



Installation and Configuration Guide

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

eaAssist

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Table of Contents

- Preface..... 5**
 - About Customer Self-Service and eaSuite™ 5
 - About This Guide..... 8
 - Related Documentation..... 9
 - Contacting edocs Technical Support..... 10
- 1 Preparing to Install eaAssist 13**
 - Installation Overview 13
 - System Prerequisites 13
- 2 Installation for WebLogic..... 15**
 - Installing the eaAssist Software 15
 - Deploying the eaAssist EAR Files..... 18
 - Configuring the eaDirect CDA Database..... 18
 - Verifying the Installation 19
 - Uninstalling eaAssist 19

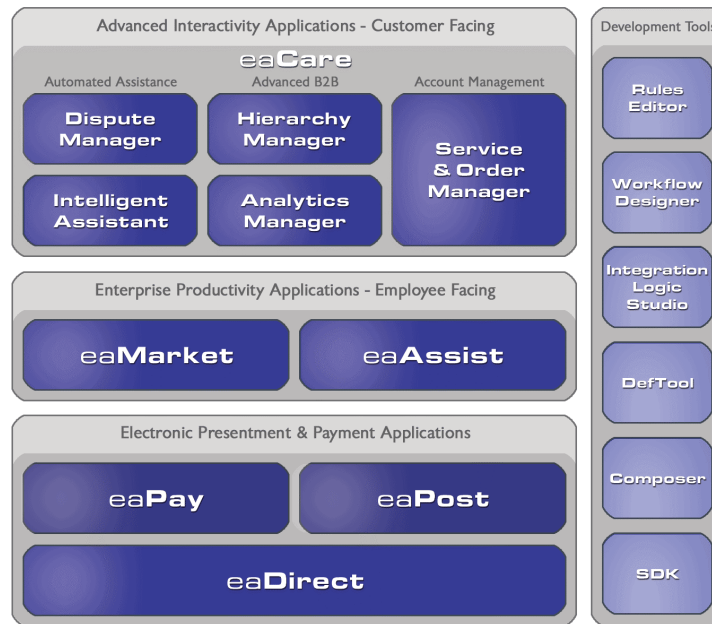
Preface

About Customer Self-Service and eaSuite™

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

eaSuite is comprised of four product families:

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



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

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

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

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

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

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

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

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

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

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

About This Guide

This guide describes how to install and configure eaAssist. eaDirect 4.0.x **must** be installed and configured before installing eaAssist.

eaAssist 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 eaAssist to work with eaDirect applications.

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

- eaDirect 4.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>Using and Customizing eaAssist</i>	How to use the APIs and sample application to customize your own CSR application.
<i>User Management Frameworks</i>	Describes how to build and implement a user management framework for an eaDirect deployment.
<i>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.

Preparing to Install eaAssist



Installation Overview

eaAssist 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 eaAssist package, you must install eaDirect.

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

- Install eaDirect
- Install the add-on eaAssist 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 guide *Using and Customizing eaAssist* for information about customizing the default sample CSR pages and CDA database to fit your application needs.

System Prerequisites

Before installing eaAssist, eaDirect 4.0.x 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*.

Installation for WebLogic

2

The sections in this chapter describe the installation, configuration, and deployment of the eaAssist application to a WebLogic Application Server. They include:

- Installing the eaAssist package
- Deploying the eaAssist applications on WebLogic
- Configuring the eaDirect CDA Database
- Verifying the Installation
- Uninstalling eaAssist

You deploy the eaAssist J2EE application using the WebLogic Console utility. For more information on how to use it, you can see the *eaDirect Installation and Configuration Guide*.

Installing the eaAssist Software

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

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.



When installing eaDirect and eaAssist, check that the eaDirect and eaAssist 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 the Application Components:

1. Log on as the root user on the application server.
2. Install eaAssist using the InstallAnywhere image for eaAssist. For example:
`/cdrom/Solaris/Assist.in.bin`
3. After reviewing the information on the Introduction screen, click **Next**.
4. 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**.
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). Click **Next**.
6. On the Owner of Web Application Server screen, enter the name of the application server owner (the same one you used when installing eaDirect). Then click **Next**.
7. On the Group of Web Application Server screen, enter the name of the group for the application server (the same one you used when installing eaDirect). Then click **Next**.
8. On the Choose Install Folder screen, accept the default installation folder or click **Choose** to specify a different installation folder. This document will refer to that directory as \$EAASSIST_HOME, and the examples given will use `/opt/EDCSrv` (the default location). When finished, click **Next**.

9. 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 eaAssist 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.

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

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

```
EDCSrv/
  config/
    edx_eaassist.config
  db/
    create_schema
  J2EEApps/
    weblogic/
      ear-eaassist.ear
  samples/
    eaSample/
      J2EEApps/
        weblogic/
          ear-easample.ear
  Uninstall/
    Uninstall_eaAssist
```

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

Deploying the eaAssist EAR Files

The two EAR files provided by eaAssist (*ear-easample.ear* and *ear-eaassist.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 eaAssist. 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
```



Caution

The above java command must be one contiguous line. Do not treat each line as a separate command (the line breaks above are to fit it on the page).

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:

[illegible]

Verifying the Installation

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

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

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

```
//leopard:7100/eaAssist
```

The eaAssist login page appears.

The initial administration User ID and Password provided for eaAssist 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 eaAssist, see the guide *Using and Customizing eaAssist*.

Uninstalling eaAssist

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

1. Switch to the *root* user.

2. Change directory to `$EAASSIST_HOME/Uninstall` and run the eaAssist uninstall tool. For example:

```
# cd /opt/EDCSrv/Uninstall  
# ./Uninstall_eaAssist
```
3. Change directory to `$EAASSIST_HOME` and remove any files that were not removed by the uninstall tool, if necessary.