Oracle® Fusion Middleware

Application Adapters Installation Guide for Oracle WebLogic Server 11*g* Release 1 (11.1.1.3.0) **E17054-03**

November 2010



Oracle Fusion Middleware Application Adapters Installation Guide for Oracle WebLogic Server, 11g Release 1 (11.1.1.3.0)

E17054-03

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Contents

Preface	v
Audience	. v
Documentation Accessibility	. v
Related Documents	. vi
Conventions	. vi

1 Introduction

Oracle Fusion Middleware Application Adapter Overview	1-1
Types of Installation	1-1
Oracle Fusion Middleware Application Adapter System Requirements	1-2
Hardware Requirements	1-2
Software Requirements	1-2
Supported EIS Systems	1-4
Considerations for SAP R/3 (Using SAP JCo 2.1.x) and SAP R/3 (Using SAPJCo 3.x)	1-4
SAP R/3 (Using SAP JCo 2.1.x)	1-4
SAP R/3 (Using SAP JCo 3.x)	1-5
PeopleSoft	1-6
Siebel	1-6
J.D. Edwards OneWorld	1-6

2 Installation and Configuration

Required Oracle Patches	2-1
Installation Overview	2-2
Installing Oracle Fusion Middleware Application Adapters on Windows	2-3
Installing Oracle Fusion Middleware Application Adapters on UNIX and Linux	2-7
Configuring Oracle WebLogic Server Adapter Application Explorer	2-8
Creating a Configuration for Oracle WebLogic Server Adapter Business Services Engine	2-8
Creating a Configuration for Oracle WebLogic Server Adapter J2EE Connector Architecture 2-11	
Configuring and Deploying J2CA	2-12
Configuring Settings for the J2CA Connector Application 2	2-13
Configuring Log File Management for the J2CA Connector Application	2-13
Deploying the J2CA Connector Application Using the Oracle WebLogic Server Administrati Console 2-14	ion

Deploying the J2CA Installation Verification Program (IVP) Using the Oracle WebLogic Se Administration Console 2-20	erver
Connecting to a J2CA Configuration Using Application Explorer	2-27
Configuring and Deploying Business Services Engine	2-27
Configuring Settings for Oracle WebLogic Server Adapter Business Services Engine (BSE) 2-27	
Deploying Oracle WebLogic Server Adapter Business Services Engine (BSE) Using the Ora WebLogic Server Administration Console 2-28	ıcle
Connecting to a BSE Configuration Using Application Explorer	2-33
Postinstallation Tasks	2-34
List of Enterprise Information System Library Files	2-34
Copying the Enterprise Information System Library Files	2-39
Directory Structure	2-43
Configuring the Database Repository	2-43
Uninstalling Oracle Fusion Middleware Application Adapters	2-48

A Configuring Oracle Fusion Middleware Application Adapter for PeopleSoft

Sp	ecifying the PeopleSoft Version	A-1
Ins	stalling the Adapter Component Interfaces	A-2
	Importing and Building the Component Interfaces	A-2
	Configuring Component Interface Security	A-5
	Installing the TCP/IP and HTTP Message Router for Oracle Fusion Middleware Application	m
	Adapter for PeopleSoft A-10	

B Configuring Oracle Fusion Middleware Application Adapter for J.D. Edwards OneWorld

Modifying the JDE.INI File for Outbound and Inbound Processing	B-1
The OneWorld Event Listener	B-2
Configuring the OneWorld Event Listener	B-2
Runtime Overview	B-4

C Configuring Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 3.x)

Overview	C-1
Scenario I	C-1
Scenario II	C-3
SAP Ports Requirement	C-5
Microsoft Run Time DLLs	C-6

Index

Preface

Oracle Fusion Middleware Application Adapters Installation Guide for Oracle WebLogic Server describes how to install and configure Oracle Application Adapters for Oracle WebLogic Server 11g Release 1 (11.1.1.3.0).

Audience

This document is intended for system administrators who install and configure ERP application adapters.

Documentation Accessibility

Our goal is to make Oracle products, services, and supporting documentation accessible to all users, including users that are disabled. 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/.

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Related Documents

For more information, see the following documents in the Oracle Enterprise Repository 11*g* Release 1 (11.1.1.3.0) documentation set:

- Oracle Fusion Middleware Application Adapter Best Practices Guide for Oracle WebLogic Server
- Oracle Fusion Middleware Application Adapter Upgrade Guide for Oracle WebLogic Server
- Oracle Fusion Middleware Application Adapter for SAP R/3 User's Guide for Oracle WebLogic Server
- Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 3.0) User's Guide for Oracle WebLogic Server
- Oracle Fusion Middleware Application Adapter for Siebel User's Guide for Oracle WebLogic Server
- Oracle Fusion Middleware Application Adapter for PeopleSoft User's Guide for Oracle WebLogic Server
- Oracle Fusion Middleware Application Adapter for J.D. Edwards OneWorld User's Guide for Oracle WebLogic Server
- Oracle's Unified Method (OUM)

A wealth of additional Governance information can be found within Oracle's Unified Method (OUM). OUM can be used by Oracle employees, Oracle Partner Network Certified Partners or Certified Advantage Partners, and Clients who either participate in the OUM Customer Program or are engaged on projects where Oracle provides consulting services. OUM is a web-deployed toolkit for planning, executing and controlling software development and implementation projects.

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http://my.oracle.com/portal/page/myo/ROOTCORNER/KNOWLEDGEAREAS1/BUSIN ESS_PRACTICE/Methods/Learn_about_OUM.html

Conventions

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.

The following text conventions are used in this document:

Introduction

1

This chapter provides an overview of Oracle Fusion Middleware Application Adapters for Oracle WebLogic Server 11*g* Release 1 (11.1.1.3.0). It contains the following topics:

- Section 1.1, "Oracle Fusion Middleware Application Adapter Overview"
- Section 1.2, "Oracle Fusion Middleware Application Adapter System Requirements"

1.1 Oracle Fusion Middleware Application Adapter Overview

The Oracle Fusion Middleware Application Adapters CD for Oracle WebLogic Server enables you to install packaged application adapters.

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

Table 1–1 describes the packaged application adapters.

Adapter	Description
Oracle Fusion Middleware Application Adapter for J.D. Edwards OneWorld	Provides comprehensive, bidirectional, and standards-based connectivity to J.D.Edwards OneWorld applications.
Oracle Fusion Middleware Application Adapter for PeopleSoft	Provides comprehensive, bidirectional, and standards-based connectivity to PeopleSoft applications.
Oracle Fusion Middleware Application Adapter for Siebel	Connects Oracle WebLogic Server to a Siebel system by providing unique features that minimize the implementation effort.
Oracle Fusion Middleware Application Adapter for SAP R/3	Connects Oracle WebLogic Server to an SAP R/3 system through Oracle Fusion Middleware Application Adapter for SAP R/3 to provide connectivity and integration with an SAP R/3 system.

Table 1–1 Oracle Fusion Middleware Application Adapters for Packaged Applications

1.1.1 Types of Installation

Packaged application adapters can be deployed as a:

- J2CA 1.0 resource adapter and test servlet for J2CA deployments
- Web services servlet within Oracle WebLogic Server, which is known as Oracle WebLogic Server Adapter Business Services Engine (BSE)

Oracle WebLogic Server Adapter Application Explorer (Application Explorer) is also provided to configure Oracle WebLogic Server Application Adapters for packaged applications (for J2CA and BSE deployments).

1.2 Oracle Fusion Middleware Application Adapter System Requirements

The following sections describe the system requirements for installing Oracle Fusion Middleware Application Adapters:

- Section 1.2.1, "Hardware Requirements"
- Section 1.2.2, "Software Requirements"
- Section 1.2.3, "Supported EIS Systems"

1.2.1 Hardware Requirements

Table 1–2 lists the hardware requirements for the computer where the Oracle Fusion Middleware Application Adapters are installed.

Table 1–2 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	

Table 1–2 Hardware Requirements

1.2.2 Software Requirements

The following section describes the Oracle Fusion Middleware Application Adapters software requirements:

Note: The supported systems and platforms vary for Oracle Fusion Middleware Application Adapters on an individual adapter level. For example, the Oracle Fusion Middleware Application Adapter for SAP R/3 does not support the Windows 2008 (64-bit) operating system.

For more information on supported systems and platforms for Oracle Fusion Middleware Application Adapters, see Section 1.2.3, "Supported EIS Systems" on page 1-4.

Operating System Requirements

Table 1–3 lists the operating system requirements for the computer where Oracle Fusion Middleware Application Adapters can be installed.

 Table 1–3
 Operating System Requirements

Platform Type	Platform List	32- or 64-bit	JDK Version
Windows	Intel x86 Microsoft	32-bit	■ Sun 1.6.0_07+ (32-bit)
	Windows 2003 SP2/R2+		■ JRockit 27.6 (32-bit)

Platform Type	Platform List	32- or 64-bit	JDK Version
	x64 Windows 2003	64-bit	■ Sun 1.6.0_07+ (64-bit)
	with SP2/R2+		■ JRockit 27.6 (64-bit)
	Intel x86 Windows	32-bit	• Sun 1.6.0_07+ (32-bit)
	Server 2008		■ JRockit 27.6 (32-bit)
	x64 Windows Server	64-bit	• Sun 1.6.0_07+ (64-bit)
	2008		■ JRockit 27.6 (64-bit)
Solaris	Sun Solaris Sparc 2.9	64-bit	• Sun 1.6.0_07+ (64-bit)
			■ JRockit 27.6 (64-bit)
	Sun Solaris Sparc 2.10	64-bit	• Sun 1.6.0_07+ (64-bit)
			■ JRockit 27.6 (64-bit)
НР	PA-RISC HP UX 11i 11.23, 11.31	64-bit	HP JDK 1.6.0.02 (64-bit)
	Itanium-2 HP UX 11.23, 11.31	64-bit	HP JDK 1.6.0.02 (64-bit)
Linux	Intel x86 RedHat Linux EL 4 (UL7+)	32-bit	• Sun 1.6.0_07+ (32-bit)
			■ JRockit 27.6 (32-bit)
	Intel x86 RedHat	32-bit	• Sun 1.6.0_07+ (32-bit)
	Linux EL 5.x (UL2)		■ JRockit 27.6 (32-bit)
	x64 RedHat Linux EL	64-bit	• Sun 1.6.0_07+ (64-bit)
	4 (UL7+)		■ JRockit 27.6 (64-bit)
	x64 RedHat Linux EL	EL 64-bit 32-bit	• Sun 1.6.0_07+ (64-bit)
	5.x (UL2+)		■ JRockit 27.6 (64-bit)
	Intel SUSE 10		• Sun 1.6.0_07+ (32-bit)
			■ JRockit 27.6 (32-bit)
	x64 SUSE10	64-bit	• Sun 1.6.0_07+ (64-bit)
			■ JRockit 27.6 (64-bit)
	Intel Oracle Enterprise	32-bit	• Sun 1.6.0_07+ (32-bit)
	Linux 4 (UL7+)		■ JRockit 27.6 (32-bit)
	Intel Oracle Enterprise	32-bit	• Sun 1.6.0_07+ (32-bit)
	Linux 5.x (UL2+)		■ JRockit 27.6 (32-bit)
	x64 Oracle Enterprise	64-bit	• Sun 1.6.0_07+ (64-bit)
	Linux 4 (UL7+)		JRockit 27.6 (64-bit)
	x64 Oracle Enterprise	64-bit	• Sun 1.6.0_07+ (64-bit)
	Linux 5.x (UL2+)		JRockit 27.6 (64-bit)
AIX	IBM Power AIX 5L (5.3 ML01+)	64-bit	IBM 1.6 SR2 (64-bit)
	IBM Power AIX 6.1	64-bit	IBM 1.6 SR2 (64-bit)

 Table 1–3 (Cont.) Operating System Requirements

1.2.3 Supported EIS Systems

This section indicates which combinations of releases and system platforms are supported for the following EIS systems:

- Considerations for SAP R/3 (Using SAP JCo 2.1.x) and SAP R/3 (Using SAPJCo 3.x)
- SAP R/3 (Using SAP JCo 2.1.x)
- SAP R/3 (Using SAP JCo 3.x)
- PeopleSoft
- Siebel
- J.D. Edwards OneWorld

1.2.3.1 Considerations for SAP R/3 (Using SAP JCo 2.1.x) and SAP R/3 (Using SAPJCo 3.x)

iWay Software released the SAP R/3 adapter for SAP Java Connector (JCo) version 2.1.8 in 2007. The SAP JCO 2.1.8 / 2.1.9 support is limited to Java 1.4 JVM support. Note that while SAP has extended the life of the 2.x JCo until 2013, iWay Software can only support this connector for SUN JVM 1.4 under the terms of SAP note 549268. SAP has released the SAP Java Connector 3 (JCo) for Java 1.5 and 1.6 support. iWay Software has also released the SAP R/3 adapter (using SAPJCO 3.x) and recommends that all customers migrate to this version to take advantage of the speed and stability that is offered by JCo 3.x and the new features that have been added to the adapter. The new release of the SAP R/3 adapter contains all of the previous adapter fixes and new feature enhancements. For more information about migrating existing application artifacts (BPEL, Mediator, ESB, and OSB) and installing the Oracle Fusion Middleware Application Adapter for SAP R/3 (using SAP JCo 3.x), see Appendix C, "Configuring Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 3.x)".

Oracle Fusion Middleware Application Adapter for SAP R/3 (using SAP JCo 3.x) is developed with Java 1.5 and also certified on Java 1.6. Note that if the SAP R/3 adapter is deployed to an application server, the application server must also use Java 1.5 or higher. It is recommended to upgrade to the new version of the SAP R/3 adapter in 2010 to provide ongoing support, maintenance, and enhancements. For specific releases of SAP JCo 3.x, see SAP note 1077727.

iWay Software has separately announced the advanced notification of End Of Support (EOS) for the SAP R/3 adapter (using SAP JCo 2.1.x) effective 12/31/2011. 11g Release 1 (11.1.1.3.0) is the last supported release for the SAP R/3 adapter (using SAP Jco 2.1.x). It is recommended that you begin migrating to the SAP R/3 adapter (using SAP JCo 3.x) starting with 11g Release 1 (11.1.1.3.0). This is the only Oracle release where both versions of the SAP R/3 adapters are supported. The SAP R/3 adapter (using SAP JCo 2.1.x) adapter is not supported in any future releases as well as after 12/31/2011.

1.2.3.2 SAP R/3 (Using SAP JCo 2.1.x)

The following SAP R/3 platforms are supported by the Oracle Fusion Middleware Application Adapter for SAP R/3 (using SAP JCo 2.1.x):

- SAP R/3 Enterprise 47x100
- SAP R/3 Enterprise 47x200
- mySAP ERP Central Component (ECC) 5.0, deployed on SAP NetWeaver 2004

- mySAP ERP Central Component (ECC) 6.0, deployed on SAP NetWeaver 2004s
- SAP Java Connector (SAP JCo) Version 2.1.9

Notes:

- SAP JCo Version 2.1.8 is no longer supported by SAP. SAP recommends using SAP JCo Version 2.1.9. For more information, see the SAP Note #1257539 in the SAP Service Marketplace.
- For 11g Release 1 (11.1.1.3.0), the Oracle Fusion Middleware Application Adapter for SAP R/3 supports SAP JCo Version 2.1.9.
- SAP JCo Version 2.1.9 is not supported on the Windows 64-bit platform. The JCo API does not support this platform.
- The Oracle Fusion Middleware Application Adapter for SAP R/3 does not support any versions of *Apple Mac* Operating Systems.
- Release versions may vary by product component. In addition, SAP functions may vary by SAP product version and support package.

1.2.3.3 SAP R/3 (Using SAP JCo 3.x)

The following SAP R/3 platforms are supported by the Oracle Fusion Middleware Application Adapter for SAP R/3 (using SAP JCo 3.x):

- SAP R/3 Enterprise 47x100
- SAP R/3 Enterprise 47x200
- mySAP ERP Central Component (ECC) 5.0, deployed on SAP NetWeaver 2004
- mySAP ERP Central Component (ECC) 6.0, deployed on SAP NetWeaver 2004s
- SAP Java Connector (SAP JCo) Version 3.0.5

The following operating systems are supported by the Oracle Fusion Middleware Application Adapter for SAP R/3 (using SAP JCo 3.x):

- Windows 32-bit (Windows XP, Windows Vista, Windows Server 2003, and Windows Server 2008)
- Windows 64-bit (Windows XP, Windows Vista, Windows Server 2003, and Windows Server 2008)
- Linux (Intel processor only) (32-bit and 64-bit)
- HP-UX PA-RISC (64-bit only)
- HP-UX Itanium (64-bit only)
- Solaris (64-bit only)
- AIX (64-bit only)

For supported JVM information that corresponds to each operating system, see the SAP Note #1077727 in the SAP Service Marketplace.

