`** directory. For example:

   ```
   cd /export/home/oracle/product/9.2.0/dbs
   ```

5. Remove any references to the initialization file created during the installation process. The references you are looking for will take the form: *initepx0.ora*.

6. Change directory to the individual directories that you specified in the Capture Database File Locations option.

7. Remove any directories whose name matches the *oracle* SID (for example, *epx0*) defined in the Sign in Menu option.

3

Installing eaPost on the Application Server

Installing eaPost Application Components

This process loads all the eaPost application files using the hierarchy of subdirectories that eaPost uses to store the application files. The default directory for the eaPost distribution is */opt/EDCSpost*.

To install eaPost application components:

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

   ```
   # ./Postins.bin
   ```

   A start-up screen appears.
3. On the Introduction screen, read the eaPost introductory information. Then click **Next**.
4. On the License Agreement screen, carefully read and accept the terms of the license agreement (use the scroll bars to move up and down on the screen) by clicking the appropriate radio button. 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 recommended 'owner' is *nobody*). Then click **Next**.
7. On the Group of Web Application Server screen, enter the name of the group for the application server (the recommended group is *nobody*). Then click **Next**.
8. On the Choose Install Folder screen, accept the default installation folder (*/opt/EDCSpost*) or click **Choose** to specify another installation folder. Then click **Next**.

9. On the Choose Product Features screen, click **`Application`**, or select **`Custom`** and then select the components you wish to install. Then click **`Next`**.

10. On the Pre-Installation Summary screen, confirm that the information is accurate. Then click **`Install`**.

    At this point, the eaPost 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. The Install Complete screen reports a successful installation and the directory that contains the database server components.

12. Click **`Done`** to exit the installer.

Configuring eaPost on the Application Server

After you have installed the eaPost application server files have been installed, they need to be deployed, and WebLogic must be configured for eaPost:

1. Update the eaDirect EAR file with the eaPost EAR, and re-deploy the updated eaDirect EAR

2. Deploy the eaPost sample application to view redirected bills

3. Configure WebLogic for eaPost

Updating the eaDirect EAR

The *ear-eadirect.ear* file must be updated for eaPost. eaPost installs a file called *ear-eapost.ear*, which must be merged into the *ear-eadirect.ear* file.

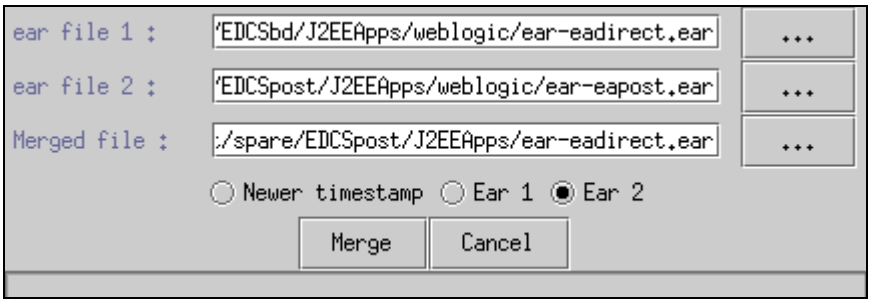
Before you start, please make a backup copy of the original *ear-eadirect.ear*.

1. Log on as the root user, and change your working directory to *$EPX_HOME/lib*.

2. Run the database configuration tool, using the following command.

   `java -jar ear_merge_app.jar`

3. Enter the paths to the EAR files and the EAR which will be replaced with the merged EAR file, similar to the following example:



You can click on the **...** button to bring up a file dialog to locate the EAR files. Be sure to select which method to use when merging the EAR files. The example shows EAR 2 as the selected method, which means the *ear-eapost.ear* file's contents will override any entries in EAR 1.

