

eaMarket™ Installation and Configuration Guide

eaMarket is a member of the eaSuite™ product line

Sun Solaris Operating Environment $^{\text{TM}}$ Software and the IBM WebSphere $^{\text{(B)}}$ Application Server

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edocs, Inc., Two Apple Hill, 598 Worcester Road, Natick, MA 01760

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Preface

eaMarket is the personalization management solution that enables companies to increase revenue and improve customer satisfaction by weaving personalized marketing and customer service messages throughout the online account management experience.

The online statement is the best platform to create recurring one-to-one relationships with your customers, as it provides personal, time-sensitive and financially relevant information. Transactional account data – such as purchase history, investment activity and service and usage charges – allows you to gain the most insight into your customers and optimally personalize your marketing campaigns. With eaMarket, you can deploy targeted marketing and customer service messages based on the customer's dynamic account and transaction data.

Online marketing demands real actions in real time. eaMarket allows your marketing team to design, schedule, evaluate, and manage the entire process from anywhere on your network – all from a browser-based user interface that operates without heavy involvement from your IT department.

Move beyond your competition. Use eaMarket to send your customers personalized e-sertsTM instead of envelopes full of one-size-fits-all inserts. Increase cross-sell and up-sell offer acceptance rates with personalized messages that are based on your customer's actual account activity.

With eaMarket, you can deliver the right message to the right customer at the right time.

About Customer Self Service and eaSuite™

eaSuite

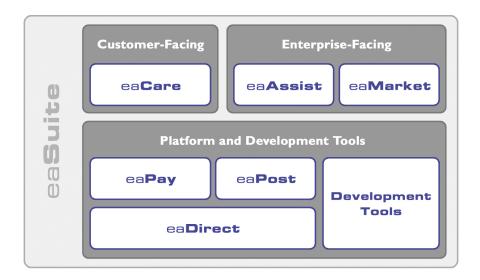
edocs has developed the industry's most comprehensive software and services for deploying Customer Self-Service solutions. eaSuiteTM combines electronic presentment and payment (EPP), order management, knowledge management, personalization and application integration technologies to create an integrated, 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 designed to support how organizations approach designing and deploying Customer Self-Service applications:

Customer-Facing Solutions present customers with the sophisticated functionality to meet customers' self-service needs. eaSuite offers a full set of capabilities to enable the range of business and consumer customer service activities, along with the flexibility to completely customize the solution to meet vertical industry and specific company requirements.

Enterprise-Facing Solutions empower employees within an organization and external partners to leverage the edocs platform to facilitate self-service and to support assisted service. Customer service representatives (CSRs), sales agents, account managers, marketing managers, broker-dealers and channel partners all play a role in delivering customer service, creating content, accessing information and performing activities for the benefit of customers.

Platform and Development Tools are designed to meet the rigorous infrastructure demands of the most technologically advanced organizations. These components of the eaSuite power edocs solutions with the functionality and development tools necessary to make account data available, and to create the customer- and enterprise-facing applications that enable customer self-service.



eaAssist

eaAssistTM 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.

eaDirect

eaDirectTM 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

eaPayTM 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

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.

Development Tools

eaSuite Development ToolsTM are visual development applications that provide intuitive graphical user interface (GUI) environments for designing and developing Customer Self-Service solutions. The Development Tools encompass data management, workflow authoring, rules management and accounts receivable integration, as well as a full Software Developers Kit for custom application development.

About this Guide

This guide describes how to install and configure the eaMarket Version 3.4 components. Its intended audience is the System Administrator who will install and configure eaMarket for the Solaris TM Operating Environment.

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 eaMarket command center screens.		
_	A PDF of this guide is available on the eaMarket product CD-ROM.		

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

Print Document	Description
eaMarket Production Guide	Describes the eaMarket application, its components, and how to utilize its functionality.
eaMarket Users Guide	Explains what you need to know to use the eaMarket application to manage marketing promotions, content, business conditions, and workflow.
eaDirect Production Guide	Contains instructions for creating applications and jobs, publishing design files, and managing the production environment. It also provides sample enrollment procedures for enabling customers to view and pay bills online, as well as perform a number of other online-bill payment transactions.

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.

To reach the U.S. Service Center, located in Natick, MA (Monday through Friday 8:00am to 8:00pm EST):

Telephone: 508.652.8400

- Toll Free: 877.336.3362
- E-support: support.edocs.com (This requires a one-time online registration)
- E-mail: <u>support@edocs.com</u>

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.

This chapter describes installation tasks that must be performed before you install eaMarket.

System Requirements

This section describes the software requirements for eaMarket™ Version 3.4.2. It also outlines the prerequisites required before installing the eaMarket application, some of which may be optional for your specific environment.

The following hardware is required to support eaMarket:

- Sun Sparc running at 275 MHz or higher.
- 256 MB of RAM for eaMarket, plus additional memory for any other eaSuite products installed on the eaMarket server. See the release notes for each eaSuite product for that product's memory requirements.
- 9 GB hard drive space.
- 512 MB Swap Memory.

In addition to these requirements, eaMarket must interact with eaDirect 3.4.1 or later. Please refer to the *eaDirect Installation and Configuration Guide* for its disk and memory requirements.

Software Requirements

The following software is required to support eaMarket:

- Sun Solaris 8 operating system.
- Internet Explorer 5.5 or above. Minimum resolution of 800 x 600 pixels with minimum 256 colors, but optimized for 1024 x 768 pixels.
- IBM WebSphere 4.0.4.
- Oracle8i version 8.1.7. Install Oracle8i Database if the eaMarket database is on the eaMarket server. Install the Oracle8i Client if the database is on a different server.
- IBM's 1.3.1 04 JDK which is packaged with WebSphere 4.0.4
- Xvfb virtual frame buffer X server. Have your Solaris system administrator install Xvfb.

In addition to these requirements, eaMarket must interact with eaDirect 3.4.1. Please refer to the *eaDirect Installation and Configuration Guide* for its software requirements.

Tasks to Do Before You Install eaMarket

Before you install the eaMarket components, there are several prerequisites that need to be addressed to ensure that the operating system and software programs that eaMarket uses are installed and configured correctly.

1. First, you must install and configure the Application Server and Database Server components of eaDirect Version 3.4.1 as described in the *eaDirect Installation and Configuration Guide*. Then, you can continue with the following steps to configure the server running eaMarket, which assumes that eaMarket will be installed on a separate server from the eaDirect servers:



It is important that the products below are installed in the order they are listed.

- 2. Install Sun Solaris 8 operating system.
- 3. Install Xvfb, the virtual frame buffer X server. See Setting Up Xvfb for setup instructions.
- 4. Install Oracle8i Database if the eaMarket database is on the eaMarket server. Install the Oracle8i Client if the database is on a different server.
- 5. Install WebSphere 4.0.4.

Installing eaMarket

Installing the eaMarket Components

The installation of eaMarket components is done through the InstallAnywhere installer. The tool is provided with eaMarket on its distribution CD-ROM. Below is the InstallAnywhere screen where you select the eaMarket components to install.



Through InstallAnywhere's easy-to-follow graphical user interface, you can choose to do a stand-alone or custom install of eaMarket components on a single server or on multiple servers in a distributed environment. The following tables describes the various eaMarket installation options:

Option	Components Installed
Standalone	Installs eaMarket application server components, eaMarket database server components, WebSphere J2EE files for eaMarket, and online product Help.
Tracking Component	Installs components for eaMarket support on eaDirect application server.
Database	Installs eaMarket database server components.
Custom	Gives users the option to install eaMarket application server components, eaMarket database server components, eaMarket J2EE applications.

InstallAnywhere copies eaMarket files from the distribution CD-ROM to the appropriate directories, and sets up the directory hierarchy for database server and application server components.

For specific information about installing eaMarket components using InstallAnywhere, see the topics: *Installing the eaMarket Application Server*, Installing the eaMarket Integration Components and Installing the eaMarket Database Server Components.