Note: The Oracle JRockit JVM is not supported by SAP JCo 3.0.5.

1.2.3.4 PeopleSoft

The following PeopleSoft platforms are supported by the Oracle Fusion Middleware Application Adapter for PeopleSoft:

Adapter Platform	PeopleSoft Platform	PeopleSoft Release	PeopleTools Release Level
List of platforms in	All PeopleSoft	8.1	8.16.03 - 8.22
Table 1–3, " Operating System Requirements"	supported platforms (for example, Windows, Solaris, AIX, and so on)	8.4	8.40.05 - 8.50

1.2.3.5 Siebel

The following Siebel platforms are supported by the Oracle Fusion Middleware Application Adapter for Siebel:

Adapter Platform	Siebel Platform	Siebel Release	ΑΡΙ
List of platforms in	Windows	6.0.1 - 6.2	СОМ
Table 1–3, " Operating System	Windows	6.3 - 8.0	Java Data Bean
Requirements"	Solaris	6.0.1 - 8.0	Java Data Bean
	AIX	6.3 - 8.0	Java Data Bean

1.2.3.6 J.D. Edwards OneWorld

The following J.D. Edwards OneWorld platforms are supported by the Oracle Fusion Middleware Application Adapter for J.D. Edwards OneWorld:

Adapter Platform	J.D. Edwards OneWorld Platform	J.D. Edwards OneWorld Product and Release
List of platforms in Table 1–3, " Operating System Requirements"		 XE (B7333) from SP19 to SP23 ERP 8.0 (B7334) EnterpriseOne B9 (8.9) EnterpriseOne 8.10 (Tools Release 8.93 and 8.94) EnterpriseOne 8.11 (SP1) EnterpriseOne 8.12 (Tools Release 8.96 2.0)
		 EnterpriseOne 9.0 (Tools Release 8.98.1.3)

Installation and Configuration

This chapter describes how to install and configure Oracle Fusion Middleware Application Adapters for Oracle WebLogic Server 11g. It contains the following topics:

- Section 2.1, "Required Oracle Patches"
- Section 2.2, "Installation Overview"
- Section 2.3, "Installing Oracle Fusion Middleware Application Adapters on Windows"
- Section 2.4, "Installing Oracle Fusion Middleware Application Adapters on UNIX and Linux"
- Section 2.5, "Configuring Oracle WebLogic Server Adapter Application Explorer"
- Section 2.6, "Configuring and Deploying J2CA"
- Section 2.7, "Configuring and Deploying Business Services Engine"
- Section 2.8, "Postinstallation Tasks"
- Section 2.9, "Uninstalling Oracle Fusion Middleware Application Adapters"

2.1 Required Oracle Patches

The following patches are required to ensure that the Oracle Fusion Middleware Application Adapters for Oracle WebLogic Server 11*g* function properly.

Mandatory Patch for BPM PS2 - BPM BP1 (Patch 9958661)

This patch is required if you are planning to use Oracle Fusion Middleware Application Adapters with Business Process Management (BPM).

Mandatory Patches for OSB PS2 (Patch 9654566 and 10182476)

These patches are required if you are planning to use Oracle Fusion Middleware Application Adapters with Oracle Service Bus (OSB).

Mandatory Patch for SOA Suite PS2 (Patch 9563280)

This patch is required if you are planning to use Oracle Fusion Middleware Application Adapters with Oracle Service-Oriented Architecture (SOA) Suite PS2.

The patches mentioned here are available on the Oracle Support Web site:

http://support.oracle.com

For additional details, contact Oracle Customer Support.

2.2 Installation Overview

The Application Adapter installer for 11*g* Release 1 (11.1.1.3.0) is applicable for the Oracle Service-Oriented Architecture (SOA) Suite and Oracle Service Bus (OSB). The Application Adapters that are installed can be used with Business Process Execution Language (BPEL), Mediator, Business Process Management (BPM), and OSB components. Using this installer, Application Adapters can be installed in a standalone SOA environment, standalone OSB environment, or mixed (SOA and OSB) environment.

The Application Adapters are installed based on the value that is specified for the *ORACLE_HOME* parameter. The installer uses the OPatch utility to check for the specific version of OSB or SOA that is installed on the system. The installer starts the OPatch utility with the -oh option to use the JDK that is delivered with the Oracle SOA Suite and OSB. For example:

<ORACLE_HOME>\Oracle_SOA1\OPatch>opatch.bat lsinventory -oh <SOA_HOME> -jre <JDK_ HOME>

The installer parses the output of the OPatch utility for the following strings and values:

- 1. Application Server 11g SOA Patchset 11.1.1.3.0
- 2. Oracle Service Bus 11.1.1.3.0

If the installer finds the string Application Server 11g SOA Patchset 11.1.1.3.0, then it assumes that the system is an Oracle SOA Suite environment. If the installer finds the string Oracle Service Bus 11.1.1.3.0, then it assumes that the system is an OSB environment.

If you enter the value of *SOA_HOME* for *ORACLE_HOME*, then the Application Adapters are installed in the following folder:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty

If you enter the value of *OSB_HOME* for *ORACLE_HOME*, then the Application Adapters are installed in the following folder:

<OSB_HOME>\Oracle_OSB1\3rdparty

If only OSB and SOA Suite are installed, then the Application Adapters are installed in *SOA_HOME* or *OSB_HOME* based on the value that is specified for *ORACLE_HOME* during the installation. In this case, the Application Adapters are installed in either of the following folders:

- 1. <OSB_HOME>\Oracle_OSB1\3rdparty
- 2. <ORACLE_HOME>\Oracle_SOA1\soa\thirdparty

For the installer to run successfully, the OPatch utility must be run successfully in your environment. The OPatch utility is a prerequisite for the Application Adapters installer. Note that *SOA_HOME* and *OSB_HOME* have their own OPatch utilities in the combined or standalone environments. Ensure that the OPatch utility is run successfully in the system where the Application Adapters are installed.

For more information (including prerequisites) about the Opatch utility, see the following Web site:

http://www.comp.dit.ie/btierney/oracle11gdoc/em.111/b31207/oui7_opatch.htm#CEGHCGJI

Note: If the OPatch utility is not started with the default options that are described in this section, then the installer does not work in your environment. If the OPatch utility or installer do not work as described, then you can install the Application Adapters using a .zip file. For more information on bug 10207507 and downloading the zip file version of the installer, contact Oracle Support.

Oracle Fusion Middleware Application Adapter for SAP R/3 Installation

The Application Adapter installer for 11*g* Release 1 (11.1.1.3.0) installs both versions of the Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 2.1.x and SAP JCo 3.x). By default, the Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 2.1.x) is installed in the following folder:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\lib

The Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 3.x) is installed in the following folder:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\etc\mysap30

For more information about installing the Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 3.x), see Appendix C, "Configuring Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 3.x)".

2.3 Installing Oracle Fusion Middleware Application Adapters on Windows

Oracle Fusion Middleware Application Adapters can be installed with the following:

- Application Server 11g SOA Patchset 11g Release 1 (11.1.1.3.0)
- Oracle Service Bus 11g Release 1 (11.1.1.3.0)

To install Oracle Fusion Middleware Application Adapters on a Windows platform, perform the following steps:

1. Install Java Development Kit (JDK) version 1.6 on the system.

Oracle Fusion Middleware Application Adapters are certified with JDK version 1.6.

2. Ensure that the JDK is added to your system PATH or on a predefined path.

If you have multiple JDK versions other than JDK version 1.6 installed on your system, then ensure that JDK version 1.6 is listed first in your system PATH. The installation program should install the adapters only with JDK version 1.6. The adapters should not be installed with any other JDK version.

- **3.** Navigate to the location on your system where the **iwora11g.application-adapters.win32.exe** installation file is located.
- 4. Double-click the **iwora11g.application-adapters.win32.exe** file to start the Oracle Fusion Middleware Application Adapters for Oracle WebLogic Server installation program.

The installation program uses the JDK version that is available in your system PATH or on a predefined path.

If you want the installer to use a JDK version in a specific path, then you can invoke the installer by performing the following steps.

For example, on Windows:

- **a.** Navigate to the command prompt for your system.
- **b.** Enter the following command:

iworallg.application-adapters.win32.exe -is:javahome c:\myfolder\jdk1.6

In this example, the installation program is run using JDK version 1.6.

The Welcome screen is displayed, as shown in Figure 2–1.

Figure 2–1 Welcome Screen

8 Installer	
ORACLE	
Welcome to the installer for Application Adapters for Oracle We Server 11gPS2(10.3.3.0)	blogic
The installer will install the PeopleSoft, SAP, Siebel and JD Edwards adapters on your computer. To continue, choose Next. Application Adapters for Oracle Weblogic Server 11gPS2(10.3.3.0) Oracle http://www.oracle.com	
Copyright © 2004, 2009, Oracle and/or its affiliates. All rights reserved.	
nstallShield	<u>C</u> ancel

5. Click Next.

The ORACLE_HOME path screen is displayed, as shown in Figure 2–2.

® 1	installer	× 🗆 -
	ORACLE	
	Please enter ORACLE_HOME: C:toracletMiddlewaretOracle_SOA1	Browse
Ins	stallShield	
	< <u>B</u> ack <u>N</u> ext >	<u>C</u> ancel

Figure 2–2 ORACLE_HOME Path Screen

6. Enter the path where Oracle SOA Suite or OSB is installed on your system. For example:

Oracle SOA Suite Home

C:\oracle\Middleware\Oracle_SOA1

OSB Home

C:\OSB\Oracle_OSB1

Depending on your environment (Oracle SOA Suite or OSB), the installation program installs all the application adapters and related files in the following location:

For Oracle SOA Suite:

<ORACLE_HOME>\soa\thirdparty\ApplicationAdapters

In this example, *<ORACLE_HOME>* is the location where Oracle SOA Suite is installed.

For OSB:

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters

In this example, *<OSB_HOME>* is the location where Oracle Service Bus is installed.

For more information about the Application Adapter installer for 11g Release 1 (11.1.1.3.0), see "Installation Overview" on page 2-2.

7. Click Next.

The Summary screen is displayed, as shown in Figure 2–3.

Figure 2–3 Summary Screen

9	Installer
	ORACLE
[Please read the summary information below.
	Application Adapters for Oracle Weblogic Server 11gPS2(10.3.3.0) will be installed in the following location: C:\oracle\Middleware\Oracle_SOA1\soa\thirdparty\ApplicationAdapters
	for a total size: 50 MB
	nstallShield

8. Review specific details on the Summary screen, including the disk requirements to ensure that you have sufficient disk space, and click **Next** to begin the installation.

A Status screen is displayed.

After the installation is complete, the following installation confirmation screen is displayed, as shown in Figure 2–4.

Figure 2–4 Confirmation Screen

ORACLE
Please read the summary information below.
The InstallShield Wizard has successfully installed Application Adapters for Oracle Weblogic Server 11gPS2(10.3.3.0). Choose Finish to exit the wizard.
nstall8hield
< Back Next > Finish

9. Click Finish.

The Oracle Fusion Middleware Application Adapters for Oracle WebLogic Server are now installed on your system.

In addition, the following Windows Program Menu listing is created, as shown in Figure 2–5.

Figure 2–5 Windows Program Menu

All <u>P</u> rograms 🕨	m Oracle Application Adapters	Application Explorer
		🖬 IBSE Test Servlet
		🔂 JCA Test Servlet

Starting Application Explorer from the Windows Start menu does not run the Oracle WebLogic Server batch command *setdomainenv.cmd*. It is recommended to run the *setdomainenv.cmd* command on Windows systems and the *setdomainenv.sh* command on UNIX/Linux systems before starting Application Explorer.

Before starting and using Application Explorer, you must perform the following steps:

- **1.** Open the command prompt window.
- 2. Navigate to the following directory:

<WLS_Home>\user_projects\domains\base_domain\bin

3. Execute setDomainEnv.cmd (Windows) or . ./setDomainEnv.sh (UNIX/Linux).

This command sets the class path and other environment variables for Application Explorer in the Oracle WebLogic Server environment. In addition, it allows Application Explorer to access the Oracle WebLogic Server APIs to publish WSDL files to the Oracle Service Bus (OSB) Console.

- 4. Do not close the command prompt window.
- 5. Navigate to the following directory:

For Oracle SOA Suite:

<ORACLE_HOME>\soa\thirdparty\ApplicationAdapters\tools\iwae\bin\ae.bat

In this example, *<ORACLE_HOME>* is the location where Oracle SOA Suite is installed.

For OSB:

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\tools\iwae\bin\ae.bat

In this example, *<OSB_HOME>* is the location where Oracle Service Bus is installed.

<OSB_Home>\3rdparty\ApplicationAdapters\tools\iwae\bin

6. Execute ae.bat (Windows) or iwae.sh (UNIX/Linux) to start Application Explorer.

2.4 Installing Oracle Fusion Middleware Application Adapters on UNIX and Linux

To install Oracle Fusion Middleware Application Adapters on a UNIX or Linux platform, you can invoke the installer by performing the following steps:

1. Navigate to the command prompt for your UNIX or Linux platform.

2. Depending on your UNIX or Linux platform, enter the following command: For IBM AIX:

\$./iworallg.application-adapters.aix.bin

For HP-UX:

\$./iworallg.application-adapters.hp.bin

For Linux:

\$./iworallg.application-adapters.linux.bin

For Solaris:

\$./iworallg.application-adapters.solaris.bin

Note: It is recommended to use the -is:javahome option on the UNIX and Linux platforms. For more information on how to start the installer with a command to use a JDK version in a specific path, see step 4 in "Installing Oracle Fusion Middleware Application Adapters on Windows" on page 2-3.

After the installation file is invoked, the remaining installation steps for the UNIX and Linux platform are similar to those for the Windows platform.

2.5 Configuring Oracle WebLogic Server Adapter Application Explorer

Before you can use Application Explorer to generate WSDL files, you must create a repository where your configuration details are stored. Each implementation requires you to configure a specific repository before you can explore Enterprise Information System (EIS) metadata. The information in the repository is also referenced at run time.

Business Services Engine (BSE) generates Web services based on enterprise assets that are accessible from adapters regardless of the programming language or the particular operating system being used. In addition, you can use BSE as a standalone Java application running in Oracle WebLogic Server.

The J2CA runs in J2EE Connector Architecture compliant application servers and uses the Common Client Interface (CCI) to provide integration services using Oracle Fusion Middleware Application Adapters for Oracle WebLogic Server. After you deploy the connector, you can access the adapters.

2.5.1 Creating a Configuration for Oracle WebLogic Server Adapter Business Services Engine

To create a configuration for Oracle WebLogic Server Adapter Business Services Engine (BSE) using Application Explorer, you must first define a new configuration. This is a prerequisite for deploying BSE as a Web application in Oracle WebLogic Server.

Defining a New Configuration for BSE

To define a new configuration for BSE:

1. Click the Windows Start menu, select All Programs, Oracle Application Adapters, and then click Application Explorer, as shown in Figure 2–6.

Figure 2–6 Oracle Application Adapters Program Menu

All <u>P</u> rograms 🕨	💼 Oracle Application Adapters	Þ	Application Explorer
		6 44	IBSE Test Servlet
	Zog on		JCA Test Servlet

Application Explorer is displayed.

Alternatively, you can run the **ae.bat** file, which is located in the following directory, to start Application Explorer:

Oracle SOA Suite:

<ORACLE_HOME>\Oracle_
SOA1\soa\thirdparty\ApplicationAdapters\tools\iwae\bin\ae.bat

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\tools\iwae\bin\ae.bat

It is a good practice to create a shortcut for the **ae.bat** file on your desktop.

If you are using a UNIX or Linux platform, then you can start Application Explorer by using the **iwae.sh** file.

Note: Before you run the **iwae.sh** file on UNIX or Linux platforms, the permissions must be changed. For example:

chmod +x iwae.sh

2. Right-click **Configurations** and select **New**, as shown in Figure 2–7.

Figure 2–7 Configurations Node



The New Configuration dialog is displayed, as shown in Figure 2–8.