4. The utility places the updated EAR file as specified by the Merged File parameter.

Command Line Merge

The merge utility can also be run from the command line, as follows:

```
java -jar ear_merge_app.jar
<-newertimestamp|-ear1|-ear2> <file1> <file2> <mergedfile> [-
overwrite]
```

where the parameters between:

<> are required
[] are optional

and the parameters are defined as:

-newertimestamp: if the contents of the two files are the same, use the one with the newer time stamp

-ear1: prioritize the content in file 1

-ear2: prioritize the content in file 2

-overwrite: overwrite the merged file if it exists. (the default is to not overwrite)

For example:

```
java -jar ear_merge_app.jar -ear2
/opt/EDCSbd/J2EEApps/weblogic/ear-eadirect.ear
/opt/EDCSpost/J2EEApps/weblogic/ear-eapost.ear
/opt/EDCSpost/J2EEApps/ear-eadirect.ear
```

The preceding example produces a new merged EAR file called *ear-eadirect.ear* in the directory */opt/EDCSpost/J2EEApps*.

To Deploy the Updated eaDirect EAR:

eaPost requires that the eaDirect EAR be re-deployed, since it was updated in the previous step. 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 that you updated for eaPost. 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 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 it's components.

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.

To Deploy the eaPost Sample Application:

The eaPost sample application allows bills to be redirected. It can be used as a base for your site's application if you wish to customize the web application.

- To install the eaPost sample application, follow the same steps that show how to deploy the updated *ear-eadirect.ear*, but deploy the file *$EPX_HOME/samples/J2EEApps/weblogic/eapost-sample.ear*.

Configuring a JDBC Connection Pool

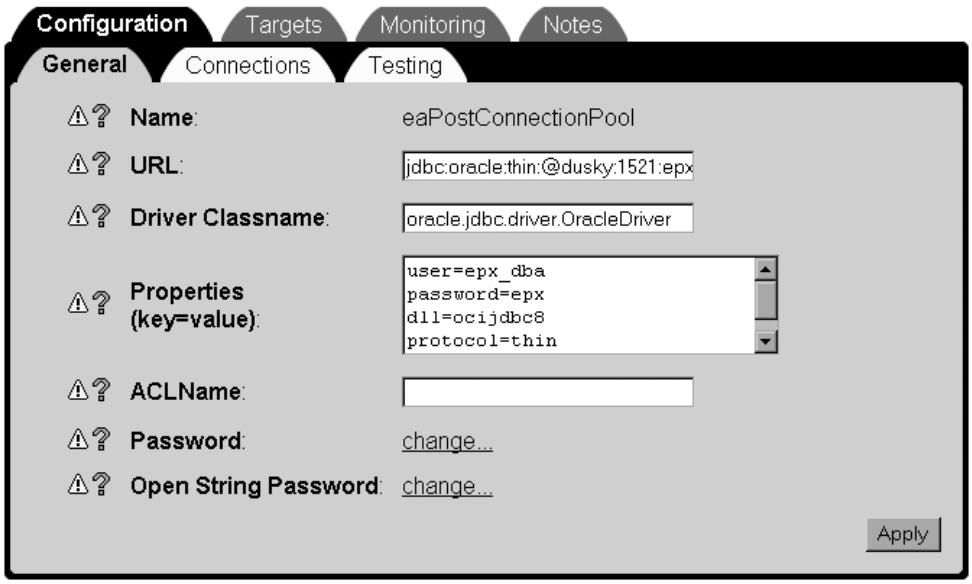
A connection pool contains named groups of JDBC connections that are created when the connection pool is registered, usually when starting up WebLogic Server. WebLogic Server opens JDBC connections to the database during the startup process and adds the connections to the pool.

Your application borrows a connection from the pool, uses it, and then returns it to the pool by closing it. For more information about how WebLogic Server uses JDBC connection pools, refer to the WebLogic programming and user documentation at http://bea.com.

You will create one JDBC Connection Pools for eaPost.

