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## Oracle Application Adapters for Oracle WebLogic Server

This chapter describes issues and workarounds for the following Oracle Application Adapters for Oracle WebLogic Server 11g:

- Oracle Application Adapter for PeopleSoft
- Oracle Application Adapter for SAP R/3
- Oracle Application Adapter for Siebel
- Oracle Application Adapter for J.D. Edwards OneWorld

This chapter includes the following topics:

- [Section 14.1, "Oracle Application Adapters: New Features"](#)
- [Section 14.2, "Oracle Application Adapters: General Issues and Workarounds"](#)
- [Section 14.3, "Application Explorer"](#)
- [Section 14.4, "Oracle Application Adapter for PeopleSoft: Issues and Workarounds"](#)
- [Section 14.5, "Oracle Application Adapter for SAP R/3: Issues and Workarounds"](#)
- [Section 14.6, "Oracle Application Adapter for Siebel: Issues and Workarounds"](#)
- [Section 14.7, "Oracle Application Adapter for J.D. Edwards OneWorld: Issues and Workarounds"](#)

### 14.1 Oracle Application Adapters: New Features

The following topics discuss new features that pertain to Oracle Application Adapters for Oracle WebLogic Server 11g:

- [Section 14.1.1, "Oracle Application Adapter for SAP R/3"](#)
- [Section 14.1.2, "Performing a Silent Installation"](#)
- [Section 14.1.3, "Upgrading the Oracle Fusion Middleware Application Adapters"](#)
- [Section 14.1.4, "Latest Supported Systems"](#)
- [Section 14.1.5, "J2CA Migration Utility"](#)
- [Section 14.1.6, "BSE Migration Utility"](#)
- [Section 14.1.7, "SAP2\\_SAP3 BSE Migration Utility"](#)

- [Section 14.1.8, "Oracle Service-Oriented Architecture \(SOA\) Admin Mode Support"](#)
- [Section 14.1.9, "Oracle Fusion Middleware Application Adapter for SAP R/3 \(SAP JCo 3.0\) Enhancements"](#)

### 14.1.1 Oracle Application Adapter for SAP R/3

In 11g Release 1 (11.1.1.7.0), the Oracle Application Adapter for SAP R/3 only supports the SAP Java Connector (JCo) Version 3.x. The adapter does not support SAP JCo 2.x.

### 14.1.2 Performing a Silent Installation

As of Oracle 11g PS6 (11.1.1.7.0), a silent installer option is available to install Oracle Fusion Middleware Application Adapters.

For more information, see *Section 2.3.3, Performing a Silent Installation* in the *Oracle Fusion Middleware Application Adapters Installation Guide for Oracle WebLogic Server*.

### 14.1.3 Upgrading the Oracle Fusion Middleware Application Adapters

As of Oracle 11g PS6 (11.1.1.7.0), Oracle Fusion Middleware Application Adapters can be upgraded. Earlier releases are not required to be uninstalled before installing the PS6 release. When upgrading the adapters, the installer overwrites the adapter components (for example, .jar files, scripts, tools, and so on). However, the installer will not remove any WSDL files and schema files that were previously generated using an earlier release.

For more information, see *Section 2.3.4, Upgrading the Oracle Fusion Middleware Application Adapters* in the *Oracle Fusion Middleware Application Adapters Installation Guide for Oracle WebLogic Server*.

### 14.1.4 Latest Supported Systems

As of Oracle 11g PS6 (11.1.1.7.0), Oracle Fusion Middleware Application Adapters provide support for the following:

- Oracle Fusion Middleware Application Adapter for SAP R/3:  
Support for SAP Java Connector (SAP JCo) Version 3.0.9
- Oracle Fusion Middleware Application Adapter for PeopleSoft:  
Support for People Tools Version 8.52.
- Oracle Fusion Middleware Application Adapter for Siebel:  
Support for Siebel Public Sector Version 8.2.
- Oracle Fusion Middleware Application Adapter for J.D. Edwards OneWorld:  
Support for J.D. Edwards OneWorld Version 9.1 with Tools Release 9.1.0.4.

For more information, see the corresponding adapter user guide and the *Oracle Fusion Middleware Application Adapters Installation Guide for Oracle WebLogic Server*.

### 14.1.5 J2CA Migration Utility

The J2CA migration utility is used to migrate Oracle Application Adapter targets and channels between environments. This migration utility can be used to migrate an adapter repository in the J2CA container from development, test, and production

environments. The repositories can be migrated completely or partially for these artifacts.

For more information, see *Section 1.1, J2CA Migration Utility* in the *Oracle Fusion Middleware Application Adapter Upgrade Guide for Oracle WebLogic Server*.

### 14.1.6 BSE Migration Utility

The BSE migration utility is used to migrate Oracle Application Adapter targets and Web services between environments. This migration utility can be used to migrate the repository configuration details from development, test, and production environments. The repositories can be migrated completely or partially for these artifacts.

For more information, see *Section 1.2, BSE Migration Utility* in the *Oracle Fusion Middleware Application Adapter Upgrade Guide for Oracle WebLogic Server*.

### 14.1.7 SAP2\_SAP3 BSE Migration Utility

To enable the transition from the previous version of the SAP R/3 adapter, a command line migration utility is available that can be used to migrate the adapter targets and Web services from the SAP R/3 adapter (using SAP JCo 2.x) to the SAP R/3 adapter (using SAP JCo 3.x).

For more information, see *Section 1.4, SAP2\_SAP3 BSE Migration Utility* in the *Oracle Fusion Middleware Application Adapter Upgrade Guide for Oracle WebLogic Server*.

### 14.1.8 Oracle Service-Oriented Architecture (SOA) Admin Mode Support

For more information, see *Section 1.2.2, Supported Modes* in the *Oracle Fusion Middleware Application Adapters Installation Guide for Oracle WebLogic Server*.

### 14.1.9 Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 3.0) Enhancements

This section lists enhancements for Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 3.0).

- IDOC Confirm Parameter

For more information, see *Table 4–8 Advanced Tab Parameters* in the *Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 3.0) User's Guide for Oracle WebLogic Server*.

- IDOC Release Provider Parameter (Automatic Check Option)

For more information, see *Table 4–8 Advanced Tab Parameters* in the *Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 3.0) User's Guide for Oracle WebLogic Server*.

- SAProuter Service

For more information, see *Section 4.10, Configuring the SAProuter Service* in the *Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 3.0) User's Guide for Oracle WebLogic Server*.

- Explicit Commit Parameter

For more information, see *Table 4–2 System Tab Parameters* in the *Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 3.0) User's Guide for Oracle WebLogic Server*.