Figure 2–8 New Configuration Dialog

New Co	nfiguration	×
?	Name:	
BSE_SampleConfig		
	on our our	

3. Enter a name for the new configuration, for example, *BSE_SampleConfig*, and click **OK**.

Note: The name of the BSE configuration that is specified here is used during the BSE deployment process.

Figure 2–9 BSE New Configuration Dialog

New Configuration	×
Service Provider iBSE 👻	
iBSE URL http://localhost:7001/ibse/IBSEServlet	
OK Cancel	

- 4. From the Service Provider list, select **iBSE**.
- **5.** In the iBSE URL field, accept the default URL or replace it with a different URL with the following format:

http://host name:port/ibse/IBSEServlet

where *host name* is the system on which Oracle WebLogic Server resides and *port* is the HTTP port number where Oracle WebLogic Server is listening, as shown in Figure 2–9.

Note: The HTTP port number varies depending on the type of installation (Oracle SOA Suite or Oracle Service Bus).

6. Click OK.

A node representing the new configuration appears beneath the root Configurations node, as shown in Figure 2–10.

Figure 2–10 BSE_SampleConfig Node

S Configurations

2.5.2 Creating a Configuration for Oracle WebLogic Server Adapter J2EE Connector Architecture

To create a configuration for Oracle WebLogic Server Adapter J2EE Connector Architecture (J2CA) using Application Explorer, you must first define a new configuration. This is a prerequisite for deploying J2CA as a Web application in Oracle WebLogic Server.

Defining a New Configuration for J2CA

To define a new configuration for J2CA:

1. Click the Windows Start menu, select All Programs, Oracle Application Adapters, and then click Application Explorer, as shown in Figure 2–11.

Figure 2–11 Oracle Application Adapters Program Menu



Application Explorer is displayed.

Alternatively, you can run the **ae.bat** file, which is located in the following directory, to start Application Explorer:

Oracle SOA Suite:

<ORACLE_HOME>\Oracle_
SOA1\soa\thirdparty\ApplicationAdapters\tools\iwae\bin\ae.bat

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\tools\iwae\bin\ae.bat

It is a good practice to create a shortcut for the **ae.bat** file on your desktop.

If you are using a UNIX or Linux platform, then you can start Application Explorer by using the **iwae.sh** file.

Note: Before you run the **iwae.sh** file on UNIX or Linux platforms, the permissions must be changed. For example:

chmod +x iwae.sh

2. Right-click **Configurations** and select **New**, as shown in Figure 2–12.

Figure 2–12 Configurations Node in Application Explorer



The New Configuration dialog is displayed, as shown in Figure 2–13.

Figure 2–13 J2CA New Configuration Name

New Co	nfiguration	×
?	Name: J2CA_SampleConfig	
	OK Cancel	

3. Enter a name for the new configuration, for example, *J2CA_SampleConfig*, and click **OK**.

Note: The name of the J2CA configuration that is specified here is used during the J2CA deployment process.

Figure 2–14 J2CA New Configuration Dialog

🕅 New Configuration 🛛 🔀
Service Provider JCA 💌
Home C:\oracle\Middleware\home_0309\Oracle_9
OK Cancel

- **4.** From the Service Provider list, select **JCA**, as shown in Figure 2–14.
- 5. Click OK.

A node representing the new configuration appears beneath the root Configurations node, as shown in Figure 2–15.

Figure 2–15 J2CA Sample Configuration Node

S Configurations

2.6 Configuring and Deploying J2CA

After the appropriate settings are configured according to your requirements, you must first deploy the J2CA Connector Application for use with Oracle WebLogic Server using the Oracle WebLogic Server Administration Console. After the J2CA Connector Application is deployed successfully, you can configure and deploy the J2CA Installation Verification Program (IVP). This section describes how to configure settings for the J2CA Connector Application and J2CA Installation Verification Program (IVP). It contains the following topics:

Section 2.6.1, "Configuring Settings for the J2CA Connector Application"

- Section 2.6.2, "Configuring Log File Management for the J2CA Connector Application"
- Section 2.6.3, "Deploying the J2CA Connector Application Using the Oracle WebLogic Server Administration Console"
- Section 2.6.4, "Deploying the J2CA Installation Verification Program (IVP) Using the Oracle WebLogic Server Administration Console"
- Section 2.6.5, "Connecting to a J2CA Configuration Using Application Explorer"

2.6.1 Configuring Settings for the J2CA Connector Application

To configure settings for the J2CA Connector Application:

1. Locate the **ra.xml** file, which is located in the following directory:

<ORACLE_HOME>\soa\thirdparty\ApplicationAdapters\iwafjca.rar\META-INF\ra.xml

- 2. Open the **ra.xml** file in an editor.
- 3. Enter a value for the IWayHome property.

This is the folder where the adapters are installed. For example:

```
<config-property>
    <config-property-name>IWayHome</config-property-name>
    <config-property-type>java.lang.String</config-property-type>
    <config-property-value>C:\oracle\Middleware\home_0309\Oracle_
SOA1\soa\thirdparty\ApplicationAdapters</config-property-value>
</config-property>
```

4. Enter a value for the IWayConfig property.

This is the value that you specified when you created a new J2CA configuration using Application Explorer. For example:

```
<config-property>
<config-property-name>IWayConfig</config-property-name>
<config-property-type>java.lang.String</config-property-type>
<config-property-value>J2CA_SampleConfig</config-property-value>
</config-property>
```

5. Save the **ra.xml** file and exit the editor.

2.6.2 Configuring Log File Management for the J2CA Connector Application

Log file management for the J2CA Connector Application is governed by the configuration of the **ra.xml** file. The properties such as LogLevel, LogSize, and LogCount are the actual parameters that must be configured.

For example:

```
<config-property>
<config-property-name>LogLevel</config-property-name>
<config-property-type>java.lang.String</config-property-type>
<config-property>
<config-property>
<config-property>
<config-property-name>LogSize</config-property-name>
<config-property-type>java.lang.Integer</config-property-type>
<config-property-value>100000</config-property-value>
```

```
<config-property>
<config-property-name>LogCount</config-property-name>
<config-property-type>java.lang.Integer</config-property-type>
<config-property-value>10</config-property-value>
</config-property>
```

LogLevel specifies the level of the log to be shown in the log files. Valid values for LogLevel include DEBUG, INFO, ERROR, FATAL, and WARN. For development and test environments, DEBUG is the preferred log level, which displays all of the log details. For production environments, ERROR is the preferred log level.

LogSize is the parameter that controls the size of the log files. The size should be mentioned in bytes.

LogCount is the parameter that controls the number of log files that are required. The value for this parameter must be specified as an integer. The number of log files that are generated do not exceed the number that is specified and a rollover of the log occurs only within the files that have been generated.

The log files would be created under the <ORACLE_

HOME>\soa\thirdparty\ApplicationAdapters\config\xxxxxx\log folder where xxxxxxx is the name of the J2CA configuration that you created in Application Explorer. Each J2CA configuration in Application Explorer has a corresponding log folder under the named J2CA configuration folder.

Regardless of inbound or outbound processing, all log information is stored in a file that uses the **iwafjcaxxx.log** naming convention. Outbound process logs are updated in the format **iwafjcaxx.log** (for example, **iwafjca00.log**). Inbound process logs are updated in the format **iwafjca15xx.log** (for example, **iwafjca1500.log**).

When an outbound process is deployed, all the current logs are updated in the **iwafjca00.log** file. After this file reaches its maximum log file size, the file is saved as **iwafjca10.log** and **iwafjca00.log** continues to log new activity. If **iwafjca00.log** reaches its maximum log file size for a second time, then this file is saved as **iwafjca10.log** and the previous log file (**iwafjca10.log**) is now saved as **iwafjca20.log**.

All new log files are created in this manner based on the value specified for the LogCount parameter in the **ra.xml** file. After the log files reaches the maximum log file size (LogSize) and number of log files (LogCount), then the logs are overwritten on the log file that was created first. For example, if you set LogSize to 100000 and LogCount to 5, then five separate files with a maximum size of 100000 are created initially as **iwafjca00.log**, **iwafjca10.log**, **iwafjca20.log**, **iwafjca30.log**, and **iwafjca40.log**. When the **iwafjca00.log** file reaches its maximum size, then the contents of the **iwafjca40.log** file would be replaced with **iwafjca30.log** and subsequent replacement with the other log files also occurs. This same behavior is followed with J2CA log file management for inbound processing.

2.6.3 Deploying the J2CA Connector Application Using the Oracle WebLogic Server Administration Console

To deploy the J2CA Connector Application:

- 1. Start the Oracle WebLogic Server for the Oracle WebLogic Server domain that you have configured.
- **2.** Open the Oracle WebLogic Server Administration Console in a Web browser by entering the following URL:

http://host name:port/console

where *host name* is the name of the system where Oracle WebLogic Server is running and *port* is the port for the Oracle WebLogic Server that is running. The default port for the Oracle WebLogic Server is 7001. However, this value can vary between installations.

The Oracle WebLogic Server Administration Console page is displayed, as shown in Figure 2–16.

Figure 2–16 Oracle WebLogic Server Administration Console



3. Log in to the Oracle WebLogic Server Administrative Console using an account that has administrator privileges.

The Oracle WebLogic Server Administration Console home page is displayed, as shown in Figure 2–17.

Figure 2–17 Oracle WebLogic Server Administration Console Home Page

hange Center	🟦 Home Log Out Preferences 🔤 Rea	cord Help	Welcome, weblogic Connected to: base_domain		
liew changes and restarts	Home				
Pending changes exist. They must be activated o take effect.	Home Page				
 Activate Changes 	— Information and Resources				
	Helpful Tools	General Information			
Undo All Changes	 Configure applications 	 Common Administration Task Descriptions 			
omain Structure	 Recent Task Status 	 Read the documentation 			
	 Set your console preferences 				
ase_domain ==Environment	 Oracle Enterprise Manager 				
Deployments BServices	— Domain Configurations				
Security Realms	Domain	Services	Interoperability		
Interoperability Diagnostics	Domain	Messaging	WTC Servers		
Diagnosocs		 JMS Servers 	Jolt Connection Pools		
	Environment	 Store-and-Forward Agents 			
	Servers	 JMS Modules 	Diagnostics		
	Clusters	 Path Services 	Log Files		
	Virtual Hosts	 Bridges 	Diagnostic Modules		
	Migratable Targets	JDBC	Diagnostic Images		
ow do I	Machines	 Data Sources 	Archives		
	Work Managers	 Multi Data Sources 	Context		
Search the configuration	Startup And Shutdown Classes	 Data Source Factories 	SNMP		
 Use the Change Center 		Persistent Stores			

4. In the Domain Structure section in the left pane, click **Deployments**. The Deployments page is displayed, as shown in Figure 2–18.

Figure 2–18 Deployments Page

D	Deployments							
	Install Update Delete Start V Stop V Showing 1 to 24 of 24 Previous Next							
		Name 🗞	State	Health	Туре	Deployment Order		
		₩ AqAdapter	New		Resource Adapter	324		
		€ Cob2bui	New		Enterprise Application	313		

5. Click Install.

The Install Application Assistant page is displayed, as shown in Figure 2–19.

Figure 2–19 Install Application Assistant Page

Back Next Finish	Cancel					
Locate deployment to install and prepare for deployment						
Select the file path that represents the application root directory, archive file, exploded archive directory, or application module descriptor that you want to install. You can also enter the path of the application directory or file in the Path field.						
Note: Only valid file path contains the required dep	s are displayed below. If you cannot find your deployment files, upload your file(s) and/or confirm that your application loyment descriptors.					
Path:	C:\oracle\Middleware\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\iwafjca.rar					
Recently Used Paths:	C:\oracle\Middleware\Oracle_SOA1\soa\thirdparty\ApplicationAdapters					
Current Location:	oracle11g-vm2 \ C: \ oracle \ Middleware \ Oracle_SOA1 \ soa \ thirdparty \ ApplicationAdapters					
uninst config etc						
🔿 🧕 ibse.war (oper) directory)					
💿 🐸 iwafjca.rar (op	pen directory)					
C i iwafjca.war (open directory)						
🔿 🖲 iwafjca.war (o						
~ · ·						

6. Browse to the following directory:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\iwafjca.rar

7. Select the iwafjca.rar option and click Next.

The Choose Targeting Style page is displayed, as shown in Figure 2–20.

Back Nex	t Finish Cancel	
Choose ta	irgeting style	
Targets are	the servers, clusters, and virtual hosts on which this deployment will run. There are several ways you can target an applica	ion.
Instal	this deployment as an application	
he applicati	on and its components will be targeted to the same locations. This is the most common usage.	
O Instal	this deployment as a library	
	braries are deployments that are available for other deployments to share. Libraries should be available on all of the targets icing applications.	running
Back Nex	t Finish Cancel	

Figure 2–20 Choose Targeting Style Page

8. Leave the default **Install this deployment as an application** selected and click **Next**.

The Select Deployment Targets page is displayed, as shown in Figure 2–21.

Figure 2–21 Select Deployment Target Page

Install Application Assistant	
Back Next Finish Cancel	
Select deployment targets	
Select the servers and/or clusters to which you want to deploy this application. (You can red	configure deployment targets later).
Available targets for iwafjca :	
Servers	
□ AdminServer	
₩ <u>soa_server1</u>	
Back Next Finish Cancel	

9. Select soa_server1 and click Next.

The Optional Settings page is displayed, as shown in Figure 2–22.

Install Application Assistant
Back Next Finish Cancel
Optional Settings
You can modify these settings or accept the defaults
General
What do you want to name this deployment?
Name: iwafjca
Source accessibility
How should the source files be made accessible?
O Use the defaults defined by the deployment's targets
Recommended selection.
C Copy this application onto every target for me
During deployment, the files will be copied automatically to the managed servers to which the application is targeted.
$^\circ$ I will make the deployment accessible from the following location
Location: C:\oracle\Middleware\Oracle_SOA1\soa\thirdparty\Applica
Provide the location from where all targets will access this application's files. This is often a shared directory. You must ensure the application files exist in this location and that each target can reach the location.
Back Next Finish Cancel

Figure 2–22 Optional Settings Page

10. Click Next again leaving the default values.

The Summary page is displayed, as shown in Figure 2–23.

Figure 2–23 Summary Page

— Summary ——					
Deployment:	Deployment: C:\oracle\Middleware\Oracle_50A1\soa\thirdparty\ApplicationAdapters\iwafjca.rar				
Name: iwafjca					
Staging mode:	Staging mode: Use the defaults defined by the chosen targets				
Target Summary	Target Summary				
Components 🗞 Targets					
iwafjca.rar soa_server1					

Back Next Finish Cancel

11. Click Finish.

The Settings page for the J2CA (iwafjca) Connector Application is displayed, as shown in Figure 2–24.

0	Deelessee bolee	Carl Carriellan	Constant Sec.	Toursha	Contract.	The states of		Aleks a		
Overview	Deployment Plan	Configuration	Security	Targets	Control	Testing	Monitoring	Notes		
Save										
This page o	lisplays basic inform	ation about this re	source adap	oter deployi	ment.					
Name:	iwa	ifica				The r	iame of this ap	plication dep	oloyment.	More Info
		·					•		•	
Source Pat		oracle\ Middlewar plicationAdapters\			hirdparty\		ath to the sou			nit on the
	μh	plicationAdapters	iwai jua, rar			Admin	IISCRACION DERV	er. More II		
Deploymer	nt Plan: (no	plan specified)					ath to the dep			on
						Admir	histration Serv	er. More Ir	nfo	
						T L	oode that spec	ifies whethe	r an applica	ition's files an
Staging Mo	ode: (no	t specified)				i ne n				
Staging Mo	o de: (no	t specified)				copie	d from a sourc	e on the Adi		
Staging Mo	o de: (no	t specified)				copie Mana		e on the Adi taging area		
Staging Mo Security M		t specified) Only				copie Mana prepa	d from a sourc ged Server's s	e on the Adi taging area Info	during appli	cation

Figure 2–24 J2CA Settings Page

12. Click Save.

The "Settings updated successfully" message is displayed, which indicates a successful deployment, as shown in Figure 2–25.

Figure 2–25 Settings Updated Successfully Message

Messages

Settings updated successfully.

- **13.** In the Domain Structure section in the left pane, click **Deployments**.
- **14.** Navigate through the table that lists all the deployed applications until you find the J2CA (iwafjca) Connector Application, as shown in Figure 2–26.