To Configure a JDBC Connection Pool for eaPost:

1. Right-click on **`Connection Pools`** and select **`Configure a new JDBCConnectionPool`**. A tabbed dialog for configuring a new connection pool appears:

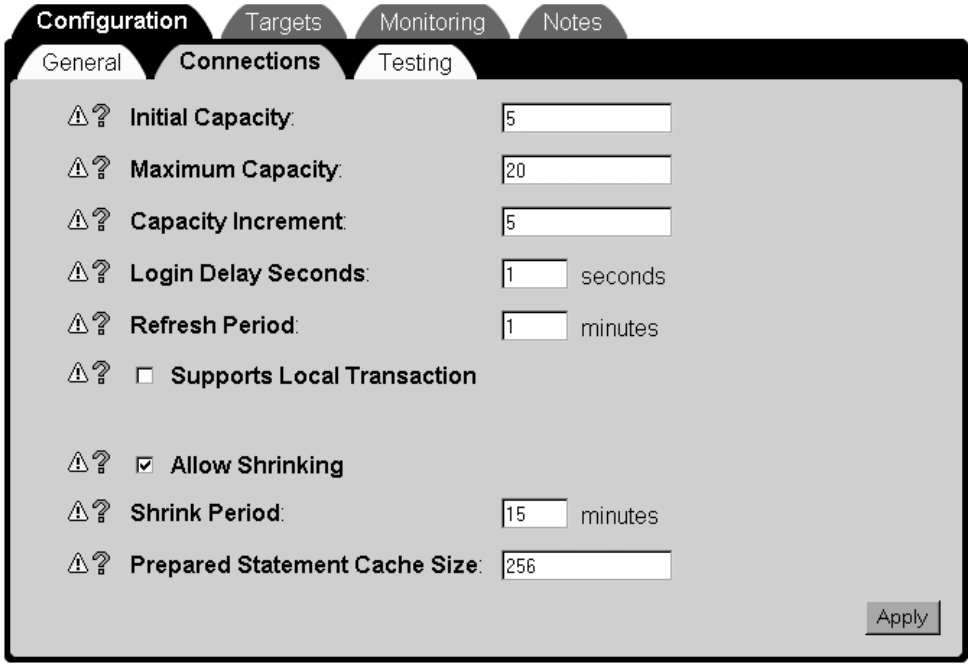


2. On the Configuration tab, enter the following values:

Name	Value
Name	**eaPostConnectionPool**
URL	**jdbc:oracle:thin:@<*servername*>:1521:<*dbinstance*>** For example: **jdbc:oracle:thin:@dusky:1521:epx0**
Driver Classname	**oracle.jdbc.driver.OracleDriver**
Properties	**user=<db_username>** **password=<db_password>** The user and password values correspond to the *username:password* combination specified during the eaPost database configuration procedure. If you are upgrading an existing eaPost installation, be sure to use the username and password for the existing installation, usually **bpx_dba** and **bpx**.

3. Click **Create** to create the connection pool. The new instance is added to your domain under the Connection Pools node in the left pane.

