



Installation and Configuration Guide

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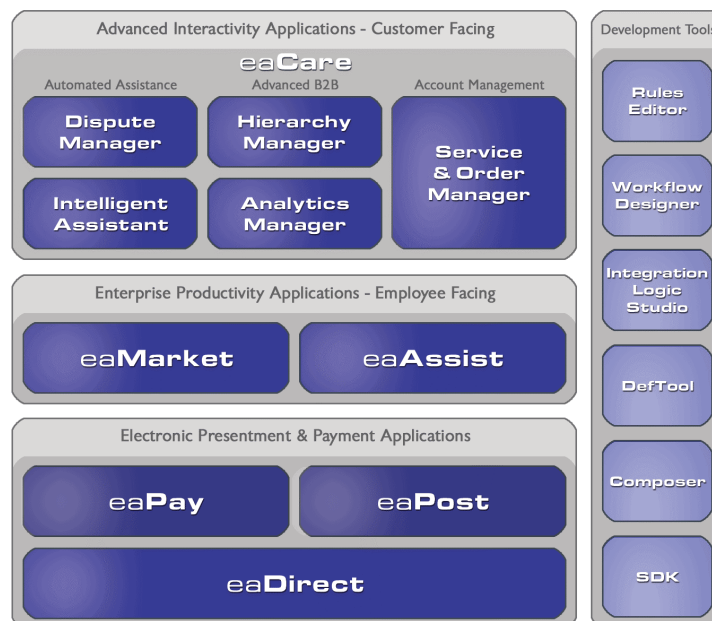
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Preface

About Customer Self-Service and eaSuite™

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



eaSuite is comprised of four product families:

- Electronic Presentment and Payment (EPP) Applications

- Advanced Interactivity Applications
- Enterprise Productivity Applications
- Development Tools

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

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

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

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

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

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

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

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

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

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

About 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>Deploying and Customizing J2EE Applications</i>	Describes the basic concepts and tools for building and deploying an eaDirect J2EE application.

Obtaining edocs Software and Documentation

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

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

If You Need Help

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

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

US Support Center

Natick, MA

Mon-Fri 8:30am – 8:00pm US EST

Telephone: 508-652-8400

Europe Support Center

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

Asia Pac Rim Support Center

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

Customer Central

<https://support.edocs.com>

Email Support

<mailto:support@edocs.com>

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

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

If the system crashed or hung, please tell us.



Installing eaAssist

Installation and Configuration 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.

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

- Install and configure eaDirect on your WebSphere Application Server
- Install eaAssist on that same server
- Deploy the eaAssist EAR application files
- Configure the eaDirect CDA to include enrollment information for the CSR based on your eaAssist 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 4.1 or higher must be installed, along with its required software components. For information about eaDirect and its requirements, see the eaDirect installation and configuration Guides.

Installing the eaAssist Software

Follow the instructions below to install eaAssist on your system. By default, eaAssist is installed in:

Platform	Default Path
Solaris or HP-UX	<i>/opt/EDCSrv</i>
AIX	<i>/usr/EDCSrv</i>
Windows	<i>C:\EDCSrv</i>

You can change the default installation directory when prompted during the installation procedure. This guide uses the generic term EAASSIST_HOME to define the installation directory in the examples.

During the installation procedure, you are prompted to enter the user and group identifier of the Web Application Server owner. edocs recommends you use the default Web Application Server owner and group accounts.

To install the Application Components:

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

For Unix, enter **./Assistins.bin** from a command prompt at the directory location where the installer resides.

For Windows, double-click the **Assistins.exe** installer application at the directory location where it resides.
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 the default location defined above. 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:

```
EDCSSrv/
  config/
    edx_eaassist.config
  db/
    create_schema
J2EEApps/
  weblogic/
    ear-eaassist.ear
  websphere/
    ear-eaassist.ear
  websphere5/
    ear-eaassist.ear
    Deployed_ear-eaassist.ear
  samples/
    eaSample/
      J2EEApps/
        weblogic/
          ear-easample.ear
        websphere/
          ear-easample.ear
        websphere5/
          ear-easample.ear
          Deployed_ear-easample.ear
Uninstall/
  Uninstall_eaAssist
```


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Configuration for WebLogic

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

- Define eaAssist to WebLogic
- Deploying the eaAssist applications on WebLogic
- Configuring the eaDirect CDA Database
- Verifying the Installation

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*.

Defining eaAssist to WebLogic

Copy the *edx_eaassist.config* file from *EAASSIST_HOME/config* to the location where the other eaDirect configuration files reside (by default: *EDX_HOME/config*).

When you restart the WebLogic server, *edx_eaassist.config* is called to pass eaAssist settings to the application server.

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 in Windows

The *create_schema* file contains the CDA Client Tool commands to modify the default Microsoft SQL Server 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 (by default *EDCSrv\db*).

2. Set the EDX_HOME value to the location where eaDirect resides, for example:

```
set EDX_HOME=C:\EDCSbd
```

3. Enter the following CLASSPATH value:

```
set CLASSPATH=C:\EDCSbd\lib\edx_common.jar;C:\EDCSbd\lib\opta2000.jar; C:\bea6.1\wlserver6.1\lib\weblogic.jar
```

However, the `\bea6.1\wlserver6.1` directory specified above may differ depending on where you installed WebLogic and which WebLogic version you are using.

