Oracle® Application Server

Adapter Installation Guide

10*g* Release 2 (10.1.2)

B14063-05

July 2006

ORACLE®

Oracle Application Server Adapter Installation Guide, 10*g* Release 2 (10.1.2)

B14063-05

Primary Author: Sheela Vasudevan

Contributors: Meera Srinivasan, Vishal Saxena, Sunil Gopla, Shashi Suravarapu

Contents

Preface v

Audience v
Documentation Accessibility v
Related Documents vi
Conventions vi

1 Introduction

n Oracle Application Server Adapter Overview 1-1
n Packaged-Application Adapters 1-1
Table 1–1 Legacy Adapters 1-2
Table 1–2 Oracle Application Server Components Integration with Adapters 1-2
Table 1–3 Types of Installation 1-3
n Oracle Application Server Adapter System Requirements 1-5
n Hardware Requirements 1-5
Table 1–6 Software Requirements 1-5

2 Installation and Configuration

n Installation Tasks 2-1
n Postinstallation Tasks for Packaged-Application Adapters 2-5
n Copying the Library Files 2-6
n Verifying BSE deployment 2-8
2. Configuring the J2CA deployment 2-9
3. Verifying the J2CA Installation 2-10
2. Directory Structure 2-10
Table 2–1 Starting Application Explorer 2-11
Table 2–1 Configuring the Database Repository for J2CA 2-11
4. PostInstallation Tasks for Legacy Adapters 2-12
n Configuring Run-Time Connections 2-12
2. Configuring Design-Time Connections 2-13
Example 2–2Deinstallation Tasks 2-15
7. Globalization Support 2-16

A EIS Adapter Plugin

n EIS Adapter Plugin Overview A-1
n EIS Adapter Plugin System Requirements A-1

n Hardware Requirements A-1
Table A–1 Software Requirements A-1
Table A–2 EIS Adapter Plugin Installation A-2
n Preinstallation Tasks A-2
n Installation Tasks A-2
9. EIS Adapter Plugin Configuration A-3
Table A–6 Using the Application Parameter A-4
Table A–6 Ini File Settings A-5
n hub.ini File A-5
Table A–8 adapter.ini File A-5

B Configuring OracleAS Adapter for PeopleSoft

n Specifying the PeopleSoft Version B-1
n Installing the Adapter Component Interfaces B-1
3. Importing and Building the Component Interfaces B-2
12. Configuring Component Interface Security B-4
6. Installing the TCP/IP Message Router for OracleAS Adapter for PeopleSoft B-8
3. Copying PeopleSoft Files into the Lib Directory B-10

Index

Preface

This Preface contains the following topics:

- Audience
- Documentation Accessibility
- Related Documents
- Conventions

Audience

Oracle Application Server Adapter Installation Guide is intended for system administrators who perform the following tasks:

- Install and configure Oracle Application Server adapters
- Use adapters with BPEL Process Manager

Documentation Accessibility

Our goal is to make Oracle products, services, and supporting documentation accessible, with good usability, to the disabled community. To that end, our documentation includes features that make information available to users of assistive technology. This documentation is available in HTML format, and contains markup to facilitate access by the disabled community. Accessibility standards will continue to evolve over time, and Oracle is actively engaged with other market-leading technology vendors to address technical obstacles so that our documentation can be accessible to all of our customers. For more information, visit the Oracle Accessibility Program Web site at

`http://www.oracle.com/accessibility/`

Accessibility of Code Examples in Documentation

Screen readers may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, some screen readers may not always read a line of text that consists solely of a bracket or brace.

Accessibility of Links to External Web Sites in Documentation

This documentation may contain links to Web sites of other companies or organizations that Oracle does not own or control. Oracle neither evaluates nor makes any representations regarding the accessibility of these Web sites.

TTY Access to Oracle Support Services

Oracle provides dedicated Text Telephone (TTY) access to Oracle Support Services within the United States of America 24 hours a day, seven days a week. For TTY support, call 800.446.2398.

Related Documents

For more information, see the following documents in the Oracle Other Product One Release 7.0 documentation set or in the Oracle Other Product Two Release 6.1 documentation set:

- *Oracle Other Product One Release Notes*
- *Oracle Other Product One Configuration Guide*
- *Oracle Other Product Two Getting Started Guide*
- *Oracle Other Product Two Reference Guide*
- *Oracle Other Product Two Tuning and Performance Guide*

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
`monospace`	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

1 Introduction

This chapter provides an overview of Oracle Application Server adapters. It contains the following topics:

- Oracle Application Server Adapter Overview
- Oracle Application Server Adapter System Requirements

Oracle Application Server Adapter Overview

The OracleAS Adapters CD enables you to install the following types of adapters:

- Packaged-Application Adapters
- Legacy Adapters
- Oracle Application Server Components Integration with Adapters
- Types of Installation

Packaged-Application Adapters

Packaged-application adapters integrate Oracle Application Server with various packaged applications, such as SAP and Siebel. These adapters include OracleAS Adapter for PeopleSoft, OracleAS Adapter for SAP R/3, OracleAS Adapter for Siebel, and OracleAS Adapter for J.D. Edwards.

Table 1–1 describes the packaged-application adapters.

Table 1–1 Oracle Application Server Adapters for Packaged Applications

Adapter	Description
OracleAS Adapter for J.D. Edwards	Provides comprehensive, bidirectional, and standards-based connectivity to J.D.Edwards applications
OracleAS Adapter for PeopleSoft	Provides unique features, such as the support for J2CA and Web Service standards, for creating an open and reusable service-oriented architecture that offers a complete connectivity solution for PeopleSoft applications
OracleAS Adapter for SAP R/3	Exchanges real-time business data between SAP systems and other applications, databases, or external business partner systems.
OracleAS Adapter for Siebel	Connects Oracle Application Server to a Siebel system by providing unique features that minimize the implementation effort.

Legacy Adapters

Legacy adapters integrate Oracle Application Server with legacy and mainframe applications. These adapters include OracleAS Adapter for Tuxedo, OracleAS Adapter for CICS, OracleAS Adapter for VSAM, OracleAS Adapter for IMS/TM, and OracleAS Adapter for IMS/DB.

Table 1–2 describes legacy adapters. These adapters are deployed as J2CA resource adapters within the OC4J container during installation.

Table 1–2 Oracle Application Server Adapters for Legacy Applications

Adapter	Description
OracleAS Adapter for Tuxedo	Models services running on the BEA Tuxedo application server. Captures and maintains a metadata schema for the Tuxedo system by importing Tuxedo metadata and transforming this metadata into mapping definitions for Oracle Connect.
OracleAS Adapter for CICS	Connects Oracle Application Server with CICS. This adapter supports two-phase commit and can fully participate in a distributed transaction.
OracleAS Adapter for VSAM	Enables access to VSAM data managed by CICS or directly. This adapter implements interactions as parameterized SQL with the parameters forming the input record, and with the output (in cases where there is an output) aggregated into an XML document forming the output record.
OracleAS Adapter for IMS/TM	Provides access to MPP based IMS/TM transactions. Each OracleAS Adapter for IMS/TM outbound interaction is mapped to a specific IMS/TM transaction.
OracleAS Adapter for IMS/DB	Captures and maintains a metadata schema for IMS/DB by importing various IMS definition files such as a PSB file, DBD files, and COBOL copybooks.

Oracle Application Server Components Integration with Adapters

The Oracle Application Server adapters enable you to integrate packaged, legacy, and mainframe applications with various Oracle Application Server components, such as OracleAS Integration InterConnect and Oracle BPEL Process Manager. The Oracle Application Server adapters for technology applications and Oracle AS Adapter for Oracle Applications are packaged with the BPEL Process Manager installation.

Table 1–3 describes the Oracle Application Server components that can be integrated with adapters.

Table 1–3 Oracle Application Server Component Integration with Adapters

Component	Description
OracleAS Integration InterConnect	Enables you to integrate heterogeneous systems such as Oracle applications, non-Oracle applications, and third-party, messaging-oriented middleware (MOM). OracleAS Integration InterConnect is a high-speed message broker that is suited for data and application integration. Integrations can be deployed within an enterprise or across enterprise boundaries through the Internet.

Table 1–3 (Cont.) Oracle Application Server Component Integration with Adapters

Component	Description
Oracle Application Server Portal	Combines a declarative environment for creating a portal Web interface, publishing and managing information, accessing dynamic data, and customizing the portal experience, with an extensible framework for J2EE-based application access. Using OracleAS Portal, organizations can provide employees, partners, and suppliers with the information they need and the flexibility to create views tailored to each community.
Oracle Application Server Containers for J2EE (OC4J)	The J2EE server component of Oracle Application Server written entirely in Java that runs on the standard Java Development Kit (JDK) Java Virtual Machine (JVM). OC4J includes a JSP Translator, a Java servlet container, and an Enterprise JavaBeans container.
Oracle BPEL Process Manager	Enables organizations to model and deploy business processes based on the Business Process Execution Language for Web Services (BPEL) standard. Using Oracle BPEL Process Manager, organizations can reduce the cost and complexity of integration projects and increase their strategic value.

Types of Installation

You can use the following two types of installation for Oracle Application Server adapters:

- Design time and Run time
- Design time

After selecting an installation type during installation, select the type of adapter you want to install. Table 1–4 describes the types of installation.

Table 1–4 Types of Installation

Installation Type	Description
Design time and Run time	Installs the following design time and run time components: ■ Design time components Installs Application Explorer. **Note:** For legacy applications, the design-time components are not installed. ■ Run-time components Deploys the following runtime components automatically: – J2CA deployment for packaged applications – BSE deployment for packaged applications – J2CA legacy adapter for connecting with Oracle Connect engine running on legacy platforms **Note:** You need to install Oracle Studio on Windows and Oracle Connect on the required legacy platform. These are not components of Oracle Universal Installer, but part of the Adapters CD.

Table 1–4 (Cont.) Types of Installation

Installation Type	Description
Design time	Installs only the Application Explorer design time component. None of the run-time components are deployed. **Note:** This installation type does not require J2EE and Web Cache or any other Middle Tier installation type.

Packaged-application adapters can be deployed as a:

- J2CA 1.0 resource adapter and test servlet for J2CA deployments
- Web services servlet within the OC4J container, which is known as OracleAS Adapter Business Services Engine (BSE)

The OracleAS Adapter Application Explorer tool is also provided for configuring OracleAS adapters for packaged applications (for both J2CA and BSE deployments).

See Also: *Oracle Application Server Adapter Concepts Guide*

Legacy adapters can be deployed as a J2CA 1.0 resource adapter. To install Oracle Connect for legacy adapters, refer to the sections described in Table 1–5. These sections describe how to install Oracle Connect and Oracle Studio from the CD-ROM and how to configure Oracle Connect using Oracle Studio.

Table 1–5 Installing Oracle Connect

Legacy Adapter	Refer to
OracleAS Adapter for Tuxedo	The Installing and Configuring OracleAS Adapter for Tuxedo chapter in *Oracle Application Server Adapter for Tuxedo User's Guide*
OracleAS Adapter for CICS	The Installing and Configuring OracleAS Adapter for CICS chapter in *Oracle Application Server Adapter for CICS User's Guide*,
OracleAS Adapter for VSAM	The Installing and Configuring OracleAS Adapter for VSAM chapter in *Oracle Application Server Adapter for VSAM User's Guide*
OracleAS Adapter for IMS/TM	The Installing and Configuring OracleAS Adapter for IMS/TM chapter in *Oracle Application Server Adapter for IMS/TM User's Guide*
OracleAS Adapter for IMS/DB	The Installing and Configuring the OracleAS Adapter for IMS/DB chapter in *Oracle Application Server Adapter for IMS/DB User's Guide*

See Also: The following documentation in the Oracle Application Server 10*g* Documentation Library for additional information:

- *Oracle Application Server BPEL Process Manager User's Guide*
- Oracle Application Server BPEL Process Manager Installation Guide
- *Oracle Application Server Adapter Concepts*
- *Oracle Application Server Portal User's Guide*
- *Oracle Application Server Integration InterConnect User's Guide*
- *Oracle Application Server Adapter for PeopleSoft User's Guide*
- *Oracle Application Server Adapter for SAP R/3 User's Guide*
- *Oracle Application Server Adapter for Siebel User's Guide*
- *Oracle Application Server Adapter for J.D. Edwards OneWorld User's Guide*
- *Oracle Application Server Adapter for Tuxedo User's Guide*
- *Oracle Application Server Adapter for CICS User's Guide*
- *Oracle Application Server Adapter for VSAM User's Guide*
- *Oracle Application Server Adapter for IMS/TM User's Guide*
- *Oracle Application Server Adapter for IMS/DB User's Guide*

Oracle Application Server Adapter System Requirements

The following sections describe the system requirements for installing Oracle Application Server adapters:

- Hardware Requirements
- Software Requirements

Hardware Requirements

Table 1–6 lists the hardware requirements for the computer where OracleAS Adapter will be installed.