Installing eaMarket in Console Mode

The installation procedures in this guide show eaMarket being installed using the InstallAnywhere GUI. However, you can choose one of two InstallAnywhere installation modes to install eaMarket:

- GUI Mode (default installation mode)
- Console Mode

Console Mode is an interactive character-based installation where you are prompted to respond to several installation questions.

Recommended User and Group Permissions

During the installation of your application server, you are prompted to specify user and group permissions for files and directories. edocs recommends that you use the default application server permissions nobody:nobody with the eaSuite. However, if your UNIX system administrator uses custom user and group permissions at installation, you can set these permissions with the chown command.



Make sure that you install eaMarket as the same user as WebSphere.

To change user and group permissions:

1. Switch to root user, for example:

```
$ su root
```

2. Change directory to your application server home directory (\$WAS_HOME). For example:

```
$ cd /usr/WebSphere/AppServer
```

3. Recursively change the user id and group id permissions of the application server installation directory and any subdirectories to the default, which is nobody:nobody. For example:

```
$ chown -R nobody:nobody /usr/WebSphere/AppServer
```

To install eaMarket in Console Mode:

1. From the /Solaris subdirectory on the eaMarket installation CD-ROM, run the command to install eaMarket in Console Mode:

```
# ./Markins.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.

A successful installation displays the message:

```
Congratulations! eaMarket 3.4 has been successfully installed to: \label{eq:congratulations} $$ / \operatorname{opt/EDCSmkt} $$
```



Installing eaMarket on the Database Server

This section describes how to install the eaMarket components on the eaDirect database server, the *edocs - eaMarket Promotion Management System - Database*.

Running the Installation Script

To Install the Database Components

1. From the /solaris subdirectory on the installation CD-ROM, run the command to invoke the InstallAnywhere GUI:

./Markins.bin

This process loads all the eaMarket application files and sets up the hierarchy of subdirectories that eaMarket uses to store the application files. The default directory for the eaMarket distribution is /opt/EDCSmkt. The installation script displays the message:

```
Preparing to install...

Extracting the JRE from the installer archive...

Unpacking the JRE...

Extracting the installation resources from the installer archive...

Configuring the installer for this system's environment...

Launching installer...
```

2. On the Introduction screen, read the eaMarket introductory information. Then click Next.

- 3. On the License Agreement screen, carefully read the terms of the agreement (use the scroll bars to move up and down on the screen) and accept the terms of the license agreement by clicking the appropriate radio button. Then click Next.
- 4. 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.
- 5. On the Owner of Web Application Server screen, enter the name of the application server owner (the recommended 'owner' is *NOBODY*). Then click **Next**.
- 6. 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**.
- 7. On the Choose Install Folder screen, accept the default installation folder (opt/EDCSmkt), or click Choose to specify another installation folder. Then click Next.
- 8. On the Choose Product Features screen, click Database. Then click Next.
- 9. On the Pre-Installation Summary screen, confirm that the information is accurate. Then click Install.
 - At this point, the eaMarket 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.
- 10. The Install Complete screen reports a successful installation and the directory that contains the database server components.
- 11. Click **Done** to exit the installer.

Configuring the eaMarket Database

Configure the eaMarket Oracle8i database by running the *eamarket_admin.sh* script. The configuration process consists of a series of prompts, some of which require user input.



This section does not address the installation of the Oracle8i Server itself. If you have not installed the Oracle8i Server, consult the product installation documentation and follow the on-screen prompts to complete the process.

To Configure the eaMarket Database for eaMarket

1. Go to /opt/EDCSmkt/config and run the eam_config script. Make sure you are logged in as root.

The installation script displays the following message:

```
Enter the installation path of the eaMarket Application
Server, default :
/opt/EDCSmkt [?,q]
```

- 2. Type the name of the directory where eaMarket has been installed. For example, /opt/EDCSmkt.
- 3. Enter the JNDI name of the eaMarket DataSource.

The installation script displays the following message:

```
JNDI Name of the eaMarket DataSource, default :
jdbc/eaMarket [?,q]
```

4. On the database server, log in as the oracle user and change the working directory to the <*eaMarket install*>/*db/oracle* subdirectory. For example:

```
cd /opt/EDCSmkt/db/oracle
```

5. Set the ORACLE_SID environment variable to the SID name, which will be used with eaMarket. For example:

```
export ORACLE SID=edx9
```

6. Enter the following command at the prompt:

```
./eamarket admin.sh
```

7. The edocs eaMarket Server Administration Main Menu displays with an initial set of options.

```
edocs eaMarket Server Administration Main Menu Version 3.4

[1] Sign in Menu
[2] Capture Database File Locations
[3] Install edocs eaMarket
[4] Initial Data Population
[Q] Quit

Enter Your Selection:
```

Select Option 1, Sign in Menu.

8. A second sign-in screen is displayed. Enter the username, password, and SID for the eaMarket Oracle8i database. For example:

```
Enter Database USERNAME: edx_dba
Enter Database PASSWORD: edx
Enter ORACLE SID: edx9
```

After you have entered all the required information, the main menu is displayed again.

9. Select option 2, Capture Database File Locations.

This option specifies the absolute path for the various files that will comprise the eaMarket database. The location of these files depends on the type of file structure you are using. This installation process assumes the Oracle Optimal Flexible Architecture (OFA) for the database files. Therefore, you should have created at least four mount points (one for the software and three for the database files) when you installed the Oracle8i Server software. See the Oracle8i Server installation documentation for more information about OFA and creating mount points.

During this session, you will be prompted to provide absolute paths for the following files:

- [1] Redo Log File
- [2] System tablespace file location
- [3] Temporary tablespace file location
- [4] Rollback tablespace file location
- [5] Data tablespace file location
- [6] Index data tablespace file location
- [7] Application data tablespace file location
- [8] Application index data tablespace file location
- [9] Enter control files location

Using separate mount points is suggested. For example:

- [1] Redo Log File -> /u01/oradata
- [2] System tablespace file location \rightarrow /u02/oradata

10. Select Option 3, Install edocs eaMarket.

This option begins the installation of the physical database. A new menu is displayed from which you select Option 1, Initialize Oracle Database I.

Install edocs eaMarket

[1] Initialize Oracle Database I
[2] Shutdown Database
[3] Startup Database
[4] Initialize Oracle Database II
[5] Install Application Database I
[6] View Status Log Directory

[R] & Return to previous menu

SELECT YOUR OPTION:

This menu begins the initialization of the eaMarket database. Database initialization consists of:

- Creating a new database initialization file from the installation template
 init.ora file. The name of the newly created initialization file combines the
 init prefix followed by the oracle SID you entered when you logged in to
 the oracle account.
- Creating the shell script, *create_ora_db.sh*, which contains the Oracle8i command used to create a database.
- Executing the two files.

No user input is required for this option. At the end of this process, you are returned to the Install edocs eaMarket menu.

11. Select Option 2, Shutdown Database, and then Option 3, Restart Database.

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

When these options complete, you are returned to the Install edocs eaMarket menu.

12. Select Option 4, Initialize Oracle Database II.

This option executes utility scripts that define the data dictionary for the new database, and create a stored procedure. The stored procedure is modified to contain the absolute paths that were defined in Option 2, **Define Database**File Locations. The newly created stored procedure creates the various database tablespaces and rollback segment data files that the eaMarket database requires.

Completion of **this option might take several minutes**. During this process, informational messages are displayed indicating that the utility scripts and the stored procedure are executing. A final message will indicate whether the processing was successful.

No user input is required for this option.

13. Select Option 5, Install Application Database I.

This option creates the eaMarket database tables and indexes using a SQL script named *create_tables.sql*.

No user input is required for this option.



The error messages that are displayed during this step are an expected part of the process and can be ignored.

14. Select Return to Previous Menu. The eaMarket Server Administration Main Menu is displayed.

```
edocs eaMarket Server Administration Main Menu Version 3.4

[1] Sign in Menu
[2] Capture Database File Locations
[3] Install edocs eaMarket
[4] Initial Data Population
[Q] Quit

Enter Your Selection:
```

- 15. Select Option 4, Initial Data Population. The Initial Data Population Menu is displayed.
- 16. Select Option 1, Import initial data set.

