Oracle® Fusion Middleware

Release Notes

11*g* Release 1 (11.1.1) for IBM: Linux on System z

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Oracle Fusion Middleware Release Notes, 11*g* Release 1 (11.1.1) for IBM: Linux on System z

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Preface

This preface includes the following sections:

- Audience
- Documentation Accessibility
- Related Documents
- Conventions

Audience

This document is intended for users of Oracle Fusion Middleware 11*g*.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at
`http://www.oracle.com/us/corporate/accessibility/index.html`.

Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit `http://www.oracle.com/support/contact.html` or visit `http://www.oracle.com/accessibility/support.html` if you are hearing impaired.

Related Documents

For more information, see these Oracle resources:

- Oracle Fusion Middleware Documentation on Oracle Fusion Middleware Disk 1
- Oracle Fusion Middleware Documentation Library 11g Release 1 (11.1.1)
- Oracle Technology Network at
  `http://www.oracle.com/technetwork/index.html`.

Conventions

The following text conventions are used in this document:

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

Part I

Oracle Fusion Middleware

Part I contains the following chapters:

1

Introduction

This chapter introduces Oracle Fusion Middleware Release Notes, 11g Release 1 (11.1.1). It includes the following topics:

- Section 1.1, "Latest Release Information"
- Section 1.2, "Purpose of this Document"
- Section 1.3, "System Requirements and Specifications"
- Section 1.4, "Memory Requirements"
- Section 1.5, "Certification Information"
- Section 1.6, "Downloading and Applying Required Patches"
- Section 1.7, "Licensing Information"

1.1 Latest Release Information

This document is accurate at the time of publication. Oracle will update the release notes periodically after the software release. You can access the latest information and additions to these release notes on the Oracle Technology Network at:

http://www.oracle.com/technetwork/indexes/documentation/index.html

1.2 Purpose of this Document

This document contains the release information for Oracle Fusion Middleware 11g Release 1 (11.1.1). It describes differences between Oracle Fusion Middleware and its documented functionality.

Oracle recommends you review its contents before installing, or working with the product.

1.3 System Requirements and Specifications

Oracle Fusion Middleware installation and configuration will not complete successfully unless users meet the hardware and software pre-requisite requirements before installation.

For more information, see "Review System Requirements and Specifications" in the *Oracle Fusion Middleware Installation Planning Guide*

1.4 Memory Requirements

Oracle Fusion Middleware memory requirements for installation, configuration, and runtime are as follows:

1. Without a Database on the same server: Minimum 4 GB physical memory and 4 GB swap.

2. With a Database on the same server: Minimum 6 GB physical memory and 6 GB swap.

> **Note:** These minimum memory values are with the assumption that no user or operating system process is consuming any unusually high amount of memory. If such a condition exists, corresponding amount of additional physical memory will be required.

1.5 Certification Information

This section contains the following:

- Section 1.5.1, "Where to Find Oracle Fusion Middleware Certification Information"
- Section 1.5.2, "Certification Exceptions"
- Section 1.5.3, "JMSDELIVERYCOUNT Is Not Set Properly"
- Section 1.5.4, "Viewer Plugin Required On Safari 4 To View Raw XML Source"

1.5.1 Where to Find Oracle Fusion Middleware Certification Information

The latest certification information for Oracle Fusion Middleware 11g Release 1 (11.1.1) is available at the Oracle Fusion Middleware Supported System Configurations Central Hub:

http://www.oracle.com/technetwork/middleware/ias/downloads/fusion-certification-100350.html

1.5.2 Certification Exceptions

This section describes known issues (exceptions) and their workarounds that are associated with Oracle Fusion Middleware 11g certifications. For a list of known issues that are associated with specific Oracle Fusion Middleware 11g Release 1 (11.1.1) components, see the Release Notes for the specific Oracle Fusion Middleware 11g Release 1 (11.1.1) component.

This section contains the following topics:

- Section 1.5.2.1, "Certification Information for Oracle Fusion Middleware 11g R1 with Oracle Database 11.2.0.1"
- Section 1.5.2.2, "Restrictions on Specific Browsers"
- Section 1.5.2.3, "Support for GridLink Data Sources in Oracle Fusion Middleware 11g"

1.5.2.1 Certification Information for Oracle Fusion Middleware 11g R1 with Oracle Database 11.2.0.1

If you choose to configure Oracle Internet Directory with Database vault, do the following:

1. Apply patch 8897382 to fix bug 8897382.

    > **Note:** the following workaround is required only if the Oracle Fusion Middleware version is 11.1.1.1.0 (11gR1). This issue will be fixed in 11.1.1.2.0.

2. Apply the workaround for bug 8987186 by editing `<OH>/ldap/datasecurity/dbv_oid_command_rules.sql` file and find the following declaration:

```
/declare
 begin
      dvsys.dbms_macadm.CREATE_COMMAND_RULE(
      command => 'CONNECT'
      ,rule_set_name => 'OID App Access'
      ,object_owner => 'ODS'
      ,object_name => '%'
      ,enabled => 'Y');
 commit;
 end;/
```

and change the line that is indicated in **bold**:

```
/declare
 begin
      dvsys.dbms_macadm.CREATE_COMMAND_RULE(
      command => 'CONNECT'
      ,rule_set_name => 'OID App Access'
      ,object_owner => '%'
      ,object_name => '%'
      ,enabled => 'Y');
 commit;
end;/
```

1.5.2.2 Restrictions on Specific Browsers

1.5.2.2.1 Java Plugin for Discoverer Plus Not Downloaded Automatically on Firefox When you attempt to connect to Discoverer Plus by using the Mozilla Firefox browser on a computer that does not have Java 1.6 installed, Firefox does not download the JRE 1.6 plug-in automatically. Instead, Firefox displays the following message: "Additional plugins are required to display this page..."

The workaround is to download the JRE 1.6 plug-in by clicking the Install Missing Plugin link to install it manually.

1.5.2.3 Support for GridLink Data Sources in Oracle Fusion Middleware 11g

Active GridLink for Oracle RAC allows you to create GridLink data sources. GridLink data sources provide connectivity between Oracle WebLogic Server and an Oracle Database service targeted to an Oracle RAC cluster. You can also use GridLink data sources when configuring Oracle Exalogic with an Oracle RAC cluster.