Table 1–6 Hardware Requirements

Hardware	Windows 2000	Solaris	Linux
Disk Space (to install all adapters)	200 MB	200 MB	200 MB
Memory	256 MB	256 MB	256 MB

Software Requirements

The following sections describe the Oracle Application Server adapters software requirements:

- Operating System Requirements
- J2EE and Web Cache Requirements

Operating System Requirements

Table 1–7 lists the operating system requirements for the computer where Oracle Application Server adapters will be installed.

Table 1–7 Operating System Requirements

Operating System	Version
HP Tru64	HP Tru64 UNIX (Alpha) 5.1b
HP-UX	HP-UX (PA-RISC) 11.11, 11.23
IBM AIX	AIX (POWER) version 5.2
Linux (x86)	Red Hat Enterprise Linux 2.1, 3.0
	SuSE SLES8, SLES9
	See Also: *Oracle Application Server Installation Guide* for Linux x86 for information about any required operating system patches and packages and kernel parameter settings
Sun SPARC Solaris	Sun SPARC Solaris 8 and 9
	See Also: *Oracle Application Server Installation Guide* for Solaris for information about any required operating system patches and packages, swap space requirements, and kernel parameter settings
Microsoft Windows	Windows XP Professional, Windows 2000(SP3 or later)
	See Also: *Oracle Application Server Installation Guide* for Windows for information on processor, `TEMP` directory, virtual memory, and swap space requirements

J2EE and Web Cache Requirements

If you want to use the Complete installation type, then the J2EE and Web Cache installation type of Oracle Application Server must first be installed. You then install the Complete installation type of Oracle Application Server adapters into the same Oracle home.

The design time installation type does not require J2EE and Web Cache or any other Middle Tier installation type.

Note:

- The OracleAS Integration InterConnect Adapter Plugin for EIS is available on the OracleAS Integration InterConnect CD-ROM. Refer to *Oracle Application Server InterConnect Installation Guide* for installation instructions.
- To install Oracle Application Server adapters with Oracle BPEL Process Manager, you need to use the BPEL Process Manager patch 1.

2

Installation and Configuration

This chapter describes how to install and configure Oracle Application Server adapters. It contains the following topics:

- Installation Tasks
- Postinstallation Tasks for Packaged-Application Adapters
- PostInstallation Tasks for Legacy Adapters
- Deinstallation Tasks

Installation Tasks

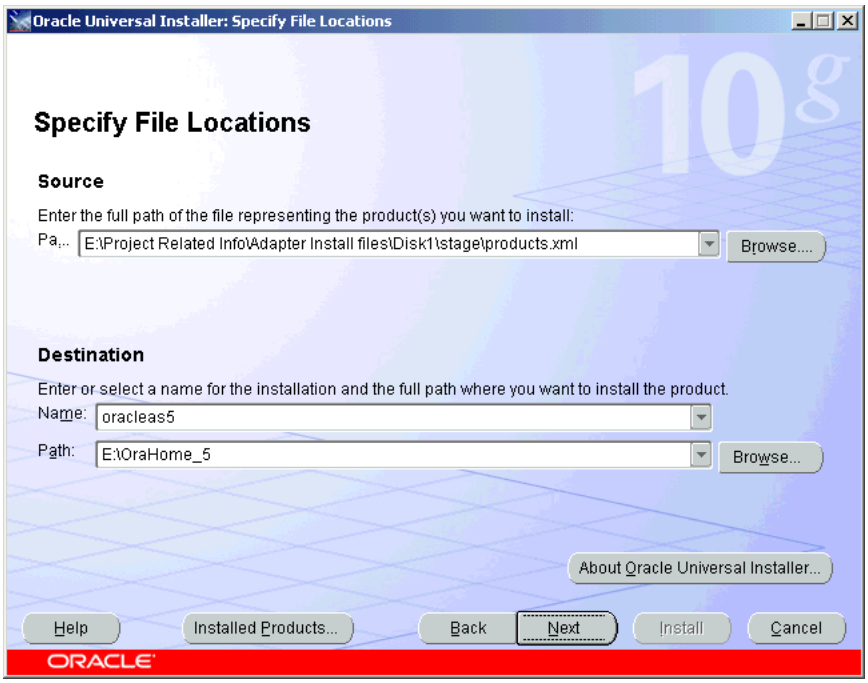
To install Oracle Application Server adapters, perform the following steps:

1. If you want to install the Complete installation type, then log on to the middle-tier host where you installed the J2EE and Web Cache installation type of Oracle Application Server.
2. If you are installing on Solaris or Linux, then refer to *Oracle Application Server Installation Guide for Microsoft Windows* for the specific operating system for instructions to:
   - Set the mount point for the CD-ROM
   - Start Oracle Universal Installer
3. Insert the OracleAS Adapter CD-ROM.
4. Navigate to the `software` directory of the OracleAS Adapter CD-ROM.
5. Start Oracle Universal Installer. The following table describes the step for starting Oracle Universal Installer.

Platform	Step
Solaris or Linux	Enter the following command at the operating system prompt: `./runInstaller`
Windows	Click `setup.exe`.

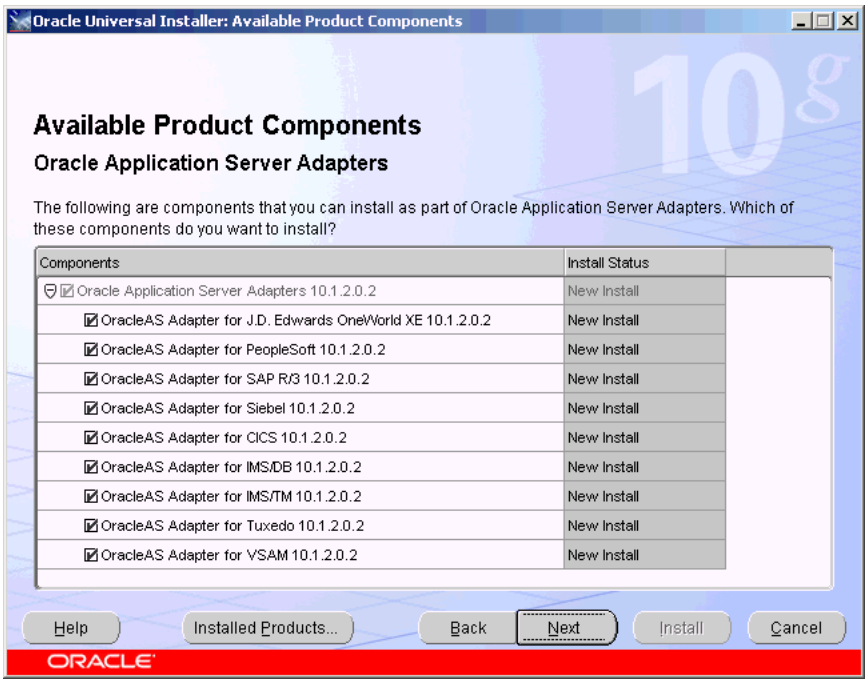
   The Welcome screen is displayed.
6. Click **Next**. The Specify File Locations screen is displayed as shown in Figure 2–1.

Figure 2–1 Specify File Locations



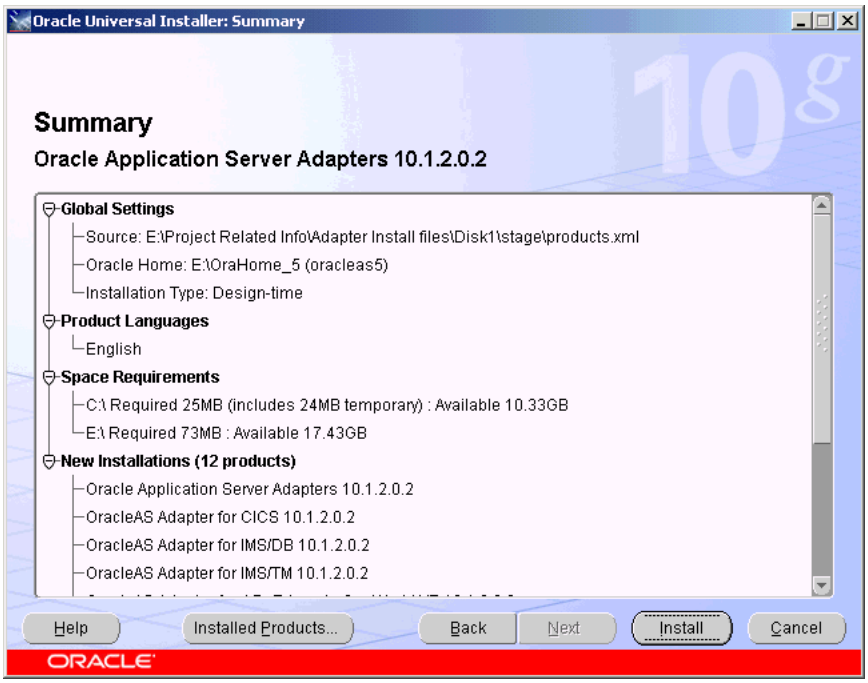
7. Enter the Oracle Home name, where you want to install OracleAS Adapter in the Destination fields. Do not change the directory path in the Source field. This is the location of the OracleAS Adapter installation files.
8. Click **Next**. The Select Installation Type screen is displayed.
9. Select one of the following types of installation type:
   - Design time and Run time
   - Design time
10. Click **Next**. The Available Product Components screen is displayed as shown in Figure 2–2.

Figure 2–2 Available Products Components



11. Select the adapters you want to install from the following list:
    - OracleAS Adapter for J.D. Edwards OneWorld XE 10.1.2.0.2
    - OracleAS Adapter for PeopleSoft 10.1.2.0.2
    - OracleAS Adapter for SAP R/3 10.1.2.0.2
    - OracleAS Adapter for Siebel 10.1.2.0.2
    - OracleAS Adapter for CICS 10.1.2.0.2
    - OracleAS Adapter for IMS/DB 10.1.2.0.2
    - OracleAS Adapter for IMS/TM 10.1.2.0.2
    - OracleAS Adapter for Tuxedo 10.1.2.0.2
    - OracleAS Adapter for VSAM 10.1.2.0.2
12. Click **Next**.
13. If you have selected **Design-time and Run-time** in Step 9, then the select the OC4J home page is displayed. Perform Steps 13a through 13b. Otherwise, the Summary screen is displayed. Go to Step 14.
    a. Select the container where you want to deploy the run-time components. By default, the runtime components are deployed in the OC4J_BPEL container home.
    b. Click **Next**. The Summary screen is displayed.