```
Initial Data Population
------
[1] Import initial data set
[2] eaMarket configuration
[R] Return to previous menu

SELECT YOUR OPTION:
```

This option populates the newly defined database with information from the SQL scripts. As data is imported into tables, informational messages are displayed indicating whether the data is being imported correctly.

No user input is required for this option.

17. Select Option 2, eaMarket Configuration.

This option prompts you for the directory path for the eaMarket installation. This path should point to the installation directory on the eaMarket server.

A message is displayed if the configuration path was defined successfully.

- 18. Select Return to Previous Menu. The eaMarket Server Administration Main Menu is displayed.
- 19. Select Quit to end the eaMarket Oracle8i database configuration session.
- 20. Check to make sure that several eaMarket database instances are running. For example, assuming the eaMarket SID is edx9:

```
ps -ef | grep edx9
```

Tell the database administrator to make sure that the eaMarket database instance restarts if the Unix system is restarted.

Aborting the Configuration Script and Running it Again

At some point during the eaMarket database configuration process, you may encounter problems that require you to prematurely terminate the session. Although the database configuration procedure displays a number of helpful informational messages, you still may have to quit the session and run the configuration script again. Quitting the configuration results in the loss of any information that you entered.

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

- 1. Shut down any database using the Shutdown Database option.
- 2. Change directory to the \$ORACLE_HOME/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, edx9.
- 4. Change directory to the \$ORACLE_HOME/product/<version>/dbs directory. For example:

```
cd /export/home/oracle/product/8.1.7/dbs
```

- 5. Remove any references to the initialization file created during the installation process. The references you are looking for will take the form: *initedx9.ora*, assuming edx9 is the eaMarket Oracle SID.
- 6. Change directory to the individual directories that you specified in the Capture Database File Locations option. Next, remove any directories whose name matches the Oracle SID (for example, edx9) defined in the Setting User and Database Identification Menu option.

Enabling Database Connectivity to eaMarket

After installing eaMarket 3.4.2, you must create or edit *tnsnames.ora* and *listener.ora* to enable connectivity between the database and the eaMarket server.

To edit the tnsnames.ora file:

- 1. Log on as the oracle user.
- 2. Change the working directory to \$ORACLE HOME/network/admin.
- 3. Open *tnsnames.ora* and add lines similar to the following for the eaMarket service name. In this example, /export/home/oracle is the Oracle installation directory, and the eaMarket Oracle SID is edx9:

4. Save and close the file.

To edit the listener.ora file:

- 1. Log on as the oracle user.
- 2. Change the working directory to \$ORACLE HOME/network/admin.
- 3. Open *listener.ora* and add lines similar to the following for the eaMarket service name. In this example, /export/home/oracle is the Oracle installation directory, and the eaMarket Oracle SID is edx9:

```
SID LIST LISTENER =
  (SID LIST =
    (SID DESC =
      (SID NAME = PLSExtProc)
      (ORACLE HOME = /export/home/oracle/product/8.1.7)
      (PROGRAM = extproc)
   (SID DESC =
     (SID NAME = edx9)
     (ORACLE HOME = /export/home/oracle/product/8.1.7)
```

4. Save and close the file.

Testing Database Connectivity

You can validate database connectivity to the application server by running the following commands (you must set ORACLE SID equal to the eaMarket Oracle SID).

```
Database username/database password@database.alias
$ sqlplus edxmkt/edxmkt@edxmkt
```

This will display results similar to the following:

SQL*Plus: Release 8.1.7.0.0 - Production on Thu Feb 27 00:30:28 2003

(c) Copyright 2000 Oracle Corporation. All rights reserved.

Connected to:

Oracle8i Enterprise Edition Release 8.1.7.0.0 - Production With the Partitioning option JServer Release 8.1.7.0.0 - Production

SQL>

Installing and Configuring the eaMarket Application Server



This chapter provides instructions for installing eaMarket on an application server.

The installation and configuration examples shown in this chapter use default eaMarket pathnames. If you choose not to accept the default pathnames, make sure your pathnames are consistent throughout the installation of eaMarket on the database and application servers.

Configuring the eaMarket Application Server

Running the Installation Script

To install eaMarket

1. From the /solaris subdirectory on the installation CD-ROM, run the command to invoke the InstallAnywhere GUI:

./Markins.bin

This process loads all the eaMarket application files and sets up the hierarchy of subdirectories that eaMarket uses to store the application files. The default directory for the eaMarket distribution is /opt/EDCSmkt. The installation script displays the message:

```
Preparing to install...

Extracting the JRE from the installer archive...

Unpacking the JRE...
```

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```
Extracting the installation resources from the installer archive...

Configuring the installer for this system's environment...

Launching installer...
```

- 2. On the Introduction screen, read the eaMarket introductory information. Then click **Next**.
- 3. On the License Agreement screen, carefully read the terms of the agreement (use the scroll bars to move up and down on the screen) and accept the terms of the license agreement by clicking the appropriate radio button. Then click **Next**.
- 4. 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.
- 5. On the Owner of Web Application Server screen, enter the name of the application server owner (the recommended 'owner' is *NOBODY*). Then click **Next**.
- 6. 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**.
- 7. On the Choose Install Folder screen, accept the default installation folder (opt/EDCSmkt), or click Choose to specify another installation folder. Then click Next.
- 8. On the Choose Product Features screen, click **Standalone**. Then click **Next**.
- 9. On the Pre-Installation Summary screen, confirm that the information is accurate. Then click Install.
 - At this point, the eaMarket system components are copied to the designated installation folder.
- 10. The Install Complete screen reports a successful installation and the directory that contains the database server components.

11. Click **Done** to exit the installer.

Setting Environment Variables for eaMarket

- 1. Go to the /opt/EDCSmkt/config folder and run the set eam env script.
- 2. The script displays the following:

```
Enter eaMarket Home
[/opt/EDCSmkt] : [?,q]
```

- 3. Press Enter to accept the default as the eaMarket home directory or enter a different directory and press Enter to continue.
- 4. The script displays the following:

```
JNDI Name of the eaMarket DataSource jdbc/eaMarket [?,q]
```

- 5. Press Enter to accept the default as the JNDI name of the eaMarket data source or enter a different JNDI name and press Enter to continue.
- 6. The script displays the following:

```
Enter Oracle Home Directory
[/u01/app/oracle/product/8.1.7] : [?,q]
```

- 7. Press Enter to accept the default Oracle home directory or enter a different directory and press Enter to continue.
- 8. The application servers (WebLogic and WebSphere) will be displayed. Select **WebSphere** as the application server.
- 9. The script displays the following:

```
Enter WebSphere Application Server root directory:
[/opt/WebSphere/AppServer] [?,q]
```

10. Press Enter to accept the default WebSphere application server root directory or enter a different directory and press Enter to continue.

11. Once you finish the following message will appear:

```
Environment settings are successfully written to
/opt/EDCSmkt/eam env
```

Configuring WebSphere for eaMarket

You access and configure Java resources through the WebSphere Administrative Console.