However, GridLink data sources are currently supported for use only with custom Java EE applications running on Oracle WebLogic Server and Oracle Exalogic. They are not supported for use with the other Oracle Fusion Middleware products, such as Oracle SOA Suite, Oracle WebCenter, and Oracle Enterprise Content Management. For

products other than Oracle WebLogic Server and Oracle Exalogic, Oracle recommends using JDBC Multi Data Sources to connect to an Oracle RAC service.

For more information about using GridLink data sources, see "Using Grid Link Data Sources" in *Configuring and Managing JDBC Data Sources for Oracle WebLogic*.

1.5.3 JMSDELIVERYCOUNT Is Not Set Properly

When using AQ JMS with Oracle Database 11.2.0.1, JMXDELIVERYCOUNT is not set correctly.

The workaround is to apply patch 9932143 (`http://aru.us.oracle.com:8080/ARU/ViewCheckin/process_form?bug=9932143`) to Oracle Database 11.2.0.1.

1.5.4 Viewer Plugin Required On Safari 4 To View Raw XML Source

You need a Safari plugin to view raw XML. If there is no plugin installed, you will see unformatted XML which will be difficult to read. This is because Safari applies a default stylesheet, which only displays the text nodes in the XML document.

As a workaround, go to **View > View Source** in the Safari menu bar to see the full XML of the metadata document. Also, selecting **File > Save** and choosing **XML Files** as the file type, will correctly save the XML metadata file with all the markup intact.

1.6 Downloading and Applying Required Patches

After you install and configure Oracle Fusion Middleware 11g Release 1 (11.1.1.4.0), there might be cases where additional patches are required to address specific known issues.

Patches for Oracle Fusion Middleware 11*g* are available from My Oracle Support:

```
http://support.oracle.com/
```

Table 1–1 lists some of the specific Oracle Fusion Middleware patches that were available at the time these release notes were published.

Table 1–1   Patches Required to Fix Specific Issues with Oracle Fusion Middleware 11g

Oracle Fusion Middleware Product or Component	Bug/Patch Number	Description
Oracle SOA Suite - Oracle BPM Worklist application	9901600	Unless you apply this patch, errors appear in the log files when you access the Event Driven page in the Oracle Business Process Management Worklist application.
Oracle XDK for Java	10337609	This patch fixes the following issue.
		If you use the XSU utility to insert some data into the database, and the database connection had the connection property called `oracle.jdbc.J2EE13Compliant` set to "true", and the target column was some kind of numeric column, then it is possible for the insert to fail with a the following error:
		`java.lang.NumberFormatException`

1.7 Licensing Information

Licensing information for Oracle Fusion Middleware is available at:

http://oraclestore.oracle.com

Detailed information regarding license compliance for Oracle Fusion Middleware is available at:

http://www.oracle.com/technetwork/middleware/ias/overview/index.html

2

Oracle Fusion Middleware Administration

This chapter describes issues associated with Oracle Fusion Middleware administration. It includes the following topics:

- Section 2.1, "General Issues and Workarounds"
- Section 2.2, "Configuration Issues and Workarounds"

Note: This chapter contains issues you might encounter while administering any of the Oracle Fusion Middleware products.

Be sure to review the product-specific release note chapters elsewhere in this document for any additional issues specific to the products you are using.

2.1 General Issues and Workarounds

This section describes general issue and workarounds. It includes the following topic:

- Section 2.1.1, "Fusion Middleware Control May Return Error in Mixed IPv6 and IPv4 Environment"
- Section 2.1.2, "Deploying JSF Applications"
- Section 2.1.3, "Limitations in Cloning"
- Section 2.1.4, "Limitations in Moving Oracle Business Process Management from Test to Production Environment"
- Section 2.1.5, "Message Returned with Incorrect Error Message Level"

2.1.1 Fusion Middleware Control May Return Error in Mixed IPv6 and IPv4 Environment

If your environment contains both IPv6 and IPv4 network protocols, Fusion Middleware Control may return an error in certain circumstances.

If the browser that is accessing Fusion Middleware Control is on a host using the IPv4 protocol, and selects a control that accesses a host using the IPv6 protocol, Fusion Middleware Control will return an error. Similarly, if the browser that is accessing Fusion Middleware Control is on a host using the IPv6 protocol, and selects a control that accesses a host using the IPv4 protocol, Fusion Middleware Control will return an error.

For example, if you are using a browser that is on a host using the IPv4 protocol and you are using Fusion Middleware Control, Fusion Middleware Control returns an error when you navigate to an entity that is running on a host using the IPv6 protocol, such as in the following situations:

- From the Oracle Internet Directory home page, you select Directory Services Manager from the Oracle Internet Directory menu. Oracle Directory Services Manager is running on a host using the IPv6 protocol.

- From a Managed Server home page, you click the link for Oracle WebLogic Server Administration Console, which is running on IPv6.

- You test Web Services endpoints, which are on a host using IPv6.

- You click an application URL or Java application which is on a host using IPv6.

To work around this issue, you can add the following entry to the /etc/hosts file:

```
nnn.nn.nn.nn  myserver-ipv6 myserver-ipv6.example.com
```

In the example, *nnn.nn.nn.nn* is the IPv4 address of the Administration Server host, myserver.example.com.

2.1.2 Deploying JSF Applications

Some JSF applications may experience a memory leak due to incorrect Abstract Window Toolkit (AWT) application context classloader initialization in the Java class library. Setting the `oracle.jrf.EnableAppContextInit` system property to **true** will attempt eager initialization of the AWT application context classloader to prevent this leak from occurring. By default, this property is set to **false**.

2.1.3 Limitations in Cloning

Note the following limitations in cloning:

- When you execute the pasteBinary command, the -executesysprereqs option is set to true by default. If you set it to false, the operation fails. To work around this problem, either do not pass the option to the pasteBinary command, or set it to true.