Figure 2–3 Summary Screen

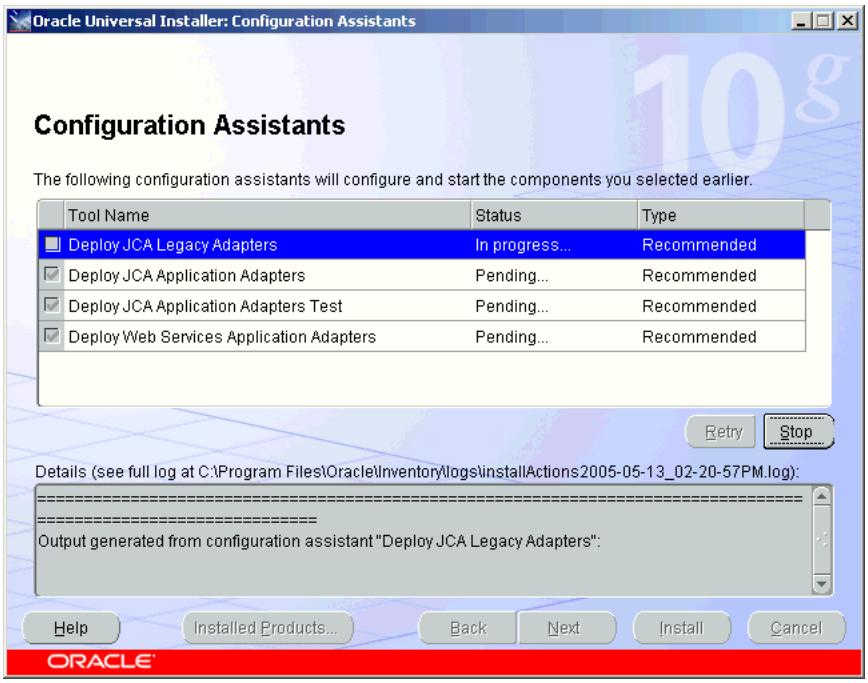


14. Review specific details on the Summary screen, including the disk requirements to ensure that you have sufficient disk space.
15. Click **Install**.

    After the installation is complete, the following postinstallation configuration assistants are started to automatically configure OracleAS Adapter:

    - Deploy JCA Legacy Adapters
    - Deploy JCA Application Adapters
    - Deploy JCA Application Adapters Test
    - Deploy Web Services Application Adapters

Figure 2–4 Configuration Assistants Screen



16. If installation and configuration are successful, then the End of Installation screen is displayed. The selected adapters are installed in the `adapters/application` directory of your Oracle home for packaged application adapters.

    For details about the installation, refer to the latest `installActions`*`YEAR_MM_DD_TIME`*`.log` file located in the `oraInventory_location/logs` directory on UNIX or the `Program Files\Oracle\Inventory\logs` directory on Windows.

Note:

- If you wish to install the EIS Adapter Plugin, then refer to the installation steps mentioned in Appendix A, "EIS Adapter Plugin".
- If you wish to install the OracleAS Adapter for PeopleSoft, then refer to the installation steps mentioned in Appendix B, "Configuring OracleAS Adapter for PeopleSoft".

Postinstallation Tasks for Packaged-Application Adapters

Perform the following postinstallation configuration tasks for packaged-application adapters:

- Copying the Library Files
- Verifying BSE deployment
- Configuring the J2CA deployment
- Verifying the J2CA Installation
- Directory Structure
- Starting Application Explorer

- Configuring the Database Repository for J2CA

> **Note:** The directory paths mentioned in this guide follow UNIX conventions. For example, forward slashes (/) are used.
>
> If you are using OracleAS Adapter on Windows, then modify the directory paths as required.

Copying the Library Files

Packaged-application adapters require you to copy library files to directories.

1. Copy the library files for these adapters into the *ORACLE_HOME*/adapter/application/lib directory.

Adapter	Library Files
OracleAS Adapter for J.D. Edwards OneWorld XE	J.D. Edwards OneWorld Java-based ThinNet API This API is distributed as .jar files on the J.D. Edwards OneWorld installation media. These libraries can vary based on the J.D. Edwards OneWorld release and include the following filess: ■ Kernel.jar ■ Connector.jar
OracleAS Adapter for PeopleSoft	■ PeopleSoft Java Object Adapter file (psjoa.jar) This file provides a low-level interface between client applications and PeopleSoft. This file is provided with PeopleSoft in the *PeopleSoft_home_directory*/web/PSJOA directory. The psjoa.jar file is different for every version of PeopleSoft. When you upgrade your Peopletools release, ensure that you copy the psjoa.jar file for the new release into the lib directory and restart all components. ■ pstools.properties This file is required for PeopleSoft 8.1*x*. This file belongs in the *PeopleSoft_home_directory*/web/jmac directory.

Adapter	Library Files
OracleAS Adapter for SAP R/3	The SAP Java connector (typically named `sapjco.jar`) Information on the current set of SAP connectors is available at `http://service.sap.com/connectors`. A valid SAP service ID is required to access this file. Follow the instructions provided on the SAP Java Connector (SAP JCo) overview page to download the current version. For more information, contact your SAP BASIS Administrator. Using the archive tool, open the archive containing the SAP JCo and extract the runtime files. The file names can vary by operating system, but typically are contained in the root of the archive. **Note: All operating systems**: You must place the `sapjco.jar` file in the *`ORACLE_HOME`*`\adapters\application\lib` directory. Then, you must add the `sapjco.jar` to the Oracle Application Server classpath. On Windows, `librfc32.dll` should be placed in the `%WINDIR%\system32` directory and `sapjcorfc.dll` should be placed in the same directory as `sapjco.jar` (*`ORACLE_HOME`*`\adapters\application\lib`). On other platforms, use the corresponding location. These library files vary by operating system. For example: `Linux/Solaris/OS400`: ■ `libsapjcorfc.so` ■ `librfccm.so` `HP-UX`: ■ `librfccm.sl` ■ `libsapjcorfc.sl` `AIX`: ■ `librfccm.so` ■ `libsapjcorfc.so` On `UNIX` platforms, the directory in which the shared library files are located must be added to the shared library variable applicable to the operating system. The following is a list of platforms and associated variables: `AIX`: ■ `LIBPATH` `HP-UX`: ■ `SHLIB_PATH` Other `UNIX` Platforms ■ `LD_LIBRARY_PATH` **`Solaris`**: The following are the two supported methods for specifying the `SAP` library files: ■ Copy the `SAP JCO` files (`sapjco.jar`, `librfccm.so`, and `libsapjcorfc.so`) to *`ORACLE_HOME`*`/jdk/jre/lib/sparc/server` ■ Copy the `SAP JCO` files to `/usr/j2sdk1.4.2_09/jre/lib/sparcv9/server` Alternatively, you may add the path to these files to your environment variable definition using the Application Server Control console. For details on application server administration options, see Oracle Application Server Administrator's Guide.

Adapter	Library Files
OracleAS Adapter for Siebel	For Siebel 6.3.*x* and later, the Siebel Java Data Bean API, which is distributed as `.jar` files with the Siebel Thin Client These libraries vary by Siebel release in both content and name. Therefore, the Siebel Thin Client that comes with the target Siebel system must always be used with the adapter. For example: For Siebel 6.3.*x*: ■ `SiebelTcOM.jar` ■ `SiebelTcCommon.jar` ■ `SiebelTC_enu.jar` ■ `SiebelDataBean.jar` For Siebel 7.0.3: ■ `SiebelJI_Common.jar` ■ `SiebelJI_enu.jar` For Siebel 7.5.2: ■ `SiebelJI_Common.jar` ■ `SiebelJI_enu.jar` The Siebel COM-based API (Windows only) requires the Siebel Thin Client to be installed and accessible to the Siebel adapter. **Note:** The following previously listed files are for English language installations: ■ `SiebelTC_enu.jar` ■ `SiebelJI_enu.jar` ■ `SiebelJI.jar` For non-English installations, the last three letters (`enu`) vary. If you are using the MQ Series as a transport, then you also need to use `com.ibm.mq.jar` file.

Verifying BSE deployment

To verify the OracleAS Adapter Business Services Engine installation:

1. Open the following page in your Web browser:

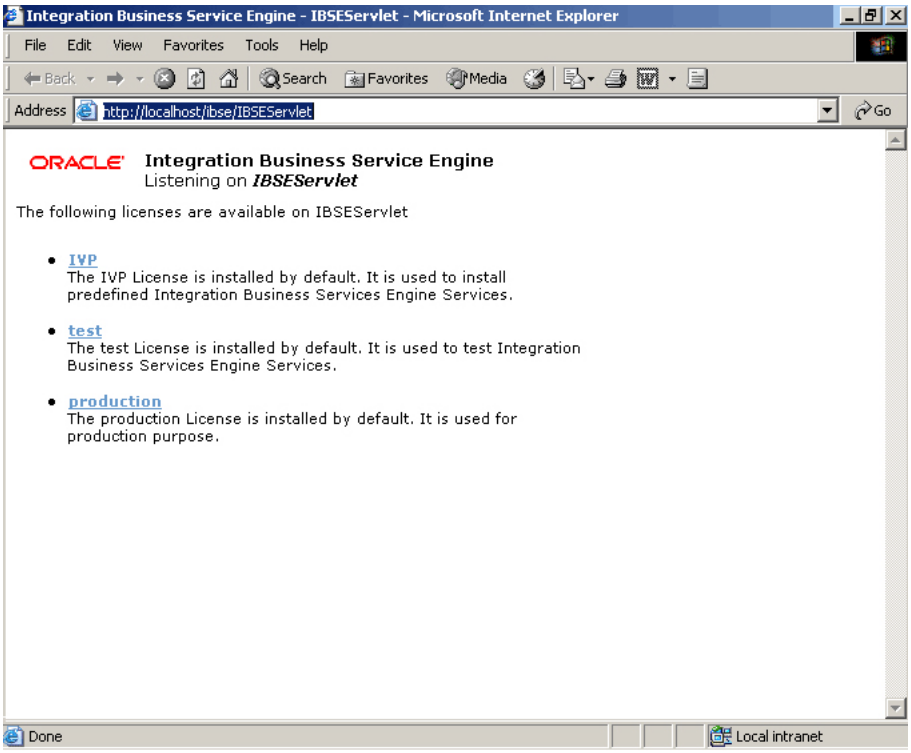
   `http://`*`hostname`*`:`*`port`*`/ibse/IBSEServlet/`

   where *`hostname`* is the name of the Oracle Application Server host and *`port`* is the HTTP port of the Oracle Application Server. For example:

   ```
   http://localhost:80/ibse/IBSEServlet
   ```

   The OracleAS Adapter Business Services Engine home page opens as shown in Figure 2–5. This page enables you to test the sample Web server installed with the OracleAS Adapter Business Services Engine.

Figure 2–5 OracleAS Adapter Business Services Engine Home Page



2. Click **IVP**, **iwayivp**, **ivp**, and **Invoke**.

   An XML response similar to the following is displayed in your browser:

```
<?xml version="1.0" encoding="UTF-8" ?>
- <SOAP-ENV:Envelope xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:SOAPENV="
http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
- <SOAP-ENV:Body>
- <ivpResponse xmlns="urn:oraclesoftware:ibse:jul2003:ivp:response"
cid="A0328ED84ABFA055C4F64B8039C991AA">
<CurrentTime>2004-01-05T19:15:48Z</CurrentTime>
<Version>IWAY5.5</Version>
</ivpResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Configuring the J2CA deployment

OracleAS Adapter JCA supports file and database repository. The default repository is a file repository. You can create the database repository by running the `iwse.ora` SQL script in the `adapters/application/etc` directory.

If you selected the Design-time and Run-time installation type, then Oracle Universal Installer automatically deploys OracleAS Adapter JCA version 1.0 and provides a default `oc4j-ra.xml` configuration file. This file contains a default `ManagedConnectionFactory` with `eis/Oracle JCAAdapter/DefaultConnection` as the JNDI name:

```
<connector-factory location="eis/OracleJCAAdapter/DefaultConnection"
connector-name="IWAFJCA10">
```

```
   <config-property name="IWayHome" value="../../adapters/application"/>
   <config-property name="IWayConfig" value="jca_sample"/>
   <config-property name="IWayRepoURL" value=""/>
   <config-property name="IWayRepoUser" value=""/>
   <config-property name="IWayRepoPassword" value=""/>
   <config-property name="logLevel" value="debug"/>
</connector-factory>
```

Note: The `IWayRepoURL`, `IWayRepoUser`, and `IWayRepoPassword` parameters are used for a database repository only.

You can create a different `ManagedConnectionFactory` by editing the `oc4j-ra.xml` configuration file. To do this:

1. Open the *ORACLE_HOME*`/j2ee/OC4J_BPEL/application-deployments/default/jca-app-adapter/oc4j-ra.xml` file.
2. Change the `iWayConfig` parameter to point to the corresponding OracleAS Adapter JCA version 1.0 repository project.
3. Set the JNDI location to the correct value. For example:

```
<connector-factory location="eis/OracleJCAAdapter/MyConnection"
connector-name="IWAFJCA10">
   <config-property name="IWayHome" value="../../adapters/application"/>
   <config-property name="IWayConfig" value="My_jca_config"/>
   <config-property name="IWayRepoURL" value=""/>
   <config-property name="IWayRepoUser" value=""/>
   <config-property name="IWayRepoPassword" value=""/>
   <config-property name="logLevel" value="debug"/>
   </connector-factory>
```

Verifying the J2CA Installation

To verify the J2CA version 1.0 installation:

1. Open the *ORACLE_HOME*`/j2ee/OC4J_BPEL/applications/jca-app-adapter-test/iwafjca/WEB-INF/web.xml` file.
2. Modify the deployment descriptor `web.xml` file to point to the JNDI location of the `ManagedConnectionFactory` defined in Step 2 of "Configuring the J2CA deployment" on page 2-9.

   You can access the OracleAS Adapter JCA test servlet using the following URL:

   `http://`*`hostname`*`:`*`port`*`/iwafjca`

   where *`hostname`* is the name of the Oracle Application Server host and *`port`* is the HTTP port of the Oracle Application Server.

Directory Structure

The packaged application adapters are installed into the `adapters/application` subdirectory of your Oracle home directory. Table 2–1 shows the directory structure. The `license.xml` file is also installed in the `application` directory.

Table 2–1 Packaged Application Adapter Directory Structure

Subdirectory	Description
bin	Contains the install.xml file
config	Contains the jca_sample subdirectory and the XML-file-based repository for the OracleAS Adapter J2CA
etc	Contains the ibse.ear, iwafjca.ear, iwafjca.rar, and iwse.ora files
lib	Contains library files
tools	Contains the OracleAS Adapter Application Explorer graphical user interface
wsdl	Contains the WSDL files generated by the user

The directory\legacy folder contains the .rar file for legacy adapters. In addition, the adapters\lib folder contains the orabpel-adapters.jar file.

Note: A user can create additional directories under the WSDL directory to organize the generated WSDL files.

Starting Application Explorer

Use Application Explorer to configure the OracleAS Adapter J2CA version 1.0 and OracleAS Adapter Business Services Engine repository projects. To start Application Explorer on Windows, From the **Start** menu, select **Programs**, **OracleAS_home Adapters**, and then select **Application Explorer**.

In addition, on Windows, iaexplorer.bat is found under OracleAS_home\adapters\application\tools

Where OracleAS_home is the directory where Oracle Application Server is installed.

On UNIX, load the iwae.sh script, found under OracleAS_home/adapters/application/tools

Where OracleAS_home is the directory where Oracle Application Server is installed.

Configuring the Database Repository for J2CA

1. Execute the iwse.ora SQl statement on the computer where database is installed.
2. Copy the jcatransport.properties file at the following directory:

   Oracle_Home\adapters\application\config\jca_sample
3. Remove comments form the following fields and enter details for the following fields in the jcatransport.properties file

   ```
   iwafjca.repo.url=jdbc:oracle:thin:@90.0.0.51:1521:orcl
   ```
4. Alter the JDBC driver path in Application Explorer as shown:

   ```
   lcp=..\lib\orabpel-adapters.jar;..\..\..\jdbc\lib\classes12.jar;..\..\..\jdbc\lib\nls_charset12.jar;%lcp%
   ```

PostInstallation Tasks for Legacy Adapters

This section describes the following postinstallation taks for legacy adapters:

- Configuring Run-Time Connections
- Configuring Design-Time Connections

Configuring Run-Time Connections

Perform the following steps to configure run-time connections:

1. Edit the `oc4j-ra.xml` file present at the following location:

   ORACLE_HOME`\j2ee\OC4J_BPEL\application-deployments\default\jca-legacy-adapter`

2. Set the following settings for each connection:

```
<oc4j-connector-factories>
  <connector-factory location=" " connector-name="Oracle Legacy Adapter">
    <config-property name="userName" value=" "/>
    <config-property name="password" value=" "/>
    <config-property name="eisName" value=" "/>
    <config-property name="serverName" value=" "/>
    <config-property name="workspace" value=" "/>
    <config-property name="portNumber" value=" "/>
    <config-property name="persistentConnection" value=" "/>
    <config-property name="keepAlive" value=" "/>
    <config-property name="firewallProtocol" value=""/>
    <config-property name="connectTimeout" value=""/>
    <config-property name="encryptionProtocol" value=""/>
    <config-property name="encryptionKeyName" value=""/>
    <config-property name="encryptionKeyValue" value=""/>
    <config-property name="fakeXa" value="false"/>
    <config-property name="useNamespace" value="true"/>
  </connector-factory>
</oc4j-connector-factories>
```

   The following table lists the properties that must be specified:

Property	Description
`location`	Specifies the JNDI location where Oracle Application Server should bind the connection factory instance for application components. It is mandatory that you specify the location as `eis/legacy/eisName`. This convention is used by the design-time WSIL browser when it generates the legacy adapter service WSDLs containing the jndi location (specifically for the `adapterInstanceJndi` attribute on the *`jca:address`* element); this is the same jndi location that the runtime uses to acquire a connection. For example, if the `eisName` is `DEMOEvent`, then the location should be specified as `eis/legacy/DEMOEvent`. In this example, the given `eisName` is `DEMOEvent`, therefore the WSIL design time sets `adapterInstanceJndi=eis/legacy/DEMOEvent` in the WSDL, and the runtime automatically will use `eis/legacy/DEMOEvent` jndi location to acquire a run-time connection. Therefore, you need to set this same value for the location attribute, otherwise, the run-time resolution is going to fail and error out.

Property	Description
eisName	Sets the name of the adapter to use.
serverName	Sets the TCP/IP address or host name where the Oracle Connect daemon is running.
workspace	Specifies the name of an Oracle Connect server workspace to use. The default workspace is Navigator.
portNumber	Specifies the TCP/IP port where the Oracle Connect daemon is running on the server. The default port is 2552.
fakeXa	Values can be set to true or false. When set to true, The XA APIs are converted internally to local transaction APIs.
useNamespace	Values can be set to true or false. When set to true, XSD metadata are provided with namespace and payload nodes are built using this namespace. **Note**: It is recommended that you set this property to true.

The following table lists the optional properties:

Property	Description
userName	Specifies a user who can access the Oracle Connect server. The user is defined in the Oracle Connect daemon configuration.
password	Specifies a valid password for the user.
persistentConnection	Set to true or false. When set to true, connections can persist across multiple requests or connection context changes. It is recommended to set this property to true.
keepAlive	Set to true or false. When set to true, the socket used for the connection is always kept open. It is recommended to set this property to true.
firewallProtocol	Specifies the firewall protocol used: either none or fixedNat (the Nat protocol using a fixed address for the daemon). The default is none.
connectTimeout	Specifies the connection timeout in seconds. The default is 0, meaning that there is no connection timeout
encryptionProtocol	Specifies the name of encryption protocol to use. The default is null. The RC4 protocol is supported.
encryptionKeyName	Specifies the name of the symmetric encryption key to use.
encryptionKeyValue	Specifies the value of the symmetric encryption key to use.

Configuring Design-Time Connections

If you need to browse legacy interactions using WSIL browser in JDeveloper, then update the collaxa-config.xml file. This enables the BPEL Process Manager to communicate with the legacy server. The collaxa-config.xml file is available at the following location:

$Oracle_Home/integration/orabpel/system/config

Perform the following steps to configure design-time connections:

1. From the Start menu, select **Programs**, **Oracle BPEL PM**, and then select **Developer Prompt**.

2. Type **encrypt <passwd>**.
3. In the `collaxa-config.xml` file, update the parameters listed in the following table :

Parameter	Description
`LegacyServer`	Specifies the legacy server(s) where attunity connect is running
`LegacyPort`	Specifies the port(s) where attunity connect is listening
`LegacyUser`	Specifies the user ID(s) that can acces mainframe system
`LegacyUserCredential`	Specifies the encrypted pasword(s) for the user

Example 2–1 Updating the collaxa-config.xml File

In the following example, the `collaxa-config.xml` file is updated with the required parameters.

```
 <property id="LegacyServer">
        <name>Legacy server(s) where Oracle Connect is installed</name>
        <value>mvs08</value>
        <comment>
        <![CDATA[Server IP where Oracle Connect has been installed.
        <p/>
        The default fault is value <i>localhost</i>.]]>
       </comment>
   </property>

<property id="LegacyPort">
        <name>Legacy server port(s) where Oracle Connect is running</name>
        <value>2554</value>
      <comment>
      <![CDATA[Server port where Oracle Connect has been installed.
      <p/>
      The default is <i>2551</i>.]]>
     </comment>
</property>

<property id="LegacyUser">
      <name>Legacy server user(s) where Oracle Connect is running</name>
      <value>null</value>
      <comment>
      <![CDATA[Server user who has access to Oracle Connect.
      <p/>
      The default is <i>Null</i>.]]>
     </comment>
</property>

<property id="LegacyUserCredential">
       <name>Legacy server user credential(s) where Oracle Connect is
running</name>
        <value>null</value>
        <comment>
        <![CDATA[Credential for server user that has access to Oracle Connect.
        <p/>
        The default is <i>Null</i>.]]>
```

```
        </comment>
 </property>
```

> **Note:** if you have an anonymous access setup in Oracle Studio, then you need to specify `null` for both `LegacyUser` and `LegacyUserCredential`property.

Example 2–2 Specifying Multiple Connections

To add more instances of legacy systems, provide comma separated values for each computer as shown in the following example:

```
 <property id="LegacyServer">
        <name>Legacy server(s) where Oracle Connect is installed</name>
        <value>mvs08,mvs09</value>
        <comment>
        <![CDATA[Server IP where Oracle Connect has been installed.
        <p/>
        The default is <i>localhost</i>.]]>
        </comment>
 </property>

 <property id="LegacyPort">
        <name>Legacy server port(s) where Oracle Connect is running</name>
        <value>2554,2555</value>
        <comment>
        <![CDATA[Server port where Oracle Connect has been installed.
        <p/>
        The default is <i>2551</i>.]]>
        </comment>
  </property>

<property id="LegacyUser">
        <name>Legacy server user(s) where Oracle Connect is running</name>
        <value>null,xyz</value>
        <comment>
        <![CDATA[Server user who has access to Oracle Connect.
        <p/>
        The default is <i>Null</i>.]]>
        </comment>
 </property>