4. In the right pane, click **Connections**. A tabbed dialog for configuring connection attributes appears.

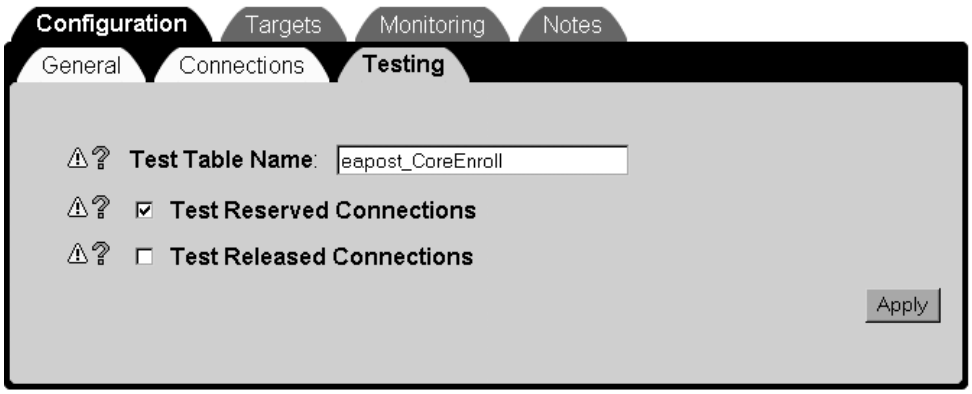


5. On the Connections tab, enter values for the attributes shown in the following table:

Name	Value
Initial Capacity	`5`
Maximum Capacity	`20`
Capacity Increment	`5`
Login Delay Seconds	`1`
Refresh Period	`1`
Supports Local Transaction	**`False`** `(box unchecked)`
Allow Shrinking	**`True`** (box checked)
Shrink Period	`15`
Prepared Statement Cache Size	`256`

6. Click **`Apply`** for the attribute values to take effect the next time you restart WebLogic Server.

7. In the right pane, click the **`Testing`** link. A tabbed dialog for configuring testing appears:

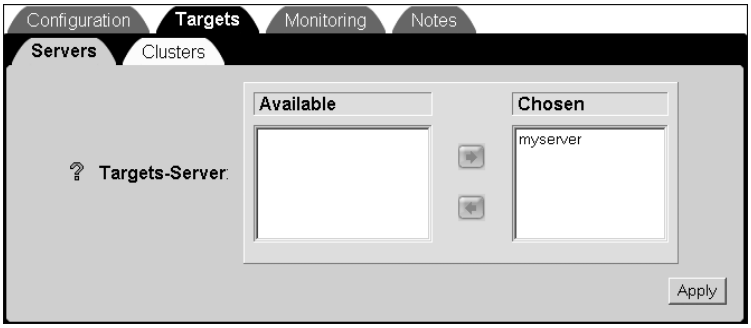


8. On the Configuration/Testing tab, enter values for the Test Table Name and Test Reserved Connections attributes as shown in the following table:

Name	Value
Test Table Name	**`eapost_CoreEnroll`**
Test Reserved Connections	**`True`** (checked)

9. Click **`Apply`** for the attribute values to take effect the next time you restart WebLogic Server.

10. On the Targets/Servers tab, move the target server from Available to Chosen.



11. Click **`Apply`** for the new value to take effect the next time you restart WebLogic Server.

Configuring JDBC transaction (TX) data sources

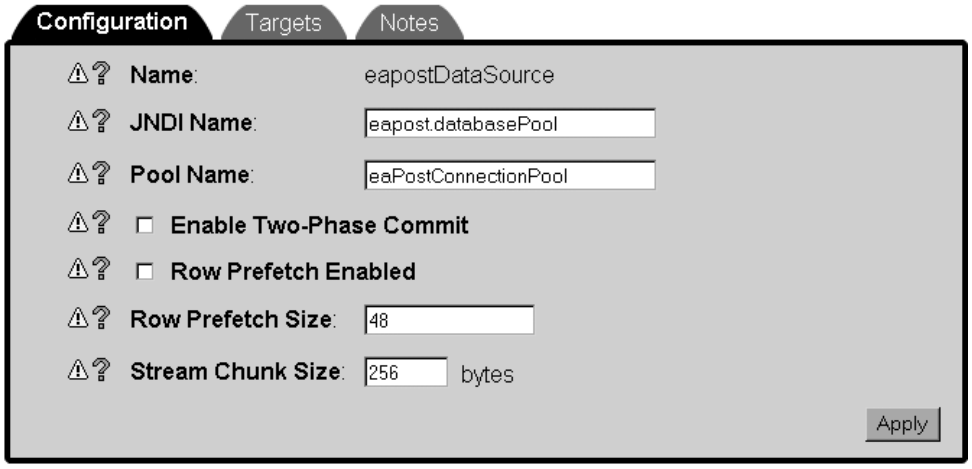
A transaction data source enables JDBC clients to obtain a connection to a Database Management System (DBMS). Each data source points to the value specified for the Name attribute when a JDBC connection pool was configured. For more information about how WebLogic Server uses transaction data sources, see the WebLogic programming and user documentation at http://bea.com.