Deployments							
Install Update Delete Showing 1 to 25 of 25 Previous Next							
	Name 🚕	Servicing all requests Servicing only administration requests	State	Health	Туре	Deployment Order	
	👼 AqAdapter		New		Resource Adapter	324	
	🗈 📑 b2bui		New		Enterprise 313		
			New		Enterprise Application	315	
			New		Resource Adapter	322	
	Carlon DoTaskFlow				Enterprise Application	314	
	OMS Application (11.1.1.0)			🖋 ок	Web Application	5	
	🛨 📑em		Active	🖋 ок	Enterprise Application	400	
	👼 File Adapter		New		Resource Adapter	321	
	E EFMW Welcome Page Application (11.1.0.0.0)			🖋 ок	Enterprise Application	5	
	👼 FtpAdapter		New		Resource Adapter	325	
V	👼 iwafjca		Installed		Resource Adapter	100	
	🗑 JmsAdapter		New		Resource Adapter	323	

Figure 2–26 Deployments Page

- **15.** Select the **iwafjca** option.
- **16.** Click the **Start** submenu (down arrow) and select **Servicing all requests**.

The Start Application Assistant page is displayed, as shown in Figure 2–27.

Figure 2–27 Start Application Assistant Page

Start Application Assistant
Yes No
Start Deployments
You have selected the following deployments to be started. Click 'Yes' to continue, or 'No' to cancel. • iwafjca
Yes No

17. Click **Yes** to start the selected deployment.

You are now ready to deploy the J2CA Installation Verification Program (IVP).

2.6.4 Deploying the J2CA Installation Verification Program (IVP) Using the Oracle WebLogic Server Administration Console

The J2CA Installation Verification Program (IVP) must be deployed and started after the J2CA Connector Application. It is better to have the deployment order also changed when deploying the J2CA IVP. For example, if the J2CA Connector Application has a deployment order of 100, then the J2CA IVP can have a deployment order of 101.

To deploy the J2CA IVP:

- **1.** Start the Oracle WebLogic Server for the Oracle WebLogic Server domain that you have configured.
- **2.** Open the Oracle WebLogic Server Administration Console in a Web browser by entering the following URL:

http://host name:port/console

where *host name* is the name of the system where Oracle WebLogic Server is running and *port* is the port for the Oracle WebLogic Server that is running. The default port for the Oracle WebLogic Server is 7001. However, this value can vary between installations.

The Oracle WebLogic Server Administration Console page is displayed, as shown in Figure 2–28.

Figure 2–28 Oracle WebLogic Server Administration Console

ORACLE WebLogic Server® 11g Administration Console		
		Welcome
and a second descent second second descent descent	Log in to work with the	e WebLogic Server domain
	Username:	weblogic
Second State Stat	Password:	•••••
		Log In

3. Log in to the Oracle WebLogic Server Administrative Console using an account that has administrator privileges.

The Oracle WebLogic Server Administration Console home page is displayed, as shown in Figure 2–29.

Figure 2–29 Oracle WebLogic Server Administration Console Home Page

Change Center	🔒 Home Log Out Preferences 🔤 Rei	cord Help	Welcome, weblogic Connected to: base_domai	
View changes and restarts	Home			
Pending changes exist. They must be activated to take effect.	Home Page			
Activate Changes	- Information and Resources			
	Helpful Tools	lpful Tools General Information		
Undo All Changes	Configure applications Common Administration Task Descriptions			
	Recent Task Status Read the documentation			
Domain Structure	 Set your console preferences 	Set your console preferences Ask a question on My Oracle Support		
ase_domain Environment	Oracle Enterprise Manager Oracle Guardian Overview			
Deployments Services	- Domain Configurations			
Security Realms	Domain	Services	Interoperability	
Interoperability Diagnostics	Domain	Messaging	WTC Servers	
En Diagnostics		 JMS Servers 	 Jolt Connection Pools 	
	Environment	 Store-and-Forward Agents 		
	Servers	 JMS Modules 	Diagnostics	
	Clusters	 Path Services 	Log Files	
	Virtual Hosts	 Bridges 	 Diagnostic Modules 	
	Migratable Targets	JDBC	 Diagnostic Images 	
How do I	Machines	 Data Sources 	Archives	
	Work Managers	 Multi Data Sources 	Context	
 Search the configuration 	Startup And Shutdown Classes	 Data Source Factories 	SNMP	
 Use the Change Center 		Persistent Stores		

4. In the Domain Structure section in the left pane, click **Deployments**.

The Deployments page is displayed, as shown in Figure 2–30.

Figure 2–30 Deployments Page

Install Update Delete Start * Stop * Showing 1 to 24 of 24 Previous Next					
	Name 🗞	State	Health	Туре	Deployment Order
		New		Resource Adapter	324
	. € Cob2bui	New		Enterprise Application	313

5. Click Install.

Deployments

The Install Application Assistant page is displayed, as shown in Figure 2–31.

Figure 2–31 Install Application Assistant

	Jack Next Finish Cancel				
Locate deployment to install and prepare for deployment					
Select the file path that represents the application root directory, archive file, exploded archive directory, or application module descriptor that you want to install. You can also enter the path of the application directory or file in the Path field.					
Note: Only valid file path: contains the required dep	s are displayed below. If you cannot find your deployment files, upload your file(s) and/or confirm that your application loyment descriptors.				
Path:	C:\oracle\Middleware\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\iwafjca.war				
Recently Used Paths:	C:\oracle\Middleware\Oracle_SOA1\soa\thirdparty\ApplicationAdapters				
urrent Location:	oracle11g-vm2 \ C: \ oracle \ Middleware \ Oracle_SOA1 \ soa \ thirdparty \ ApplicationAdapters				
🗀 uninst					
_	directory ()				
C (a) ibse.war (open directory)					
🔿 🏁 implies you (as					
2000 TA	An Anna				
💿 🧕 jwafjca.war (o	pen directory)				
2000 TA	pen directory)				

6. Browse to the following directory:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\iwafjca.war

7. Select the iwafjca.war option, and click Next.

The Choose Targeting Style page is displayed, as shown in Figure 2–32.

Back Next	Einish Cancel
Choose targe	ting style
Targets are the	servers, clusters, and virtual hosts on which this deployment will run. There are several ways you can target an application.
Install this	s deployment as an application
he application a	nd its components will be targeted to the same locations. This is the most common usage.
🔿 Install this	s deployment as a library
pplication librari neir referencing	es are deployments that are available for other deployments to share. Libraries should be available on all of the targets running applications.

Figure 2–32 Choose Targeting Style Page

8. Leave the default **Install this deployment as an application** selected and click **Next**.

The Select Deployment Targets page is displayed, as shown in Figure 2–33.



Install Application Assistant				
Back Next Finish Cancel				
Select deployment targets				
Select the servers and/or clusters to which you want to deploy this application. (You can reconfigure deployment targets later).				
Available targets for iwafjca :				
Servers AdminServer soa_server1				
Back Next Finish Cancel				

9. Select soa_server1 and click Next.

The Optional Settings page is displayed, as shown in Figure 2–34.

Install Application Assis	tant			
Back Next Finish	Cancel			
Optional Settings	Optional Settings			
You can modify these settings or accept the defaults				
— General ———				
What do you want to nam	e this deployment?			
Name: iwafjca	atest			
Security				
What security model do y	ou want to use with this application?			
\odot DD Only: Use only roles and policies that are defined in the deployment descriptors.				
C Custom Roles: Use defined in the deployn	e roles that are defined in the Administration Console; use policies that are nent descriptor.			
m O Custom Roles and Policies: Use only roles and policies that are defined in the Administration Console.				
\cap Advanced: Use a custom model that you have configured on the realm's configuration page.				
Source accessibility				

Figure 2–34 Optional Settings Page

10. In the Name field, enter the following:

iwafjcatest

11. Click **Next** and leave the remaining default values unchanged.

The Summary page is displayed, as shown in Figure 2–35.

Figure 2–35 Summary Page

— Summary ——			
Deployment:	$\label{eq:c:oracle} \end{tabular} C:\cale \end{tabular} in \end{tabular} C:\cale \end{tabular} in \end{tabular} and \e$		
Name:	iwafjcatest		
Staging mode:	Use the defaults defined by the chosen targets		
Security Model:	DDOnly: Use only roles and policies that are defined in the deployment descriptors.		
Target Summary			
Components 🗞		Targets	
iwafjca		soa_server1	

Back Next Finish Cancel

12. Click Finish.

The Settings page for the J2CA Installation Verification Program (IVP) is displayed, as shown in Figure 2–36.

comys for	iwafjcatest								
Overview	Deployment Plan	Configuration	Security	Targets	Control	Testing	Monitoring	Notes	
Save									
Use this pa	ge to view the insta	lled configuration	of a Web Ap	plication.					
Name:	iwa	fjcatest				The n	ame of this ap	plication deploym	ent. More Info
Context Ro	oot: iwa	fjca					pecific path at vlet. More In		pplication is found
Path:		oracle\ Middlewar IlicationAdapters\			:hirdparty\			urce of the deploy- er. More Info	
Deploymer	nt Plan: (no	plan specified)						oloyment plan doc er. More Info	ument on
Staging Mo	ode: (no	t specified)				copie Mana	d from a sourc	e on the Administ taging area during	application's files a ration Server to th g application

Figure 2–36 J2CA Settings Page

13. Click Save.

The "Settings updated successfully" message is displayed, which indicates a successful deployment, as shown in Figure 2–37.

Figure 2–37 Settings Updated Successfully Message

Messages Settings updated successfully.

- 14. In the Domain Structure section in the left pane, click Deployments.
- **15.** Navigate through the table that lists all the deployed applications until you find the J2CA (iwafjcatest) Installation Verification Program (IVP), as shown in Figure 2–38.

.

.

Deplo	yments						
Insta	I Update Delete Start ∽	Stop 🗸			2	Showing 1 to 26 of	26 Previous Next
	Name	ng all requests ng only administration requests		State	Health	Туре	Deployment Order
	👼 AqAdapter			New		Resource Adapter	324
	E Eb2bui			New		Enterprise Application	313
	E Composer			New		Enterprise Application	315
	DbAdapter			New		Resource Adapter	322
	EDefaultToDoTaskFlow			New		Enterprise Application	314
	B ODMS Application (11.1.1.1.0)			Active	🖋 ок	Web Application	5
	E Eem			Active	🖋 ок	Enterprise Application	400
	🗖 👼 FileAdapter			New		Resource Adapter	321
		oplication (11.1.0.0.0)		Active	🖋 ок	Enterprise Application	5
	👼 FtpAdapter			New		Resource Adapter	325
	👼 iwafica			New		Resource Adapter	100
V	🗉 🦲 iwafjcatest			distribute Initializing		Web Application	100
	🗑 JmsAdapter			New		Resource Adapter	323

Figure 2–38 Deployments Page

16. Select the **iwafjcatest** option.

17. Click the Start submenu (down arrow) and select Servicing all requests.

The Start Application Assistant page is displayed, as shown in Figure 2–39.

Figure 2–39 Start Application Assistant

Start Application Assistant
Yes No
Start Deployments
You have selected the following deployments to be started. Click 'Yes' to continue, or 'No' to cancel. iwafjcatest
Yes No

18. Click **Yes** to start the selected deployment.

The J2CA (iwafjcatest) Installation Verification Program (IVP) has been deployed successfully to Oracle WebLogic Server.

After the adapter targets are created using Application Explorer, you can select these targets and test outbound connections from the Oracle J2CA Test Servlet.

Note: Oracle WebLogic Server must be restarted after adapter targets are created using Application Explorer.

2.6.5 Connecting to a J2CA Configuration Using Application Explorer

To connect to a new J2CA configuration:

- 1. Right-click the configuration to which you want to connect, for example, J2CA_ SampleConfig.
- 2. Select Connect

Nodes appear for Adapters and Events.

Note: You can configure events using a J2CA configuration only.

An example of a J2CA configuration named *J2CA_SampleConfig* is displayed, as shown in Figure 2–40.

Figure 2–40 J2CA Sample Configuration Node



- Use the Adapters folder to create inbound interaction with an adapter, for example, Siebel. For example, you can use the Siebel node in the Adapters folder to configure a service that updates a Siebel system.
- Use the Events folder to configure listeners that listen for events in Siebel.

After completing the postinstallation tasks, you can define new targets for Oracle Fusion Middleware Application Adapters. For more information about configuring targets, see the corresponding user guide for your adapter.

2.7 Configuring and Deploying Business Services Engine

After the appropriate settings are configured according to your requirements, you must deploy BSE for use with Oracle WebLogic Server using the Oracle WebLogic Server Administration Console. This section describes how to configure settings for Oracle WebLogic Server Adapter Business Services Engine (BSE). It contains the following topics:

- Section 2.7.1, "Configuring Settings for Oracle WebLogic Server Adapter Business Services Engine (BSE)"
- Section 2.7.2, "Deploying Oracle WebLogic Server Adapter Business Services Engine (BSE) Using the Oracle WebLogic Server Administration Console"
- Section 2.7.3, "Connecting to a BSE Configuration Using Application Explorer"

2.7.1 Configuring Settings for Oracle WebLogic Server Adapter Business Services Engine (BSE)

To configure settings for BSE:

1. Locate the **web.xml** file, which is located in the following directory:

```
<ORACLE_HOME>\Oracle_
SOA1\soa\thirdparty\ApplicationAdapters\ibse.war\WEB-INF\web.xml
```

- 2. Open the **web.xml** file in an editor.
- 3. Enter a value for the ibseroot parameter.

This is the folder where the BSE files are stored in subdirectories for each adapter. For example:

```
<context-param>
<param-name>ibseroot</param-name>
<param-value>C:\oracle\Middleware\home_0309\Oracle_
SOA1\soa\thirdparty\ApplicationAdapters\ibse.war</param-value>
<description>ibse root directory</description>
</context-param>
```

4. Enter a value for the iway.home parameter.

This is the folder where adapters are installed. For example:

```
<context-param>
<param-name>iway.home</param-name>
<param-value>C:\oracle\Middleware\home_0309\Oracle_
SOA1\soa\thirdparty\ApplicationAdapters</param-value>
<description>license file location</description>
</context-param>
```

5. Enter a value for the iway.config parameter.

This is the value that you specified when you created a new BSE configuration using Application Explorer. For example:

```
<context-param>
<param-name>iway.config</param-name>
<param-value>BSE_SampleConfig</param-value>
<description>Base Configuration</description>
</context-param>
```

6. Save the **web.xml** file and exit the editor.

2.7.2 Deploying Oracle WebLogic Server Adapter Business Services Engine (BSE) Using the Oracle WebLogic Server Administration Console

To deploy BSE:

- 1. Start the Oracle WebLogic Server for the Oracle WebLogic Server domain that you have configured.
- **2.** Open the Oracle WebLogic Server Administration Console in a Web browser by entering the following URL:

http://host name:port/console

where *host name* is the name of the system where Oracle WebLogic Server is running and *port* is the port for the Oracle WebLogic Server that is running. The default port for the Oracle WebLogic Server is 7001. However, this value can vary between installations.

The Oracle WebLogic Server Administration Console page is displayed, as shown in Figure 2–41.



Figure 2–41 Oracle WebLogic Server Administration Console

3. Log in to the Oracle WebLogic Server Administrative Console using an account that has administrator privileges.

The Oracle WebLogic Server Administration Console home page is displayed, as shown in Figure 2–42.



hange Center	🖻 Home Log Out Preferences 🔤 Red	cord Help	Welcome, weblogic Connected to: base_dom				
iew changes and restarts	Home						
ending changes exist. They must be activated o take effect.	Home Page						
Activate Changes	Information and Resources						
	Helpful Tools	General Information					
Undo All Changes	 Configure applications 	 Common Administration Task Descript 	tions				
omain Structure	 Recent Task Status 	 Read the documentation 					
ase domain	 Set your console preferences 	 Ask a question on My Oracle Support 					
B-Environment	 Oracle Enterprise Manager 	 Oracle Guardian Overview 	e Guardian Overview				
Deployments B-Services	- Domain Configurations						
Security Realms	Domain	Services	Interoperability				
P-Interoperability P-Diagnostics	Domain	 Messaging 	WTC Servers				
2"Diagnostics		 JMS Servers 	Jolt Connection Pools				
	Environment	 Store-and-Forward Agents 					
	Servers	 JMS Modules 	Diagnostics				
	Clusters	 Path Services 	Log Files				
	Virtual Hosts	 Bridges 	Diagnostic Modules				
	Migratable Targets	JDBC	 Diagnostic Images 				
pw do I	Machines	 Data Sources 	Archives				
	Work Managers	 Multi Data Sources 	Context				
Search the configuration	Startup And Shutdown Classes	Data Source Factories	 SNMP 				

4. In the Domain Structure section in the left pane, click **Deployments**. The Deployments page is displayed, as shown in Figure 2–43.