 <property id="LegacyUserCredential">
        <name>Legacy server user credential(s) where Oracle Connect is
running</name>
        <value>null,AVCGS80JK9J08M9MLYJM90U</value>
        <comment>
        <![CDATA[Credential for server user that has access to Oracle Connect.
        <p/>
        The default is <i>Null</i>.]]>
        </comment>
 </property>
```

Deinstallation Tasks

To deinstall Oracle Application Server adapters:

1. Start Oracle Universal Installer, which is installed on your host.
2. Click **Deinstall Products**.
3. Expand the Oracle home directory that contains the products that you want to deinstall.
4. Select the specific OracleAS Adapter that you want to deinstall.
5. Click **Remove**.
6. Click **Yes** when prompted. The selected products are deinstalled.
7. Click **Close**.

> **Note:** The legacy J2CA resource adapter must be undeployed only if you choose to undeploy the entire set of legacy adapters.

Globalization Support

The Oracle Application Server adapters for packaged applications and legacy applications support a wide variety of encoding and can accept non-ASCII data during runtime. In addition, Application Explorer supports localization, while Oracle Studio does not support localization.

> **Note:** Application Explorer supports ADA compliance, while Oracle Studio does not support ADA compliance.

A

EIS Adapter Plugin

This appendix provides an overview of how to use OracleAS Integration InterConnect Enterprise Information Systems (EIS) Adapter Plugin. It contains the following topics:

- EIS Adapter Plugin Overview
- EIS Adapter Plugin System Requirements
- EIS Adapter Plugin Installation
- EIS Adapter Plugin Configuration

EIS Adapter Plugin Overview

In conjunction with Oracle adapters, EIS Adapter Plugin enables you to integrate any EIS application with other applications that use OracleAS Integration InterConnect. EIS Adapter Plugin is useful in all Enterprise Application Integration (EAI) scenarios involving packaged applications such as SAP and PeopleSoft. EAI is the integration of applications and business processes within the same company.

This appendix explains all the necessary installation-related concepts of EIS Adapter Plugin.

EIS Adapter Plugin System Requirements

The following sections describe EIS Adapter Plugin system requirements:

- Hardware Requirements
- Software Requirements

Hardware Requirements

Table A–1 lists the hardware requirements for the computer where EIS Adapter Plugin will be installed.

Table A–1 Hardware Requirements

Hardware	Windows 2000	UNIX
Disk Space	500 MB	500 MB
Memory	128 MB	128 MB

Software Requirements

The following sections describe EIS Adapter Plugin software requirements:

- Operating System Requirements
- JRE Requirements

Operating System Requirements

Table A–2 lists the operating system requirements for the computer where EIS Adapter Plugin will be installed.

Table A–2 Operating System Requirements

Operating System	Version
HP Tru64	HP Tru64 UNIX (Alpha) 5.1b
HP-UX	HP-UX (PA-RISC) 11.11, 11.23
IBM AIX	AIX (POWER) version 5.2
Linux (x86)	Red Hat Enterprise Linux 2.1, 3.0 SuSE SLES8, SLES9
Sun SPARC Solaris	Sun SPARC Solaris 2.8 and 2.9
Microsoft Windows	Windows XP Professional, Windows 2000(SP3 or higher)

JRE Requirements

OracleAS Integration InterConnect uses Java Runtime Environment (JRE) 1.4, which is installed with its components.

EIS Adapter Plugin Installation

EIS Adapter Plugin must be installed in an existing Oracle home Middle Tier for OracleAS Integration InterConnect 10*g* Release 2 (10.1.2).

This section contains the following topics:

- Preinstallation Tasks
- Installation Tasks

Preinstallation Tasks

Refer to the following guides before installing EIS Adapter Plugin:

- *Oracle Application Server Installation Guide* for information about OUI startup
- *Oracle Application Server InterConnect Installation Guide* for information about mounting CD-ROMs, software, hardware, and system requirements for OracleAS Integration InterConnect

Installation Tasks

To install EIS Adapter Plugin:

1. Select EIS Adapter Plugin on the Available Product Components page of the OracleAS Integration InterConnect installation, and click **Next**. If the Oracle home does not have an existing InterConnect component installation, the Set Oracle Wallet Password screen is displayed. If the Oracle home has an existing InterConnect component installation, the Specify Oracle Wallet Password screen is displayed.

2. Enter and confirm the password on the screen, which will be used to administer OracleAS Integration InterConnect installation. Click **Next**.
   - Go to step 3, if installing EIS Adapter Plugin in an OracleAS Middle Tier Oracle home that does not have an InterConnect component already installed. Ensure that the OracleAS Integration InterConnect hub has been installed.
   - Go to step 4, if installing EIS Adapter Plugin in an OracleAS Middle Tier Oracle home that has an existing InterConnect component. Ensure that it is a home directory to an OracleAS Integration InterConnect component.
3. The Specify Hub Database Connection screen is displayed. Enter information in the following fields:
   - Host Name: The host name of the computer where the hub database is installed.
   - Port Number: The TNS listener port for the hub database.
   - Database SID: The System Identifier (SID) for the hub database.
   - Password: The user password for the hub database user.
4. Click **Next**. The Specify EIS Adapter Plugin Name page is displayed.
5. Enter the application name. Blank spaces are not permitted. The default value is `myEISApp`.
6. Click **Next**. The Configure URL page is displayed. Enter the complete URL used to connect to the OracleAS Integration Adapters's Business Services Engine.
7. Click **Next**. The Summary page is displayed.
8. Click Install to install EIS Adapter Plugin and other selected components. EIS Adapter Plugin is installed in the following directory:

Platform	Directory
Windows	*ORACLE_HOME*\integration\interconnect\adapters\Application
UNIX	*ORACLE_HOME*/integration/interconnect/adapters/Application

   Application is the value specified in Step 5.
9. Click Exit on the Installation page to exit EIS Adapter Plugin installation.

EIS Adapter Plugin Configuration

After an EIS Adapter Plugin installation, you can configure it according to your requirements. The following tables describe the location and details of the configuration files.

Table A–3 describes the location where the adapter is installed:

Table A–3 EIS Adapter Plugin Adapter Directory

Platform	Directory
UNIX	*ORACLE_HOME*/integration/interconnect/adapters/Application

Table A–3 (Cont.) EIS Adapter Plugin Adapter Directory

Platform	Directory
Windows	*ORACLE_HOME*\integration\interconnect\adapters\Application

Table A–4 describes the various executable files of EIS Adapter Plugin.

Table A–4 Executable Files

File	Description
`start` (UNIX)	Does not use parameters, starts the adapter.
`start.bat` (Windows)	Does not use parameters, starts the adapter.
`stop` (UNIX)	Does not use parameters, stops the adapter.
`stop.bat` (Windows)	Does not use parameters, stops the adapter.

Table A–5 describes EIS Adapter Plugin configuration files.

Table A–5 Configuration Files

File	Description
`adapter.ini` (UNIX)	Contains all the initialization parameters, which the adapter reads at startup.
`adapter.ini` (Windows)	Contains all the initialization parameters, which the adapter reads at startup.

Table A–6 describes the directories used by EIS Adapter Plugin.

Table A–6 Directories

File	Description
`logs`	The adapter activity is logged in subdirectories of the `logs` directory. Each time the adapter is run, a new subdirectory is created for the `oailog.txt` log file.
`persistence`	The messages are persisted in this directory. Do not edit this directory or its files.

Using the Application Parameter

Adapters do not have integration logic. EIS Adapter Plugin has a generic transformation engine that processes metadata from the repository as runtime instructions to perform transformations. The application parameter defines the capabilities of an adapter, such as the messages to be published and subscribed, and the transformations to be performed. The application parameter allows the adapter to retrieve only the relevant metadata from the repository. The application parameter must match the corresponding application that will be defined in iStudio, under the Applications folder.

If you use prepackaged metadata, then import it into the repository and start iStudio to find the corresponding application under the Applications folder. You can use this as the application name for the adapter you are installing.

See Also: Step 4 on page A-3

Ini File Settings

The following are the `.ini` files used to configure EIS Adapter Plugin:

- hub.ini File
- adapter.ini File

hub.ini File

EIS Adapter Plugin connects to the hub database using parameters in the `hub.ini` file located in the `hub` directory. Table A–7 lists the parameters, their description, and an example for each parameter.

Table A–7 hub.ini Parameters

Parameters	Description	Example
`hub_host`	The name of the computer hosting the hub database. There is no default value. The value is set during installation.	`hub_host=mpscottpc`
`hub_instance`	The SID of the hub database. There is no default value. The value is set during installation.	`hub_instance=orcl`
`hub_port`	The TNS listener port number for the hub database instance. There is no default value. The value is set during installation.	`hub_port=1521`
`hub_username`	The name of the hub database schema (or user name). There is no default value.	`hub_username=myhub`
`repository_name`	The name of the repository that communicates with the adapter. The default value is `InterConnectRepository`.	`repository_name=InterConnectRepository`

Oracle Real Application Clusters hub.ini Parameters

For a hub installed on an Oracle Real Application Clusters database, the parameters listed in Table A–8 represent information on additional nodes used for connection and configuration. These parameters are in addition to the default parameters for the primary node. In Table A–8, `x` represents the node number, which can take a value between 2 and the number of nodes. For example, if the cluster contains 4 nodes, `x` can be a value between 2 and 4.

Table A–8 Real Application Clusters hub.ini Parameters

Parameter	Description	Example
`hub_hostx`	The host where the Real Application Clusters database is installed.	`hub_host2=dscott13`
`hub_instancex`	The instance on the respective node	`hub_instance2=orcl2`
`hub_num_nodes`	The number of nodes in a cluster.	`hub_num_nodes=4`
`hub_portx`	The port where the TNS listener is listening.	`hub_port2=1521`

adapter.ini File

EIS Adapter Plugin connects to the spoke application using parameters from the `adapter.ini` file. Table A–9 lists the parameters, their description, and an example for each parameter.

Table A–9 adapter.ini Parameters

Parameter	Description	Example
agent_admin_port	Specifies the port through which the adapter can be accessed through firewalls. Possible Value: A valid port number. Default Value: None.	agent_admin_port=1059
agent_delete_file_cache_at_startup	Specifies whether to delete the cached metadata during startup. If any agent caching method is enabled, then metadata from the repository is cached locally on the file system. Set the parameter to true to delete all cached metadata on startup. Possible Values: true or false. Default Value: false. **Note:** After changing metadata or DVM tables for the adapter in iStudio, you must delete the cache to guarantee access to new metadata or table information.	agent_delete_file_cache_at_startup=false
agent_dvm_table_caching	Specifies the Domain Value Mapping (DVM) table caching algorithm. Possible values: ■ startup: Cache all DVM tables at startup. This may be time-consuming if there are many tables in the repository. ■ demand: Cache tables as they are used. ■ none: No caching. This slows down performance. Default Value: demand.	agent_dvm_table_caching=demand
agent_log_level	Specifies the amount of logging necessary. Possible values: 0=errors only 1=status and errors 2=trace, status, and errors Default Value: 1	agent_log_level=2