You will configure one TX Data Source for eaPost.

To configure the JDBC transaction data source:

1. From your domain in the left pane, select **`Services`** and **`JDBC`** and **`Tx Data Sources`**.

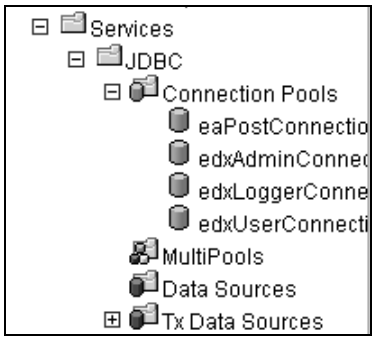
2. In the right pane, click **Configure a New JDBC Tx Data Source** link. A tabbed dialog for configuring a new transaction data source appears.



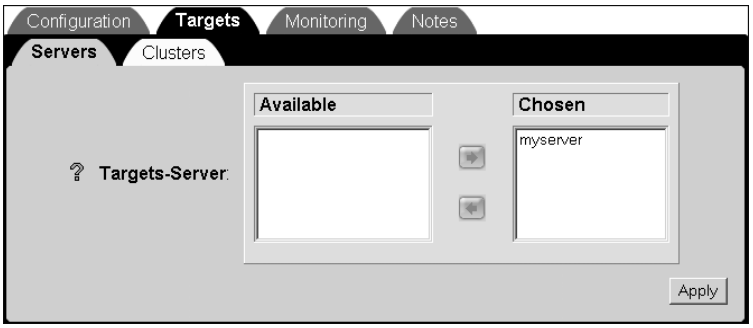
3. On the Configuration tab, enter values for the Name, Java Naming and Directory Interface (JNDI) Name, and Pool Name attributes as shown in the table below.

Name	Value
Name	**`eapostDataSource`**
JNDI Name	**`eapost.databasePool`**
Pool Name	**`eaPostConnectionPool`**

4. Click **Create** to create a JDBC transaction data source instance named eapostDataSource. The new instance is added to your domain under the Tx Data Sources node in the left pane.



5. On the Targets/Servers tab, move the target server from Available to Chosen.



6. Click **`Apply`** for the new value to take effect the next time you restart WebLogic Server.

Once eaPost has been successfully installed, you can configure the portal and biller(s), plus configure the eaPost jobs in the command center. For information about how to do this, see the *Portal Consolidation Production Guide*.

4 Upgrading from a Previous Version of eaPost

When upgrading from earlier versions of eaPost, you should:

- Migrate the existing eaPost database to the new format
- Update the eaPost jobs in the eaDirect database
- Reconfigure the portal and biller settings
- Convert the data in the eaPost database to the new format
- Add the eaPost jobs to the eaDirect database

The upgrade path depends on installation of all sequential releases and patches. edocs does not support upgrading from skipped versions. For detailed upgrade assistance, contact your edocs Professional Services representative.

For information about migrating from Oracle 8i to 9i, see the *Upgrading eaSuite 4.0 from Oracle8i to Oracle9i* guide.

Upgrading an Existing eaPost Database

You can upgrade your existing eaPost v1.2 or v1.1.1 database to eaPost v4.0.

Be sure to backup your existing database before starting the upgrade.

To upgrade an existing Oracle8i database:

1. Log in as the *oracle* user.
2. Change directory to the default location where you installed the eaPost files. For example:

   ```
   cd /opt/EDCSpost/db/oracle/migration/12to40
   ```

   to migrate an eaPost v1.2 database, or

   ```
   cd /opt/EDCSpost/db/oracle/migration/111to40
   ```

   to migrate an eaPost v1.1 database.
3. Set the ORACLE_SID environment variable to the eaPost database value, using the syntax from the following examples.

