



eaService™ Installation and Configuration Guide

eaService is a member of the eaSuite™ product line

Sun Solaris Operating Environment™ Software

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Preface

About Online Account Management and the eaSuite™

Online Account Management solutions provide organizations and their business and consumer customers with the capability to service every aspect of their account relationship over the Internet. The account encapsulates all pertinent customer information, along with the activity and charges associated with the exchange of goods or services between a customer and an organization, and as such serves as the foundation for the relationship.

Whether an organization provides physical goods or services, the account relationship is one-time or recurring; or the customer is a large business with a global presence or is an individual consumer, the needs remain the same. Today, both organizations and their customers are demanding the ability to efficiently and conveniently manage, analyze accounts and have visibility into account initiations and modifications, detailed account history, orders, disputes and payments.

eaSuite – The Proven Platform for Online Account Management

edocs has developed the most comprehensive and sophisticated software platform and services for Online Account Management. Organizations that deploy edocs Online Account Management solutions increase productivity and improve profitability by:

- Reducing support and processing costs
- Improving operational effectiveness
- Increasing customer satisfaction

- Enhancing marketing effectiveness

The eaSuite has been deployed at organizations worldwide in some of the most complex business and rigorous technical environments, and has proven to be the industry's most scalable, standards-based platform with a total cost of ownership lower than any competing packaged or custom developed solution.



eaDirect™ is the platform product of the eaSuite that creates the core infrastructure of enterprise Online Account Management solutions. Organizations use eaDirect to access customer account data and develop ways of presenting the data for viewing, analysis and modification online. By providing business and consumer customers with online account information and self-service capabilities, eaDirect enables organizations to reduce support and processing costs, improve operational effectiveness, and increase customer satisfaction.

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 Automatic Clearing House (ACH) and credit card payments, and payments via various payment processing service providers.

eaService™ reduces call center management costs and increases customer satisfaction by providing critical account data access to customer service representatives (CSRs). With eaService, a contact center is able to provide better service by more efficiently resolving customer account inquiries at the point of customer contact. Through its intuitive browser interface, eaService allows CSRs to take advantage of what are generally thought of as customer-facing online capabilities of an Online Account Management system, to draw out account information.

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 Online Account Management experience. eaMarket leverages the transactional account data that is the foundation of an Online Account Management system to present personalized relevant marketing and customer service messages to customers.

eaPost® is the account content distribution system that provides an organization's customers with the convenience of All Portals Addressable™ access to account information. eaPost handles all the complexities of securely distributing summary account information to any endpoint while also bringing customers back the organization's Website to manage and control their online experience.

About This Guide

This guide describes how to install and configure eaService. eaDirect 3.0 **must** be installed and configured before installing eaService.

eaService provides a GUI interface to allow CSRs to access customer information stored in an eaDirect application. It also allows developers to write custom CSR applications against edocs applications. You will need to use the information in this guide to install and configure eaService to work with eaDirect applications.

The edocs SDK and eaService are intended for senior web application developers. It assumes in-depth understanding of and practical experience with:

- eaDirect 3.x system architecture, installation, deployment, application design, and administration
- Java 2 Enterprise Edition (J2EE), including Enterprise JavaBeans (EJB), servlets and Java Server Pages (JSPs)
- Packaging and deploying J2EE applications
- Directory services including the Java Naming Directory Interface (JNDI) and the Lightweight Directory Access Protocol (LDAP)

- Internet technologies, including HTML and XML, web server administration, and web browsers

Related Documentation

There are other guides included with the eaSDK documentation set that are referenced in this guide:

Print Document	Description
<i>eaSDK: Customizing eaService</i>	How to use the APIs and sample application to customize your own CSR application.
<i>eaSDK: Implementing a User Management Framework</i>	Describes how to build and implement a user management framework for an eaDirect deployment.
<i>eaSDK: Customizing and Deploying Applications</i>	Describes the basic concepts and tools for building and deploying an eaDirect J2EE application.