agent_lookup_table_caching	Specifies the lookup table caching algorithm. Possible values: ■ startup: Cache all lookup tables at startup. This may be time-consuming if there are many tables in the repository. ■ demand: Cache tables as they are used. ■ none: No caching. This slows down performance. Default Value: demand.	agent_lookup_table_caching=demand
agent_max_ao_cache_size	Specifies the maximum number of application object metadata to cache. Possible Value: An integer greater than or equal to 1. Default Value: 200.	agent_max_ao_cache_size=200
agent_max_co_cache_size	Specifies the maximum number of common object metadata to cache. Possible Value: An integer greater than or equal to 1. Default Value: 100.	agent_max_co_cache_size=100

Table A–9 (Cont.) adapter.ini Parameters

Parameter	Description	Example
`agent_max_dvm_table_cache_size`	Specifies the maximum number of DVM tables to cache. Possible Value: An integer greater than or equal to `1`. Default Value: `200`.	`agent_max_dvm_table_cache_size=200`
`agent_max_lookup_table_cache_size`	Specifies the maximum number of lookup tables to cache. Possible Value: Any integer greater than or equal to `1`. Default Value: `200`.	`agent_max_lookup_table_cache_size=200`
`agent_max_message_metadata_cache_size`	Specifies the maximum number of message metadata (publish/subscribe and invoke/implement) to cache. Possible Value: An integer greater than or equal to `1`. Default Value: `200`.	`agent_max_message_metadata_cache_size=200`
`agent_max_queue_size`	Specifies the maximum size that the internal OracleAS Integration InterConnect message queues can grow. Possible Value: An integer greater than or equal to `1`. Default Value: `1000`.	`agent_max_queue_size=1000`
`agent_message_selector`	Specifies conditions for message selection when the adapter registers its subscription with the hub. Possible Value: A valid Oracle Advanced Queue message selector string (such as `%,aqapp,and %`). Default Value: None.	`agent_message_selector=%,aqapp,%`
`agent_metadata_caching`	Specifies the metadata caching algorithm. Possible values: ■ `startup`: Cache everything at startup. This may be time-consuming if there are many tables in the repository. ■ `demand`: Cache metadata as it is used. ■ `none`: No caching. This slows down performance. Default Value: `demand`.	`agent_metadata_caching=demand`
`agent_persistence_cleanup_interval`	Specifies how often to run the persistence cleaner thread, in milliseconds. Possible Value: An integer greater than or equal to `30000` milliseconds. Default Value: `60000`.	`agent_persistence_cleanup_interval=60000`
`agent_persistence_queue_size`	Specifies the maximum size of internal OracleAS Integration InterConnect persistence queues. Possible Value: An integer greater than or equal to `1`. Default Value: `1000`.	`agent_persistence_queue_size=1000`
`agent_persistence_retry_interval`	Specifies how often the persistence thread retries when it fails to send an OracleAS Integration InterConnect message. Possible Value: An integer greater than or equal to `5000` milliseconds. Default Value: `60000`.	`agent_persistence_retry_interval=60000`

Table A–9 (Cont.) adapter.ini Parameters

Parameter	Description	Example
agent_pipeline_from_hub	Specifies whether to turn on the pipeline for messages from the hub to the bridge. If you set the pipeline to false, then file persistence is not used in that direction. Possible Value: true, false. Default Value: false.	agent_pipeline_from_hub=false
agent_pipeline_to_hub	Specifies whether to turn on the pipeline for messages from the bridge to the hub. If you set the pipeline to false, then file persistence is not used in that direction. Possible Value: true, false. Default Value: false.	agent_pipeline_to_hub=false
agent_reply_message_selector	Specifies the application instance to which the reply must be sent. This parameter is used if multiple adapter instances exist for the given application and given partition. Possible Value: A string built using the application name (parameter:application) concatenated with the instance number (parameter:instance_number). Default Value: None.	If application=aqapp, instance_number=2, then agent_reply_message_selector=recipient_list like'%,aqapp2,%'
agent_reply_subscriber_name	Specifies the subscriber name used when multiple adapter instances are used for the given application and given partition. This parameter is optional if only one instance is running. Possible Value: The application name (parameter:application) concatenated with the instance number (parameter:instance_number). Default Value: None.	If application=aqapp and instance_number=2, then agent_reply_subscriber_name=aqapp2
agent_subscriber_name	Specifies the subscriber name used when this adapter registers its subscription. Possible Value: A valid Oracle Advanced Queue subscriber name. Default Value: None.	agent_subscriber_name=aqapp
agent_throughput_measurement_enabled	Specifies if the throughput measurement is enabled. Set this parameter to true to turn on throughput measurements. Possible Value: true or false. Default Value: true.	agent_throughput_measurement_enabled=true
agent_tracking_enabled	Specifies if message tracking is enabled. Set this parameter to false to turn off tracking of messages. Set this parameter to true to track messages with tracking fields set in iStudio. Possible Value: true or false. Default Value: true.	agent_tracking_enabled=true
agent_use_custom_hub_dtd	Specifies whether to use a custom DTD for the common view message when handing it to the hub. By default, adapters use a specific OracleAS Integration InterConnect DTD for all messages sent to the hub. Set this parameter to true to have the adapter use the DTD imported for the message of the common view instead of the OracleAS Integration InterConnect DTD. Default Value: None.	agent_use_custom_hub_dtd=false

Table A–9 (Cont.) adapter.ini Parameters

Parameter	Description	Example
application	Specifies the name of the application to which this adapter connects. This must match the name specified in iStudio while creating metadata. Possible Value: An alphanumeric string. Default Value: None.	application=aqapp
encoding	Specifies the character encoding for published messages. The adapter uses this parameter to generate encoding information for the encoding tag of transformed OracleAS Integration InterConnect messages. OracleAS Integration InterConnect represents messages internally as XML documents. Possible Value: A valid character encoding. Default Value: UTF-8. When there is no existing encoding in the subscribed message, this parameter will be used to explicitly specify the encoding of the published message. This parameter will be ignored when the encoding already exists in the subscribed message.	encoding=Shift_JIS
external_dtd_base_url	Specifies the base URL for loading external enitites and DTDs.This instructs the XML parser to resolve the external entities in the instance document using the given URL. Possible Value: A URL. Default Value: The URL of the current user directory.	external_dtd_base_url=file://C:\InterConnect10_1_2\adapters\AQApp\
instance_number	Specifies the instance number to which this adapter corresponds. Specify a value only if you have multiple adapter instances for the given application with the given partition. Possible Value: An integer greater than or equal to 1. Default Value: None.	instance_number=1
nls_country	Specifies the ISO country code. The codes are defined by ISO-3166. Possible Value: A valid code. A full list of the codes is available at http://www.chemie.fu-berlin.de/diverse/doc/ISO_3166.html Default Value: US. **Note**: This parameter specifies date format and is applicable for the date format only.	nls_country=US
nls_date_format	Specifies the format for a date field expressed as a string. Possible Value: A valid date format pattern as shown in Table A–10 for the definitions of the format characters. Default Value: EEE MMM dd HHmmss zzz yyyy.	Date format pattern dd/MMM/yyyy can represent 01/01/2003. nls_date_format=dd-MMM-yy Multiple date formats can be specified as num_nls_formats=2 nls_date_format1=dd-MMM-yy nls_date_format2=dd/MMM/yy

Table A–9 (Cont.) adapter.ini Parameters

Parameter	Description	Example
nls_language	Specifies the ISO language code. The codes are defined by ISO-639. Possible Value: A valid code. A full list of these codes is available at http://www.ics.uci.edu/pub/ietf/http/related/iso639.txt Default Value: en. **Note**: This parameter specifies the date format and is applicable for the date format only.	nls_language=en
partition	Specifies the partition this adapter handles in iStudio. Possible Value: An alphanumeric string. Default Value: None.	partition=germany
service_class	Specifies the entry class for the Windows service. Possible Value: oracle/oai/agent/service/AgentService. Default Value: None.	service_class=oracle/oai/agent/service/AgentService
service_classpath	Specifies the class path used by the adapter Java Virtual Machine (JVM). If a custom adapter is developed and the adapter is to pick up any additional jar files, then add the files to the existing set of jar files. Possible Value: A valid PATH setting. Default Value: None. This parameter is for Microsoft Windows only.	service_classpath=D:\oracle\oraic\integration\interconnect\lib\oai.jar;D:\oracle\oraic\jdbc\classes12.zip
service_jdk_dll	Specifies the Dynamic Link Library(DLL) that the adapter JVM should use. Possible Value: A valid jvm.dll. Default Value: jvm.dll. This parameter is for Microsoft Windows only.	service_jdk_dll=jvm.dll
service_jdk_version	Specifies the JDK version that the adapter JVM should use. Possible Value: A valid JDK version number. Default Value: 1.4 This parameter is for Microsoft Windows only.	service_jdk_version=1.4
service_max_heap_size	Specifies the maximum heap size for the adapter JVM. Possible Value: A valid JVM heap size. Default Value: 536870912. This parameter is for Microsoft Windows only.	service_max_heap_size=536870912
service_max_java_stack_size	Specifies the maximum size the JVM stack can grow. Possible Value: A valid JVM maximum stack size. Default Value: Default value for the JVM. This parameter is for Microsoft Windows only.	service_max_java_stack_size=409600

Table A–9 (Cont.) adapter.ini Parameters

Parameter	Description	Example
service_max_native_stack_size	Specifies the maximum size the JVM native stack can grow. Possible Value: The valid JVM maximum native stack size. Default Value: Default value for the JVM. This parameter is for Microsoft Windows only.	service_max_native_size=131072
service_min_heap_size	Specifies the minimum heap size for the adapter JVM. Possible Value: The valid JVM heap size. Default Value: 536870912. This parameter is for Microsoft Windows only.	service_min_heap_size=536870912
service_num_vm_args	Specifies the number of service_vm_arg*number* parameters specified in JVM. Possible Value: The number of service_vm_arg*number* parameters. Default Value: None. This parameter is for Microsoft Windows only.	service_num_vm_args=1
service_path	Specifies the environment variable PATH. The PATH variable is set before starting the JVM. Typically, list all directories that contain necessary DLLs. Possible Value: The valid PATH environment variable setting. Default Value: None. This parameter is for Microsoft Windows only.	service_path=%JREHOME%\bin;D:\oracle\oraic\bin
service_vm_argnumber	Specifies any additional arguments to the JVM. For example, to retrieve line numbers in any stack traces, set service_vm_arg1=java.compiler=NONE. If a list of arguments exists, then use multiple parameters, by incrementing the last digit by 1. Possible Value: A valid JVM argument. Default Value: None. This parameter is for Microsoft Windows only.	service_vm_arg1=java.compiler=NONE service_vm_arg2=oai.adapter=.aq

Table A–10 shows the reserved characters used to specify the value of the nls_date_format parameter. Use these reserved characters, to define date formats.

Table A–10 Reserved Characters for the Value of the nls_date_format Parameter

Letter	Description	Example
G	Era designator	AD
y	Year	1996 or 96
M	Month in year	July or Jul or 07
w	Week in year	27
W	Week in month	2
D	Day in year	189
d	Day in month	10

Table A–10 (Cont.) Reserved Characters for the Value of the nls_date_format Parameter