1. Change directory to \$WAS_HOME/bin and run the administration server start-up script, startupServer.sh. For example:

```
# nohup ./startupServer.sh &
```

2. To ensure that that administration server has started correctly, change directory to *\$WAS_HOME/logs* and use the Solaris **tail** command to view the contents of the *tracefile* file. For example:

```
# cd /opt/WebSphere/AppServer/logs
# tail -f tracefile
```

A successful startup of the administration server will report in the tracefile:

"adminServer open for e-business". For example:

```
# tail -f tracefile
[02.01.09 12:07:46:408 EST] 69c82e AdminServer I
ADMS0008I: Initializing WebSphere Administration server
[02.01.09 12:07:52:754 EST] 69c82e ResourceBinde I
SVR0049I: Binding SM_DATASOURCE as jdbc/SM_Datasource
[02.01.09 12:07:56:213 EST] 69c82e EJBEngine I
WSVR0037I: Starting EJB jar : Name Service
[02.01.09 12:07:59:884 EST] 69c82e EJBEngine I
WSVR0037I: Starting EJB jar : Repository
[02.01.09 12:08:19:160 EST] 69c82e EJBEngine I
WSVR0037I: Starting EJB jar : Tasks
[02.01.09 12:08:24:048 EST] 69c82e Server A WSVR0023I:
Server adminServer open for e-business
```

3. Change directory to \$WAS_HOME/bin, and invoke the WebSphere Administrative Console by running the script adminclient.sh. For example:

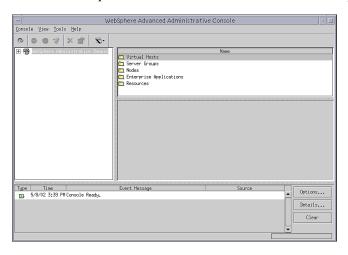
```
# ./adminclient.sh &
```



Be sure to set your display before starting the administrative console. For example, using the sh shell:

export DISPLAY=neon:0.0

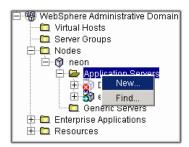
4. The WebSphere Advanced Administrative Console appears.



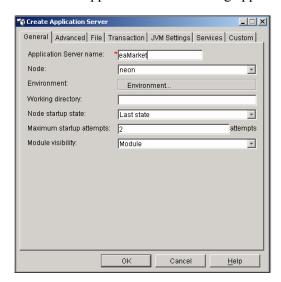
Creating an Application Server

To create an Application Server:

1. Expand Nodes (e.g. Neon), right-click on the Application Server, and then select **New** from the menu.

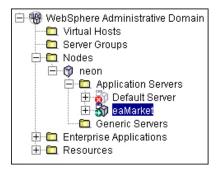


Create Application Server dialog appears.



2. On the General tab, enter **eaMarket** in the Name field. If necessary, change the information in the rest of the text boxes and the tabs or accept the default values.

3. Once you finish entering all data, click **ox**. The Application Server you created will be added into the WebSphere Administrative Domain.



To configure JVM settings for eaMarket

- 4. Expand **Nodes**, (that is, the name of the machine that your application server is on. For example, Neon) and select eaMarket (Application Server).
- 5. Select the JMV Settings tab and on the System Properties, manually enter the following:

Name	Value
com.ibm.websphere.naming.jndicache.cacheobject	none

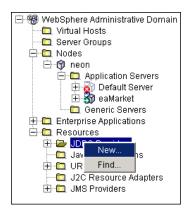
Creating a Connection Pool

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

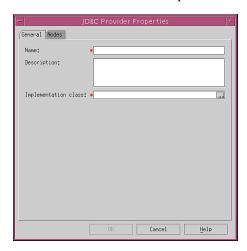
Your application borrows a connection from the pool, uses it, and then returns it to the pool by closing it.

To Create a Connection Pool

1. Expand the Resources folder in your domain, right-click on JDBC Providers, and then select **New** from the menu.

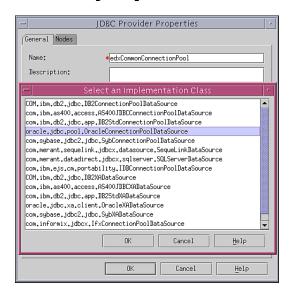


The JDBC Provider Properties dialog appears.

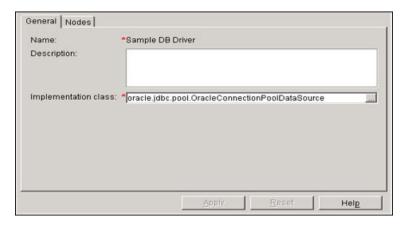


- 2. On the General tab, enter eamConnectionPool in the Name field.
- 3. Click the (...) button next to the Implementation Class field. The Select an Implementation Class dialog appears.

4. From the list of implementation classes, select oracle.jdbc.pool.OracleConnectionPoolDataSource.

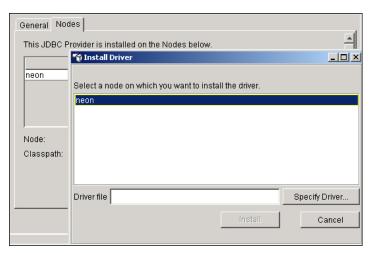


5. Click **OK**. The name of the implementation class is added to the Implementation class field in the JDBC Provider Properties dialog.

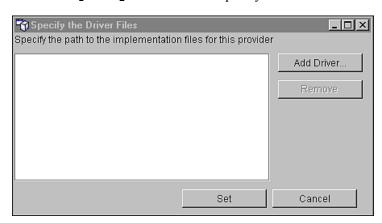


6. Click the **Nodes** tab, and click **Install New**. The Install Driver dialog appears.

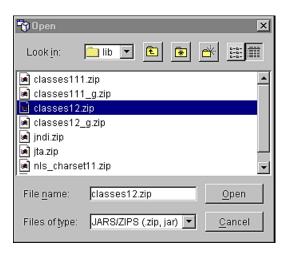
7. Select the node (that is, the name of the machine that your application server is on. For example, Neon) on which you want to install the JDBC driver.



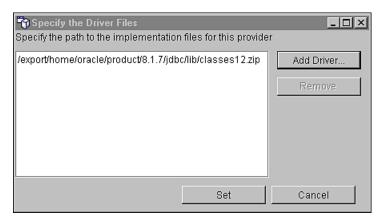
8. Click **Specify Driver**. The Specify the Driver Files dialog appears.



- 9. Click Add Driver and in the Open dialog, navigate to \$ORACLE_HOME/jdbc/lib.
- 10. Select *classes12.zip*. The file is added to the File name field.

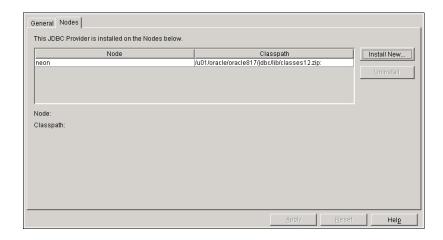


11. Click Open. The Specify the Driver Files dialog appears, showing the absolute pathname to the JDBC driver you just selected.

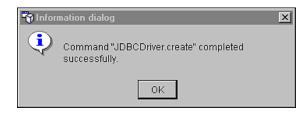


- 12. Click **set**. The Install Driver dialog appears, showing the pathname to the selected JDBC driver in the Driver file field.
- 13. Click Install. The node and Classpath of the JDBC driver are added to the JDBC Provider Properties dialog.

Installing and Configuring the eaMarket Application Server



14. Click ox. You should see:



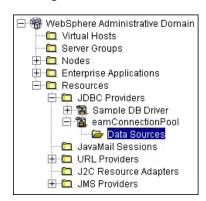
- 15. Click **or** to close the Information dialog.
- 16. Expand the Resources folder and the JDBC Providers folder to confirm that the new JDBC connection pool, eamConnectionPool, has been added.

Configuring 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. Then you will configure a transaction data source.

To configure a data source for eamConnectionPool:

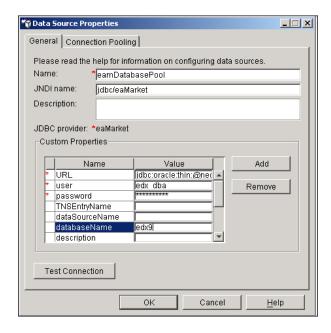
- 1. Expand the Resources folder in your domain to show the JDBC Providers folder.
- 2. Expand the JDBC Providers folder and expand eamConnectionPool.
- 3. Right-click on Data Sources, and then select New from the menu.



The Data Source Properties dialog appears.