- When you are cloning Oracle Virtual Directory, the Oracle instance name in the source environment cannot be the same as the Oracle instance name in the target environment. The Oracle instance name in the target must be different than the name in the source.

- After you clone Oracle Virtual Directory from one host to another, you must add a self-signed certificate to the Oracle Virtual Directory keystore and EM Agent wallet on Host B. Take the following steps:

    a. Set the ORACLE_HOME and JAVA_HOME environment variables.

    b. Delete the existing self-signed certificate:

    ```
    $JAVA_HOME/bin/keytool -delete -alias serverselfsigned
      -keystore ORACLE_INSTANCE/config/OVD/ovd_component_
    name/keystores/keys.jks
      -storepass OVD_Admin_password
    ```

    c. Generate a key pair:

    ```
    $JAVA_HOME/bin/keytool -genkeypair
      -keystore ORACLE_INSTANCE/config/OVD/ovd_component_
    name/keystores/keys.jks
      -storepass OVD_Admin_password -keypass OVD_Admin_password -alias
    serverselfsigned
      -keyalg rsa -dname "CN=Fully_qualified_hostname,O=test"
    ```

    d. Export the certificate:

```
$JAVA_HOME/bin/keytool -exportcert
  -keystore ORACLE_INSTANCE/config/OVD/ovd_component_
name/keystores/keys.jks
  -storepass OVD_Admin_password -rfc -alias serverselfsigned
 -file ORACLE_INSTANCE/config/OVD/ovd_component_name/keystores/ovdcert.txt
```

    e. Add a wallet to the EM Agent:

```
ORACLE_HOME/../oracle_common/bin/orapki wallet add
  -wallet ORACLE_INSTANCE/EMAGENT/EMAGENT/sysman/config/monwallet
  -pwd EM_Agent_Wallet_password -trusted_cert
  -cert ORACLE_INSTANCE/config/OVD/ovd_component_name/keystores/ovdcert.txt
```

    f. Stop and start the Oracle Virtual Directory server.

    g. Stop and start the EM Agent.

2.1.4 Limitations in Moving Oracle Business Process Management from Test to Production Environment

Note the following limitations when moving Oracle Business Process Management from a test envrionment to a production environment:

- When you move Oracle Business Process Management from a test environment to a production environment as described in the Task "Move Oracle Business Process Management to the New Production Environment" in the *Oracle Fusion Middleware Administrator's Guide*, Oracle Business Process Management Organization Units are not imported.

  To work around this issue, you must re-create the Organization Units in the production environment. In addition, if any Organization associations with the Calendar rule for the Role exist in the test environment, you must re-create them, using the Roles screen.

  For information, see "Working with Organizations" in the *Oracle Fusion Middleware Modeling and Implementation Guide for Oracle Business Process Management.*

- Oracle recommends that you move artifacts and data into a new, empty production environment. If the same artifacts are present or some data has been updated on the production environment, the procedure does not update those artifacts.

2.1.5 Message Returned with Incorrect Error Message Level

In Fusion Middleware Control, when you select a metadata repository, the following error messages are logged:

```
Partitions is NULL
Partitions size is 0
```

These messages are logged at the Error level, which is incorrect. They should be logged at the debug level, to provide information.

2.2 Configuration Issues and Workarounds

This section describes configuration issues and their workarounds. It includes the following topics:

-
-
-
-
-
-

2.2.1 Must Stop Oracle SOA Suite Managed Server Before Stopping soa-infra

Using Fusion Middleware Control, if you stop a Oracle SOA Suite Managed Server before you stop soa-infra, then you start the Managed Server, the soa-infra application is not restarted automatically. If you try to restart the soa-infra, you will received an error. When you encounter the problem, you cannot close the dialog box in the browser, so you cannot take any further actions in Fusion Middleware Control.

To avoid this situation, you should stop the Managed Server, which stops all applications, including the soa-infra application. To start the Managed Server and the soa-infra, start the Managed Server.

To close the browser dialog box, enter the following URL in your browser:

```
http://host:port/em
```

2.2.2 Configuring Fusion Middleware Control for Windows Native Authentication

To use Windows Native Authentication (WNA) as the single sign-on mechanism between Fusion Middleware Control and Oracle WebLogic Server Administration Console, you must make changes to the following files:

- web.xml
- weblogic.xml

These files are located in the em.ear file. You must explode the em.ear file, edit the files, then rearchive the em.ear file. Take the following steps (which assume that while the front end is on Windows, the em.ear file is on UNIX):

1. Set the JAVA_HOME environment variable. For example:

   ```
   setenv JAVA_HOME /scratch/Oracle/Middleware/jrockit_160_05_R27.6.2-20
   ```

2. Change to the directory containing the em.ear, and explode the file. For example:

   ```
   cd /scratch/Oracle/Middleware/user_projects/applications/domain_name
   JAVA_HOME/bin/jar xvf em.ear em.war
   JAVA_HOME/bin/jar xvf em.war WEB-INF/web.xml
   JAVA_HOME/bin/jar xvf em.war WEB-INF/weblogic.xml
   ```

3. Edit web.xml, commenting out the first login-config block and uncommenting the login-config block for WNA. (The file contains information about which block to comment and uncomment.) When you have done this, the portion of the file will appear as in the following example:

   ```
   <!--<login-config>
       <auth-method>CLIENT-CERT</auth-method>
   ```

```
        </login-config>
-->
 <!--
  the following block is for Windows Native Authentication, if you are using
WNA, do the following:
    1. uncomment the following block
    2. comment out the previous <login-config> section.
    3. you also need to uncomment a block in weblogic.xml
-->
  <login-config>
    <auth-method>CLIENT-CERT,FORM</auth-method>
    <form-login-config>
      <form-login-page>/faces/targetauth/emasLogin</form-login-page>
      <form-error-page>/login/LoginError.jsp</form-error-page>
    </form-login-config>
  </login-config>
  <security-constraint>
.
.
.
  <security-role>
    <role-name>Monitor</role-name>
  </security-role>
```

4. Edit weblogic.xml, uncommenting the following block. (The file contains information about which block to uncomment.) When you have done this, the portion of the file will appear as in the following example:

```
<!--
the following block is for Windows Native Authentication, if you are using
WNA, uncomment the following block.
-->
 <security-role-assignment>
    <role-name>Admin</role-name>
    <externally-defined/>
  </security-role-assignment>
.
.
.
  <security-role-assignment>
    <role-name>Deployer</role-name>
    <externally-defined/>
  </security-role-assignment>
```

5. Rearchive the em.ear file. For example:

```
JAVA_HOME/bin/jar uvf em.war WEB-INF/web.xml
JAVA_HOME/bin/jar uvf em.war WEB-INF/weblogic.xml
JAVA_HOME/bin/jar uvf em.ear em.war
```

2.2.3 Fusion Middleware Control Does Not Keep Column Preferences in Log Viewer Pages

In Fusion Middleware Control, you can reorder the columns in the pages that display log files and log file messages. However, if you navigate away from the page and then back to it, the columns are set to their original order.