Letter	Description	Example
F	Day of week in month	Number 2
E	Day in week	Tuesday or Tue
a	a.m./p.m. marker	P.M.
H	Hour in day (0-23)	0
k	Hour in day (1-24)	24
K	Hour in a.m./p.m. (0-11)	0
h	Hour in a.m./p.m. (1-12)	12
m	Minute in hour	30
s	Second in minute	55
S	Millisecond	978

EIS Adapter Plugin-Specific Parameters

Table A–11 lists the parameters specific to EIS Adapter Plugin.

Table A–11 EIS Adapter Plugin-Specific Parameters

Parameter	Description	Example
bridge_class	Specifies the entry class for the OA Adapter. The value cannot be modified later. Default Value: com.iwaysoftware.iwbridge.IWBridge.	bridge_class=com.iwaysoftware.iwbridge.IWBridge
bridge_rmi_port	Specifies the RMI port the EIS Plugin Bridge is listening on. Default Value: None.	bridge_rmi_port=2000
ibse_url	Specifies the Business Servlet Engine URL that the EIS Plugin Bridge will make the SOAP request to. Default Value: None.	ibse_url=http://mpscott-pc:7878/ibse/IBSEServlet

B

Configuring OracleAS Adapter for PeopleSoft

This appendix describes how to configure OracleAS Adapter for PeopleSoft. To configure:

- Specify the version of PeopleSoft you are using.
- Install the Component Interfaces of the adapter.
- Install the TCP/IP message router adapter.
- Copy the `psjoa.jar` file (and, for PeopleSoft release 8.1, the `pstools.properties` file) into the *`OracleAS_home`*`\adapters\application\lib` directory.

This appendix contains the following topics:

- Specifying the PeopleSoft Version
- Installing the Adapter Component Interfaces

Specifying the PeopleSoft Version

OracleAS Adapter for PeopleSoft supports multiple versions of PeopleSoft. However, certain versions are incompatible with each other, and the adapter must recognize the version you are using.

After installation, files for both PeopleSoft versions appear in the default location, *`OracleAS_home`*`\adapters\application\lib`.

Use the corresponding location on non-Windows systems.

To ensure that the adapter functions properly, remove the file that does not correspond to your release:

- For PeopleSoft 8.4x releases, remove `iwpsci81.jar`.
- For PeopleSoft 8.1x releases, remove `iwpsci84.jar`.

After changing the contents of the lib directory, restart all components.

Installing the Adapter Component Interfaces

OracleAS Adapter for PeopleSoft includes two custom Component Interfaces. Application Explorer uses these Component Interfaces to create schemas for events and services.

To configure Component Interfaces for OracleAS Adapter for PeopleSoft, you must:

1. Import and build the Component Interfaces.

2. Configure Component Interface security.
3. Test the Component Interfaces.

Importing and Building the Component Interfaces

The Component Interfaces provided with OracleAS Adapter for PeopleSoft are delivered through a PeopleSoft project:

- For PeopleSoft Release 8.4, it is the IWY_CI_84 project, packaged in `iwpsci84.zip`.
- For PeopleSoft Release 8.1, it is the IWY_CI_81 project, packaged in `iwpsci81.zip`.

On Microsoft Windows, the default location of the files is *`OracleAS_home`*`\adapters\application\etc\peoplesoft`.

Use the corresponding location on non-Windows systems.

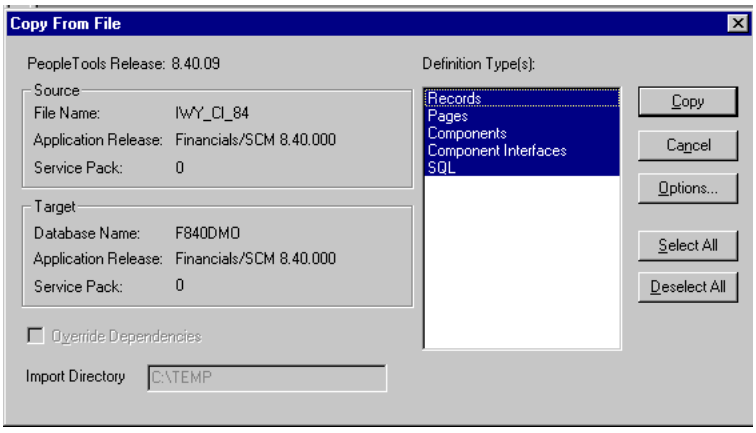
Importing and Building the Component Interfaces

To import the IWY_CI_81 or IWY_CI_84 project to PeopleSoft:

1. Unzip `iwpsci81.zip` or `iwpsci84.zip` to any directory.

   The unzip process creates its own subdirectory. For example, if you extract the file to `c:\temp`, it creates `c:\temp\IWY_CI_81` or `c:\temp\IWY_CI_84`.
2. Launch the PeopleSoft Application Designer in the two-tier mode.
3. Open the Copy From File Select Project dialog box as follows:
   - In PeopleSoft 8.4, select **Copy Project** from the Tools menu, and then select From File.
   - In PeopleSoft 8.1, select Copy Project from File from the File menu.

     The Copy Project From File dialog box opens.
4. Navigate to the original directory in which you unzipped the file.

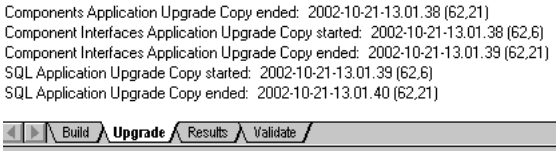


5. Click Open (in release 8.4) or Copy (in release 8.1) to open the Copy From File dialog box.

Note: Although the preceding figures illustrate PeopleSoft release 8.4, the corresponding instructions are accurate for releases 8.1 and 8.4.

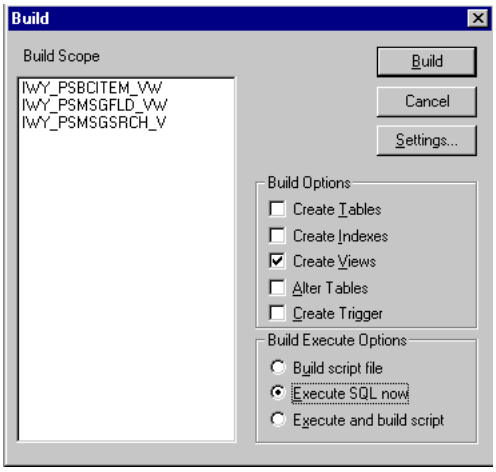
6. Highlight all objects listed in Definition Type(s), and click Copy.

   The Application Designer displays the following message, which indicates successful completion.



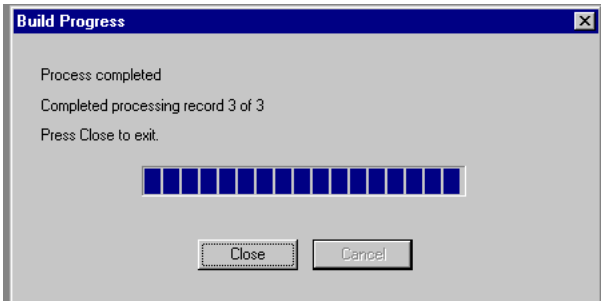
7. To build the views in the project, select Build, and then select Project.

   The Build dialog box is displayed.



8. In the Build Options pane, select Create Views.
9. Select your site's customary option in the Build Execute Options pane. (In the previous figure, Execute SQL now is selected.)
10. Click Build.

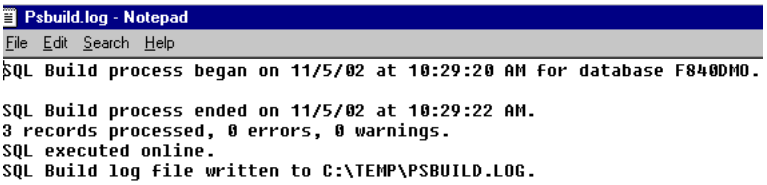
    The Application Designer displays a Build Progress status window.



You can use your native SQL Tool to view the records from the generated view to ensure that they have been created correctly.

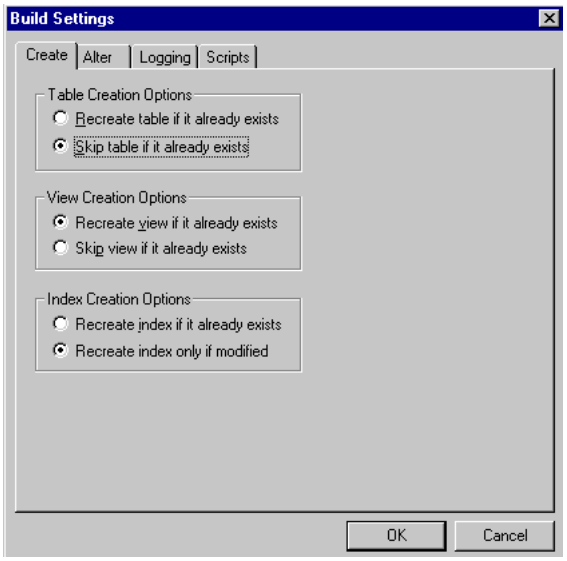
11. If the view has not been generated correctly, click Close, and double-click the SQL Build log statement.

    The PSBUILD log file appears.



12. If you encounter problems, check the Build settings options by selecting Build, and then Settings.

    The Build Settings dialog box is displayed.



Depending on the application server database for PeopleSoft, some databases may require the Tablespace name. Consult your PeopleSoft database administrator for more information regarding this function.

You have now finished importing and building the Component Interfaces. To configure security for Component Interfaces, refer to "Configuring Component Interface Security" on page B-4.

Configuring Component Interface Security

Application Explorer requires the custom Component Interfaces that you imported and built in the previous step, so you need to ensure that all Application Explorer users have access to these Component Interfaces. As with all PeopleSoft objects, security is assigned at the Permission List level. Review your site security requirements to determine which users are going to work with Application Explorer, and then set Component Interface security for each distinct Permission List belonging to those users.

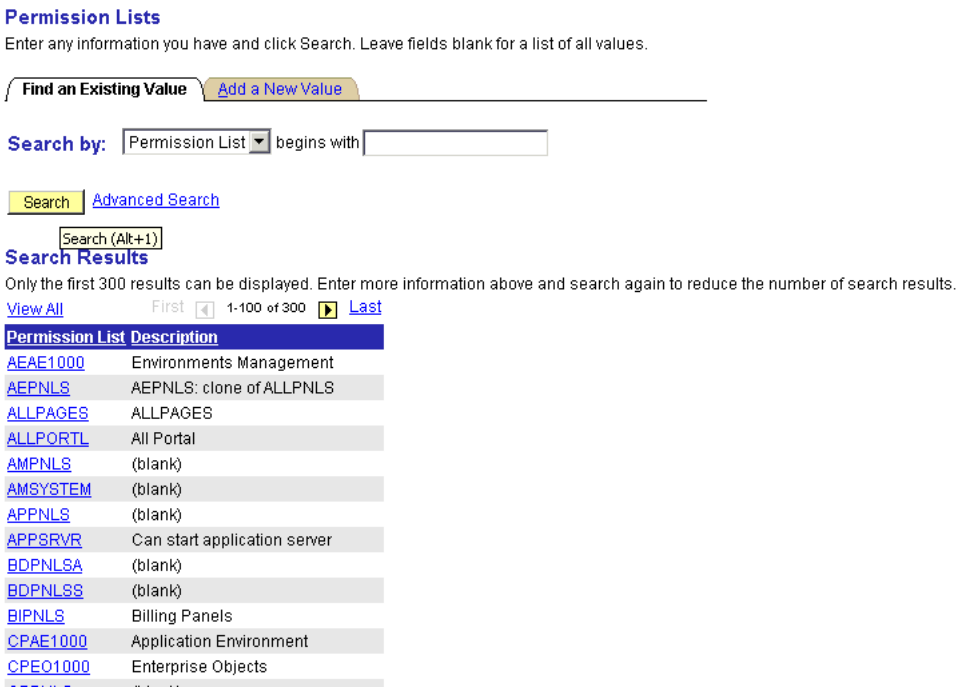
Note: These Component Interfaces are required for creating schemas and business services, and they are used at runtime for using the Find method. They have only Get and Find access and cannot be used to update your PeopleSoft database. This minimizes any possible security exposure.

In PeopleSoft release 8.1, you can set security in 2, 3, or 4-tier mode, whereas in release 8.4 and higher, you can set security 4-tier mode only.

The following steps describe how to configure security for all supported releases of PeopleSoft in all supported modes. The figures shown in the steps reflect PeopleSoft release 8.4 in 4-tier mode.

1. Select PeopleTools, Security, User Profiles, Permissions & Roles, and then Permission Lists.
2. Click Search and select the relevant Permission List.

   The Permission List pane opens on the right.



3. Click the right arrow next to the Sign-on Times tab to display the Component Interfaces tab.

4. Click the Component Interfaces tab.
5. To add a new row to the Component Interfaces list, select the plus sign (+).
6. Enter or select IWY_CI_ATTRIBUTES Component Interface and click Edit.
7. To set the Get and Find methods to Full Access, click Full Access (All).
8. Click OK.
9. Repeat steps 5 through 8 for the IWY_CI_MESSAGES Component Interface.
10. Scroll down to the bottom of the Component Interfaces window, and click Save.

You have finished configuring security for the Component Interfaces delivered with OracleAS Adapter for PeopleSoft. To test these Component Interfaces, refer to "Testing the Component Interfaces" on page B-6.

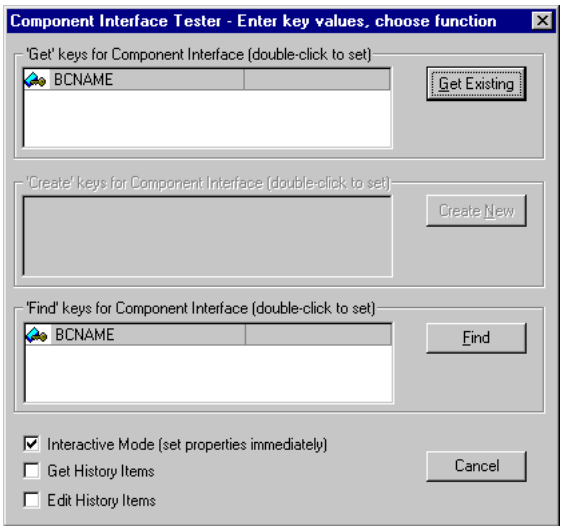
Testing the Component Interfaces

You must test each of the OracleAS Adapter for PeopleSoft Component Interfaces before using them.

To test the Component Interfaces:

1. In PeopleSoft Application Designer, open the IWY_CI_ATTRIBUTES Component Interface.
2. Select **Tools**, and then Test Component Interface.

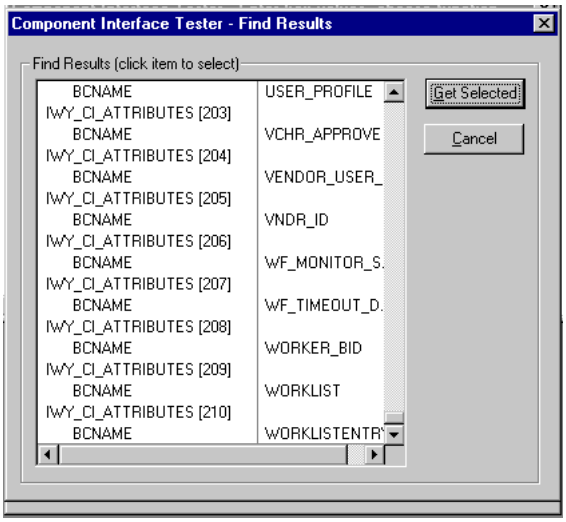
   The Component Interface Tester dialog box is displayed.



> **Note:** The Create New option is disabled because the Add method is not applicable to this Component Interface.

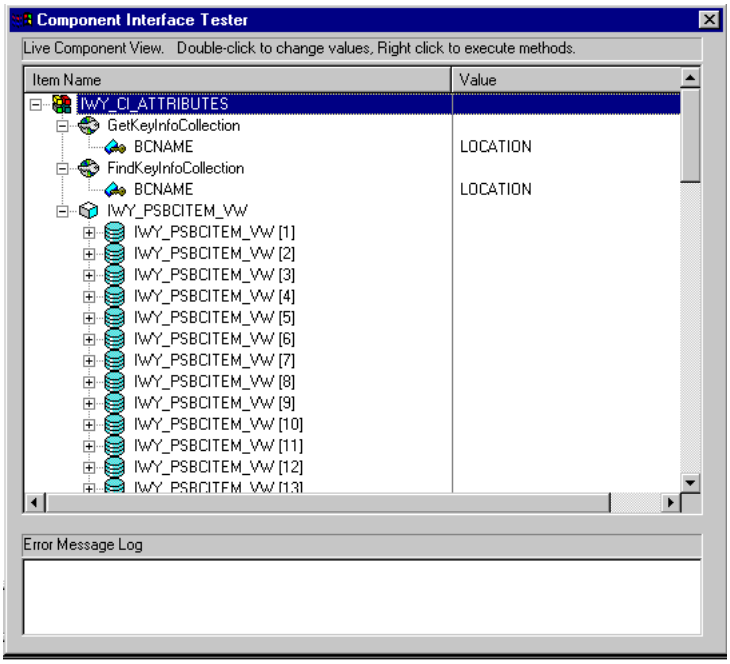
3. Click Find. Entries for the underlying component appear.

   A message may appear stating that display is limited to a certain number of entries. This is not a problem.

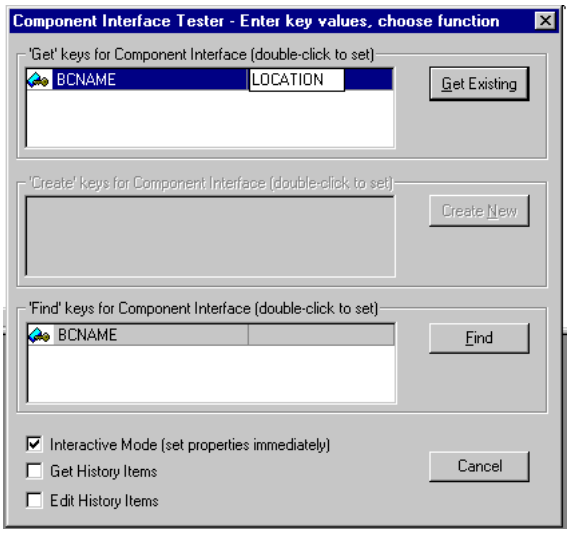


4. Highlight one of the lines with its corresponding key in the Find Results window and click Get Selected. The relevant data for the selected key is displayed.

   If this window opens, the Component Interface has been successfully tested for the Find method.

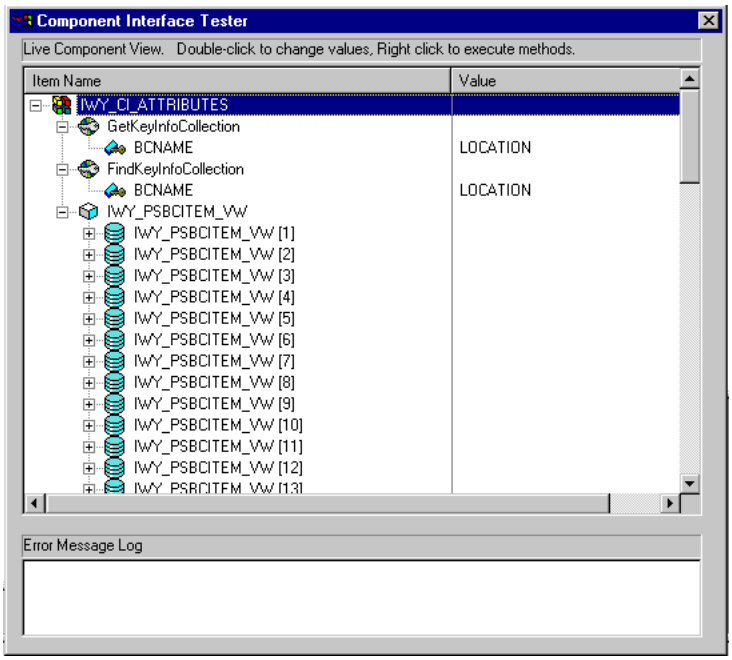


5. Click Get Existing. For the Get method, an existing key must be entered.



The exposed properties for the key that is entered are returned.

If the following window opens, the Component Interface has been successfully tested for the Get method.



6. Repeat this process for the IWY_CI_MESSAGES Component Interface.

You have finished testing the Component Interfaces.

Installing the TCP/IP Message Router for OracleAS Adapter for PeopleSoft

To enable PeopleSoft to send an XML event document to components using TCP/IP, you must install the type of TCP/IP message router required for your PeopleSoft release:

- For Release 8.4, install the TCP/IP target connector. For more information, refer to "Installing the TCP/IP Target Connector for PeopleSoft Release 8.4" on page B-9.

- For Release 8.1, install the TCP/IP handler. For more information, refer to "Installing the TCP/IP Handler for PeopleSoft Release 8.1" on page B-9.

> **Note:** If you are not using PeopleSoft messages for event handling, you may skip this topic.

Installing the TCP/IP Target Connector for PeopleSoft Release 8.4

The TCP/IP target connector for PeopleSoft release 8.4 is installed with OracleAS Adapter for PeopleSoft. The default location on Microsoft Windows is *OracleAS_home*\adapters\application\etc\peoplesoft\iwpsevent84.jar.

Use the corresponding location on non-Windows systems.

To install the TCP/IP target connector for PeopleSoft Release 8.4:

1. Extract TCPIPTARGET84.class from iwpsevent84.jar. Use any extraction utility for your platform.
2. Port TCPIPTARGET84.class to the platform where the PeopleSoft gateway Web server is located.
3. Place TCPIPTARGET84.class in the PeopleSoft server target connector directory.

Installing the TCP/IP Handler for PeopleSoft Release 8.1

The TCP/IP target connector for PeopleSoft release 8.1 is installed with OracleAS Adapter for PeopleSoft. The default location on Microsoft Windows is *OracleAS_home*\adapters\application\etc\peoplesoft\iwpsevent81.jar

Use the corresponding location on non-Windows systems. If this location does not exist, contact your distributor for copies of the relevant files.

To install the TCP/IP Handler for PeopleSoft release 8.1:

1. Port iwpsevent81.jar to the platform on which the PeopleSoft gateway Web server is located.
2. Place iwpsevent81.jar in the servletclasses directory under the PeopleSoft Web server.
3. Extract the embedded class files.

Installing the TCP/IP Handler on a UNIX System

To install the TCP/IP handler for PeopleSoft release 8.1 on a UNIX system:

1. Log on to the UNIX system with the proper PeopleSoft ID and permissions.
2. Navigate to the PeopleSoft Web servlets directory. This may vary by release and by Web server, but is usually:

   ```
   $PS_HOME/webserv/servletclasses
   ```

3. Issue the jar command to extract the class files required by PeopleSoft.

   This is a sample command:

   ```
   jar -xvf /tmp/iwpsevent81.jar
   ```

   It displays the following output on a Sun or Solaris system:

   ```
   $ jar -xvf /tmp/iwpsevent81.jar
   created: META-INF/
   extracted: META-INF/MANIFEST.MF
   extracted: psft/pt8/tcphandler/TCPIPHandler81$Entry.class
   ```