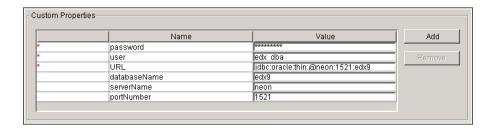
4. On the **General** tab, enter the following values for the Name and JNDI Name parameters (entering a description is optional):

Field	Value
Name	eamDatabasePool (case-sensitive)
JNDI Name	jdbc/eaMarket (required; case-sensitive)

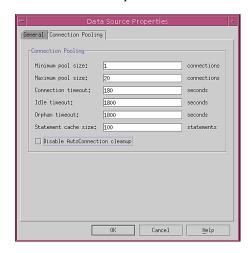


5. Scroll down to Custom Properties, and enter the following database properties by clicking **Add** to open a new line:

Parameter	Value
URL	jdbc:oracle:thin:@ <servername>:1521:<oracle_sid></oracle_sid></servername>
	For example: jdbc:oracle:thin:@jaguar:1521:eam
user	edx_dba (or the name of the Oracle database user you specified during the database configuration procedure)
password	edx (or the name of the Oracle database password you specified during the database configuration procedure. Make sure you confirm your password.)
databaseName	edx9 (or the name of the Oracle SID you specified during the database configuration procedure)



6. Click the **Connection Pooling** tab. In the Maximum pool size field, set the maximum pool size to 20.



- 7. Make sure that the "Disable AutoConnection cleanup" parameter is disabled (box unchecked).
- 8. Click **ox** to close the Data Source Properties dialog. You should see:



9. Click **ox** to close the Information dialog.

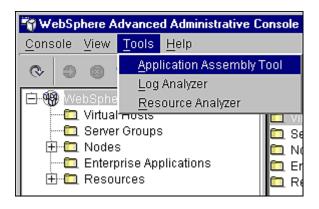
Generating Deployment Code for eaMarket J2EE Applications

The next step in setting up the application server is to generate the deployment code for the eaMarket J2EE applications that you will deploy on WebSphere. This is done though the Application Assembly Tool.

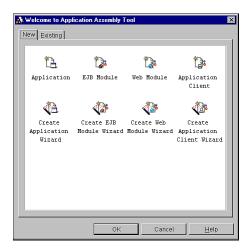
The following instructions describe how to invoke the Application Assembly Tool from the WebSphere Administrative Console. However, you can also start it from a command line window.

To generate deployment code for eaMarket J2EE applications:

1. From the WebSphere Administrative Console, open the Tools menu and select Application Assembly Tool.



The Application Assembly Tool appears.





You can also invoke the Application Assembly Tool from a command line by change directory to \$WAS_HOME/bin, and running the script assembly.sh. For example:

./assembly.sh &

The Application Assembly Tool appears in an Xwindow, so you will have to have Xwindow software installed and you might have to set your display (in your *.profile* file) to the local machine if you are trying to invoke the Application Assembly tool remotely. For example:

set DISPLAY=<your_machine_name>:0.0
export DISPLAY

2. Click the **Existing** tab, and click **Browse** at the bottom of the dialog to navigate to the directory that contains the eaMarket J2EE application that you want to deploy.

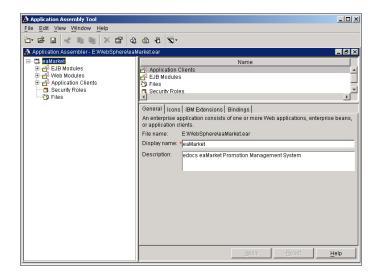
Installing and Configuring the eaMarket Application Server



3. Select the J2EE application, in this case *eaMarket.ear*, and then click **select**. (By default, *eaMarket.ear* is located in the directory \$EAM_HOME/J2EEApps/websphere. E.g. /opt/EDCSmkt/J2EEApps/websphere)



4. Click **ox**. The eaMarket application opens in the Application Assembly Tool.



5. Expand the left navigation panel, click on **EJB Modules** and select eaMarket.jar.Then click on the **General tab** and enter the java classpath separated by spaces, for example:

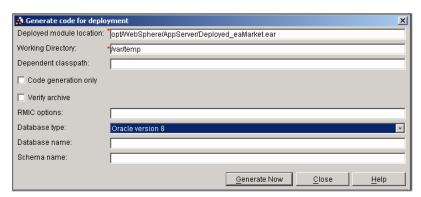
lib/crimson.jar lib/jaxp.jar lib/xerces.jar

- 6. Click Apply.
- 7. Select eaMarket and click Web Modules. Enter the following classpath: eaMarket.jar lib/crimson.jar lib/jaxp.jar lib/xerces.jar
- 8. Click **EJB Modules** and expand the eaMarket.jar file. Next, expand **Session Bean** and select the Action Bean. Make sure the JNDI name on **Bindings** tab on the right side panel is eaMarket/ActionBean.
- 9. Follow step 8 to make sure the JNDI name for **TagBean** is eaMarket/TagBean.
- 10. Click Save.
- 11. Right-click on the file name and select Generate code for deployment on the menu.



The Generate code for deployment dialog appears.

12. From the Database type drop-down menu, select Oracle version 8.

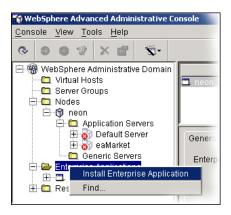


- 13. Click **Generate Now**. During generation of the deployment code, status information is shown in the window at the bottom of the dialog.
- 14. Wait for the progress bar at the bottom of the Application Assembly Tool to complete. Some applications might take several minutes to deploy, depending on the speed of your machine.
- 15. Click Close.
- 16. Click **Exit** in the File menu to close the Application Assembly Tool.

Deploying eaMarket J2EE Applications

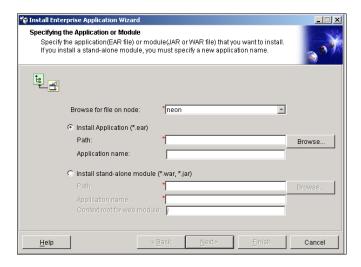
To deploy eaMarket J2EE applications:

- 1. Expand the WebSphere Administrative Domain view.
- 2. Right-click the Enterprise Applications folder, and then select Install Enterprise Applications on the menu.



The Install Enterprise Application Wizard dialog appears.

3. Click the Install Application radio button, and confirm that the correct node has been chosen in the Browse for file on node field. For example:



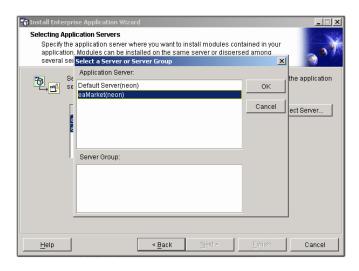
- 4. Click Browse. The Open dialog appears.
- 5. Navigate to \$EAM_HOME/J2EEApps/websphere, and select Deployed_eaMarket.ear. The name of the file appears in the File name field.



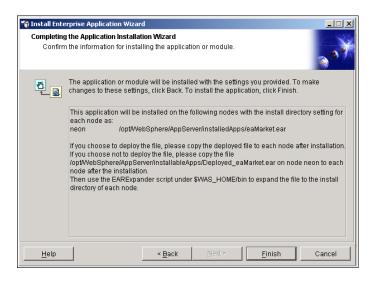
6. Click Open. The Install Enterprise Application Wizard dialog appears with the name of the deployed EAR file in the InstallApplication (*.ear) Path field.



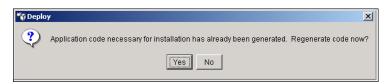
- 7. Click **Next** about nine times until you come to the Selecting Application Servers screen. Highlight all the modules for selection by clicking the first and last module in the list, while holding down the **Shift** key.
- 8. Click **Select Server**. The Select a Server or Server Group dialog appears. Select the eaMarket Server.



- 9. Click **or** to close the Select a Server of Server Group dialog. The Install Enterprise Application Wizard dialog lists the modules and the server on which they will be installed.
- 10. Click Next.