2.2.4 Topology Viewer Does Not Display Applications Deployed to a Cluster

In Fusion Middleware Control, the Topology Viewer does not display applications that are deployed to a cluster.

2.2.5 Changing Log File Format

When you change the log file format note the following:

- When you change the log file format from text to xml, specify the path, but omit the file name. The new file will be named log. xml.

- When you change the log file format from xml to text, specify both the path and the file name.

2.2.6 SSL Automation Tool Configuration Issues

The following issues have been observed when using the SSL Automation tool:

- The script creates intermediate files that contain passwords in clear text. If the script fails, these files might not be removed. After a script failure, delete all files under the `rootCA` directory.

- If Oracle Internet Directory password policy is enabled, passwords entered for wallet or keystore fail if they violate the policy.

- Before you run the script, you must have JDK 1.6 installed and you must have `JAVA_HOME` set in your environment.

- If the Oracle Virtual Directory configuration script fails, check the run log or enable debug for the shell script to view specific errors. If the error message looks similar to this, rerun the script with a new keystore name:

```
WLSTException: Error occured while performing cd : Attribute
oracle.as.ovd:type=component.listenersconfig.sslconfig,name=LDAP SSL
Endpoint,instance=%OVD_INSTANCE%,component=ovd1 not found
```

3

Oracle Enterprise Manager Fusion Middleware Control

This chapter describes issues associated with Fusion Middleware Control. It includes the following topics:

- Section 3.1, "General Issues and Workarounds"
- Section 3.2, "Documentation Errata"

> **Note:** This chapter contains issues you might encounter while using Fusion Middleware Control to manage any of the Oracle Fusion Middleware products.
>
> Be sure to review the product-specific release note chapters elsewhere in this document for any additional issues specific to the products you are using.

3.1 General Issues and Workarounds

This section describes general issue and workarounds. It includes the following topic:

- Section 3.1.1, "Product Behavior After a Session Timeout"
- Section 3.1.2, "Fixing Errors Displayed When Selecting the TopLink Sessions Command in Fusion Middleware Control"
- Section 3.1.3, "Verifying the DISPLAY Variable to Correct Problems Displaying Graphics"
- Section 3.1.4, "Incomplete Information Available on the MDS Configuration Page"
- Section 3.1.5, "Exceptions When Starting Oracle Web Cache After Accessing Configuration Pages from Oracle Enterprise Manager Fusion Middleware Control"
- Section 3.1.6, "Table Display Problems When Using Some Language Variants"
- Section 3.1.7, "Problems When Internet Explorer 7 is Configured to Open Pop-Up Windows in a New Tab."
- Section 3.1.8, "Additional Fusion Middleware Control Release Notes"
- Section 3.1.9, "Problem with Performance Charts After Moving a Chart Region"
- Section 3.1.10, "Display Problems When Running JDK 160_18 on Intel Systems that Support the SSE4.2 Instruction Set"

- Section 3.1.11, "Adobe Flash Plugin Required When Displaying Fusion Middleware Control in the Apple Safari Browser"

- Section 3.1.12, "Unable to Access Fusion Middleware Control After Installing the Oracle Identity Management 11.1.1.4.0 Patch Set"

3.1.1 Product Behavior After a Session Timeout

For security purposes, your sessions with the Fusion Middleware Control will time out after a predefined period of inactivity, and you will be asked to log in to the console again. In most cases, you are returned to the page you had displayed before the session timed out.

However, in some circumstances, such as when you are using the Fusion Middleware Control deployment wizards, you will not be returned the same location in the product after you log in. In those cases, you will have to navigate to the specific Fusion Middleware Control page you were using before the session timed out.

3.1.2 Fixing Errors Displayed When Selecting the TopLink Sessions Command in Fusion Middleware Control

In Fusion Middleware Control, you can view the Oracle TopLink management pages by selecting **TopLink Sessions** from the **Application Deployment** menu.

However, if you receive an error message when you select this command, you can remedy the problem by adding one or both of the following MBean system properties, as follows

On Windows operating systems:

```
rem set JAVA_OPTIONS=%JAVA_OPTIONS% -Declipselink.register.dev.mbean=true
rem set JAVA_OPTIONS=%JAVA_OPTIONS% -Declipselink.register.run.mbean=true
```

On UNIX operating systems:

```
JAVA_OPTIONS="${JAVA_OPTIONS} -Declipselink.register.dev.mbean=true"
JAVA_OPTIONS="${JAVA_OPTIONS} -Declipselink.register.run.mbean=true"
```

For more information, see the following URL on the Eclipse WIKI Web site:

```
http://wiki.eclipse.org/Integrating_EclipseLink_with_an_Application_Server_
(ELUG)#How_to_Integrate_JMX
```

3.1.3 Verifying the DISPLAY Variable to Correct Problems Displaying Graphics

The graphics subsystem for the Fusion Middleware Control generates some of its graphics on demand, and if the DISPLAY environment variable is set, Fusion Middleware Control tries to open the specified DISPLAY environment.

If Fusion Middleware Control fails to start due to graphics errors, check to see whether the DISPLAY environment variable is set to a proper DISPLAY environment.

If the DISPLAY environment variable is set incorrectly, unset the DISPLAY environment variable. Then restart Fusion Middleware Control.