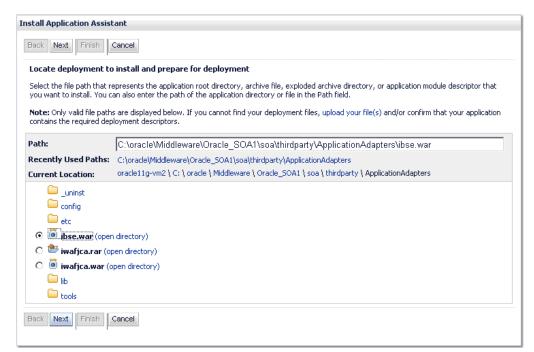
Figure 2–43 Deployments Page

Deployments Install Update Delete Start v Stop v Showing 1 to 24 of 24 Previous Nex					
	Name 🗞	State	Health	Туре	Deployment Order
		New		Resource Adapter	324
	€ 📑 b2bui	New		Enterprise Application	313

5. Click Install.

The Install Application Assistant page is displayed, as shown in Figure 2–44.

Figure 2–44 Install Application Assistant



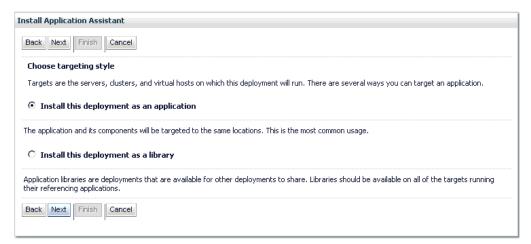
6. Browse to the following directory:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\ibse.war

7. Select the **ibse.war** option and click **Next**.

The Choose Targeting Style page is displayed, as shown in Figure 2–45.

Figure 2–45 Choose Targeting Style Page



8. Leave the default **Install this deployment as an application** selected and click **Next**.

The Deployment Target page is displayed, as shown in Figure 2–46.

stall Application Assistant		
Back Next Finish Cancel		
Select deployment targets		
Select the servers and/or clusters to whi	ch you want to deploy this applica	ation. (You can reconfigure deployment targets later).
vailable targets for iwafjca :		
Servers		
AdminServer		
Soa server1		
✓ soa_server1		
✓ soa server1		

Figure 2–46 Deployment Target Page

9. Select soa_server1 and click Next.

The Optional Settings page is displayed, as shown in Figure 2–47.

Figure 2–47 Optional Settings Page

Install Applica	ation Assistant
Back Next	Finish Cancel
Optional Se	ettings
You can mod	lify these settings or accept the defaults
— General –	
What do you	want to name this deployment?
Name:	ibse
- Security -	
What security	model do you want to use with this application?
O Custom	r: Use only roles and policies that are defined in the deployment descriptors. Roles: Use roles that are defined in the Administration Console; use policies that are ne deployment descriptor.
C Custom Console.	Roles and Policies: Use only roles and policies that are defined in the Administration
C Advanc	ed: Use a custom model that you have configured on the realm's configuration page.
— Source ac	cessibility

10. Click **Next** and leave the remaining default values unchanged.

The Summary page is displayed, as shown in Figure 2–48.

Staging mode: Use the defaults defined by the chosen targets				
Security Model: DDOnly: Use only roles and policies that are defined in the deployment descriptors.				
Target Summary				
Components 🚕		Targets		

Figure 2–48 Summary Page

11. Click Finish.

The Settings page for the BSE (ibse) Application is displayed, as shown in Figure 2–49.

Figure 2–49 BSE Settings Page

ettings for	ibse							
Overview	Deployment Plan	Configuration	Security	Targets	Control	Testing	Monitoring	Notes
Save								
Use this pa	ge to view the instal	led configuration (of a Web Ap	plication.				
Name:	ibse	9				The r	name of this ap	oplication deployment. More Info
Context Ro	oot: ibse	•					pecific path at vlet. More In	t which this web application is found nfo
Path:	th: C:\ oracle\ Middleware\ Oracle_SOA1\ soa\ thirdparty\ ApplicationAdapters\ ibse. war		The path to the source of the deployable unit on the Administration Server. More Info					
Deploymer	n t Plan: (no	(no plan specified)				The path to the deployment plan document on Administration Server. More Info		
Staging Mo	o de: (no	t specified)				copie Mana	d from a sourc	cifies whether an application's files a ce on the Administration Server to th staging area during application = Info

12. Click Save.

The "Settings updated successfully" message is displayed, which indicates a successful deployment, as shown in Figure 2–50.

Figure 2–50 Settings Updated Successfully Message



- **13.** In the Domain Structure section in the left pane, click **Deployments**.
- **14.** Navigate through the table that lists all the deployed applications until you find the BSE (ibse) Application, as shown in Figure 2–51.

eplo	yments					
Insta	II Update Delete	Start V Stop V			Showing 1 to 27	of 27 Previous N
	Name 🚕	Servicing all requests Servicing only administration requests	State	Health	Туре	Deployment Order
			New		Resource Adapter	324
	🗉 📑 b2bui		New		Enterprise Application	313
			New		Enterprise Application	315
		New		Resource Adapter	322	
		New		Enterprise Application	314	
		Active	🖋 ок	Web Application	5	
	🕀 📑 em	Active	🖋 ок	Enterprise Application	400	
	👼 FileAdapter	New		Resource Adapter	321	
		Page Application (11.1.0.0.0)	Active	🖋 ок	Enterprise Application	5
			New		Resource Adapter	325
~	🕂 🦲ibse		New		Web Application	100
	👼 iwafjca		New		Resource Adapter	100
	표 🧿 iwafjcatest		New		Web Application	100
				-		-

Figure 2–51 Deployments Page

- **15.** Select the **ibse** option.
- 16. Click the Start submenu (down arrow) and select Servicing all requests.

The Start Application Assistant page is displayed, as shown in Figure 2–52.

Figure 2–52 Start Application Assistant

Start Application Assistant	
Yes No	
Start Deployments	
You have selected the following deployments to be started. Click 'Yes' to continue, or 'No' to cancel. • ibse	
Yes No	

17. Click Yes to start the selected deployment.

The BSE (ibse) Application has been deployed successfully to Oracle WebLogic Server.

2.7.3 Connecting to a BSE Configuration Using Application Explorer

To connect to a new BSE configuration:

- 1. Right-click the configuration to which you want to connect, for example, BSE_SampleConfig.
- 2. Select Connect.

Nodes appear for Adapters and Business Services (also known as Web services). The Business Services node is only available for BSE configurations.

Events are not applicable when using a BSE configuration. You can configure events using a J2CA configuration only.

An example of a BSE configuration named *BSE_SampleConfig* is displayed, as shown in Figure 2–53.

Figure 2–53 BSE Sample Configuration Node



- Use the Adapters folder to create inbound interaction with an adapter, for example, Siebel. For example, you can use the Siebel node in the Adapters folder to configure a service that updates Siebel.
- Use the Business Services folder (available for BSE configurations only) to test Web services created in the Adapters folder. You can also control security settings for the Web services by using the security features of the Business Services folder.

After completing the postinstallation tasks, you can define new targets for Oracle Fusion Middleware Application Adapters. For more information about configuring targets, see the corresponding user guide for your adapter.

2.8 Postinstallation Tasks

Perform the following postinstallation configuration tasks for packaged application adapters:

- Section 2.8.1, "List of Enterprise Information System Library Files"
- Section 2.8.2, "Copying the Enterprise Information System Library Files"
- Section 2.8.3, "Directory Structure"
- Section 2.8.4, "Configuring the Database Repository"

If you installed the Oracle WebLogic Server Application Adapter for PeopleSoft, then see Appendix A, "Configuring Oracle Fusion Middleware Application Adapter for PeopleSoft". If you installed the Oracle WebLogic Server Application Adapter for J.D. Edwards OneWorld, then see Appendix B, "Configuring Oracle Fusion Middleware Application Adapter for J.D. Edwards OneWorld". If you installed the Oracle WebLogic Server Application Adapter for SAP R/3 (SAP JCo 3.x), then see Appendix C, "Configuring Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 3.x)".

Note: The directory paths mentioned in this guide follow Windows conventions. For example, back slashes $(\)$ are used.

If you are using an Oracle WebLogic Server Application Adapter on UNIX, then modify the directory paths as required.

2.8.1 List of Enterprise Information System Library Files

The following section lists the required Enterprise Information System (EIS) library files for the following adapters:

- Oracle Fusion Middleware Application Adapter for J.D. Edwards OneWorld
- Oracle Fusion Middleware Application Adapter for PeopleSoft
- Oracle Fusion Middleware Application Adapter for Siebel
- Oracle Fusion Middleware Application Adapter for SAP R/3 (Using SAP JCo 2.1.x)
- Oracle Fusion Middleware Application Adapter for SAP R/3 (Using SAP JCo 3.x)

Oracle Fusion Middleware Application Adapter for J.D. Edwards OneWorld

This section lists the library files that are required by the Oracle Fusion Middleware Application Adapter for J.D. Edwards OneWorld.

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.

On the J.D. Edwards OneWorld system, these library files are located in the following folder:

\\system\classes

For XE (B7333):

- Connector.jar
- Kernel.jar

For ERP 8.0 (B7334):

- Connector.jar
- Kernel.jar

For EnterpriseOne 8.9 (B9):

- Connector.jar
- Kernel.jar
- jdeutil.jar
- log4j.jar

For EnterpriseOne 8.10:

- Connector.jar
- Kernel.jar
- jdeutil.jar
- log4j.jar

For EnterpriseOne 8.11 (SP1 and Tools Release 8.95):

- Base_JAR.jar
- Connector.jar
- JdeNet_JAR.jar
- log4j.jar
- System_JAR.jar

For EnterpriseOne 8.12 (Tools Release 8.96.2.0):

- Connector.jar
- log4j.jar
- Base_JAR.jar
- EventProcesser_EJB.jar
- EventProcesser_JAR.jar
- JdeNet_JAR.jar
- System_JAR.jar

For EnterpriseOne 9.0 (Tools Release 8.98.1.3):

- Connector.jar
- log4j.jar
- Base_JAR.jar
- EventProcesser_EJB.jar
- EventProcesser_JAR.jar
- JdeNet_JAR.jar
- System_JAR.jar
- commons-httpclinet-3.0.jar
- jmxri.jar
- ManagementAgent_JAR.jar

The corresponding library files for J.D. Edwards OneWorld must be copied to the specific <ORACLE_HOME> or <OSB_HOME> application adapters and domain lib directories. For more information, see "Copying the Enterprise Information System Library Files" on page 2-39.

Oracle Fusion Middleware Application Adapter for PeopleSoft

This section lists the library files that are required by the Oracle Fusion Middleware Application 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 PeopleTools 8.1*x*. This file belongs in the *PeopleSoft_home_directory*/web/jmac directory.

PeopleSoft Generated Java APIs

For more information on generating the Component Interface Java APIs, see the Oracle Fusion Middleware Application Adapter for PeopleSoft User's Guide for Oracle WebLogic Server.

The library files for the PeopleSoft adapter must be copied to the specific <ORACLE_ HOME> or <OSB_HOME> application adapters and domain lib directories. For more information, see "Copying the Enterprise Information System Library Files" on page 2-39.

Oracle Fusion Middleware Application Adapter for Siebel

This section lists the library files that are required by the Oracle Fusion Middleware Application 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:

On the Siebel system, these library files are located in the following folder:

<siebel home>\siebsrvr\CLASSES
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
- SiebelJI.jar

For Siebel 7.7 - 8.0:

- SiebelJI_enu.jar
- Siebel.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

For non-English installations, the last three letters (_enu) vary.

If you are using the MQ Series as a transport, then you must use com.ibm.mq.jar file.

For any additional steps required for Siebel, see the Oracle Fusion Middleware Application Adapter for Siebel User's Guide for Oracle WebLogic Server.

The corresponding library files for Siebel must be copied to the specific <ORACLE_ HOME> or <OSB_HOME> application adapters and domain lib directories. For more information, see "Copying the Enterprise Information System Library Files" on page 2-39.

Oracle Fusion Middleware Application Adapter for SAP R/3 (Using SAP JCo 2.1.x)

This section lists the library files that are required by the Oracle Fusion Middleware Application Adapter for SAP R/3 (Using SAP JCo 2.1.x).

Windows:

- SAP Java Connector (SAP JCo) Version 2.1.9
 - sapjco.jar
 - sapjcorfc.dll
- librfc32.dll

For more information about the current set of SAP connectors, see:

http://service.sap.com/connectors

A valid SAP service ID is required to access this file. Follow the instructions provided on the 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 run-time files. The file names can vary by operating system, but typically are contained in the root of the archive.

Linux/Solaris/OS400:

- sapjco.jar
- libsapjcorfc.so
- librfccm.so

HP-UX:

- sapjco.jar
- libsapjcorfc.sl
- librfccm.sl

AIX:

- sapjco.jar
- libsapjcorfc.so
- librfccm.o

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

UNIX:

LD_LIBRARY_PATH

Oracle Fusion Middleware Application Adapter for SAP R/3 (Using SAP JCo 3.x)

This section lists the library files that are required by the Oracle Fusion Middleware Application Adapter for SAP R/3 (Using SAP JCo 3.x).

Windows:

- SAP Java Connector (SAP JCo) Version 3.0.5
 - sapjco3.jar
 - sapjco3.dll

Linux/Solaris/OS400:

- sapjco3.jar
- libsapjco3.so

HP-UX:

- sapjco3.jar
- libsapjco3.sl

AIX:

- sapjco3.jar
- libsapjco3.so

For more information about configuring the Oracle Fusion Middleware Application Adapter for SAP R/3 using SAP JCo 3.x, see Appendix C, "Configuring Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 3.x)".

2.8.2 Copying the Enterprise Information System Library Files

This section describes the specific directories where Enterprise Information System (EIS) library files must be copied for the following adapters:

- Oracle Fusion Middleware Application Adapter for J.D. Edwards OneWorld
- Oracle Fusion Middleware Application Adapter for PeopleSoft
- Oracle Fusion Middleware Application Adapter for Siebel

Copy the EIS library files for these adapters into the following directories:

For Oracle SOA Suite:

- <ORACLE_HOME>\Oracle_ SOA1\soa\thirdparty\ApplicationAdapters\lib
- *<ORACLE_HOME>*\user_projects\domains\base_domain\lib

For Oracle Service Bus:

- <OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\lib
- <OSB_HOME>\user_projects\domains\base_domain\lib

The list of specific EIS library files are provided in the following sections for each EIS, depending on the EIS version.

Note: You must only use one version of an EIS at a given point in time. Do not use two versions of an EIS library file simultaneously. Oracle Fusion Middleware Application Adapter for J.D. Edwards OneWorld, Oracle Fusion Middleware Application Adapter for PeopleSoft, and Oracle Fusion Middleware Application Adapter for Siebel can be used to connect to only one version of the EIS at a given point in time.

Oracle Fusion Middleware Application Adapter for SAP R/3 (Using SAP JCo 2.1.x)

This section describes the specific directories where Enterprise Information System (EIS) library files must be copied for the Oracle Fusion Middleware Application Adapter for SAP R/3 (Using SAP JCo 2.1.x).