```
extracted:
psft/pt8/tcphandler/TCPIPHandler81$HandlerEntry.class
extracted:
psft/pt8/tcphandler/TCPIPHandler81$PublicationHandler.class
extracted: psft/pt8/tcphandler/TCPIPHandler81.class
$
```

Note: The files are placed in a new directory, `tcphandler`, under `psft/pt8`.

Copying PeopleSoft Files into the Lib Directory

Application Explorer creates XSD schemas and business services from PeopleSoft Component Interfaces, and creates XSD schemas from PeopleSoft messages. To do this, the following files must be in the *`OracleAS_home`*`\adapters\application\lib` directory.:

Ensure the following is in the lib directory:

- PeopleSoft Java Object Adapter (`psjoa.jar`)

  This file provides a low level interface between client applications and PeopleSoft. This file is provided with PeopleSoft and can be found in the following directory:

  `PS_HOME``\web\PSJOA`

  The `psjoa.jar` file is different for every version of PeopleSoft. When you upgrade your Peopletools release, be sure to copy the new release's `psjoa.jar` file into the *`OracleAS_home`*`\adapters\application\lib` directory and restart all components.

- `pstools.properties` (for PeopleSoft 8.1.x)

  PeopleSoft release 8.1x requires an additional file, `pstools.properties`, found in the following directory:

  `PS_HOME``\web\jmac`

- `psoftcrmci.jar`

  This is a set of Java classes generated from PeopleSoft Component Interfaces.

Index

A

agent_admin_port, A-6
agent_delete_file_cache_at_startup, A-6
agent_dvm_table_caching, A-6
agent_log_level, A-6
agent_lookup_table_caching, A-6
agent_max_ao_cache_size, A-6
agent_max_co_cache_size, A-6
agent_max_dvm_table_cache_size, A-7
agent_max_lookup_table_cache_size, A-7
agent_max_message_metadata_cache_size, A-7
agent_max_queue_size, A-7
agent_message_selector, A-7
agent_metadata_caching, A-7
agent_persistence_cleanup_interval, A-7
agent_persistence_queue_size, A-7
agent_persistence_retry_interval, A-7
agent_pipeline_from_hub, A-8
agent_pipeline_to_hub, A-8
agent_reply_message_selector, A-8
agent_reply_subscriber_name, A-8
agent_subscriber_name, A-8
agent_throughput_measurement_enabled, A-8
agent_tracking_enabled, A-8
agent_use_custom_hub_dtd, A-8
application, A-9
application parameter, A-4

B

bridge_class, A-12

C

configuration
  adapter.ini, A-5
  hub.ini, A-5
  ini file settings, A-5
Configuring OracleAS Adapter JCA Version 1.0 after Deployment, 2-9
Configuring the OracleAS Adapter Application Explorer, 2-11
Copying Library Files, 2-6

D

Deinstallation Tasks, 2-15
Design time components, 1-3

E

EIS Adapter Plugin, A-3
  hardware requirements, A-1
  installation, A-2
  overview, A-1
  software requirements, A-1
EIS Adapter Plugin-specific Parameters, A-12
encoding, A-9
Enterprise Application Integratio, A-1

H

Hardware Requirements, 1-5
hub_hostx, A-5
hub_instancex, A-5
hub_num_nodes, A-5

I

installation, A-2
  tasks, A-2
installation log files
  location of, 2-5
Installation Tasks, 2-1
instance_number, A-9

J

J2EE and Web Cache
  installed in same Oracle home as Oracle Application Server Integration B2B, 2-2
  required for using Oracle Application Server Integration B2B, 2-1, 2-2
J2EE and Web Cache Requirements, 1-6
JRE Requirements, A-2

L

log files
  location of, 2-5

N

nls_country, A-9
nls_date_format, A-9
nls_language, A-10

O

Operating System Requirements, 1-6, A-2
Oracle Application Server Containers for J2EE (OC4J), 1-3
Oracle Application Server Integration B2B
J2EE and Web Cache requirement, 2-1, 2-2
Oracle Application Server Integration InterConnect, 1-2
Oracle Application Server Portal, 1-3
Oracle AS Adapter Business Services Engine, 1-4
OracleAS Adapter for J.D. Edwards OneWorld XE, 2-6
OracleAS Adapter for PeopleSoft, 2-6
OracleAS Adapter for SAP R/3, 2-7
OracleAS Adapter for Siebel, 2-8
OracleAS Adapters, 1-2

P

Packaged Application Adapter Directory Structure, 2-10
partition, A-10
preinstallation
tasks, A-2

R

Real Application Clusters, A-5
Runtime components, 1-3

S

service_class, A-10
service_classpath, A-10
service_jdk_dll, A-10
service_max_heap_size, A-10
service_max_java_stack_size, A-10
service_max_native_stack_size, A-11
service_min_heap_size, A-11
service_num_vm_args, A-11
service_path, A-11
service_vm_argnumber, A-11
Software Requirements, 1-5

V

Verifying OracleAS Adapter Business Services Engine Installation, 2-8
Verifying OracleAS Adapter JCA Version 1.0 Installation, 2-10