3.1.4 Incomplete Information Available on the MDS Configuration Page

After deploying a Oracle SOA Suite application that requires Oracle Metadata Services (MDS), in some rare circumstances, you may find that the MDS configuration page for the application does not contain complete information about the MDS repository.

To address this problem, use the Metadata Repositories page to register the repository again. For more information, see "Create and Register an MDS Repository" in the Fusion Middleware Control online help.

3.1.5 Exceptions When Starting Oracle Web Cache After Accessing Configuration Pages from Oracle Enterprise Manager Fusion Middleware Control

To start, stop, or restart Oracle Web Cache from Fusion Middleware Control, from the **Web Cache** menu, you can choose **Control**, and then **Start Up**, **Shut Down**, or **Restart**.

If you select **Shut Down**, and then **Start Up** on a configuration page, Fusion Middleware Control may return exception errors. If these errors occur in your environment, perform the operations from Web Cache Home page.

3.1.6 Table Display Problems When Using Some Language Variants

When you use Fusion Middleware Control in some non-English language environments, some of the tables on the component home pages display incorrectly. For example, some rows of the table appear to be merged and without content.

These issues can be safely ignored, since no data on the pages is hidden. The table cells that appear incorrectly do not contain performance data or other information.

3.1.7 Problems When Internet Explorer 7 is Configured to Open Pop-Up Windows in a New Tab

If you configure Microsoft Internet Explorer 7 so it always displays pop-up windows in a new browser tab, then you may experience problems using Fusion Middleware Control. For example, in some cases, Enteprise Manager content displays in a new tab as expected, but Fusion Middleware Control stops responding to mouse clicks. The only way to continue working is to close the tab.

To avoid this problem, use the Internet Options dialog box in Internet Explorer to disable the option for displaying pop-up windows in a new tab.

3.1.8 Additional Fusion Middleware Control Release Notes

Refer to Chapter 4, "Oracle Fusion Middleware Administration" for additional Fusion Middleware Control release notes.

Additional Fusion Middleware Control release notes are also included in the component chapters of the Release Notes.

3.1.9 Problem with Performance Charts After Moving a Chart Region

Oracle Enterprise Manager Fusion Middleware Control provides performance charts on many of the component home pages. For example, it provides charts that display the current response and load metrics, as well as the CPU and memory usage.

If you move one of these charts to a new location on the home page, then sometimes the Table View link (which provides a tabular view of the data) does not work properly and the chart might stop refreshing automatically.

To fix this problem, click the refresh icon at the top, right corner of the page to refresh the page.

3.1.10 Display Problems When Running JDK 160_18 on Intel Systems that Support the SSE4.2 Instruction Set

Some of the newer Intel-based computers support the SSE4.2 instruction set. If you are using the `160_18` version of the Java Development Kit (JDK) on one of these computers, then you might see some display issues in the Oracle Enterprise Manager Fusion Middleware Control.

This is related to the following issue on the Sun Developer Network (SDN):

http://bugs.sun.com/view_bug.do?bug_id=6875866

In particular, when using Fusion Middleware Control, you might experience some font size and alignment issues, and an error similar to the following appears in the server log file:

```
Servlet failed with Exception
java.lang.StringIndexOutOfBoundsException: String index out of range
```

To remedy this problem:

1. Locate and open the `setDomainEnv` configuration file in your Oracle WebLogic Server domain home.

   For example:

   ```
   DOMAIN_HOME/bin/setDomainEnv.sh
   ```

2. Add the following to the `JAVA_OPTIONS` entry in the `setDomainEnv` file and save your changes:

   ```
   -XX:-UseSSE42Intrinsics
   ```

   For example:

   ```
   JAVA_OPTIONS="${JAVA_OPTIONS} ${JAVA_PROPERTIES}
    -Dwlw.iterativeDev=${iterativeDevFlag} -Dwlw.testConsole=${testConsoleFlag}
    -Dwlw.logErrorsToConsole=${logErrorsToConsoleFlag} -XX:-UseSSE42Intrinsics"
   ```

3. Locate the following directory in your Oracle WebLogic Server domain home:

   ```
   DOMAIN_HOME/servers/AdminServer/tmp/_WL_user/em/jmb4hf/public/adf/styles/cache/
   ```

4. Delete the style sheets (.css) files from the directory.

5. Restart the Oracle WebLogic Server domain.

6. Clear the cache in your Web browser.

3.1.11 Adobe Flash Plugin Required When Displaying Fusion Middleware Control in the Apple Safari Browser

To use the Apple Safari browser to display Fusion Middleware Control, you must have the Adobe Flash browser plugin installed.

If you experience problems displaying graphics or other Fusion Middleware Control elements, download and install a newer version of the plugin from the Adobe Web site.

3.1.12 Unable to Access Fusion Middleware Control After Installing the Oracle Identity Management 11.1.1.4.0 Patch Set

After you install the Oracle Fusion Middleware 11*g* Release 1 (11.1.1.4.0) patch set, you might experience problems when accessing the Fusion Middleware Control pages used to manage the Oracle Identity Management components.

Specifically, an error similar to the following appears in the Administration Server log files:

```
[ACTIVE].ExecuteThread: '0' for queue: 'weblogic.kernel.Default
(self-tuning)'] [userId: <anonymous>] [ecid:
0000In^zrbUF8DQ6ubU4UH1D1qXF00000s,0] [APP: em] [[
oracle.adf.controller.ControllerException: ADFC-00025: The ADF controller has
not been successfully initalized.
```

If you experience this problem, restart the Administration Server. After the restart, you should be able to log in and access the Fusion Middleware Control pages.