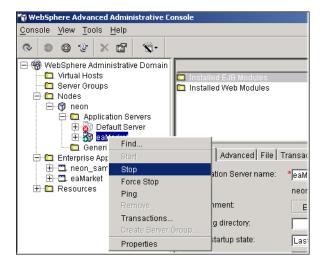
- 11. Click Finish.
- 12. When asked if you want to regenerate code, click **No**. The installation of eaMarket takes place on the application server.



13. Click **ox** to close the Information dialog reporting that the installation was successful.

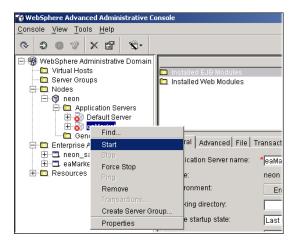


14. Stop the server on which you installed the eaMarket J2EE application. Select (expand) Nodes and <your_node> and Application Servers, and then right-click the server name in the left pane. Select Stop on the menu.

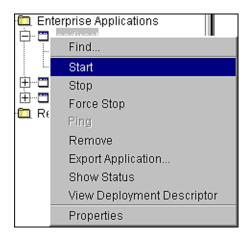


- 15. An Information dialog notifies you that the application server has stopped successfully.
- 16. Click **ox** to close the Information dialog.
- 17. Expand Nodes, (that is, the name of the machine that your application server is on. For example, Neon). Right-click and select **Regen Webserver Plugin**.
- 18. Restart the application server by right-clicking on the its name, and selecting **Start** on the menu.

Installing and Configuring the eaMarket Application Server



- 19. An Information dialog notifies you that the application server has started successfully.
- 20. Click **ox** to close the Information dialog.
- 21. Start the eaMarket J2EE application by expanding the Enterprise Applications folder, right clicking on the application name (for example, *eaMarket*), and then selecting **Start** from the menu.



22. An Information dialog notifies you that the application has started successfully.



23. Click **ox** to close the Information dialog.

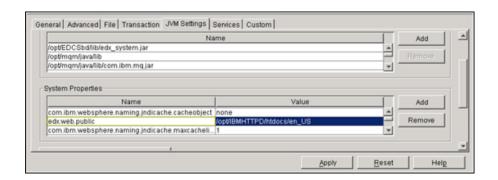
Configuring eaDirect for eaMarket

To configure JVM settings for eaDirect:

- 1. Expand **Nodes**, (that is, the name of the machine that your application server is on. For example, Neon) and select eaDirect.
- 2. Select the JMV Settings tab and on the System Properties, manually enter the following: $\frac{1}{2}$

Name	Value
com.edocs.xml.sax.parser	org.apache.xerces.parsers.SAXParser
PROPDIR	/export/home/EDCStrack
edx. web.public	/opt/IBMHTTPD/htdocs/en_US(web shared folder for eaMarket images on eaDirect server)

Installing and Configuring the eaMarket Application Server



- 3. Enter the Classpath as /opt/EDCSmkt/lib/xerces.jar
- 4. Click Apply.

Installing eaMarket Integration Components for eaDirect



This section describes how to install the eaMarket components on the eaDirect application server, the *edocs - eaMarket Promotion Management System - Tracking Component*, and how to configure support for a non-clustered environment. This package should be installed on the eaDirect Application server for separate eaDirect and eaMarket servers. If eaMarket is installed on the same server as eaDirect, then this component does not need to be installed on that server.

Running the Installation Script

To Install the Integration Components

1. From the /solaris subdirectory on the installation CD-ROM, run the command to invoke the InstallAnywhere GUI:

./Markins.bin

This process loads all the eaMarket application files and sets up the hierarchy of subdirectories that eaMarket uses to store the application files. The default directory for the eaMarket distribution is /opt/EDCSmkt. The installation script displays the message:

```
Preparing to install...

Extracting the JRE from the installer archive...

Unpacking the JRE...

Extracting the installation resources from the installer archive...

Configuring the installer for this system's environment...
```

Launching installer...

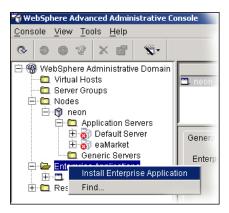
- 2. On the Introduction screen, read the eaMarket introductory information. Then click **Next**.
- 3. On the License Agreement screen, carefully read the terms of the agreement (use the scroll bars to move up and down on the screen) and accept the terms of the license agreement by clicking the appropriate radio button. Then click **Next**.
- 4. 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 edoes Technical Support). Then click Next.
- 5. On the Owner of Web Application Server screen, enter the name of the application server owner (the recommended 'owner' is nobody). Then click **Next**.
- 6. 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**.
- 7. On the Choose Install Folder screen, accept the default installation folder (opt/EDCSmkt), or click Choose to specify another installation folder. Then click Next.
- 8. On the Choose Product Features screen, click **Tracking Component**. Then click **Next**.
- 9. On the Pre-Installation Summary screen, confirm that the information is accurate. Then click Install.
 - At this point, the eaMarket 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.
- 10. The Install Complete screen reports a successful installation and the directory that contains the Integration components.
- 11. Click **Done** to exit the installer.

Configuring WebSphere

Configuring WebSphere on the eaDirect server that will deploy eaMarket promotions consists of updating the WebSphere startup script, deploying the eaMarket Web Archive file, and defining a directory where eaMarket can store content.

Deploying the eaMarket Web Archive File

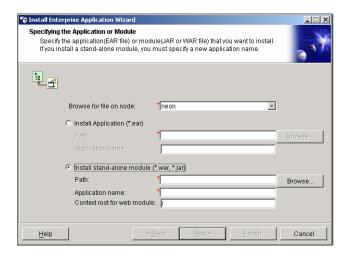
- 1. Expand the WebSphere Administrative Domain view.
- 2. Right-click the Enterprise Applications folder, and then select Install Enterprise Applications on the menu.



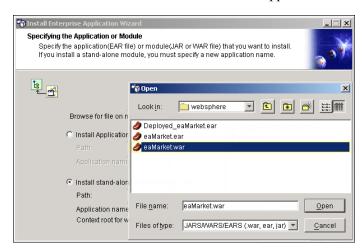
The Install Enterprise Application Wizard dialog appears.

3. Click the Install Stand-alone module radio button, and confirm that the correct node has been chosen in the Browse for file on node field. For example:

Installing eaMarket Integration Components for eaDirect

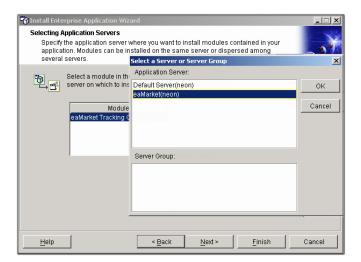


- 4. Context root for web module as /eaMarket
- 5. Click Browse. The Open dialog appears.
- 6. Navigate to \$EAM_HOME/J2EEApps/websphere, and select eaMarket.war. The name of the file appears in the File name field.



7. Click Open. The Install Enterprise Application Wizard dialog appears with the name of the deployed WAR file in the Install Stand-alone (*.war) Path field.

- 8. Enter the Application name as eaMarket Tracking Component.
- 9. Click **Next** about nine times until you come to the Selecting Application Servers screen. Highlight all the modules for selection by clicking the first and last module in the list, while holding down the **Shift** key.
- 10. Click **Select Server**. The Select a Server or Server Group dialog appears.
- 11. Select the eaMarket Server.

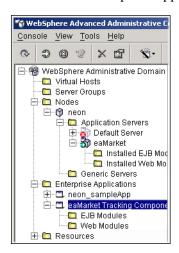


- 12. Click **ox** to close the Select a Server of Server Group dialog. The Install Enterprise Application Wizard dialog lists the modules and the server on which they will be installed.
- 13. Click Next.

Installing eaMarket Integration Components for eaDirect



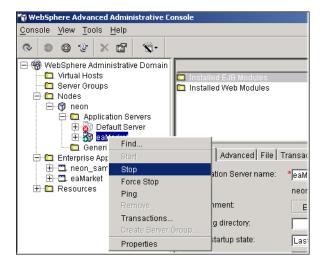
14. Click Finish. Once this is done the eaMarket Tracking Component will be added to Enterprise Application.