## 14.2 Oracle Application Adapters: General Issues and Workarounds

The following topics discuss general issues that pertain to Oracle Application Server Application Adapters, Oracle WebLogic Server Adapter J2CA, and Oracle WebLogic Server Adapter Business Services Engine (BSE):

- [Section 14.2.1, "Supported ojdbc.jar File"](#)
- [Section 14.2.2, "Supported Modes"](#)
- [Section 14.2.3, "Testing Outbound BPEL and Mediator Processes"](#)
- [Section 14.2.4, "Certified Repository"](#)
- [Section 14.2.5, "HTTP Repository Connection"](#)
- [Section 14.2.6, "File Repository Usage"](#)
- [Section 14.2.7, "Using Business Services Engine for Inbound Processing"](#)
- [Section 14.2.8, "Synchronous Events"](#)
- [Section 14.2.9, "Ports Option for Inbound Processing"](#)
- [Section 14.2.10, "Supported Custom Objects"](#)
- [Section 14.2.11, "Adapter Compatibility"](#)
- [Section 14.2.12, "Unsupported Configuration"](#)
- [Section 14.2.13, "Encoding Support"](#)
- [Section 14.2.14, "J2CA Components"](#)
- [Section 14.2.15, "Invoking a Run-Time Message When BSE Is Unavailable"](#)
- [Section 14.2.16, "Invoking Outbound BPEL Process at Run Time Using BSE"](#)
- [Section 14.2.17, "Using the J2CA Test Tool for Outbound Only"](#)
- [Section 14.2.18, "BSE Web Services Browser Pages Do Not Support DBCS Input"](#)
- [Section 14.2.19, "Adapter Language Certification"](#)
- [Section 14.2.20, "File Channel"](#)
- [Section 14.2.21, "JDK Version Support for Application Explorer"](#)
- [Section 14.2.22, "Unsupported Adapter Functionality"](#)
- [Section 14.2.23, "Opening PS5 Projects in Oracle JDeveloper PS6"](#)
- [Section 14.2.24, "Upgrading Adapters \(BSE Configuration\) on Windows Platforms"](#)

### 14.2.1 Supported ojdbc.jar File

When an Oracle enterprise database is configured as a repository with Oracle Application Adapters for Oracle WebLogic Server, only the *ojdbc6.jar* file is currently certified.

### 14.2.2 Supported Modes

The following section lists the supported modes for the Oracle Application Adapters.

#### **Oracle Service-Oriented Architecture (SOA) and Oracle Business Process Management (BPM)**

Supported modes:

- Admin and Managed mode

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**Note:** Oracle Application Adapters must be deployed to the Managed Server during deployment.

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### Oracle Service Bus (OSB)

Supported modes:

- Admin and Managed mode

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**Note:** Oracle Application Adapters must be deployed to the Managed Server during deployment.

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- Admin mode

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**Note:** By default, the Oracle Application Adapters are deployed to the Admin Server during deployment.

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### Combined Oracle Service-Oriented Architecture (SOA) and Oracle Service Bus (OSB)

Supported modes:

- Admin and Managed mode

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**Note:** ■ Installing Oracle Application Adapters to SOA \$Oracle\_Home (for example, `<Oracle_Home>\soa\thirdparty\ApplicationAdapters`) is sufficient to work with SOA and OSB in a combined SOA and OSB environment.

- Oracle Application Adapters must be deployed to the Managed Server during deployment.
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- Admin mode

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**Note:** ■ Installing Oracle Application Adapters to SOA \$Oracle\_Home (for example, `<Oracle_Home>\soa\thirdparty\ApplicationAdapters`) is sufficient to work with SOA and OSB in a combined SOA and OSB environment.

- By default, the Oracle Application Adapters are deployed to the Admin Server during deployment.
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### 14.2.3 Testing Outbound BPEL and Mediator Processes

When testing an outbound BPEL process from the BPEL console or an outbound Mediator process from the Enterprise Manager (EM) console, do not use the XML envelopes that are generated by these consoles. Instead, remove them and use the XML payloads that are generated from the schemas, which conform to the WSDLs for namespace qualifications.

The Mediator data flows can be tested using the EM console. When creating a Mediator data flow and interactions, the Web services are created and registered with the Oracle Application Server. For more information about testing Web services, see your Oracle Application Server administrator and the following documentation:

- *Oracle Fusion Middleware Application Adapter for SAP R/3 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*

### 14.2.4 Certified Repository

iWay Software adapters have been certified with the Oracle enterprise database as the repository. The version that was certified is Oracle Database 11g Enterprise Edition (11.2.0.1.0).

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.

### 14.2.5 HTTP Repository Connection

HTTP repository connections are not supported for 11g Release 1 (11.1.1.7.0), which prevents you from connecting to the Oracle Application Adapters instance from a remote machine. As a workaround, you must install Application Explorer on every platform where integration with Oracle Application Adapters using Application Explorer is required.

### 14.2.6 File Repository Usage

Do not use a File repository in development, testing, and production environments. Only use the Oracle database repository.

### 14.2.7 Using Business Services Engine for Inbound Processing

Using Business Services Engine (BSE) for inbound processing is not supported. BSE only supports services (outbound).

### 14.2.8 Synchronous Events

Synchronous event handling is not supported for the Oracle Application Adapter for Siebel, Oracle Application Adapter PeopleSoft, and Oracle Application Adapter J.D. Edwards OneWorld.

### 14.2.9 Ports Option for Inbound Processing

The ports option for inbound processing is not supported for J2CA events. Only the no-ports option is supported.

### 14.2.10 Supported Custom Objects

iWay continues to support the custom objects of an EIS. However, iWay cannot guarantee the support for all custom objects at the customer environment. Support to the custom object will be considered on a case by case option. Custom objects could fall under any of the following category:

- **SAP**  
BAPIs, RFCs, and ALE/IDocs
- **Siebel**  
Business Objects, Business Services, and Integration Objects
- **PeopleSoft**  
Component Interfaces and Messages
- **J.D. Edwards OneWorld**  
Business Functions and Transaction Types

It is recommended that customers who wish to troubleshoot an issue with the custom objects of an EIS, provide the following to iWay:

1. Data and definition of custom objects.
2. Request and response XML documents for the custom objects.
3. Reproduction steps for the custom object.

### 14.2.11 Adapter Compatibility

You cannot have multiple versions of the client library files in the same `lib` directory. Therefore, you cannot have one instance of the adapter configured to connect to different EIS versions at the same time by using different versions of the client library files.

### 14.2.12 Unsupported Configuration

Installing the Oracle Application Adapters and iWay 55 (iWay Service Manager and the iWay adapters) on the same machine is currently not a supported configuration. As a workaround, use a separate machine for each version.

### 14.2.13 Encoding Support

The Oracle Application Adapters support only UTF-8 encoding.

### 14.2.14 J2CA Components

If you are working with a J2CA configuration and you create, update, or delete an adapter target or channel using Application Explorer, then you must restart Oracle WebLogic Server. This is required to refresh the repository and recognize the new/updated target or channel in the J2CA Test Servlet, BPEL process, Mediator process, BPM process, and OSB process. The default URL for the J2CA Test Servlet is:

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

This applies to J2CA targets and channels only, not BSE targets. This also applies when a target or a channel parameter is modified using Application Explorer.

### 14.2.15 Invoking a Run-Time Message When BSE Is Unavailable

When invoking a run-time message while BSE is unavailable, a "Whitespace required" exception error occurs.

The error message "unable to connect to URL http://host:port/ibse..." appears.