3.2 Documentation Errata

This section describes documentation errata. It includes the following topics:

- Section 3.2.1, "Search Unavailable for Some Embedded Administrator's Guides"

3.2.1 Search Unavailable for Some Embedded Administrator's Guides

Search is unavailable for the following embedded administrator's guides in the Fusion Middleware Control help system:

- *Oracle Fusion Middleware Administrator's Guide for Oracle Identity Federation*
- *Oracle Fusion Middleware System Administrator's Guide for Content Server* for installations with Oracle Enterprise Content Management Suite

4

Oracle Fusion Middleware High Availability and Enterprise Deployment

This chapter describes issues associated with Oracle Fusion Middleware high availability and enterprise deployment. It includes the following topics:

- Section 4.1, "General Issues and Workarounds"
- Section 4.2, "Configuration Issues and Workarounds"
- Section 4.3, "Testing Abrupt Failures of WebLogic Server When Using File Stores on NFS"
- Section 4.4, "Documentation Errata"

> **Note:** This chapter contains issues you might encounter while configuring any of the any of the Oracle Fusion Middleware products for high availability or an enterprise deployment.
>
> Be sure to review the product-specific release note chapters elsewhere in this document for any additional issues specific to the products you are using.

4.1 General Issues and Workarounds

This section describes general issue and workarounds. It includes the following topics:

- Section 4.1.1, "Logout Does Not Function when Oracle Access Manager 11g is Integrated with Oracle Identity Federation 11g"
- Section 4.1.2, "Secure Resources in Application Tier"
- Section 4.1.3, "mod_wl Not Supported for OHS Routing to Managed Server Cluster"
- Section 4.1.4, "Only Documented Procedures Supported"
- Section 4.1.5, "SOA Composer Generates Error During Failover"
- Section 4.1.6, "Accessing Web Services Policies Page in Cold Failover Environment"
- Section 4.1.7, "Considerations for Oracle Identity Federation HA in SSL Mode"
- Section 4.1.8, "Online Help Context May be Lost When Failover Occurs in High Availability Environment"
- Section 4.1.9, "ASCRS Cannot be Used to Create a Database Resource for the Oracle Database Console Service on Windows"

4.1.1 Logout Does Not Function when Oracle Access Manager 11*g* is Integrated with Oracle Identity Federation 11*g*

Errors occur during logout when Oracle Access Manager is integrated with Oracle Identity Federation. No workaround exists at this time. Please contact Oracle Support to obtain the fix for Bug #9969090 to resolve this issue.

4.1.2 Secure Resources in Application Tier

It is highly recommended that the application tier in the SOA Enterprise Deployment topology and the WebCenter Enterprise Deployment topology is protected against anonymous RMI connections. To prevent RMI access to the middle tier from outside the subset configured, follow the steps in "Configure connection filtering" in the Oracle WebLogic Server Administration Console Online Help. Execute all of the steps, except as noted in the following:

1. Do not execute the substep for configuring the default connection filter. Execute the substep for configuring a custom connection filter.

2. In the Connection Filter Rules field, add the rules that will allow all protocol access to servers from the middle tier subnet while allowing only http(s) access from outside the subnet, as shown in the following example:

```
nnn.nnn.0.0/nnn.nnn.0.0  * * allow
0.0.0.0/0 * * allow t3 t3s
```

4.1.3 mod_wl Not Supported for OHS Routing to Managed Server Cluster

Oracle Fusion Middleware supports only `mod_wls_ohs` and does not support `mod_wl` for Oracle HTTP Server routing to a cluster of managed servers.

4.1.4 Only Documented Procedures Supported

For Oracle Fusion Middleware high availability deployments, Oracle strongly recommends following only the configuration procedures documented in the *Oracle Fusion Middleware High Availability Guide* and the *Oracle Fusion Middleware Enterprise Deployment Guides*.

4.1.5 SOA Composer Generates Error During Failover

During failover, if you are in a SOA Composer dialog box and the connected server is down, you will receive an error, such as `Target Unreachable, 'messageData' returned null.`

To continue working in the SOA Composer, open a new browser window and navigate to the SOA Composer.

4.1.6 Accessing Web Services Policies Page in Cold Failover Environment

In a Cold Failover Cluster (CFC) environment, the following exception is displayed when Web Services policies page is accessed in Fusion Middleware Control:

```
Unable to connect to Oracle WSM Policy Manager.
Cannot locate policy manager query/update service. Policy manager service
look up did not find a valid service.
```

To avoid this, implement one the following options:

- Create virtual hostname aliased SSL certificate and add to the key store.

- Add "-Dweblogic.security.SSL.ignoreHostnameVerification=true" to the JAVA_OPTIONS parameter in the startWeblogic.sh or startWeblogic.cmd files

4.1.7 Considerations for Oracle Identity Federation HA in SSL Mode

In a high availability environment with two (or more) Oracle Identity Federation servers mirroring one another and a load balancer at the front-end, there are two ways to set up SSL:

- Configure SSL on the load balancer, so that the SSL connection is between the user and the load balancer. In that case, the keystore/certificate used by the load balancer has a CN referencing the address of the load balancer.

    The communication between the load balancer and the WLS/Oracle Identity Federation can be clear or SSL (and in the latter case, Oracle WebLogic Server can use any keystore/certificates, as long as these are trusted by the load balancer).

- SSL is configured on the Oracle Identity Federation servers, so that the SSL connection is between the user and the Oracle Identity Federation server. In this case, the CN of the keystore/certificate from the Oracle WebLogic Server/Oracle Identity Federation installation needs to reference the address of the load balancer, as the user will connect using the hostname of the load balancer, and the Certificate CN needs to match the load balancer's address.

    In short, the keystore/certificate of the SSL endpoint connected to the user (load balancer or Oracle WebLogic Server/Oracle Identity Federation) needs to have its CN set to the hostname of the load balancer, since it is the address that the user will use to connect to Oracle Identity Federation.

4.1.8 Online Help Context May be Lost When Failover Occurs in High Availability Environment

In a high availability environment, if you are using online help and a failover occurs on one of the machines in your environment, your context in online help may be lost when the application is failed over.

For example, the online help table of contents may not remember the topic that was selected prior to the failover, or the last online help search results may be lost.

No data is lost, and your next online help request after the failover will be handled properly.