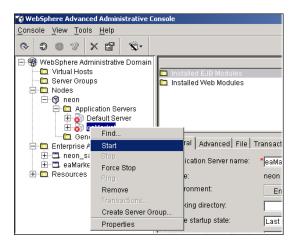
15. Click **ox** to close the Information dialog reporting that the installation was successful.



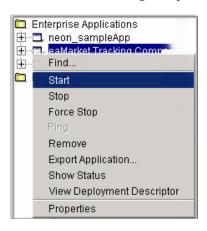
16. Stop the server on which you installed the eaMarket J2EE application. Select (expand) Nodes and <your_node> and Application Servers, and then right-click the server name in the left pane. Select Stop on the menu.



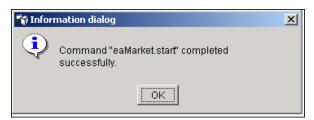
- 17. An Information dialog notifies you that the application server has stopped successfully.
- 18. Click **ox** to close the Information dialog.
- 19. Expand Nodes; select the server e.g. *Neon.* Right-click and select **Regen Webserver Plugin.**
- 20. Restart the application server by right-clicking on the its name, and selecting **Start** on the menu.



- 21. An Information dialog notifies you that the application server has started successfully.
- 22. Click ox to close the Information dialog.
- 23. Start the eaMarket J2EE application by expanding the Enterprise Applications folder, right clicking on the application name (for example, eaMarket Tracking Component), and then selecting Start from the menu.



24. An Information dialog notifies you that the application has started successfully.

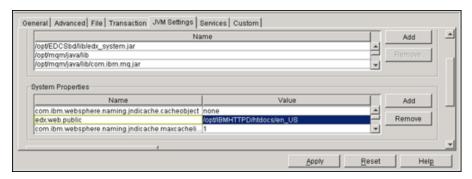


25. Click **ox** to close the Information dialog.

To configure JVM settings for eaDirect:

- 1. Expand **Nodes**, (that is, the name of the machine that your application server is on. For example, Neon) and select eaDirect.
- 2. Select the JMV Settings tab and on the System Properties, manually enter the following:





- 3. Enter the Classpath as /opt/EDCSmkt/lib/xerces.jar
- 4. Click Apply.

Setting the Directory for Promotion Storage

After eaMarket is installed, check the setting for the directory that stores images for promotions to be displayed on the eaDirect server. The path to this directory is specified in <*eaDirect dir*>/*config/eam mwi.config*. For example:

/opt/EDCSbd/config/edx_mwi.config

You can edit this file to point to any directory that exists or you create.

Configuring a Data Store for eaMarket

A database user must be created and defined to WebSphere so eaMarket can store content. Creating a eaMarket Data Store consists of:

On the database server:

• Creating a new database user, and either sharing an existing tablespace or creating a new one.

On the eaMarket server:

- Configuring a WebSphere JDBC Connection Pool, Data Source and User to connect to that database user and tablespace.
- Creating a Data Store in eaMarket.

To Create the Database User

Ask your DBA to create a user and (optionally) a tablespace for eaMarket. The command should be similar to the following, where the database user and password is eamdata:

```
create user eamdata identified by eamdata default tablespace eamdata temporary tablespace temp on temp account unlock;
```

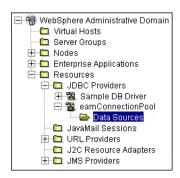
You can share an existing tablespace with another database user. For example, EDX_DATA used by eaMarket. However, using a separate tablespace may create problems with content taking up too much space. Consult your DBA for guidance.

To Configure WebSphere for the Data Store

Log on to the WebSphere console, and follow these steps:

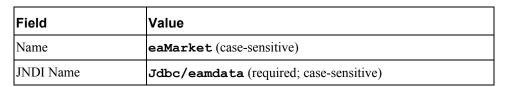
Configuring the JDBC Connection Pool

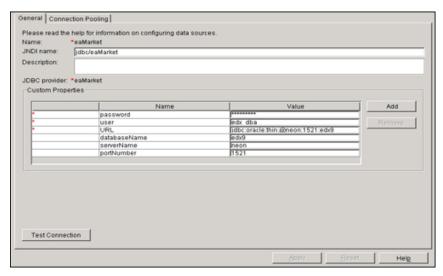
- 1. Expand the Resources folder in your domain to show the JDBC Providers folder.
- 2. Expand the JDBC Providers folder and expand eamConnectionPool.
- 3. Right-click on Data Sources, and then select New from the menu.



The Data Source Properties dialog appears.

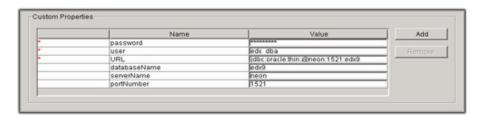
4. On the **General** tab, enter the following values for the Name and JNDI Name parameters (entering a description is optional):



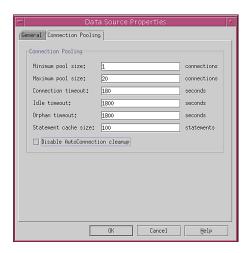


5. Scroll down to Custom Properties, and enter the following database properties by clicking **Add** to open a new line:

Parameter	Value
URL	jdbc:oracle:thin:@ <servername>:1521:<oracle_sid></oracle_sid></servername>
	For example: jdbc:oracle:thin:@jaguar:1521:eamDS
user	eam_data (or the name of the Oracle database user you specified during the database creation for the data store)
password	eam_data (or the name of the Oracle database password you specified during the database creation for the data store. Make sure you confirm your password.)
databaseName	eamDS (or the name of the Oracle SID you specified during the database configuration procedure)



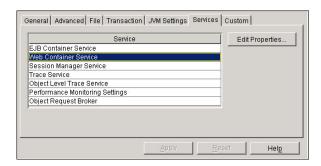
6. Click the Connection Pooling tab. In the Maximum pool size field, set the maximum pool size to 20.



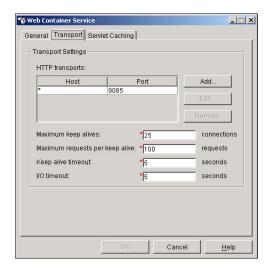
- 7. Make sure that the Disable AutoConnection cleanup parameter is enabled (box unchecked).
- 8. Click **ox** to close the Data Source Properties dialog. You should see:



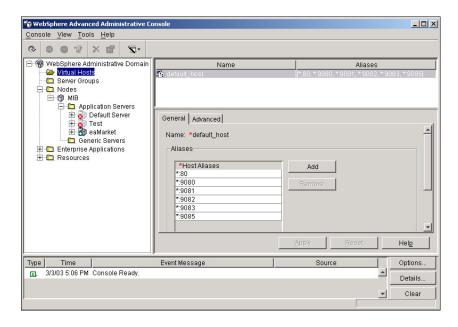
- 9. Click **ox** to close the Information dialog.
- 10. If you did not install eaMarket as the default server, then you have to select the port for the application server.
- 11. Select the eaMarket server from the application servers and then select the **Services** tab.
- 12. Select Web Container Servic and click Edit Properties.



13. Select the **Transport** tab and note the port that is shown there.



14. In the WebSphere console, select the Virtual Hosts folder.

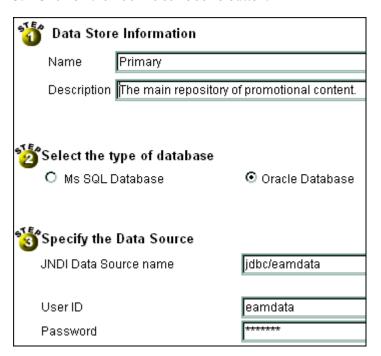


- 15. In the General tab click **Add**. A new row will get added to the bottom of the list of Host Aliases. Add the port number in the following format:
 - *:<port number>
- 16. Click Apply.

To Create a Data Store in eaMarket

This step assumes that eaMarket has been setup on the database and (optionally) eaDirect servers.