### 14.2.16 Invoking Outbound BPEL Process at Run Time Using BSE

When invoking an outbound BPEL process at run time using BSE, a "Not able to find SoapRouter" message appears.

**Workaround:** Add the following element in the respective XML file:

```
<property name "optSoapShortcut">false</property>
```

### 14.2.17 Using the J2CA Test Tool for Outbound Only

The J2CA Test Tool must be used only for outbound (services). Inbound (events) will list only the channels available for the corresponding adapters.

### 14.2.18 BSE Web Services Browser Pages Do Not Support DBCS Input

When using a BSE configuration, the browser-based test tools add encodings to the content being sent. The BSE test tool causes characters to become garbled due to these added encodings. Therefore, you cannot perform a test using input that contains Japanese characters. A possible workaround is to use a tool that can send pure SOAP requests.

### 14.2.19 Adapter Language Certification

iWay Adapters are certified with the English language. The following adapters for 11g Release 1 (11.1.1.7.0) are certified with the Japanese language:

- Oracle Application Adapter for SAP R/3 (using SAP JCo 3.x)
- Oracle Application Adapter for Siebel
- Oracle Application Adapter for PeopleSoft

The Oracle Application Adapter for J.D. Edwards OneWorld is not certified with the Japanese language, but it is supported. If you encounter any issues with other languages, then contact iWay Customer Support for a workaround.

### 14.2.20 File Channel

The File channel for events is not supported in production environments for the Oracle Application Adapter for PeopleSoft, Oracle Application Adapter for J.D. Edwards OneWorld, and Oracle Application Adapter for Siebel. The File channel is available only for testing purposes in a non-network environment. As a best practice, it is not recommended to use the File channel.



## 14.2.21 JDK Version Support for Application Explorer

Application Explorer only supports JDK version 1.6.x. Application Explorer will generate a `java.lang.UnsupportedClassVersionError` exception, if the Java version that is being used is not JDK version 1.6.x. As a workaround, verify that you have the the correct Java version installed when using Application Explorer. For example, your `PATH` environment variable should be configured as follows:

```
PATH=E:\wls_home\jdk160_05\bin;%PATH%
```

In this example, `wls_home` is the location where Oracle WebLogic Server is installed.

When JDK version 1.4.2\_x is used, the following error is generated:

```
-----
starting java
-----
Exception in thread "main" java.lang.UnsupportedClassVersionError:
com/ibi/bse/gui/BseFlashScreen (Unsupported major.minor version 50.0)
  at java.lang.ClassLoader.defineClass0(Native Method)
  at java.lang.ClassLoader.defineClass(Unknown Source)
  at java.security.SecureClassLoader.defineClass(Unknown Source)
  at java.net.URLClassLoader.defineClass(Unknown Source)
  at java.net.URLClassLoader.access$100(Unknown Source)
  at java.net.URLClassLoader$1.run(Unknown Source)
  at java.security.AccessController.doPrivileged(Native Method)
  at java.net.URLClassLoader.findClass(Unknown Source)
  at java.lang.ClassLoader.loadClass(Unknown Source)
  at sun.misc.Launcher$AppClassLoader.loadClass(Unknown Source)
  at java.lang.ClassLoader.loadClass(Unknown Source)
  at java.lang.ClassLoader.loadClassInternal(Unknown Source)
```

When JDK version 1.5.0\_x is used, the following error is generated:

```
-----
starting java
-----
Exception in thread "main" java.lang.UnsupportedClassVersionError: Bad
version number in .class file
  at java.lang.ClassLoader.defineClass1(Native Method)
  at java.lang.ClassLoader.defineClass(Unknown Source)
  at java.security.SecureClassLoader.defineClass(Unknown Source)
  at java.net.URLClassLoader.defineClass(Unknown Source)
  at java.net.URLClassLoader.access$100(Unknown Source)
  at java.net.URLClassLoader$1.run(Unknown Source)
  at java.security.AccessController.doPrivileged(Native Method)
  at java.net.URLClassLoader.findClass(Unknown Source)
  at java.lang.ClassLoader.loadClass(Unknown Source)
  at sun.misc.Launcher$AppClassLoader.loadClass(Unknown Source)
  at java.lang.ClassLoader.loadClass(Unknown Source)
  at java.lang.ClassLoader.loadClassInternal(Unknown Source)
```

## 14.2.22 Unsupported Adapter Functionality

The Oracle Application Adapter for SAP R/3, Oracle Application Adapter for PeopleSoft, Oracle Application Adapter for Siebel, and Oracle Application Adapter for J.D. Edwards OneWorld does not support functionality such as Transaction, XA, and two-phase commit.

### 14.2.23 Opening PS5 Projects in Oracle JDeveloper PS6

11g PS5 projects are compatible with Oracle JDeveloper 11g PS6, and no Migration Status messages are displayed while the project is opened.

### 14.2.24 Upgrading Adapters (BSE Configuration) on Windows Platforms

For the Oracle 11g PS6 (11.1.1.7.0) release, after upgrading the adapters on a Windows platform, if you update the adapters for a BSE configuration and click **Activate Changes**, the following error may be generated:

```
An error occurred during activation of changes, please see the log for details.
[Deployer:149258]Server failed to remove the staged files 'C:\Oracle_Home\user_
projects\domains\base_domain\servers\soa_server1\stage\ibse\ibse.war' for
application 'ibse' completely. Check the directory and make sure no other
application using this directory. This will result in inappropriate results when
this server gets partitioned and trying to deploy this application.
```

Perform the following steps as a workaround:

1. Release the configuration from the WebLogic Administration Console.
2. Restart the Managed Server.

## 14.3 Application Explorer

The following topics discuss issues that pertain to Application Explorer:

- [Section 14.3.1, "Unable to Connect to Remote Machines Using File or DB Repositories for J2CA Configurations"](#)
- [Section 14.3.2, "Unsupported JMS Disposition"](#)
- [Section 14.3.3, "Unable to Connect to a J2CA Configuration"](#)

### 14.3.1 Unable to Connect to Remote Machines Using File or DB Repositories for J2CA Configurations

Application Explorer cannot be used to connect to remote machines for a J2CA configuration when using a File or DB repository. When using a J2CA configuration, SOA Suite must be installed on the same machine that is being used as the container for the adapters.

### 14.3.2 Unsupported JMS Disposition

Expanding the Events node and any Adapter node in Application Explorer generates the following exception in the log file:

```
java.lang.ClassNotFoundException: com.ibi.soap.SOAPemitterAdapter,
com.ibi.jms.JMSOutAdapter, com.ibi.mail.MailEmitterAdapter...
```

This exception message can be ignored. The Oracle Application Adapters for Oracle WebLogic Server 11g do not support the JMS disposition. This message is recorded in the log file as a result.