4.1.9 ASCRS Cannot be Used to Create a Database Resource for the Oracle Database Console Service on Windows

In Patch Set 2 of the Oracle Fusion Middleware 11*g* Release 1 (11.1.1) release, a new feature was added to Application Server Cluster Ready Services (ASCRS) to enable users to create an ASCRS database resource for the Oracle Database Console service. Using ASCRS to create an ASCRS database resource is described in the "Creating an Oracle Database Resource" section of the "Using Cluster Ready Services" chapter in the *Oracle Fusion Middleware High Availability Guide*.

This feature works on UNIX, because the Oracle Database Console can be CFC enabled on UNIX.

However, on Windows, there is no CFC support for the Oracle Database Console service. Therefore, you cannot use ASCRS to create a database resource for the Oracle Database Console service on Windows.

4.1.10 Changes to Rulesets May Not be Persisted During an Oracle RAC Instance Failover

When you update rulesets (used in Human Workflow or BPEL) through the Worklist configuration UI or the SOA Composer application during an Oracle RAC instance failover, the new rule metadata may not get persisted to the database. In this case, you will need to perform a manual retry. However, you can continue to use the older version of metadata without any errors.

4.1.11 Manual Retries May be Necessary When Redeploying Tasks During an Oracle RAC Failover

When redeploying tasks with large number of rules during an Oracle RAC instance failover, a manual retry may be needed by the end user occasionally.

4.1.12 Timeout Settings for SOA Request-Response Operations are Not Propagated in a Node Failure

In an active-active Oracle SOA cluster, when a node failure occurs, the timeout settings for request-response operations in receive activities are not propagated from one node to the other node or nodes. If a failure occurs in the server that scheduled these activities, they must be rescheduled with the scheduler upon server restart.

4.1.13 Scale Out and Scale Up Operations Fail

The scale out and scale up operations performed on your environment after re-associating the local file based WLS LDAP store with an external LDAP store will fail. To avoid this failure, follow the steps below before performing a scale up or scale out operation.

1. Edit the `setDomainEnv.sh` file located under the *DOMAIN_HOME*/bin directory and add the "-Dcommon.components.home=${*COMMON_COMPONENTS_HOME*}" and "-Djrf.version=11.1.1" variables to the the file.

2. These variables should be added to the "EXTRA_JAVA_PROPERTIES". For example:

```
EXTRA_JAVA_PROPERTIES="-Ddomain.home=${DOMAIN_HOME}
-Dcommon.components.home=${COMMON_COMPONENTS_HOME} -Djrf.version=11.1.1
        .
        .
        .
```

3. Save the file and proceed with the scale out or scale up operation.

4.1.14 Harmless SQLIntegrityConstraintViolationException Can be Received in a SOA Cluster

The following SQLIntegrityConstraintViolationException can be received in a SOA cluster:

```
[TopLink Warning]: 2010.04.11 14:26:53.941--UnitOfWork(275924841)--Exception
[TOPLINK-4002] (Oracle TopLink - 11g Release 1 (11.1.1.3.0):
Internal Exception: java.sql.SQLIntegrityConstraintViolationException:
ORA-00001: unique constraint (JYIPS2RC4B49_SOAINFRA.SYS_C0035333) violated
    .
    .
    .
```

This is not a bug. In a cluster environment, when the messages for the same group arrive on both the nodes, one node is bound to experience this exception for the first message. The application is aware of this exception and handles it properly. It does not break any functionality.

This exception can also come on a single node after you restart the server and send the message for the existing group. Again, this exception will be experienced on the very first message.

In summary, this exception is within the application design and does not impact any functionality. It is for this reason that you do not see this exception logged as severe in the soa-diagnostic logs.

Toplink does, however, log it in its server logs.

4.1.15 WebLogic Cluster WS-AT Recovery Can Put a Server into a 'Warning' State

In certain WebLogic cluster process crash scenarios, WS-AT recovery will result in stuck threads that put the server into a "warning" state. WS-AT data recovery is successful in these cases despite the fact that the logs display "failed state" messages, due to the fact that commit acks are not being processed correctly for this scenario (this issue does not occur when the scenario involves the rollback of the transaction). While the server may continue to function in this "warning" state, the threads will continue to be stuck until the transaction abandonment timeout (which defaults to 24 hours) is reached. The workaround is to restart the server, which removes the stuck threads and "warning" state. A patch for this issue can be obtained from Oracle Support.

4.1.16 Very Intensive Uploads from I/PM to UCM May Require Use of IP-Based Filters in UCM Instead of Hostname-Based Filters

The "Adding the I/PM Server Listen Addresses to the List of Allowed Hosts in UCM" section in the *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle Enterprise Content Management Suite* and the "Adding the I/PM Server Listen Addresses to the List of Allowed Hosts in UCM" section in the *Oracle Fusion Middleware High Availability Guide* describe how to add hostname-based filters for Oracle I/PM managed server listen addresses to the list of allowed hosts in Oracle UCM.

When using hostname-based filters in Oracle UCM (`config.cfg` file) a high latency/performance impact may be observed in the system for very intensive uploads of documents from Oracle I/PM to Oracle UCM. This is caused by the reverse DNS lookup that is required in Oracle UCM to allow the connections from Oracle I/PM servers. Using hostname-based filters is recommended in preparation for configuring the system for Disaster Protection and to restore to a different host (since the configuration used is IP-agnostic when using hostname-based filters). However if the performance of the uploads needs to be improved, users can use instead IP-based filters. To do this:

1. Edit the file `/u01/app/oracle/admin/`*domainName*`/ucm_ cluster/config/config.cfg` and remove or comment out:

   ```
   SocketHostNameSecurityFilter=localhost|localhost.mydomain.com|ecmhost1vhn1|ecmh
   ost2vhn1

   AlwaysReverseLookupForHost=Yes
   ```

2. Add the IP addresses (listen address) of the WLS_IPM1 and WLS_IPM2 managed servers (ECMHOST1VHN1 and ECMHOST2VHN1, respectively) to the SocketHostAddressSecurityFilter parameter list as follows:

```
SocketHostAddressSecurityFilter=127.0.0.1|0:0:0:0:0:0:0:1|X.X.X.X|Y.Y.Y.
```

where X.X.X.X and Y.Y.Y.Y are the listen addresses of WLS_IPM1 and WLS_IPM2 respectively. Notice that 127.0.0.1 also needs to be added as shown above.