Windows:

Copy the sapjco.jar and sapjcorfc.dll files to the following directories:

For Oracle SOA Suite:

- *<ORACLE_HOME>*\Oracle_ SOA1\soa\thirdparty\ApplicationAdapters\lib
- <ORACLE_HOME>\user_projects\domains\base_domain\lib

For Oracle Service Bus:

- <OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\lib
- <OSB_HOME>\user_projects\domains\base_domain\lib

Note: You must also add the sapjco.jar and sapjcorfc.dll files to the Oracle WebLogic Server classpath

Copy the librfc32.dll file to the following directory:

\WINDOWS\system32

Linux/Solaris/OS400:

Copy the sapjco.jar, libsapjcorfc.so, and librfccm.so files to the following directories:

For Oracle SOA Suite:

- *<ORACLE_HOME>/Oracle_* SOA1/soa/thirdparty/ApplicationAdapters/lib
- <ORACLE_HOME>/user_projects/domains/base_domain/lib

For Oracle Service Bus:

- <OSB_HOME>/Oracle_OSB1/3rdparty/ApplicationAdapters/lib
- <OSB_HOME>/user_projects/domains/base_domain/lib

HP-UX:

Copy the sapjco.jar, libsapjcorfc.sl, and librfccm.sl files to the following directories:

For Oracle SOA Suite:

- *<ORACLE_HOME>/Oracle_* SOA1/soa/thirdparty/ApplicationAdapters/lib
- <ORACLE_HOME>/user_projects/domains/base_domain/lib

For Oracle Service Bus:

- <OSB_HOME>/Oracle_OSB1/3rdparty/ApplicationAdapters/lib
- <OSB_HOME>/user_projects/domains/base_domain/lib

AIX:

Copy the sapjco.jar, libsapjcorfc.so, and librfccm.so files to the following directories:

For Oracle SOA Suite:

- <ORACLE_HOME>/Oracle_ SOA1/soa/thirdparty/ApplicationAdapters/lib
- <ORACLE_HOME>/user_projects/domains/base_domain/lib

For Oracle Service Bus:

- <OSB_HOME>/Oracle_OSB1/3rdparty/ApplicationAdapters/lib
- <OSB_HOME>/user_projects/domains/base_domain/lib

Solaris:

The following are the two supported methods for specifying the SAP JCo library files:

 Copy the SAP JCo files (sapjco.jar, librfccm.so, and libsapjcorfc.so) to JDK folders such as *jdk/jre/lib/sparc/server*

Or:

Copy the SAP JCo files to /usr/j2sdkxxxxx/jre/lib/sparcv9/server

Where xxxxx represents the JDK version

Alternatively, you may add the path to these files to your environment variable definition using the Application Server Control console. For more information about Application Server administration options, see the Oracle WebLogic Server Administrator's Guide.

For any additional steps required, see the Oracle Fusion Middleware Application Adapter for SAP R/3 User's Guide for Oracle WebLogic Server.

Oracle Fusion Middleware Application Adapter for SAP R/3 (Using SAP JCo 3.x)

This section describes the specific directories where Enterprise Information System (EIS) library files must be copied for the Oracle Fusion Middleware Application Adapter for SAP R/3 (Using SAP JCo 3.x).

Windows:

Copy the sapjco3.jar and sapjco3.dll files to the following directories:

For Oracle SOA Suite:

- <ORACLE_HOME>\Oracle_ SOA1\soa\thirdparty\ApplicationAdapters\lib
- <ORACLE_HOME>\user_projects\domains\base_domain\lib

For Oracle Service Bus:

- <OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\lib
- *<OSB_HOME>*\user_projects\domains\base_domain\lib

Note: You must also add the sapjco3.jar and sapjco3.dll files to the Oracle WebLogic Server classpath

Linux/Solaris/OS400:

Copy the sapjco3.jar and libsapjcorfc.so files to the following directories:

For Oracle SOA Suite:

- <ORACLE_HOME>/Oracle_ SOA1/soa/thirdparty/ApplicationAdapters/lib
- *<ORACLE_HOME>/user_projects/domains/base_domain/lib*

For Oracle Service Bus:

- <OSB_HOME>/Oracle_OSB1/3rdparty/ApplicationAdapters/lib
- <OSB_HOME>/user_projects/domains/base_domain/lib

HP-UX:

Copy the sapjco3.jar and libsapjco3.sl and files to the following directories: For Oracle SOA Suite:

- <ORACLE_HOME>/Oracle_ SOA1/soa/thirdparty/ApplicationAdapters/lib
- <ORACLE_HOME>/user_projects/domains/base_domain/lib

For Oracle Service Bus:

- <OSB_HOME>/Oracle_OSB1/3rdparty/ApplicationAdapters/lib
- <OSB_HOME>/user_projects/domains/base_domain/lib

AIX:

Copy the sapjco3.jar and libsapjco3.so files to the following directories: For Oracle SOA Suite:

- <ORACLE_HOME>/Oracle_ SOA1/soa/thirdparty/ApplicationAdapters/lib
- /user_projects/domains/base_domain/lib

For Oracle Service Bus:

- <OSB_HOME>/Oracle_OSB1/3rdparty/ApplicationAdapters/lib
- <OSB_HOME>/user_projects/domains/base_domain/lib

Solaris:

The following are the two supported methods for specifying the SAP JCo library files:

 Copy the SAP JCo files (sapjco3.jar and libsapjco3.so) to JDK folders such as jdk/jre/lib/sparc/server

Or:

Copy the SAP JCo files to /usr/j2sdkxxxxx/jre/lib/sparcv9/server

Where xxxxx represents the JDK version

Alternatively, you may add the path to these files to your environment variable definition using the Application Server Control console. For more information about Application Server administration options, see the Oracle WebLogic Server Administrator's Guide.

For more information about configuring the Oracle Fusion Middleware Application Adapter for SAP R/3 using SAP JCo 3.x, see Appendix C, "Configuring Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 3.x)".

2.8.3 Directory Structure

The packaged application adapters are installed into the ApplicationAdapters subdirectory of your Oracle WebLogic Server home directory. Table 2–1 shows the directory structure.

Subdirectory	Description
_uninst	Contains the uninstallation files
config	Contains the <i>J2CA_SampleConfig</i> subdirectory and the XML-file-based repository for Oracle WebLogic Server Adapter J2CA
	In addition, the config subdirectory also contains a folder named log, which stores the generated log files.
etc	Contains the application, doc, jde, licenses, peoplesoft folders, mysap30 jar, and the iwse.ora file.
ibse.war	Contains the BSE application and repository configuration.
iwafjca.rar	Contains the J2CA application and repository configuration
iwafjca.war	Contains the J2CA Installation Verification Program (IVP).
lib	Contains library files and the iWay Adapter Framework files.
tools	Contains the graphical user interface for Application Explorer.

Table 2–1 Packaged Application Adapter Directory Structure

2.8.4 Configuring the Database Repository

A repository holds information about configuration details, adapter targets, channels and other configuration information. When the adapters are installed, by default, they are installed with a file repository. File repositories are not supported on development, test, or production environments. You are advised to configure the database repository immediately after the installation.

Note: iWay Software adapters have been certified with the Oracle enterprise database as the repository. The version that was certified is Oracle Database 11*g* Enterprise Edition (11.1.0.7.0).

Other versions of the Oracle enterprise database are also supported as long as they are supported by the Oracle SOA Suite. Except for the Oracle enterprise database, iWay Software does not support any other database, including Oracle XE, Oracle Berkeley Database, or databases from other vendors. 1. Run the **iwse.ora** SQL script on the system where the database is installed.

Note: When the **iwse.ora** script is used for the first time, database repositories are automatically created for BSE **and** J2CA configurations. As a result, it is not required to run the **iwse.ora** script twice for each configuration type. If the script is used multiple times, then the BSE and J2CA repositories are re-created and any values that were stored in the original database repositories are deleted.

The **iwse.ora** SQL script is located in the following directory:

Oracle SOA Suite:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\etc

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\etc

This script creates the required tables that are used to store the adapter configuration information in the database. These tables are used by Application Explorer and by adapters during design time and run time. It is recommended that you use the same credentials to create the database repository and also in the **ra.xml** file (J2CA configuration) for database user credentials.

Oracle SOA Suite:

<Oracle_Home>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\etc>sqlplus

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\etc>sqlplus

SQL*Plus: Release 11.1.1.3.0 - Production Copyright (c) 1982, 2010, Oracle. All rights reserved.

Enter user-name: scott Enter password: scott1

Connected to: Oracle Database 11g Enterprise Edition Release 11.1.1.3.0 - Production With the Partitioning, OLAP and Data Mining options

SQL>@ iwse.ora

2. Copy the **ojdbc14.jar** file to the following directory:

Oracle SOA Suite:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\lib

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\lib

The ojdbc14.jar file can be found in the following directory:

```
<ORACLE_HOME>\Oracle_
SOA1\soa\thirdparty\edifecs\XEngine\extensions\Selector\lib\thirdParties\JDBC\o
jdbc14.jar
```

3. Restart the Oracle WebLogic Server to recognize the **ojdbc14.jar** file.

J2CA Repository Configuration

The following additional steps are required to configure a J2CA repository:

1. Create the jcatransport.properties file and save it in the following directory:

Oracle SOA Suite:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\config\J2CA_ SampleConfig

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\config\J2CA_SampleConfig

Note: The *jcatransport.properties* file is required for each J2CA configuration that is created using Application Explorer. The J2CA configuration folder, for example, *J2CA_SampleConfig*, is named according to the configuration name that is specified in Application Explorer.

2. Enter values for iwafjca.repo.url, iwafjca.repo.user, and iwafjca.repo.password fields in the newly created *jcatransport.properties* file, as shown in the following example:

iwafjca.repo.url=jdbc:oracle:thin:@90.0.0.51:1521:orcl

iwafjca.repo.user=scott

iwafjca.repo.password=scott1

The following table lists and describes the iwafjca parameters.

Parameter	Description
iwafjca.repo.url	Enter the URL to use when opening a connection to the database. For example, the following repository URL format is used when connecting to Oracle:
	jdbc:oracle:thin:@host name:port;SID
iwafjca.repo.user	Enter the same user ID that you specified when running the iwse.ora SQL script to configure the database repository.
iwafjca.repo.passwo rd	Enter the same password that you specified when running the iwse.ora SQL script to configure the database repository.

3. Navigate to the following directory:

Oracle SOA Suite:

<ORACLE_HOME>\Oracle_
SOA1\soa\thirdparty\ApplicationAdapters\iwafjca.rar\META-INF

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\iwafjca.rar\META-INF

4. Open the **ra.xml** file in a text editor.

- 5. Provide the JDBC connection information as a value for the IWAYRepo_URL property the same as you provided for the *jcatransport.properties* file in step 2.
- 6. Provide a valid user name for the IWAYRepo_User property the same as you provided for the *jcatransport.properties* file in step 2.
- 7. Provide a valid password for the IWAYRepo_Password property the same as you provided for the *jcatransport.properties* file in step 2.
- 8. Save your changes to the ra.xml file.

BSE Repository Configuration

The following additional steps are required to configure a BSE repository:

1. Open the BSE configuration page in a Web browser:

http://host name:port/ibse/IBSEConfig

where *host name* is the system where BSE is installed and *port* is the port number on which BSE is listening.

Note: The server to which BSE is deployed must be running.

The BSE settings pane is displayed, as shown in Figure 2–54.

Figure 2–54 BSE Settings Pane

Property Name	Property Value
System	
Language	English 💌
Adapter Lib Directory	//base_domain/lib
Encoding	UTF-8
Debug Level	DEBUG 💌
Number of Async. Processors	0 🗸

2. Configure the system settings.

A list of System parameters with descriptions is provided in the following table.

Parameter	Description	
Parameter	Description	
Language	Specify the required language.	
Adapter Lib Directory	Enter the full path to the directory where the adapter jar files reside.	
Encoding	Only UTF-8 is supported.	
Debug Level	Specify the debug level from the following options:	
	 None 	
	Fatal	
	 Error 	
	 Warning 	
	 Info 	
	 Debug 	
Number of Async. Processors	Select the number of asynchronous processors.	

3. Configure the repository settings, as shown in Figure 2–55.

Figure 2–55 Repository Settings Pane

Repository		
Repository Type	File System 💌	
Repository Url	file://C:\oracleWiddleware\home_03	
Repository Driver		
Repository User		
Repository Password		
Repository Pooling		
		Save

4. Configure the repository settings.

BSE requires a repository to store transactions and metadata required for the delivery of Web services.

A list of Repository parameters with descriptions is provided in the following table.

Parameter	Description	
Repository Type	Select the following repositories from the list:	
	Oracle	
	 File (Do not use for BSE in production environments.) 	

Parameter	Description
Repository URL	Enter the URL to use when opening a connection to the database. For example, the following repository URL format is used when connecting to Oracle:
	jdbc:oracle:thin:@host name:port;SID
Repository Driver	Provide the driver class to use when opening a connection to the database (optional). For example, the following repository driver format is used when connecting to Oracle:
	oracle.jdbc.driver.OracleDriver
Repository User	Enter the same user ID that you specified when running the iwse.ora SQL script to configure the database repository.
Repository Password	Enter the same password that you specified when running the iwse.ora SQL script to configure the database repository.
Repository Pooling	If selected, then repository pooling is used. This option is disabled by default.

5. Click Save.

To continue working with the Oracle Fusion Middleware Application Adapters, see the corresponding adapter user guide for more information.

2.9 Uninstalling Oracle Fusion Middleware Application Adapters

To uninstall Oracle Fusion Middleware Application Adapters for Oracle WebLogic Server on a Windows platform, perform the following steps:

- 1. Undeploy the Oracle WebLogic Server Adapter J2EE Connector Architecture (J2CA) and J2CA Installation Verification Program (IVP) using the Oracle WebLogic Server Administration Console.
- **2.** Undeploy Oracle WebLogic Server Adapter Business Services Engine (BSE) using the Oracle WebLogic Server Administration Console.
- 3. Stop the Oracle WebLogic Server.
- **4.** Navigate to the following directory:

Oracle SOA Suite:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters_uninst

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters_uninst

5. Double-click the uninstaller.exe file.

The Application Adapters for Oracle WebLogic Server Uninstallation Welcome screen is displayed.

6. Click Next.

The Summary screen is displayed, which indicates the path to the Oracle Fusion Middleware Application Adapters for Oracle WebLogic Server.

7. Click Next.

The Oracle Fusion Middleware Application Adapters for Oracle WebLogic Server are uninstalled.

- 8. Click Finish.
- **9.** To manually delete any files that still remain after the uninstallation process has completed, navigate to the following directory:

Oracle SOA Suite:

<ORACLE_HOME>/Oracle_SOA1/soa/thirdparty/ApplicationAdapters

Oracle Service Bus (OSB):

<OSB_HOME>/Oracle_OSB1/3rdparty/ApplicationAdapters

To uninstall Oracle Fusion Middleware Application Adapters for Oracle WebLogic Server on UNIX and Linux platforms, perform the following steps:

- 1. Undeploy the J2CA Connector Application and J2CA Installation Verification Program (IVP) using the Oracle WebLogic Server Administration Console.
- **2.** Undeploy Business Services Engine (BSE) using the Oracle WebLogic Server Administration Console.
- **3.** Stop the Oracle WebLogic Server.
- **4.** Navigate to the following directory:

Oracle SOA Suite:

<ORACLE_HOME>/Oracle_SOA1/soa/thirdparty/ApplicationAdapters/_uninst

Oracle Service Bus (OSB):

<OSB_HOME>/Oracle_OSB1/3rdparty/ApplicationAdapters/_uninst

5. Enter the following command at the prompt to begin the uninstallation process:

./uninstaller.bin -is:javahome <java_home>

The Application Adapters for Oracle WebLogic Server Uninstallation Welcome screen is displayed.

6. Click Next.

The Summary screen is displayed, which indicates the path to the Oracle Fusion Middleware Application Adapters for Oracle WebLogic Server.

7. Click Next.

The Oracle Fusion Middleware Application Adapters for Oracle WebLogic Server are uninstalled.

- 8. Click Finish.
- **9.** To manually delete any files that still remain after the uninstallation process has completed, navigate to the following directory:

Oracle SOA Suite:

<ORACLE_HOME>/Oracle_SOA1/soa/thirdparty/ApplicationAdapters

Oracle Service Bus (OSB):

<OSB_HOME>/Oracle_OSB1/3rdparty/ApplicationAdapters

Configuring Oracle Fusion Middleware Application Adapter for PeopleSoft

This appendix describes how to configure Oracle Fusion Middleware Application Adapter for PeopleSoft. It contains the following sections:

- Section A.1, "Specifying the PeopleSoft Version"
- Section A.2, "Installing the Adapter Component Interfaces"

A.1 Specifying the PeopleSoft Version

Oracle Fusion Middleware Application 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, the iwpsci84.jar file for PeopleTools 8.4x releases are available in the default location. For example:

Oracle SOA Suite:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\lib

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\lib

The *iwpsci81.jar* file for PeopleTools 8.1x releases are available under the following directory:

Oracle SOA Suite:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\etc\peoplesoft

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\etc\peoplesoft

Use the corresponding location on non-Windows systems.