### 14.3.3 Unable to Connect to a J2CA Configuration

When connecting to a J2CA configuration in Application Explorer, the following error message may be generated:

```
oracle/tip/adapter/api/exception/PCResourceException
```

Perform the following steps to resolve this issue:

1. Open a command prompt window and navigate to the following directory:

```
<WLS_Home>\user_projects\domains\base_domain\bin
```

2. Run **setDomainEnv.cmd** (Windows) or **./setDomainEnv.sh** (UNIX/Linux).

The `setDomainEnv` command sets the class path and other environment variables for Application Explorer in the Oracle WebLogic Server environment.

3. Do not close the command prompt window.

4. Navigate to the following directory:

**For Oracle SOA Suite:**

```
<Oracle_Home>\Oracle_SOA1\soa\thirdparty\ApplicationAdapters\tools\iwae\bin
```

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
```

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

5. Run **ae.bat** (Windows) or **iwae.sh** (UNIX/Linux) to start Application Explorer.

You can now connect to a J2CA configuration.

## 14.4 Oracle Application Adapter for PeopleSoft: Issues and Workarounds

The following topics discuss issues that pertain to Oracle Application Adapter for PeopleSoft:

- [Section 14.4.1, "Platform Support"](#)
- [Section 14.4.2, "PeopleSoft LDAP Authentication Incompatible"](#)
- [Section 14.4.3, "Automatic Reconnect to PeopleSoft"](#)
- [Section 14.4.4, "HTTPS Protocol"](#)
- [Section 14.4.5, "PeopleSoft Messages"](#)
- [Section 14.4.6, "Limitation with Level 2 Scrolls"](#)
- [Section 14.4.7, "Limitation with Level 3 Scrolls"](#)
- [Section 14.4.8, "Limitation with Effective Dated Scrolls"](#)
- [Section 14.4.9, "Limitation When Inserting a Second Row for Level 1, 2, or 3 Scrolls"](#)
- [Section 14.4.10, "Limitation when Creating a Schema for Multilevel Component Interfaces"](#)
- [Section 14.4.11, "PeopleTools Date Format"](#)
- [Section 14.4.12, "Generating Java APIs"](#)
- [Section 14.4.13, "Differences Between Component Interface Functionality and Adapter Functionality"](#)

- [Section 14.4.14, "Missing Field Errors When Using a Component Interface"](#)
- [Section 14.4.15, "Support for Related Display Fields"](#)
- [Section 14.4.16, "Differences Between Component Interface Functionality and Adapter Functionality"](#)
- [Section 14.4.17, "Multiple Effective Dated Scrolls"](#)
- [Section 14.4.18, "Debug Message"](#)
- [Section 14.4.19, "LOCATION Component Interface"](#)
- [Section 14.4.20, "Component Interface Names"](#)
- [Section 14.4.21, "Component Interface Java API Compilation Errors \(People Tools 8.46\)"](#)

### 14.4.1 Platform Support

For the Oracle 11g PS6 (11.1.1.7.0) release, Oracle Application Adapter for PeopleSoft is certified only with Windows and Oracle Enterprise Linux platforms. This adapter is not certified and supported on any other platforms for the Oracle 11g PS6 (11.1.1.7.0) release. If support on any other platforms is required for this adapter, then contact Oracle customer support.

### 14.4.2 PeopleSoft LDAP Authentication Incompatible

PeopleSoft LDAP authentication relies on sign-on PeopleCode. However, the authentication services that PeopleSoft provides with Component Interfaces do not invoke sign-on PeopleCode, so you cannot use PeopleSoft LDAP authentication with Oracle Application Adapter for PeopleSoft.

#### Workaround

None.

### 14.4.3 Automatic Reconnect to PeopleSoft

Oracle Application Adapter for PeopleSoft does not automatically reconnect when a connection to PeopleSoft becomes unavailable.

#### Workaround

None.

### 14.4.4 HTTPS Protocol

Oracle Application Adapter for PeopleSoft does not support the HTTPS protocol for events.

#### Workaround

None.

### 14.4.5 PeopleSoft Messages

Oracle Application Adapter for PeopleSoft uses messages only for events and not for services.

#### Workaround

None.

### 14.4.6 Limitation with Level 2 Scrolls

PeopleSoft has acknowledged a limitation with Component Interfaces that contain level 2 scrolls. If you try to insert a new row on a level 2 scroll, then a Null Pointer Exception error occurs.

If you receive this error, then you must upgrade your PeopleSoft release level.

This limitation is fixed in PeopleTools Version 8.16.08, and PeopleTools Version 8.17.02 in the 8.1x code line. It is tracked by PeopleSoft Incident T-MZYGAR-2C5YS.

In the 8.4x code line, this limitation is tracked by PeopleSoft Incident T-TCHURY-YZ9FR and is fixed in PeopleSoft 8.41.

#### Workaround

None.

### 14.4.7 Limitation with Level 3 Scrolls

PeopleSoft has acknowledged a limitation with Component Interfaces that contain level 3 scrolls. If you try to insert a new row on a level 3 scroll, then a Null Pointer Exception error occurs.

If you receive this error, then you must upgrade your PeopleSoft release level.

This limitation is fixed in PeopleTools Version 8.18 and is tracked by PeopleSoft Incident T-MZYGAR-D2529. However, this is still a limitation in PeopleSoft 8.41 and 8.42 (PeopleSoft Incident T-MZYGAR-3F72X). PeopleSoft has reported that this will be fixed in 8.43 (PeopleSoft incident report, 562734000).

#### Workaround

None.

### 14.4.8 Limitation with Effective Dated Scrolls

PeopleSoft has acknowledged that there is a limitation with effective dating and multiple transactions. If you want to insert multiple effective dated rows for the same primary keys, then you must use two separate transactions. This limitation is tracked by PeopleSoft Incident T-ACESAR-BS362.

#### Workaround

None.

### 14.4.9 Limitation When Inserting a Second Row for Level 1, 2, or 3 Scrolls

If you are trying to insert a level 1, 2, or 3 scroll and the following conditions exist:

- There is exactly one row for the level 1, 2, or 3 scroll.
- There are required field names that end in a numeric value.

An error message appears, in the following format:

```
This is an invalid property {ADDRESS_1} (91,15)
```

This example was created using the VNDR\_ID Component Interface from the Financials application. Note that the actual property name is ADDRESS1.

#### Workaround

As a workaround, perform the following steps:

1. In the PeopleSoft Application Designer, open the Component Interface with which you are working.
2. Select the property that ends in a numeric value.
3. Right-click and select Edit Name from the context menu.
4. Change the name of the property.  
You can select a name that does not end in a number (for example, ADDRESSA), or you can add an underscore (for example, ADDRESS\_1).
5. Save the Component Interface.
6. Regenerate the Java APIs for the Component Interface.
7. Use the revised property name in your XML transaction.

#### 14.4.10 Limitation when Creating a Schema for Multilevel Component Interfaces

In later releases of the 8.1x series, if you try to create a schema for a multilevel Component Interface, then the following error occurs:

```
Index: -1, Size: 0
```

This is a result of a change in the back-end PeopleSoft interface in later versions of the 8.1 series.

##### Workaround

Use the `iwpsci84.jar` file and delete the `iwpsci81.jar` file from the `wls_home\erp-adapters\lib` directory.

##### See Also:

- *Oracle Fusion Middleware Application Adapters Installation Guide for Oracle WebLogic Server*
- *Oracle Fusion Middleware Application Adapter for PeopleSoft User's Guide for Oracle WebLogic Server*

#### 14.4.11 PeopleTools Date Format

The YYYY-MM-DD date format does not work for a Component Interface key.

PeopleSoft has acknowledged this limitation for most releases of PeopleTools and has addressed it in the newest releases. For more information, see PeopleSoft Resolution ID 200730918.

##### Workaround

Use the MM/DD/YYYY format. Alternatively, you can write a PeopleSoft method that takes a date format of YYYY-MM-DD, changes the date to a string, reformats it to DD/MM/YYYY, and passes it to the Component Interface date.

#### 14.4.12 Generating Java APIs

It is possible to create Component Interfaces within PeopleSoft that are internally inconsistent. Inconsistencies have been found in some Component Interface templates that have been delivered by PeopleSoft. Indicators of this problem include errors when generating the Java APIs in the PeopleSoft Application Designer.

If you encounter errors while generating the Java APIs, then the Component Interface is likely to malfunction and can possibly corrupt your database. The correct operation

of Component Interfaces when errors appear during API generation cannot be guaranteed. In addition, it is strongly recommended that the source of the errors is fixed before continuing.

**Workaround**

Fix the Component Interface using PeopleTools.

### 14.4.13 Differences Between Component Interface Functionality and Adapter Functionality

The differences between Component Interfaces and standard application functionality relating to panel processing have been observed. Among the possible symptoms of these differences are messages such as, "First Operand of . is NULL." Oracle Application Adapter for PeopleSoft should replicate the functionality of a PeopleSoft Component Interface, but only when the Component Interface is run through the PeopleSoft application server in three-tier mode.

If you notice differences between expected Component Interface functionality and adapter functionality, then you must verify that the differences are real by running the Component Interface with the PeopleTools Component Interface test tool in three-tier mode.

**Workaround**

Test the Component Interface using the PeopleTools Component Interface testing tool in three-tier mode only.

### 14.4.14 Missing Field Errors When Using a Component Interface

When using a Component Interface, it is difficult to determine which of the required fields are missing when you receive a PeopleSoft error message that states, "The highlighted field is required."

**Workaround**

You can edit the message in the PeopleSoft message catalog to pass a variable for the field name. For more information, see PeopleSoft Resolution 200731449.

### 14.4.15 Support for Related Display Fields

Related display fields are not supported by Component Interfaces.

**Workaround**

For more information, see PeopleSoft Resolution 200731974, which offers several workarounds.

### 14.4.16 Differences Between Component Interface Functionality and Adapter Functionality

PeopleSoft has acknowledged problems in the Component Interface back-end processor, which will cause the adapter to act differently than the Component Interface test tool in three-tier mode for certain Component Interfaces.

PeopleSoft Case 1965239 describes a problem with the CI\_JOB\_DATA\_HIRE Component Interface in HR 8.1x. In this situation, the NAME field is not populated by PeopleCode correctly. The workaround is to manually populate the NAME field through the XML.

PeopleSoft Resolution ID 200728981 describes a problem with the JOBCODE Component Interface, which does not allow the REG\_TEMP field to be changed to empty. As a workaround, customers must upgrade to a later release of PeopleTools.

**Workaround**

The workaround is dependent on the Component Interface.

### 14.4.17 Multiple Effective Dated Scrolls

A failure occurs when inserting multiple effective dated rows.

**Workaround**

If you want to insert multiple effective dated rows for the same primary keys, then you must use two separate transactions. This limitation is tracked by PeopleSoft Incident T-ACESAR-BS362.

### 14.4.18 Debug Message

For certain releases of PeopleTools 8.4x, you may receive the following message in your debug window:

```
PSProperties not yet initialized!
```

This is a PeopleSoft warning message you can ignore.

**Workaround**

None.

### 14.4.19 LOCATION Component Interface

When you attempt to access the LOCATION Component Interface using the Human Resources application, release 8.80.000, a failure occurs during runtime and the following message is displayed:

```
Component Interface Not Found
```

This is due to a problem in the way the PeopleSoft application has been delivered and is not related to the PeopleTools release.

**Workaround**

Perform the following steps:

1. Open the Component Interface in the PeopleTools Application Designer.
2. Make a small change to the Component Interface.
3. Undo the change.
4. Save the Component Interface.

This procedure resets certain internal PeopleSoft data structures, which enables Oracle Application Adapter for PeopleSoft to find the Component Interface. This has been observed in the LOCATION Component Interface running on the Human Resource applications release 8.8.000 on several different releases of PeopleTools, but it may occur in other Component Interfaces as well.



## 14.4.20 Component Interface Names

Although PeopleSoft permits Component Interface names that begin with certain special characters (such as an underscore), Application Explorer does not recognize such names.

### Workaround

Begin Component Interface names with the letters A-Z or the integers 0-9.

## 14.4.21 Component Interface Java API Compilation Errors (People Tools 8.46)

When you compile all Java APIs for the Component Interfaces using People Tools 8.46, you may encounter compilation errors with some of the Component Interfaces.

### Workaround

You can manually correct the Java source code of the failing Component Interfaces. Alternatively, if the failing Component Interfaces are not going to be used, then remove them from the API build process and do not include them in the build.

## 14.5 Oracle Application Adapter for SAP R/3: Issues and Workarounds

The following topics discuss issues that pertain to Oracle Application Adapter for SAP R/3 (using SAP JCo 3.x).

- [Section 14.5.1, "Resolved Issues"](#)
- [Section 14.5.2, "JRockit JDK Support"](#)
- [Section 14.5.3, "Considerations for SAP R/3 \(Using SAP JCo 3.x\)"](#)
- [Section 14.5.4, "Starting Multiple Channels With the Same Program ID"](#)
- [Section 14.5.5, "Oracle JRockit JVM Not Supported"](#)
- [Section 14.5.6, "Supported Versions and Platforms for SAP JCo 3.0.9"](#)
- [Section 14.5.7, "Native IDoc Format Support"](#)
- [Section 14.5.8, "SAP R/3 4.6C Support"](#)
- [Section 14.5.9, "Date and Time Field Mapping"](#)
- [Section 14.5.10, "Intermediate Documents \(IDocs\) During Inbound Processing"](#)
- [Section 14.5.11, "MSVC 7.0 Run-Time Component DLLs"](#)
- [Section 14.5.12, "SAP IDoc Data With DBCS \(Japanese, Chinese, etc.\) Characters Overflows and Truncates Characters"](#)
- [Section 14.5.13, "No Values Set for Code and Details in Binding Fault"](#)
- [Section 14.5.14, "SAP R/3 Adapter Exceptions"](#)
- [Section 14.5.15, "Behavior With Multiple Channels"](#)
- [Section 14.5.16, "Connections Not Listed in SAP Gateway Monitor"](#)
- [Section 14.5.17, "Multithreading Functionality With the Outbound Listener"](#)
- [Section 14.5.18, "Single Sign-On"](#)
- [Section 14.5.19, "Metadata Support"](#)

## 14.5.1 Resolved Issues

This section lists the issues that have been resolved for Oracle Application Adapter for SAP R/3 (using SAP JCo 3.x) since 11g PS3 Release 1 (11.1.1.4.0).

- **IRN#70972523** - User in the SAP system is logged off immediately after processing a message
- **IRN#71382542** - IDoc is not marked as failed in the SAP system, so it cannot be resubmitted
- **IRN#71442550** - The adapter (using a J2CA configuration) generates an SAP ABAP exception (not propagating to application)
- **IRN#71362520** - IDoc type exceeds the defined structure in edi\_dc (allowed length 8)
- **IRN#71852519** - Encrypted password is being displayed in plain text when using a J2CA configuration
- **IRN#71872530** - IllegalStateException: DestinationDataProvider
- **IRN#72642519** - Exceptions occur when processing a large number of IDocs
- **IRN#71472515** - The adapter fails to parse RFC when double quote characters exist in the name
- **IRN#80762518 (Bug 13851770)** - SAP BAPI call fails with NoSuchMethodError
- **IRN#81662507 (Bug 14169983)** - SAP JCo 3.0.8 transaction management issue
- **IRN#83562513 (Bug 16024565)** - The adapter ignores trfc-tid in IDoc messages

## 14.5.2 JRockit JDK Support

Oracle Application Adapter for SAP R/3 (using SAP JCo 3.x) does not support any versions of the JRockit JDK, since it is not supported by SAP Java Connector (JCo) 3.x. As an alternative, you must use a JDK that is supported by SAP JCo. For more information, see SAP Note #1077727 in the SAP Service marketplace.

## 14.5.3 Considerations for SAP R/3 (Using SAP JCo 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 and 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 SAP adapter (using SAP JCo 3.x) adapter targets and channels and application artifacts (BPEL, Mediator, ESB, and OSB) to Application Adapter for SAP R/3 (using SAP JCo 3.x), see the *Oracle Fusion Middleware Application Adapters Installation Guide for Oracle WebLogic Server*.

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). The SAP R/3 adapter (using SAP JCo 2.1.x) is not available with the PS6 release (11.1.1.7.0). Only the SAP R/3 adapter (using SAP JCo 3.x) is available with the PS6 release (11.1.1.7.0).

#### 14.5.4 Starting Multiple Channels With the Same Program ID

Multiple instances are not created for a SAP JCo server implementation. Only one instance is created. As a result, you cannot start multiple channels with the same Program ID in Application Explorer. You can create multiple channels with the same Program ID, but the channels cannot be started simultaneously. For example, if two channels are using the same Program ID, then you must stop the first channel before you can start the second channel.

This limitation is not applicable for runtime scenarios. During runtime, the adapter handles multiplexing channels and Program IDs through the inbound schema validation method. However, this is not supported for Application Explorer runtime.

#### 14.5.5 Oracle JRockit JVM Not Supported

The Oracle JRockit JVM is not supported by SAP. For more information, see SAP note 549268 for SAP JCo 2.1x and SAP note 1077727 for SAP JCo 3.x.

#### 14.5.6 Supported Versions and Platforms for SAP JCo 3.0.9

The following SAP ERP platforms are supported by the Oracle Application Adapter for SAP R/3 (using SAP JCo 3.0.9):

- 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

The following operating systems are supported by the Oracle Application Adapter for SAP R/3 (using SAP JCo 3.0.9):

- Windows 32-bit and 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, refer to SAP note 1077727 in the SAP Service Marketplace. If a specific JVM is not included on the list of supported JVMs, then it is not supported by SAP.

### 14.5.7 Native IDoc Format Support

The native IDoc format for inbound processing is not currently supported for 11g Release 1 (11.1.1.7.0). This issue will be resolved by applying a patch in a future release.

### 14.5.8 SAP R/3 4.6C Support

Oracle Application Adapter for SAP R/3 uses SAP JCo APIs that are provided by SAP. The support for this adapter is paired with the official supported versions of SAP JCo.

SAP R/3 4.6C is out of general maintenance by SAP. iWay Software can access SAP 4.6C systems using the current SAP JCo API. Adapter service is only provided by the SAP JCo API via the SAP RFC interface. If there are any application processing issues arising because of release compatibility, then the adapter user (customer) is responsible to resolve those issues by consulting with SAP. iWay Software does not provide support for SAP application or communication compatibility issues for SAP JCo and SAP R/3 4.6C systems.

### 14.5.9 Date and Time Field Mapping

Oracle Application Adapter for SAP R/3 (using SAP JCo 3.x) only handles date of format "yyyy-MM-dd" and time of format "HH:mm:ss".