The default ORACLE_SID value is typically set to the eaDirect environment variable. Changing the environment variable to eaPost will not affect eaDirect.

Example for a Bourne or Korn shell:

```
export ORACLE_SID=bpx0
```

Example for a C shell:

```
setenv ORACLE_SID=bpx0
```

4. Run the database upgrade shell script by entering the appropriate command at the prompt:

   ```
   ./migrate_111_to_40.sh
   ```

   or

   ```
   ./migrate_12_to_40.sh
   ```

   Both scripts ask for the following information:.

   ```
   Please enter Oracle SID        -->
   Please enter eaPost Username -->
   Please enter Password          -->
   ```

   Enter the SID and database username and password for the existing eaPost database. The updated database will use the same values.

5. The script then updates the database, and creates a log file in the current directory.

Updating the eaDirect Database

Update the eaPost tasks in the eaDirect database, so the command center will have the correct eaPost jobs.

1. Log in as the *oracle* user.
2. Change directory to the default location where you installed the eaPost files. For example, to migrate an eaPost v1.2 database:

   ```
   cd /opt/EDCSpost/db/oracle/migration/12to40
   ```

   or, to migrate an eaPost v1.1 database:

   ```
   cd /opt/EDCSpost/db/oracle/migration/111to40
   ```

3. Set the ORACLE_SID environment variable to the eaDirect database value, using the syntax from the following examples.

   Example for a Bourne or Korn shell:

   ```
   export ORACLE_SID=epx0
   ```

   Example for a C shell:

   ```
   setenv ORACLE_SID=epx0
   ```

4. Run the task update shell script by entering the appropriate command at the prompt:

   ```
   ./install_eadirect_task.sh
   ```

Reconfiguring Portal and Biller Settings

Before converting the previous version's data to the new tables, you must redefine the portal and biller settings using the command center. Edit the aliases for the portal and the biller using the following rules:

- match only one entry of *biller_symbol* column in the old *biller_alias* table with one entry of *billeralias* column in the new *eapost_corebilleralias* table.
- make sure one entry of the *portalalias* column in the new *eapost_coreportalalias* table matches one entry of *portal_cd* column in the old *portal* table.

Migrating existing data

Now the portal and biller aliases are properly defined, you can run the data conversion script to convert the existing eaPost data to the new format.

1. Log in as the *oracle* user.
2. Change directory to the default location where you installed the eaPost files. For example, to migrate an eaPost v1.2 database:

   ```
   cd /opt/EDCSpost/db/oracle/migration/12to40
   ```

   or, to migrate an eaPost v1.1 database:

   ```
   cd /opt/EDCSpost/db/oracle/migration/111to40
   ```

3. Run the data conversion shell script by entering the appropriate command at the prompt:

   ```
   convert_eapost_data.bat
   ```

Adding eaPost Jobs to eaDirect

You must run a shell script to add the eaPost jobs to the eaDirect command center.

1. Log in as the **oracle** user.
2. Set the ORACLE SID to the eaDirect SID. For example:

   ```
   ORACLE_SID=edx0
   export ORACLE_SID
   ```

3. Change the working directory to the *$EPX_HOME/db/oracle* directory. For example:

   ```
   cd /opt/EDCSpost/db/oracle
   ```

4. Run the eaPost job installation script, providing the eaDirect database username and password as arguments. For example:

   ```
   ./install_task.sh edx_dba edx
   ```

Upgrade eaPost Jobs

For eaPost v4.0, you will need to create new eaPost jobs using the new job types. You should remove all existing eaPost v1.2 job types when upgrading, since these job types have been changed during the conversion to support J2EE.

To upgrade eaPost jobs:

1. Create and test new eaPost jobs for each job type, using the same configuration values as you used for the old jobs. For more information on creating jobs in eaPost, see the *Portal Consolidation Production Guide.*

2. From the edocs Command Center, delete the old eaPost jobs. For more information on deleting jobs and using the Command Center, see the *eaDirect Administrator's Guide*.