To ensure that the adapter functions properly, use the file that corresponds to your release:

- For PeopleSoft 8.4x releases, use iwpsci84.jar.
- For PeopleSoft 8.1x releases, remove iwpsci84.jar and copy iwpsci81.jar from:

Oracle SOA Suite:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\etc\peoplesoft

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\etc\peoplesoft

To the following locations:

Oracle SOA Suite:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\lib <ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\iwafjca.rar

Oracle Service Bus (OSB):

```
<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\lib
<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\iwafjca.rar
```

After changing the contents of the lib directory, restart all components (for example, Application Explorer and the SOA Server).

A.2 Installing the Adapter Component Interfaces

Oracle Fusion Middleware Application Adapter for PeopleSoft includes two custom Component Interfaces. Oracle WebLogic Server Adapter Application Explorer uses these Component Interfaces to create schemas for events and services.

To configure Component Interfaces for Oracle Fusion Middleware Application Adapter for PeopleSoft, see the following sections:

- 1. Section A.2.1, "Importing and Building the Component Interfaces"
- 2. Section A.2.2, "Configuring Component Interface Security"
- **3.** Section A.2.3, "Installing the TCP/IP and HTTP Message Router for Oracle Fusion Middleware Application Adapter for PeopleSoft"

A.2.1 Importing and Building the Component Interfaces

The Component Interfaces provided with Oracle Fusion Middleware Application 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:

Oracle SOA Suite:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\etc\peoplesoft

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\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 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 is displayed, as shown in Figure A–1.

4. Navigate to the original directory in which you unzipped the file.

Figure A–1 Copy From File Dialog

Service Pack: Target	8.40.09 IWY_CI_84 Financials/SCM 8.40.000 0	Definition Type(s): Records Pages Components Component Interfaces SQL	Copy Cancel Options
	Financials/SCM 8.40.000 0		<u>S</u> elect All Deselect All

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

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 then click **Copy**.

The Application Designer displays a message, which indicates successful completion, as shown in Figure A–2.

Figure A–2 Application Designer Message

Components Application Upgrade Copy ended: 2002-10-21-13.01.38 (62,21)				
Component Interfaces Application Upgrade Copy started: 2002-10-21-13.01.38 (62,6)				
Component Interfaces Application Upgrade Copy ended: 2002-10-21-13.01.39 (62,21)				
SQL Application Upgrade Copy started: 2002-10-21-13.01.39 (62,6)				
SQL Application Upgrade Copy ended: 2002-10-21-13.01.40 (62,21)				
Build A Upgrade A Results A Validate				

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

The Build dialog is displayed, as shown in Figure A–3.

Figure A–3 Build Dialog

Build	×
Build Scope Twy_PSBCITEM_VW Twy_PSMSGFLD_VW Twy_PSMSGSRCH_V	Build Cancel Settings Build Options Create Indexes Create Indexes Create Indexes Create Yiews Alter Tables Create Trigger Build Execute Options Build Execute SQL nowi Execute SQL nowi C Execute and build script

- 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, as shown in Figure A–4.

Figure A–4 Build Progress Status

Build Progress	×
Process completed	
Completed processing record 3 of 3	
Press Close to exit.	
Close Cancel	

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, then click **Close**, and double-click the SQL Build log statement.

The PSBUILD log file appears, as shown in Figure A–5.

Figure A–5 PSBuild Log File

📱 Psbuild.log - Notepad	
<u>File E</u> dit <u>S</u> earch <u>H</u> elp	
SQL Build process began on 11/5/02 at 10:29:20 AM for database F840DM	10.
SQL Build process ended on 11/5/02 at 10:29:22 AM. 3 records processed, 0 errors, 0 warnings. SQL executed online. SQL Build log file written to C:\TEMP\PSBUILD.LOG.	

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

The Build Settings dialog is displayed, as shown in Figure A–6.

Figure A–6 Build Settings Dialog

Build Settings		×
Create Alter Logging Scripts		
Table Creation Options C <u>B</u> ecreate table if it already exists C <u>Skip table if it already exists</u>		
View Creation Options © Recreate view if it already exists © Skip view if it already exists		
- Index Creation Options		
 Recreate index if it already exists Recreate index only if modified 		
	ОК	Cancel

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. For more information about configuring security for Component Interfaces, see "Configuring Component Interface Security" on page A-5.

A.2.2 Configuring Component Interface Security

Application Explorer requires the custom Component Interfaces that you imported and built in the previous step, so you must 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 run time 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 images shown in the following steps reflect PeopleSoft release 8.4 in 4-tier mode.

Figure A–7 PeopleSoft Security Configuration

▼ Security ▶ User Profiles
V User Profiles
Permissions & Roles
 Permission Lists
 Copy Permission Lists
 Delete Permission Lists
- Roles
- Copy Roles
 Delete Roles
 Execute Role Rules

- 1. Select **PeopleTools**, **Security**, **User Profiles**, **Permissions & Roles**, and then **Permission Lists**, as shown in Figure A–7.
- 2. Click Search and select the relevant Permission List.

The Permission List pane is displayed, as shown in Figure A–8.

Figure A–8 Permission Lists Pane

Permission	Lists	
Enter any infor	mation you have and click Search. Leave fields blank for a list of all values.	
∫ Find an Exis	sting Value Add a New Value	
Search by:	Permission List 💌 begins with	
Search Ac	tvanced Search	
Search Search Res	(Alt+1) sults	
Only the first 3	00 results can be displayed. Enter more information above and search again to reduce the number of search results.	
View All	First 🕢 1-100 of 300 🕟 Last	
Permission L	ist Description	
AEAE1000	Environments Management	
AEPNLS	AEPNLS: clone of ALLPNLS	
ALLPAGES	ALLPAGES	
ALLPORTL	All Portal	
AMPNES	(blank)	
AMSYSTEM	(blank)	
APPNLS	(blank)	
APPSRVR	Can start application server	
BDPNLSA	(blank)	
BDPNLSS	(blank)	
BIPNLS	Billing Panels	
CPAE1000	Application Environment	
CPE01000	Enterprise Objects	

3. Click the right arrow next to the **Sign-on Times** tab to display the Component Interfaces tab, as shown in Figure A–9.

Figure A–9 General, Pages, PeopleTools, Process, and Sign-on Times Tabs

General Pages PeopleTools Process Sign-on Times

- 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 Oracle Fusion Middleware Application Adapter for PeopleSoft. To test these Component Interfaces, see "Testing the Component Interfaces" on page A-7.

Testing the Component Interfaces

You must test each of the Oracle Fusion Middleware Application 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 is displayed, as shown in Figure A–10.

Figure A–10 Component Interface Tester Dialog

Component Interface Tester - Enter key values, cho	ose function 🛛 🗙
Get keys for Component Interface (double-click to set)	Get Existing
Create' keys for Component Interface (double:click to set)	Create <u>N</u> ew
Find' keys for Component Interface (double-click to set)	<u>F</u> ind
 Interactive Mode (set properties immediately) Get History Items Edit History Items 	Cancel

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, as shown in Figure A–11. This is not a problem.

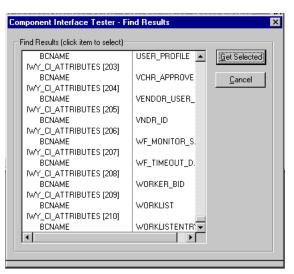


Figure A–11 Component Interface Tester - Find Results Dialog

4. Highlight a line 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, then the Component Interface has been successfully tested for the Find method, as shown in Figure A–12.

Figure A–12 Component Interface Tester Dialog

em Name	Value	
- 🚷 IWY_CI_ATTRIBUTES		
🚊 🚭 GetKeyInfoCollection		
A BCNAME	LOCATION	
🖃 🚭 FindKeyInfoCollection		
- 🚕 BCNAME	LOCATION	1
🗄 😭 Iwy_psbcitem_vw		
🗄 🥃 IWY_PSBCITEM_VW [1]		
🗄 😂 IWY_PSBCITEM_VW [2]		
🗄 🥃 IWY_PSBCITEM_VW [3]		
🖶 🤤 IWY_PSBCITEM_VW [4]		
🗄 曼 IWY_PSBCITEM_VW [5]		
🗈 鰻 IWY_PSBCITEM_VW [6]		
IWY_PSBCITEM_VW [7]		
		Î
HERE IN LEADUIEM VW USL	1	l 👘
		•
or Message Log		

5. Click **Get Existing**. For the Get method, an existing key must be entered, as shown in Figure A–13.

Component Interface Te	ster - Enter key values, nterface (double-click to set)-	choose function 🛛 🗙
BCNAME	LOCATION	<u>G</u> et Existing
Create' keys for Componen	it Interface (double-click to s	et] Create <u>N</u> ew
Find' keys for Component I	nterface (double-click to set)	<u> </u>
 Interactive Mode (set pr Get History Items Edit History Items 	roperties immediately)	Cancel

Figure A–13 Component Interface Tester Dialog - Key Values

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

If a window opens, then the Component Interface has been successfully tested for the Get method, as shown in Figure A–14 $\,$

Figure A–14 Component Interface Tester Dialog - Get Method

tem Name	Value	4
- 🥵 IWY_CI_ATTRIBUTES		
🗄 🚭 GetKeyInfoCollection		
- 🚕 BCNAME	LOCATION	
🖨 🚭 FindKeyInfoCollection		
- 🚕 BCNAME	LOCATION	
🗄 🐨 Iwy_psbcitem_vw		
🗄 🥃 IWY_PSBCITEM_VW [1]		
🖶 🥃 IWY_PSBCITEM_VW [2]		
🗄 🤤 IWY_PSBCITEM_VW [3]		
🗄 🥃 IWY_PSBCITEM_VW [4]		
🕀 😂 IWY_PSBCITEM_VW (5)		
🗄 🥃 IWY_PSBCITEM_VW [6]		
🖶 😂 IWY_PSBCITEM_VW [7]		
🗄 😂 IWY_PSBCITEM_VW [8]		
🕀 😂 IWY_PSBCITEM_VW (9)		
🕀 🧕 IWY_PSBCITEM_VW (10)		
🕀 鰻 IWY_PSBCITEM_VW [11]		
🕀 🧕 IWY_PSBCITEM_VW [12]		
in mean Iwy PSBCITEM VW [13]		
1	I	
ror Message Log		

6. Repeat this process for the IWY_CI_MESSAGES Component Interface.

You have finished testing the Component Interfaces.

A.2.3 Installing the TCP/IP and HTTP Message Router for Oracle Fusion Middleware Application Adapter for PeopleSoft

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

 For Release 8.4, install the TCP/IP and HTTP target connector. For more information, see "Installing the TCP/IP and HTTP Target Connector for PeopleSoft Release 8.4" on page A-10.

For Release 8.4, iWay Software recommends using the TCP/IP and HTTP target connectors that are delivered by PeopleSoft for the PeopleTools 8.4 series. Do not use the target connectors that are supplied by iWay Software for the PeopleTools 8.1 series. They are only packaged by iWay Software for the PeopleTools 8.4 series to assist existing users who are migrating from Release 8.1 to Release 8.4.

 For Release 8.1, install the TCP/IP and HTTP handler. For more information, see "Installing the TCP/IP and HTTP Handler for PeopleSoft Release 8.1" on page A-10.

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

Installing the TCP/IP and HTTP Target Connector for PeopleSoft Release 8.4

The TCP/IP and HTTP target connector for PeopleSoft release 8.4 is installed with Oracle Fusion Middleware Application Adapter for PeopleSoft. The default location on Microsoft Windows is:

Oracle SOA Suite:

<ORACLE_HOME>\Oracle_
SOA1\soa\thirdparty\ApplicationAdapters\etc\peoplesoft\iwpsevent84.jar

Oracle Service Bus (OSB):

<0SB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\etc\peoplesoft\iwpsevent84.jar

Use the corresponding location on non-Windows systems.

To install the TCP/IP and HTTP 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.

For example:

\$PS_HOME/webserv/servletclasses/TCPIPTARGET84.class

Installing the TCP/IP and HTTP Handler for PeopleSoft Release 8.1

The TCP/IP and HTTP target connector for PeopleSoft release 8.1 is installed with Oracle Fusion Middleware Application Adapter for PeopleSoft. The default location on Microsoft Windows is:

Oracle SOA Suite:

<ORACLE_HOME>\Oracle_
SOA1\soa\thirdparty\ApplicationAdapters\etc\peoplesoft\iwpsevent81.jar

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\etc\peoplesoft\iwpsevent81.jar

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

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

- 1. Port iwpsevent81.jar to the platform on which the PeopleSoft gateway Web server is located.
- Place iwpsevent81.jar in the servletclasses directory under the PeopleSoft Web server.

For example:

\$PS_HOME/webserv/servletclasses/iwpsevent81.jar

3. Extract the embedded class files.

Installing the TCP/IP and HTTP Handler on a UNIX System

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

- 1. Log in 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$PublicationHandler.class
extracted: psft/pt8/tcphandler/TCPIPHandler81$PublicationHandler.class
$
```

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

Configuring Oracle Fusion Middleware Application Adapter for J.D. Edwards OneWorld

This appendix describes how to configure Oracle Fusion Middleware Application Adapter for J.D. Edwards OneWorld. It contains the following sections:

- Section B.1, "Modifying the JDE.INI File for Outbound and Inbound Processing"
- Section B.2, "The OneWorld Event Listener"
- Section B.3, "Configuring the OneWorld Event Listener"
- Section B.4, "Runtime Overview"

B.1 Modifying the JDE.INI File for Outbound and Inbound Processing

This section describes the settings that are required in the *JDE*. *INI* file for the XML call object kernel (outbound and inbound processing).

The JDE. INI file is located in the following directory on the Enterprise Server:

\\system\bin32

Open the *JDE*. *INI* file and modify the [JDENET_KERNEL_DEF6] and [JDENET_KERNEL_DEF6] and [JDENET_KERNEL_DEF15] sections as follows:

[JDENET_KERNEL_DEF6] krnlName=CALL OBJECT KERNEL dispatchDLLName=XMLCallObj.dll dispatchDLLFunction=_XMLTransactionDispatch@28 maxNumberOfProcesses=1 numberOfAutoStartProcesses=1

[JDENET_KERNEL_DEF15] krnlName=XML TRANSACTION KERNEL dispatchDLLName=XMLTransactions.dll dispatchDLLFunction=_XMLTransactionDispatch@28 maxNumberOfProcesses=1 numberOfAutoStartProcesses=1

The parameters containing an underscore (_) and @28 are for Windows NT operating systems only. For other operating systems, replace the parameters with the values in the following table:

Operating System	Call Object dispatch DLLName	XML Trans dispatch DLLName
AS400	XMLCALLOBJ	XMLTRANS
HP9000B	libxmlcallojb.sl	libxmltransactions.lo
Sun or RS6000	libxmlcallojb.so	Libxmltransactions.so

Note: The J.D. Edwards OneWorld installation for version B7333(XE) does not include [**JDENET_KERNEL_DEF15**]. As a result, if you are using version B7333(XE), you must manually add it to the *jde.ini* file. For all other J.D. Edwards OneWorld versions, [**JDENET_KERNEL_DEF15**] is included with the installation.

B.2 The OneWorld Event Listener

Oracle Fusion Middleware Application Adapter for J.D. Edwards OneWorld Event Listener is designed specifically to provide J.D. Edwards approved access to your OneWorld business events. The OneWorld Event Listener refers to a specialized application that runs with OneWorld business functions and is called by the OneWorld application system.

The OneWorld application system provides the Event Listener with the information required to retrieve the event information for only the desired events. For information about configuring the OneWorld environment, see the *J.D. Edwards Interoperability Guide for OneWorld*.

The OneWorld Event Listener is called directly from the OneWorld application and is passed a Z-file record identifier. This identifier then generates a request document that is passed to the server for processing. The server retrieves the event information from the J.D. Edwards OneWorld system and propagates the information for integration with other application systems.

B.3 Configuring the OneWorld Event Listener

The OneWorld Event Listener is installed as part of the Oracle Fusion Middleware Application Adapters installation. The OneWorld Event Listener supports TCP/IP and HTTP protocols.

The OneWorld Event Listener is invoked by J.D. Edwards for specific transactions as configured in the OneWorld environment.

The OneWorld Event Listener includes the following components:

The listener exit, *IWOEvent.dll*, is located in the \etc\jde directory. For example:

Oracle SOA Suite:

<ORACLE_HOME>\Oracle_
SOA1\soa\thirdparty\ApplicationAdapters\etc\jde\iwoevent.dll

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\etc\jde\iwoevent.dll

The file extension varies depending on your operating system:

- For Windows, the exit is iwoevent.dll.
- For **Sun Solaris**, the exit is libiwoevent.so.
- For **HP-UX**, the exit is libiwoevent.sl.
- For AS/400, the exit is iwaysav.sav.
- For IBM AIX, the exit is libiwoevent.so.
- The listener configuration file, *iwoevent.cfg*, which must be created by you.

The OneWorld Event listener exit is the function that passes the key fields for a record in the OneWorld outbound transaction tables to the integration server for processing by the inbound Oracle Fusion Middleware Application Adapter for J.D. Edwards OneWorld. The OneWorld Event listener is deployed under the J.D. Edwards OneWorld Enterprise Server. The Java class for the OneWorld Event listener is called *IWOEvent* (the file extension depends on the operating system) and is case-sensitive.

1. Create a folder called Outbound under the JDE structure on the JDE Enterprise Sever, for example:

 $\ \ E812\ DDP\ Outbound$

- 2. Copy the iwoevent.dll file in the new Outbound folder.
- **3.** Create an environment variable, *IWOEVENT_HOME*, to point to the directory containing the iwoevent.dll file.
 - On Windows: Add IWOEVENT_HOME to the system environment variables.
 - On UNIX: Add the following command to your start-up script:

export IWOEVENT_HOME =/directory_name

4. On the J.D. Edwards OneWorld Server, create an iwoevent.cfg file in the defined directory, *IWOEVENT_HOME*.

The OneWorld Event listener requires connection information for the associated adapter to initiate events properly. This information is contained in the iwoevent.cfg file. You must create this file and add the connection information to it. The OneWorld Event Listener requires connection information for the associated integration server to function properly. This information is contained in the iwoevent.cfg file. The iwoevent.cfg file has three distinct sections:

Common

The common section of the configuration file contains basic configuration options. Currently, only the trace option is supported.

To set the trace option, select **on** or **off**.

common.trace=on off

where on sets the tracing to on and off sets the tracing to off. The default value is off.

By default, the OneWorld Event listener supports TCP/IP. To activate the HTTP protocol for this listener, add the following line:

common.http=on

Alias

The alias section of the configuration file contains the connection information required to send transactions to specific servers. Currently, the Oracle Fusion Middleware Application Adapter for J.D. Edwards OneWorld supports 100 entries (alias names) in the configuration file.

The alias values to these entries are as follows:

Alias.aliasname={ipaddress|dsn}:port, trace={on|off}

where aliasname is the symbolic name given to the connection.

ipaddress | dsn is the IP address or DSN name for the server containing Oracle Fusion Middleware Application Adapter for J.D. Edwards OneWorld (required).

port is the port defined for Oracle Fusion Middleware Application Adapter for J.D. Edwards OneWorld in the TCP channel configuration (required).

trace={on|off} sets the tracing to on for the particular alias.

Trans

The trans section of the configuration file contains transaction information required to route J.D. Edwards OneWorld transactions to specified servers.

If a particular J.D. Edwards OneWorld transaction is not defined to an alias, then it is sent to all aliases. The trans values to these entries are as follows:

trans.jdeTransactionName=alias1,alias2,aliasn

where jdeTransactionName is the JDE-defined name for the outbound transaction and alias1, alias2, aliasn is the list of aliases to which the transactions are sent.

The following is a sample entry for iwoevent.cfg that supplies connection information:

common.trace=on