4. After setting the CLASSPATH, you need to run the CDA Client as follows:

```
java -Djdbc.drivers=com.inet.pool.PoolDriver
com.edocs.jndi.cda.cli.Main jdbc:inetpool:inetdae7://server-
name:port database-user-name database-user-password <
create_schema
```



The preceding java commands 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).

Configuring the eaDirect CDA Database in Unix

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

1. Change your working directory to where the `create_schema` script resides on your system.
2. Set the EDX_HOME variable to the location where eaDirect resides and the source file `edx_env`. For example:

```
EDX_HOME=/opt/EDCSbd
export EDX_HOME
. $EDX_HOME/config/edx_env
```

3. Set the following CLASSPATH value:

```
CLASSPATH=$EDX_HOME/lib/edx_common.jar:
$ORACLE_HOME/jdbc/lib/classes12.zip
export CLASSPATH
```

4. After setting your environment, run the CDA Client Tool using the following command with `create_schema` as its input file.

```
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 preceding java commands 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 WebSphere 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 WebSphere and your eaDirect application. For example:

```
//javelin:7001/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*.

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Configuration for WebSphere

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

- Define eaAssist to WebSphere
- Installing the deployed applications on WebSphere
- Configuring the eaDirect CDA Database
- Verifying the Installation

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

Defining eaAssist to WebSphere

Copy the *edx_eaassist.config* file from *EAASSIST_HOME/config* to the location where the other eaDirect configuration files reside (by default: *EDX_HOME/config*).

When you restart the WebSphere server, *edx_eaassist.config* is called to pass eaAssist settings to the application server.

Deployment Using WebSphere 5

This section describes how to deploy eaSample using the WebSphere application server. eaDirect supplies a pre-assembled EAR for deployment with WebSphere 5.



Caution

The specific steps for your application server may differ from the ones described below. You should consult your System Administrator and application server documentation for complete details of how to deploy a J2EE application based on your system's configuration.

To deploy a web application with WebSphere 5:

1. From the WebSphere Administrative Console, expand the Applications branch and click on **Install New Application**.

2. Select “Server Path” and then type in the absolute path to where your application is installed. For example, on Solaris:

```
/opt/EDCSsrv/J2EEApps/websphere5/Deployed_ear-eaassist.ear
```

3. Keep clicking **Next** until you reach the last page, and then click **Finish**. Use the default settings for each step.
4. Save to the Master Configuration.

Repeat the above steps to deploy the *Deployed_ear-easample.ear* provided with eaAssist.

See the Deployment Guide for information about deploying additional edocs applications.

Configuring the eaDirect CDA Database in Unix

The *create_schema* file contains the CDA Client Tool commands to modify the default Oracle or DB2 CDA database provided by eaDirect to run eaAssist. To run the *create_schema* script, follow these steps:

1. Change your working directory to where the *create_schema* script resides on your system.
2. Set the EDX_HOME variable to the location where eaDirect resides and the source file *edx_env*. For example:

```
EDX_HOME=/opt/EDCSbd
export EDX_HOME
. $EDX_HOME/config/edx_env
```

For Oracle:

1. Set the following CLASSPATH value:


```
CLASSPATH=$EDX_HOME/lib/edx_common.jar:
$ORACLE_HOME/jdbc/lib/classes12.zip
```

```
export CLASSPATH
```
2. After setting your environment, run the CDA Client Tool using the following command with *create_schema* as its input file.

For Oracle:

```
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
```

For DB2:

1. Start the java listener, if not already running. For example:

```
$ db2jstrt 6789
```

2. Set the following CLASSPATH value:

```
CLASSPATH=$EDX_HOME/lib/edx_common.jar:$DB2HOME/sqlllib/java12/
db2java.zip
export CLASSPATH
```

3. After setting your environment, run the CDA Client Tool using the following command with *create_schema* as its input file:

```
java -Djdbc.drivers=COM.ibm.db2.jdbc.net.DB2Driver
com.edocs.jndi.cda.cli.Main jdbc:db2://<server-
name>:<port>/<database-name> <db-user-name> <db-user-password>
< create_schema
```

**Caution**

The preceding java commands 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).

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

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

Verifying the Installation

After installing and configuring eaAssist, and confirming WebSphere 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 WebSphere and your eaDirect application. For example:

```
//javelin:9085/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*.

4

Uninstalling eaAssist

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

For Unix:

1. Switch to the *root* user.
Change directory to *EAASSIST_HOME /Uninstall* and run the eaAssist uninstall tool.
2. Change directory to *EAASSIST_HOME* and remove any files that were not removed by the uninstall tool, if necessary.

For Windows:

1. From *Start>Programs>eaAssist*, run the Uninstall program. An uninstall screen opens.
2. Click **Uninstall**. A second uninstall screen appears showing the eaAssist components that will be removed from your machine.
3. Upon completion of the uninstall procedure, a screen is displayed notifying you that the components have been removed successfully.
4. Click **Quit** to close the program.