- Log in to eaMarket as the Administrator. For example: http://<eaMarket Server>:<webSphere port>/eaMarket
- 2. Select Administration-> Data Stores.
- 3. Click on the Add Data Store button.



Enter the following information:

Area/Parameter	Description
Step 1	Enter a unique name, for example Primary.

Area/Parameter	Description
Step 2	Select Oracle Database.
Step 3	Specify the JNDI datasource: JNDI Data Source Name matches the JNDI Name in the JDBC Data Source defined in WebSphere in the previous section. UserID and Password matches the entries for the Oracle database user added previously.

Setting the Tracking Server

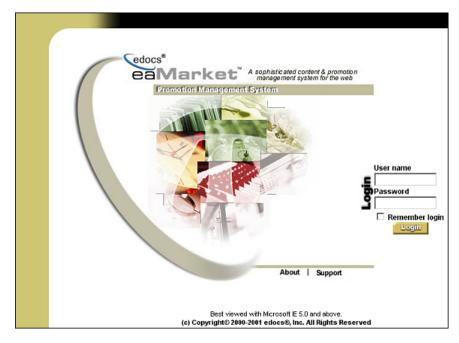
The location of the Tracking server for eaMarket must be configured in the eaMarket configuration page

1. Connect to the eaMarket server and login as the user Administrator with password admin, using a URL of the following format:

http://<servername>:<port number>/eaMarket

For example:

http://nurse:9081/eaMarket



- 2. Click on the Administration tab in the left navigation panel.
- 3. Click on the **eaMarket Preference** button and change the following parameters:
 - In the Server Information section, for the Server Information field, verify that the name of the server is correct.
 - In the Tracker section, for the Tracker option you may need to change the Transfer track summary to the eaMarket server who's URL is to the URL to the eaMarket server.
- 4. Click on the Save button.
- 5. Once the changes are made, restart the WebSphere server.

Starting the Agents

Start the agent that performs promotion deployment, scheduled imports, workflow, notification and logging.

- 1. Login as the WebSphere owner. For example, root.
- 2. Change the working directory to *<eaMarket install>* and run the agent script. For example:

```
cd /opt/EDCSmkt
./ws eam init -start -url iiop://<host name>:900
```

3. Make sure that the log files are created in <eaMarket install>/log. An example log file name is:

```
CUniqueIdRemote.log
```

Stopping the Agents

Stop the agent as part of shutting down eaMarket.

- 1. Login as the WebSphere owner. For example, root.
- 2. Change the working directory to *<eaMarket install>* and run the agent script. For example:

```
cd /opt/EDCSmkt
./ws eam init -stop
```



All directories and files accessed by eaMarket (which is a WebSphere application) must be accessible to the WebSphere user (usually, the user root). Sometimes processes can create files or directories with different owners and accesses. It is good practice to check all eaMarket and WebSphere files and directories to make sure they are still owned by the WebSphere owner. The only exception is files that are needed for the database, which need to be accessible by the database user.

Setting up Xvfb

Java's graphic packages that are part of eaMarket are based on *java.awt*, which requires X libraries and an X display. To support this, the web server rendering charts must have the X libraries installed and must have access to an X server. Even for sites where the server has an attached display device there may be difficulty loading X libraries if they are not already present. To simplify X configuration, charting can use the virtual frame buffers provided by Xvfb.

If you do not already have Xvfb installed on your machine, you can it from any internet site for X11. Un-tar the archive and install it under /usr/X11R6.

To Set Display Permission

The command in UNIX environments that allows X displays on a particular machine from other machines is: **xhost** +. Without arguments, commands following the + implies all machines (as opposed to named machines only).

If xhost is already on your path, type the following command. (xhost may exist in the /usr/openwin/bin folder, which you can add to your PATH in your .profile).

At the command prompt, type: **xhost** +

To Set the Display Device

The Xvfb command starts the virtual frame buffer, and is located in /usr/X11R6/bin. To use Xvfb:

- 1. Open an Xterm window on the main console of the server.
- 2. Set the *DISPLAY* environment variable for Xvfb to use as follows:

```
export DISPLAY=:2.0
```

3. Assuming that Display 2 will be used for Xvfb, then start the Xvfb server as follows:

/usr/X11R6/bin/Xvfb :2 -screen scrn 800x600x24 &



The "&" allows you to close the command window and still leave the task running in the background.

You can edit the /etc/profile file to set the DISPLAY environment variable for all sessions and all users, and create a startup script in the /etc/rc3.d directory to automatically startup the Xvfb server when the system is rebooted.

4. Restart the eaMarket application server, after setting up Xvfb.

Uninstalling eaMarket

When uninstalling eaMarket, it is recommended that you repeat the sequence used to install the application. That is, remove eaMarket from the database server first, then the application server.

To uninstall the eaMarket database server components

1. Shut down the Database Server and Oracle listener. Log in as the **oracle** user, make sure that **ORACLE_SID** is set to the eaMarket Oracle SID, and run the following command:

\$ svrmqrl

```
Oracle Server Manager Release 3.1.7.0.0 - Production

(c) Copyright 1997, Oracle Corporation. All Rights Reserved.

Oracle8i Release 8.1.7.0.0 - Production
With the Java option
PL/SQL Release 8.1.7.0.0 - Production

SVRMGR> connect internal
Connected.
SVRMGR> shutdown immediate
SVRMGR> exit
```

Locate all files associated with the eaMarket SID. For example:

```
find . -name '*eamarket*' -print
```

The result should look similar to the following:

- ./product/8.1.7/dbs/initedx0.ora
- ./product/oradata/edx9
- ./product/oradata/edx9/redo/logeamarket0.log
- ./product/oradata/edx9/redo/logeamarket1.log
- ./product/oradata/edx9/data/syseamarket0.dbf
- ./product/oradata/edx9/data/rbs1eamarket0.dbf
- ./product/oradata/edx9/data/usr1eamarket0.dbf
- ./product/oradata/edx9/data/tmpleamarket0.dbf
- ./product/oradata/edx9/data/indx1eamarket0.dbf
- ./product/oradata/edx9/data/eamarket data.dbf
- ./product/oradata/edx9/data/eamarket_data_idx.dbf
- ./product/oradata/edx9/data/eamarket_app_data.dbf
- ./product/oradata/edx9/data/eamarket app data idx.dbf
- ./admin/eamarket0
- ./admin/edx9/bdump/alert eamarket0.log
- ./admin/edx9/pfile/initeamarket0.ora



There may be additional log files. Their paths depend on variations in the local eaMarket installation.

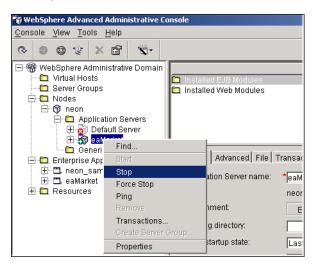
- 2. Remove the files and directories with a suitable UNIX command.
- 3. Switch user to *root* and navigate to \$EAM HOME/Uninstall.
- 4. Run the eaMarket uninstall command:
 - # ./Uninstall eaMarket
- 5. Manually remove any files that were not removed by the InstallAnywhere tool.

Uninstalling eaMarket Applications on WebSphere

Follow the steps below to uninstall J2EE applications running on your WebSphere application server.

To uninstall eaMarket J2EE applications on WebSphere:

- 1. As *root* user, start the WebSphere Administrative Console if it isn't running. This can be done by navigating to \$WAS HOME/bin and run the command:
 - # ./adminclient.sh &
- 2. When the WebSphere Administrative Console appears, expand your Domain to show the Enterprise Applications folder.
- 3. Expand the Enterprise Applications folder and click on the J2EE application that you want to uninstall.
- 4. Right-click stop from the menu.



An information dialog appears:



- 5. Open a command line window and navigate to \$WAS_HOME/installedApps.
- 6. Manually remove the EAR file from the directory.
- 7. Navigate to \$EAM_HOME/J2EEApps/websphere.
- 8. Manually remove the deployed EAR file from the directory.