```
alias.edamcs1=172.1.1.1:3694
alias.edamcs1t=172.1.1.1:3694, trace=on
alias.edamcs2=222.2.2:1234
```

```
trans.JDESOOUT=edamcs1t,edamcs2
trans.JDEPOOUT=edamcs1
```

5. Create a folder using the alias names that are specified in the *iwoevent.cfg* file under the defined directory, *IWOEVENT_HOME*. For example:

\\JDEdwards\E812\DDP\Outbound\edamcs1

B.4 Runtime Overview

After OneWorld starts the OneWorld Event listener, the listener accesses the configuration file, called iwoevent.cfg (case-sensitive). Based on the information in the configuration file, the listener sends the event notification to the integration server. All log information is saved in a file called iwoevent.log. The iwoevent.log file is created in the outbound folder where the iwoevent.dll and iwoevent.cfg files are located.

<u>C</u>

Configuring Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 3.x)

This appendix describes how to configure Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 3.x). It contains the following sections:

- Section C.1, "Overview"
- Section C.2, "Scenario I"
- Section C.3, "Scenario II"
- Section C.4, "SAP Ports Requirement"
- Section C.5, "Microsoft Run Time DLLs"

C.1 Overview

The installation of Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 3.x) on a 11g Release 1 (11.1.1) system depends on your existing configuration.

If you already have Oracle Fusion Middleware Application Adapter for SAP R/3 (using SAP JCo 2.1.x) installed on your system with configured BPEL and Mediator processes, then follow the steps described in "Scenario I" on page C-1.

If you have the 11g Release 1 (11.1.1) Oracle Fusion Middleware Application Adapters installed on your system and no configuration has been performed with the Oracle Fusion Middleware Application Adapter for SAP R/3 (using SAP JCo 2.1.x), then follow the steps described in "Scenario II" on page C-3.

C.2 Scenario I

This scenario describes how to configure Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 3.x) if you already have the previous version of the adapter (using SAP JCo 2.1.x) installed on your system with configured BPEL and Mediator processes.

1. Start Application Explorer.

For more information, see Chapter 2, "Installation and Configuration".

- **2.** Delete the following components that were created with Oracle Fusion Middleware Application Adapter for SAP R/3 (using SAP JCo 2.1.x) in Application Explorer:
 - Adapter Targets

- Channels
- All Web services that were created for BSE configurations
- **3.** Stop the Oracle WebLogic Server (Admin server) and managed Oracle WebLogic Server (SOA sever).
- **4.** Delete the **iwmysap.jar** and SAP JCo 2.1.x library files (**sapjco.jar**, **sapjcorfc.dll**, and **librfc32.dll**) from the Adapter lib directory and Domain lib directories. For example:

Adapter lib directory:

Oracle SOA Suite:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\lib

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\lib

Domain lib directory:

<ORACLE_HOME>\user_projects\domains\base_domain\lib

5. Delete the **iwmysap.jar** file from the iwafjca.rar folder.

Oracle SOA Suite:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\iwafjca.jar

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\iwafjca.jar

- 6. Delete the SAP JCo 2.1.x library files from the WebLogic domain lib directory: <ORACLE_HOME>\user_projects\domains\base_domain\lib
- **7.** Copy the new **iwmysap30.jar** file from the following installation build directory: Oracle SOA Suite:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\etc\mysap30

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\etc\mysap30

to the following directories:

Adapter lib directory

Oracle SOA Suite:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\lib

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\lib

iwafjca.rar directory

Oracle SOA Suite:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\iwafjca.rar

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\iwafjca.rar

8. Copy the SAP JCo 3.0.5 library files (**sapjco3.jar** and **sapjco3.dll**) to the Adapter lib and Domain lib directories:

Adapter lib directory

Oracle SOA Suite:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\lib

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\lib

Domain lib directory

<ORACLE_HOME>\user_projects\domains\base_domain\lib

9. Redeploy **ibse.war**, **iwafjca.rar**, and **iwafjca.war** using the Oracle WebLogic Server Administration Console.

For more information, see Chapter 2, "Installation and Configuration".

- **10.** Start Application Explorer.
- **11.** Create the following components using Application Explorer for Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 3.x):
 - Adapter Targets
 - Channels
 - All Web services that was created using BSE configurations

Note: The names that are specified for the new adapter targets, channels, and Web services must match those that were created for Oracle Fusion Middleware Application Adapter for SAP R/3 (using SAP JCo 2.1.x).

This ensures that the BPEL and Mediator processes that were created with Oracle Fusion Middleware Application Adapter for SAP R/3 (using SAP JCo 2.1.x) work properly with the new Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 3.x).

- **12.** Start the Oracle WebLogic Server (Admin server) and managed Oracle WebLogic Server (SOA sever).
- **13.** Execute all available BPEL and Mediator processes for BSE and J2CA configurations.

C.3 Scenario II

This scenario describes how to configure Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 3.x) if you have the 11g Release 1 (11.1.1) Oracle Fusion Middleware Application Adapters installed on your system and no configuration has been performed with the Oracle Fusion Middleware Application Adapter for SAP R/3 (using SAP JCo 2.1.x).

- 1. Install the Oracle Fusion Middleware Application Adapters build containing Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 3.x) on a 11g Release 1 (11.1.1) system.
- **2.** Stop the Oracle WebLogic Server (Admin server) and managed Oracle WebLogic Server (SOA sever).
- **3.** Delete the **iwmysap.jar** file from the Adapter lib directory:

Oracle SOA Suite:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\lib

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\lib

4. Delete the **iwmysap.jar** file from the iwafjca.rar folder.

Oracle SOA Suite:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\iwafjca.rar

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\iwafjca.rar

5. Copy the new **iwmysap30.jar** file from the following installation build directory: Oracle SOA Suite:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\etc\mysap30

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\etc\mysap30

to the following directories:

Adapter lib directory

Oracle SOA Suite:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\lib

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\lib

iwafjca.rar directory

Oracle SOA Suite:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\iwafjca.rar

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\iwafjca.rar

6. Copy the SAP JCo 3.0.5 library files (**sapjco3.jar** and **sapjco3.dll**) to the Adapter lib and Domain lib directories:

Adapter lib directory

Oracle SOA Suite:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\lib

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\lib

Domain lib directory

<ORACLE_HOME>\user_projects\domains\base_domain\lib

7. Deploy **ibse.war**, **iwafjca.rar**, and **iwafjca.war** using the Oracle WebLogic Server Administration Console.

For more information, see Chapter 2, "Installation and Configuration".

8. Start Application Explorer.

For more information, see Chapter 2, "Installation and Configuration".

- **9.** Create the following components using Application Explorer for Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 3.x):
 - Adapter Targets
 - Channels
- **10.** Start the Oracle WebLogic Server (Admin server) and managed Oracle WebLogic Server (SOA sever).
- **11.** Execute all available BPEL and Mediator processes for BSE and J2CA configurations.

C.4 SAP Ports Requirement

If SAP GUI is not installed on your Windows system, then you must modify the **services** file and manually add the SAP ports to the bottom of this file.

The **services** file is a relational database file, where each line consists of a service name, port number, protocol name, and an alias.

On Windows platforms, the **services** file is located in the following directory:

C:\WINDOWS\system32\drivers\etc

On UNIX/Linux platforms, the **services** file is located in the "etc" directory of the root ("/"):

/etc/services

The following is an example of the **services** file with SAP ports that have been added:

3200/tcp
3201/tcp
3202/tcp
3203/tcp
3204/tcp
3205/tcp
3206/tcp
3207/tcp
3208/tcp
3209/tcp
3210/tcp
3300/tcp

sapgw01	3301/tcp					
sapgw02	3302/tcp					
sapgw03	3303/tcp					
sapgw04	3304/tcp					
sapgw05	3305/tcp					
sapgw06	3306/tcp					
sapgw07	3307/tcp					
sapgw08	3308/tcp					
sapgw09	3309/tcp					
sapgw10	3310/tcp					
•						
•						
•						
sapdp01s	4701/tcp#	SAP	System	Dispatch	ner Secur	ity Port
sapgw01s	4801/tcp#	SAP	System	Gateway	Security	Port
sapgw00s	4800/tcp#	SAP	System	Gateway	Security	Port

C.5 Microsoft Run Time DLLs

This section applies only for users that have Oracle installed on Windows platforms. SAP JCo 3.0.5 requires you to apply a Microsoft hotfix, which is described in the following section.

SAP Note 684106 contains the C++ run time DLLs for the SAP JCo 3.x library, which are a prerequisite for running the libraries. From the SAP Note 684106 page, download the **r3dllinstll.zip** file and save it to a directory on your system. Expand the contents of this .zip file and run either **r3dllins.exe** for a GUI install or **r3dllcon.exe** for console mode, to install the required run time libraries on your system.

SAP Note 1375494 describes the details of the Microsoft ATL libraries security patch. From the SAP Note 1375494 page, download the **ATL_patch_ms_0935_1.zip** file and save it to a directory on your system. Expand the contents of this .zip file and open the PDF that is provided.

Note: The Microsoft hotfix to be applied is KB973544 in the MS09-035 security bulletin. Read the entire contents of hotfix issues KB969706 and KB973544.

1. Download Microsoft hotfix KB973544 from the following URL:

http://www.microsoft.com/technet/security/bulletin/MS09-035.mspx

Note: Select the correct ATL library version with enhanced security. Select 32- or 64-bit depending on your system. Ensure that you select the correct system type.

The hotfix installer specifies the directory on your system to install the library. You can delete the downloaded package after installation is successful. If you have other programs on your system that depend on these binaries, then you may also need to install the 2008 versions of the binaries as well.

If you have an older version of Windows (for example, XP or 200x server), then you may be required to update the Windows installer before installing the hotfix. The URL for Windows XP users is:

http://www.microsoft.com/downloads/details.aspx?FamilyID=5a58b56f-60b6-4412-95b9-54d056d6f9f4&displaylang=en

- 2. Unpack and install this hotfix on your system.
- **3.** Install SAP JCo in the Adapter lib folder. For example:

Oracle SOA Suite:

<ORACLE_HOME>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\lib

Oracle Service Bus (OSB):

<OSB_HOME>\Oracle_OSB1\3rdparty\ApplicationAdapters\lib

Index

Α

access methods, B-2 Adapter Lib Directory parameter, 2-46 alias section of iwoevent.cfg file, B-3 aliases, B-3 to B-4

В

batch.log file, B-2 BSE configuration page, 2-46 BSE settings window, 2-46 BSE system settings, 2-48 BSE URL field, 2-10

С

common section of iwoevent.cfg file, B-3 configurations connecting to, 2-27, 2-33 defining, 2-8 to 2-12 Configurations node, 2-9 to 2-11 configuring BSE system settings, 2-48 connection information, B-3 connection parameters Port, 2-46 Copying Library Files, 2-39 creating repository projects, 2-12

D

Data Source Name (DSN), B-4 Debug Level parameter, 2-47 DSN (Data Source Name), B-4

Ε

Encoding parameter, 2-47 event listeners, B-2 to B-3

Η

Hardware Requirements, 1-2 Hostname parameter, 2-10, 2-46

Installation Tasks, 2-3 IP addresses, B-4 IWOEvent listener exit, B-2 iwoevent.cfg file, B-3 to B-4 iwoevent.log file, B-2

J

J.D. Edwards OneWorld Event Listener, B-2 to B-4 jde TransactionName, B-4

L

Language parameter, 2-47 listener configuration files, B-3, B-4 listener exits, B-2 listeners, 2-27, B-2 to B-4 listeners. *See also* channels

Μ

metadata storing, 2-47

Ν

New Configuration dialog box, 2-9 to 2-12 nodes Configurations, 2-9 to 2-11 Number of Async. Processors parameter, 2-47

0

OneWorld Event Listener, B-2 to B-4 Operating System Requirements, 1-2 Oracle WebLogic Server Adapter Business Services Engine, 1-2 Oracle's Unified Method (OUM), vi outbound agents, B-2 outbound processing, B-2 outbound transactions, B-2

Ρ

Packaged Application Adapter Directory

Structure, 2-43 parameter types repository, 2-48 system, 2-47 Port Number parameter, 2-10 Port parameter, 2-46 ports, B-4

R

record identifiers, B-2 Repository Driver parameter, 2-47 repository parameters Driver, 2-48 Password, 2-48 Pooling, 2-48 Туре, 2-48 URL, 2-48 User, 2-48 Repository Password parameter, 2-47 Repository Pooling parameter, 2-47 repository projects creating, 2-12 Repository Type parameter, 2-47 Repository URL parameter, 2-47 Repository User parameter, 2-47

S

Service Provider list, 2-10 to 2-12 Software Requirements, 1-2 system parameters Adapter Lib Directory, 2-47 Debug Level, 2-47 Encoding, 2-47 Language, 2-47 Number of Async. Processors, 2-47 system settings configuring, 2-48

Т

trace settings, B-4 trans section of iwoevent.cfg file, B-3 transactions storing, 2-47

W

Web service projects creating, 2-8 Web services delivering, 2-47

Х

XDJdeOutboundAgent, B-2

Ζ

Z files, B-2