Many remotely callable functions have a field that has a DATE format. The DATE field object of an adapter is equivalent to the ABAP DATE object as an 8 byte string with the format YYMMDD. In the SAP GUI, other profiles may be executed that transform the data display in the SAP GUI environment. However, the data is always stored in the DATE object format. For ease of use, the SAP Java Connector (JCo) converts data for DATE objects that also have the format YYYY-MM-DD to YYYYMMDD. A field must have format DATE (ABAP type D) to enable these transformations. RFC and BAPI functions employ fields with type D objects. All data for IDocs is type C (Character) by definition of the EDI\_DD40 structure in the ABAP dictionary. Therefore, IDocs only accept the YYYYMMDD format as no conversions are performed on the field.

The TIME field object of an adapter is equivalent to the ABAP TIME object as a 6 byte string with the format HHMMSS. In the SAP GUI, other profiles may be executed that transform the time display in the SAP GUI environment. However, the data is always stored in the TIME object format. For ease of use, the SAP Java Connector (JCo) converts data for TIME objects that also have the format HH:MM:SS to HHMMSS. A field must have format TIME (ABAP type T) to enable these transformations. RFC and BAPI functions employ fields with type T objects. All data for IDocs is type C (Character) by definition of the EDI\_DD40 structure in the ABAP dictionary. Therefore, IDocs will only accept HHMMSS as no conversions are performed on the field.

### 14.5.10 Intermediate Documents (IDocs) During Inbound Processing

When using collected IDocs during inbound processing (service mode) where one XML file contains multiple IDocs, a unique sequence number must be provided to identify each individual IDoc in the sequence. If the SAP application server cannot determine a correct sequence from the collected IDocs, then data from the first IDoc is taken and added (duplicated) to each subsequent IDoc. All data segments in subsequent IDocs in the collected IDoc file are ignored. For more information on this topic, consult the SAP ALE reference documentation.

## Encoding

Encoding is a general term encompassing communications, hardware, software and instance documents. Encoding is usually not noticed until it is incorrect, when a document contains invalid characters with blank spaces or “?” or “#” characters. There are several areas to examine when investigating an encoding issue:

- Communications Channel

The communications channel encoding between the SAP server and the client machine is managed by the SAP server. The relevant client libraries query the client machine for the encoding setting and configure the communication with this information

- Hardware

The client machine encoding can be determined via the Windows Control Panel Applet “Region and Language” or the “Set\_Locale” environment variable on Unix or Linux machines. When using the “Set\_Locale” variable, the actual Locale files must be present on the client machine. On Windows machines, the required language pack must be installed.

- Software

Character sets are the characters or symbols of a given language or languages, and the numeric value that is used by the client machine to map data to the correct character or symbol. Data is represented in character sets and encoding is the means of transmitting this information to another character set, either local or remote. If a given character has a correct numeric value, but a missing symbol, then this results in the common convention of using “?” for the character. The resolution may be as simple as switching to a different encoding. There is also a chance that fonts, which are used to render characters or symbols on a screen or paper, do not have the correct representation or any representation for a given numeric value. This also must be checked.

A source of encoding confusion that is often overlooked is the JVM encoding, which can prevail if a document is missing an encoding statement. Missing encoding declarations can occur and unless a specific application catches this, often the JVM encoding is used as the encoding. Always check the JVM encoding parameters if an encoding issue occurs to ensure that this issue is not the cause.

- Instance Document

The XML header declaration contains an encoding statement. It should be remembered that it is a declaration, not a promise. A document may state “UTF-8” but be saved in “ASCII” or some other format. Mismatched document encoding is a common mistake that usually can be resolved by opening it in an editor that supports saving in different encodings and save to the declaration statement. However, always ensure when saving to a given encoding that all characters are present and correct after the save.

### 14.5.11 MSVC 7.0 Run-Time Component DLLs

SAP JCo 3.x requires Microsoft C++ runtime libraries to execute on Windows platforms (32- and 64-bit). Go to the SAP Service Marketplace and navigate to SAP note 684106. This note contains the downloads for the C++ runtime libraries. Download the library that corresponds to the installed operating system under which the SAP JCo will execute (32- or 64-bit).

- SAP JCo 3.x requires the Microsoft 2005 C++ runtime libraries.

If you receive an “invalid side by side execution version” error, or the SAP JCo will not load, then regardless of the version that is used, you must install the patch located at the following URL:

<http://www.microsoft.com/technet/security/bulletin/MS09-035.msp>

For SAP JCo 3.x, you must always apply the patch as well as the run time libraries.

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**Note:** A 32-bit JVM and C++ runtime libraries can be run on a 64-bit machine, as long as all pathways are 32-bit (JVM, library, and any other executables for the session; 64-bit components can only run on 64-bit devices). No 32-bit components can be referenced in the LD\_LIBRARY\_PATH or PATH environment variables in a 64-bit environment. Inserting 32-bit components into a 64-bit environment variable results in errors that consist of “wrong ELF class” or “class cannot be loaded” messages.

---

---

### 14.5.12 SAP IDoc Data With DBCS (Japanese, Chinese, etc.) Characters Overflows and Truncates Characters

SAP IDoc data with Japanese DBCS characters overflows and truncates characters in all BSE and J2CA events and services.

**Explanation:**

This issue only occurs on non-Unicode SAP MDMP environments, where one character can be two or more bytes. As an example of this issue, when using Japanese, the SAP field length is four characters. The English word “ball” fits correctly into the field because one character equals one byte. The Japanese word for ball in Shift-Jis encoding is three characters, but two bytes per character, so the last character is truncated and the last character appears in the next field. Since IDocs are positional delimited, this can cause errors in processing. This occurs because SAP uses character length, not byte length for all non-Unicode field lengths. There is no work around on this issue other than using Unicode or using shorter text in IDocs in DBCS.

### 14.5.13 No Values Set for Code and Details in Binding Fault

If you use the wrong request XML to invoke a SAP outbound process in Oracle BPEL Console, then the instance will be faulted and a binding fault will be thrown. Log in to the Oracle BPEL Console, select the faulted instance, and then click **Audit**. No values are set for Code and Details in the binding fault.

**Workaround**

None.

### 14.5.14 SAP R/3 Adapter Exceptions

During outbound processing, instead of receiving adapter exceptions from the BPEL or Mediator layer in the Enterprise Manager (EM) console, you can perform the following steps to receive adapter exceptions in XML format:

1. Open Application Explorer and connect to a configuration.
2. Expand the MySAP adapter node to view the available targets.
3. Right-click an available MySAP target node and select **Edit**.

The Application Server dialog displays the target connection information.

4. Click the **Advanced** tab.
5. From the Error Handling list, select **Creates Error Document**.
6. Click the **User** tab.
7. In the Password field, type a valid password for the SAP R/3 application.
8. Click **OK**.
9. Close Application Explorer.

Oracle BPEL or Mediator generates the error message in the response XML document. For example, if you use the GetDetail method for the CompanyCode SAP BAPI in your outbound processing, the following error message is shown in the XML response:

```
<companycode_get_detail_
oct24ProcessResponseurn:sap-com:document:sap:business.responsehttp://xmlns.orac
le.com/companycode_get_detail_oct24>
<COMPANYCODE_ADDRESS> </COMPANYCODE_ADDRESS>
<COMPANYCODE_DETAIL> </COMPANYCODE_DETAIL>
<RETURN>
<TYPE>E</TYPE>
<CODE>FN020</CODE>
<MESSAGE>Company code 1010 does not exist</MESSAGE>
<LOG_MSG_NO>000000</LOG_MSG_NO>
<MESSAGE_V1>1010</MESSAGE_V1>
</RETURN>
</companycode_get_detail_oct24ProcessResponse>
```

### 14.5.15 Behavior With Multiple Channels

When different channels are created using identical connection parameters (server, gateway, and program ID) the SAP gateway automatically enters load balancing mode. The load balancing algorithm is determined by the gateway profile configuration during gateway installation. Typically these include least used, lightest load, or several other SAP selections. If you are intentionally setting load balancing, then consult the gateway manager for the proper procedure to configure the adapter and Oracle instances to take advantage of load balancing features on the system. If load balancing is accidentally triggered by configuration errors, then it can result in missing messages (sent to another server) or wrong destination.

For example:

Shipping selects server A1 with gateway 01 and program ID MyProg.

Purchasing selects server A1 with gateway 01 and program ID MyProg.

Shipping sends ten messages and only six appear at the BPEL process.

Purchasing sends ten messages and only five appear at the BPEL process.

Shipping cannot understand what happened to four missing messages.

Shipping cannot understand why they have five purchasing messages.

The same applies for Purchasing.

#### **Workaround**

Change the program ID to a unique key for each department, as this is not a load balanced scenario.

### 14.5.16 Connections Not Listed in SAP Gateway Monitor

There are some occurrences when connections being made to SAP R/3 using Application Explorer are not listed in the SAP Gateway Monitor (transaction SMGW). This issue pertains to Oracle Application Adapter for SAP R/3 (using SAP JCo 3.0).

The adapter does not connect directly to the SAP R/3 system, but to the SAP JCo. Since the SAP JCo manages the connections to SAP R/3, and most connections are rapid and transient, most client (inbound) connections to SAP R/3 do not display in the SAP Gateway Monitor (transaction SMGW). Regular SAP JCo and RFC client traces are available from the client tracing options as described in the *Oracle Fusion Middleware Application Adapter for SAP R/3 (SAP JCo 3.0) User's Guide*. Server connections are persistent and are listed under "logged on Clients" in transaction SMGW.

### 14.5.17 Multithreading Functionality With the Outbound Listener

The adapter usually attempts to start three threads for each SAP outbound event channel. This is performance consistent with the SAP Gateway model, where only one thread is active at a time to emit. However, in the adapter one thread is emitting, one thread is writing, and one thread is in cleanup. If the gateway administrator enables multithreading on a particular program ID, then multiply the iWay threads by three when setting the threads for maximum performance.

### 14.5.18 Single Sign-On

SAP supports single sign-on by means of authentication tickets created in its own programs. Currently, there is no single sign-on support between Oracle Application Servers and SAP ERP systems.

### 14.5.19 Metadata Support

SAP ERP Version 6.0 introduced many new data structures, such as deep (multi-level) structures, nested structures (structures where each column is itself a structure), and tables of such data structures. Currently, only deep and nested structures are supported. Nested tables or line types are currently not supported by the adapter.

## 14.6 Oracle Application Adapter for Siebel: Issues and Workarounds

The following topics discuss issues that pertain to Oracle Application Adapter for Siebel.

- [Section 14.6.1, "Resolved Issues"](#)
- [Section 14.6.2, "Additional Configuration in the Siebel Environment"](#)
- [Section 14.6.3, "Service and Integration Nodes"](#)
- [Section 14.6.4, "Automatic Reconnect to Siebel"](#)
- [Section 14.6.5, "Updating or Deleting Siebel Records Using Oracle Application Adapter for Siebel"](#)
- [Section 14.6.6, "Adapter Exception Error If Siebel Request Document Contains Japanese Characters"](#)
- [Section 14.6.7, "HTTPS Protocol"](#)
- [Section 14.6.8, "Multi-Value Groups"](#)



- [Section 14.6.9, "Migration Utility"](#)

### 14.6.1 Resolved Issues

This section lists the issues that have been resolved for Oracle Application Adapter for Siebel since 11g PS3 Release 1 (11.1.1.4.0).

- **IRN#63192554 (Bug 10279149)** - A SBL-DAT-00498 error is being generated when records are inserted in Siebel
- **IRN#82002512 (3-5958642611)** - Siebel connection reset error
- **IRN#82122005 (3-5958642611)** - Siebel getDetailedMessage NoSuchMethodError

### 14.6.2 Additional Configuration in the Siebel Environment

Some out-of-the-box Siebel business services may require additional setup steps in the Siebel environment before they can be run successfully. For example:

- When using a business service such as EAI XML Converter, before generating the XSD for the integration object, you should use Siebel tools to remove the 'xml container element' tag in the integration components you plan to use.
- When building a solution with the EAI dispatch service business service, you may need to set up a named subsystem to handle HTTP requests.

### 14.6.3 Service and Integration Nodes

Service nodes and Integration node can be created using only alphanumeric characters and "-" "\_". No other special characters are allowed.

### 14.6.4 Automatic Reconnect to Siebel

When connecting to Siebel using the Java Data Bean Interface, you cannot reconnect after initial connection loss. This might occur when Application Explorer experiences a brief loss of network connection or if the Siebel Server or Gateway Service is restarted while Application Explorer is logged into the Siebel application.

#### Workaround

To log in successfully to the Siebel application, restart your application server and Application Explorer. This is a known Siebel API issue. For more information, see Siebel Alert 984.

### 14.6.5 Updating or Deleting Siebel Records Using Oracle Application Adapter for Siebel

If you are logged in as a Siebel user that does not belong to the team that owns the record being updated or deleted, then you cannot perform the action. By default, the adapter is set to 'My' view. However, in Siebel Access Control there are other views, such as 'All' view and 'Organization' view. Therefore, even if the user does not belong to the team and the record is not visible in 'My' view, the user may be able to update or delete the record through another view in the Siebel front end. This is not possible through the adapter. The adapter requires that the user is part of the team of the record being updated or deleted.

#### Workaround

There are two possible workarounds:

- Log in through the Siebel adapter as a user that is already part of the team that owns the record you need to update or delete.
- Add the user to the team that owns the record you need to update or delete.

### 14.6.6 Adapter Exception Error If Siebel Request Document Contains Japanese Characters

An adapter exception error is returned if the Siebel request document contains Japanese characters in J2CA. The same request works in BSE.

#### Workaround

This will be fixed in a future release.

### 14.6.7 HTTPS Protocol

Oracle Application Adapter for Siebel does not support the HTTPS protocol for services and events.

#### Workaround

None.

### 14.6.8 Multi-Value Groups

Oracle Application Adapter for Siebel does not support Multi-Value Groups (MVG) with join specifications.

#### Workaround

None.

### 14.6.9 Migration Utility

Migrating Integration Object nodes is currently not supported with the Oracle 11g PS6 (11.1.1.7.0) release.

## 14.7 Oracle Application Adapter for J.D. Edwards OneWorld: Issues and Workarounds

The following topic discusses issues that pertain to Oracle Application Adapter for J.D. Edwards OneWorld.

- [Section 14.7.1, "Resolved Issues"](#)
- [Section 14.7.2, "Platform Support"](#)
- [Section 14.7.3, "J.D. Edwards OneWorld Unit Of Work \(UOW\)"](#)

### 14.7.1 Resolved Issues

This section lists the issues that have been resolved for Oracle Application Adapter for J.D. Edwards OneWorld since 11g PS3 Release 1 (11.1.1.4.0).

- **IRN#32212554** - New Feature Request: JDE Listener for Linux

## 14.7.2 Platform Support

For the Oracle 11g PS6 (11.1.1.7.0) release, Oracle Application Adapter for J.D. Edwards OneWorld is certified only with Windows and Oracle Enterprise Linux platforms. This adapter is not certified and supported on any other platforms for the Oracle 11g PS6 (11.1.1.7.0) release. If support on any other platforms is required for this adapter, then contact Oracle customer support.

## 14.7.3 J.D. Edwards OneWorld Unit Of Work (UOW)

The following section provides information on the J.D. Edwards OneWorld Unit of Work (UOW).

1. iWay recommends you to generate individual business functions of J.D. Edwards OneWorld and then group them together.
2. Generating the individual business functions and grouping them together is completely based on the experience and knowledge related to the business functions of J.D. Edwards OneWorld. There is no documentation on generating the UOW.
3. To create the XML Schema Document (XSD) files that can be used for UOW, perform the following steps:
  - a. Trigger the appropriate event from the J.D. Edwards OneWorld GUI and generate an XML output file based on the event.
  - b. Using the XML file, create an XSD file using an XML editor, such as XMLSPY.
  - c. When creating the XSD, make sure that the XSD satisfies the SOA 11g namespace requirements. Manually add the namespace, target namespace, and other items that are required for SOA 11g.
4. Once generated, copy the XSD files for the UOW into the repository folder. This repository folder is automatically configured on your file system when a J.D. Edwards OneWorld target is created using Application Explorer.