Contacting edocs Technical Support

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 8:00 am to 8:00 pm EST):

- Telephone: 508.652.8400
- Toll Free: 877.336.3362
- E-support: **support.edocs.com**. This requires a one time online registration.

- E-mail: **support@edocs.com**

Whether you report a problem online, by email or by telephone, 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.
- Do you have an idea on how to improve eaDirect? Don't hesitate to e-mail your idea to support@edocs.com.

Installation and Configuration



Overview

eaService is an add-on component to the core eaDirect application that provides core features to help CSRs interact with customer statements processed by the eaDirect application. Before you can install the eaService package, you must install eaDirect.

The steps required to implement eaService for your eaDirect applications are:

- Install eaDirect
- Install the add-on eaService on top of eaDirect and move its configuration file to the eaDirect location
- Configure the eaDirect CDA to include enrollment information for the CSR based on your application

See the *eaDirect Installation and Configuration Guide* for more information about installing eaDirect. See the eaSDK Guide *Customizing eaService* for information about customizing the default sample CSR pages and CDA database to fit your application needs.

System Prerequisites

Before installing eaService, eaDirect 3.0 or higher must be installed, along with its required software components. For information about eaDirect and its requirements, see the *eaDirect Installation and Configuration Guide*.

Installing and Configuring eaService

Follow the instructions below to install eaService on your system. By default, eaService is installed in */opt/EDCSsrv*. You can change the default installation directory when prompted during the installation procedure.

You can choose one of three InstallAnywhere installation modes to install eaService:

- GUI Mode
- Silent Mode
- Console Mode

The installation procedures below show eaService being installed using each mode. Console Mode is an interactive character-based installation where you are prompted to respond to several installation questions. Silent Mode installs eaService in the background and displays a message when the installation is complete.

During the installation procedure, you are prompted to enter the user and group identifier of the WebLogic owner. edocs recommends you use the default WebLogic owner and group accounts. The WebLogic examples in this guide use the *nobody:nobody* owner and group combination.



Caution

When installing eaDirect and eaService, check that the eaDirect and eaService directories use the Unix owner that matches the WebLogic owner. For a new installation, this is *nobody*. But if there are existing WebLogic applications, an owner will have already been assigned.

To install eaService using the GUI mode:

1. From the eaService 3.0 installation CD-ROM, run the script to invoke the InstallAnywhere GUI:

```
# ./Servins.bin
```

A start-up screen is displayed.

2. After carefully reviewing the information on the Introduction screen, 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. Click **Next**.
5. On the Owner of Web Application Server screen, enter the name of the application server owner. For example, you can specify the owner of the application server files as nobody. Click **Next**.
6. On the Group of Web Application Server screen, enter the name of the group for the application server. For example, you can specify the group of the application server files as nobody. Click **Next**.
7. On the Choose Install Folder screen, accept the default installation folder or click **Choose** to specify a different installation folder. When finished, click **Next**.
8. On the Pre-Installation Summary screen, carefully review the components that are to be installed and confirm that the target server has sufficient disk space for the installation. If all the information on the screen appears satisfactory, click **Install**.

At this point, the eaService application server components are copied to the designated installation folder. A progress bar on the bottom of the screen shows each application server component being installed. No user intervention is necessary.

9. If the installation is successful, click **Done**. This completes the installation of the eaService application server components.

To install eaService in Console Mode:

1. From the eaService Installation CD-ROM, run the following command to install eaService in Console Mode:


```
# ./Servins.bin -i console
```

InstallAnywhere displays the banner:

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

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

```
Congratulations! eaService 3.0 has been successfully
installed to:
/opt/EDCSrv
```

To install eaDirect in Silent Mode:

1. From the eaService Installation CD-ROM, run the following command to install eaService in Console Mode:

```
# ./Servins.bin -i silent
```

InstallAnywhere displays the banner:

```
Preparing SILENT Mode Installation...
```

2. Read and accept the License Agreement.
3. The installation proceeds automatically. No user intervention is required.
4. A successful installation displays the message:

```
Installation Complete.
```



Tip

Note that the Silent installation mode installs eaService to the default directory `/opt/EDCSrv`. If you want to install eaService to a different directory, use another mode.

The preceding Console and Silent Mode installation procedures assume that you will be installing eaService as *nobody* for the owner of the application server files, and *nobody* as the group for the application server files. However, if you choose to specify an owner and group different than the default values, you can do so using the following command syntax:

```
# ./Servins.bin -DOWNER_ID=<owner_id> -DGROUP_ID=<group_id> -i console
```


or,

```
# ./Servins.bin -DOWNER_ID=<owner_id> -DGROUP_ID=<group_id> -i silent
```

After you complete the above steps, the eaService directory structure should contain the following files relevant to configuring eaService:

```
EDCSsrv/
  config/
    edx_easervice.config
  db/
    create_schema
J2EEApps/
  weblogic/
    ear-easervice.ear
samples/
  J2EEApps/
    weblogic/
      ear-easample.ear
```

You will need to move the *edx_easervice.config* file to the location where the other eaDirect configuration files reside (by default: */opt/EDCSbd/config*).

Deploying the eaService EAR Files

The two EAR files provided by eaService (*ear-easample.ear* and *ear-easervice.ear*) must be deployed to your WebLogic application server. Use the WebLogic Console utility to do this (see the WebLogic documentation for more information).

Configuring the eaDirect CDA Database

The *create_schema* file contains the CDA Client Tool commands to modify the default CDA database provided by eaDirect to run eaService. To run the *create_schema* script, follow these steps:

1. Go to the location where the *create_schema* script resides on your system and enter the following commands (where *<weblogic-home>* is the directory path of where you installed WebLogic, and *<eadirect-home>* is the location where you installed eaDirect):


```
. <weblogic-home>/setEnv.sh  
CLASSPATH=$CLASSPATH:<eadirect-home>/lib/edx_common.jar:  
<weblogic-home>/lib/weblogic.jar  
export CLASSPATH
```

2. After setting the CLASSPATH, you need to run CDA Client from the location where the *create_schema* file resides after installation (by default it is */opt/EDCSrv/db*). The command to run is:

```
java -Djdbc.drivers=oracle.jdbc.driver.OracleDriver  
com.edocs.jndi.cda.cli.Main  
jdbc:oracle:thin:@server-name:port:database-name  
database-user-name database-user-password <  
create_schema
```

The *server-name* and *port* correspond to the system running the database. The *database-name*, *database-user-name*, and *database-user-password* values correspond to the database parameter values defined for the eaDirect database (By default they are *edx0*, *edx_dba*, and *edx*, but they may now be different; the Oracle port is 1521 by default).

Running the *create_schema* file successfully returns the following output:

```
> > > > > > > > > > > > > > > > > > > > > > > > > > >  
> > > > > > $
```

Verifying the Installation

After installing and configuring eaService, and confirming WebLogic is running, you should be able to access eaService from your browser with the following HTTP address:

```
//<server-name>:<port>/eaService
```

where *<server-name>* and *<port>* correspond to the system running WebLogic and your eaDirect application. For example:

```
//leopard:7100/eaService
```

The eaService login page appears.

The initial administration User ID and Password provided for eaService is **admin** and **edocs**. You should use it to log in initially and later change the password. For information about how to use and customize eaService, see the eaSDK Guide *Customizing eaService*.

Uninstalling eaService

When uninstalling the eaService, you should remove it from each system that you installed it on.

1. Switch to the *root* user.
2. Change directory to *<easervice-home>/Uninstall* and run the eaService uninstall tool. For example:

```
# cd /opt/EDCSrv/Uninstall  
# ./Uninstall_eaService
```
3. Change directory to *<easervice-home>* and remove any files that were not removed by the uninstall tool, if necessary.