3. Restart the UCM servers.

4.1.17 Worklist Application May Throw Exception if Action Dropdown Menu is Used During a Failover

If you use the Oracle Business Process Management Suite Worklist application **Actions** dropdown menu to take action on a task while a failover is in progress, an exception similar to the following may be thrown:

```
<oracle.adf.view.rich.component.fragment.UIXInclude> <ADF_FACES-10020> <Tear
down of include component context failed due to an unhandled e
xception.
java.util.NoSuchElementException
        at java.util.ArrayDeque.removeFirst(ArrayDeque.java:251)
        at java.util.ArrayDeque.pop(ArrayDeque.java:480)
        at
oracle.adfinternal.view.faces.context.ApplicationContextManagerImpl.popContext
Change(ApplicationContextManagerImpl.java:66)
  .
  .
  .
```

In this case, the approval or rejection of the task does not go through.

To work around this problem, use either of these approaches:

■ Instead of using the **Actions** dropdown menu to take action on the task, use the TaskForm to take action.

■ Do a refresh after the error message. Then take the action again using the **Actions** dropdown menu.

4.1.18 ClassCastExceptions in a SOA Cluster for the SOA Worklist Application

ClassCastExceptions may arise in a SOA cluster for the Oracle SOA Worklist application (java.lang.ClassCastException: oracle.adf.model.dcframe.DataControlFrameImpl is reported in the logs). As a result, the Worklist application state may not be replicated to other managed servers in the cluster. The Worklist application and the corresponding user sessions will be usable after the exception is thrown, but any failovers to other servers in the cluster will not succeed.

There is no workaround to this problem.

To solve this problem, download the patch for bug 9561444, which solves the problem. Follow these steps:

1. To obtain the patch, log into My Oracle Support (formerly Oracle*MetaLink*) at the following URL:

http://support.oracle.com

2. Click the **Patches & Updates** tab.

3. In the **Patch Search** section, enter 9561444 in the **Patch ID or number is** field, and enter your platform in the field after the **and Platform is** field.

4. Click **Search**.

5. On the Patch Search page, click the patch number in the **Patch ID** column. This causes the page content to change to display detailed information about the patch.

6. Click **Download** to download the patch.

4.1.19 Use srvctl in 11.2 Oracle RAC Databases to Set Up AQ Notification and Server-side TAF

Because of a known issue in 11.2 Oracle RAC databases, it is required to use `srvctl` to set up AQ notification and server-side TAF. Using DBMS_SQL packages will not work as expected.

Here is an example use of `srvctl`:

```
srvctl modify service -d orcl -s orclSVC -e SELECT -m BASIC -w 5 -z 5 -q TRUE
```

In the example:

orcl - Database Name

orclSVC - Service Name used by middleware component

SELECT - Failover type

BASIC - Failover method

5 - Failover delay

5 - Failover retry

TRUE - AQ HA notifications set to TRUE

Please refer to the Oracle 11.2 Oracle database documentation for detailed information about this command usage.

4.1.20 Oracle I/PM Input Files May Not be Processed Correctly During an Oracle RAC Failover

With Oracle I/PM and Oracle UCM file processing, some files may not get loaded in UCM properly during an Oracle RAC instance failover.

The incoming files to be processed by Oracle I/PM are put into an input folder. Oracle I/PM processes the files in the input folder and then puts them into Oracle UCM, which is backed by an Oracle RAC database. Sometimes when an Oracle RAC instance failure occurs, the retry may not happen correctly, and the incoming files do not get processed. These unprocessed files show up in an error folder. These unprocessed files can manually be put back into the input folder and processed.

4.1.21 Failover Is Not Seamless When Creating Reports in Oracle BI Publisher

If you create a report in Oracle BI Publisher, and a Managed Server is failed over before the report is saved, the failover might not be seamless. For example, when you attempt to save the report, the system might not be responsive.

If this occurs, click one of the header links, such as **Home** or **Catalog**, to be redirected to the Oracle BI Publisher login page. Then, log in and create and save the report again.

4.1.22 Failed to Load Error Appears in Layout View When Oracle BI Publisher Managed Server is Failed Over

In the Oracle BI Publisher layout editor, when a Managed Server is failed over, opening or creating a Web-based layout can cause the following error to appear:

```
Failed to load: object_name
Please contact the system administrator.
```

To work around this issue, close the message and click one of the header links, such as **Home** or **Catalog**, to be redirected to the login page.

4.1.23 When Scheduling an Oracle BI Publisher Job, a Popup Window Appears After Managed Server Failover

When scheduling a job in Oracle BI Publisher, after a Managed Server fails over, a large popup window appears when you click **Submit** that shows the HTML source for the login page.

To work around this issue, close the message window and click one of the header links, such as **Home** or **Catalog**, to be redirected to the login page. You will need to re-create the report job again.

4.1.24 Cannot Save Agent When Oracle Business Intelligence Managed Server Fails Over

If you create an agent in the Oracle Business Intelligence Web interface, and a Managed Server fails over before you save the agent, an error occurs when you try to save the agent.

To work around this issue, log out, then log back in to Oracle Business Intelligence and create the agent again.

4.1.25 Patch 10094106 Required for SSO Configuration in an Enterprise Deployment

Before you configure SSO using Oracle Access Manager 11g, as described in the chapter "Configuring Single Sign-on for Administration Consoles" in the *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle Identity Management*, you must apply Patch 10094106.

If you do not apply this patch, you might get a "404 Not Found" error when you attempt to access a protected application deployed on Oracle WebLogic Server with valid credentials.

4.1.26 Installing Additional Oracle Portal, Forms, Reports, and Discoverer Instances After Upgrading Oracle Single Sign-On 10*g* to Oracle Access Manager 11*g*

This issue occurs with Oracle Portal, Forms, Reports, and Discoverer 11g environments that have been upgraded from using Oracle Single-Sign On 10*g* to Oracle Access Manager 11*g* for authentication.

When performing subsequent Oracle Portal, Forms, Reports, and Discoverer 11*g* installations against the same environment where the initial Oracle Portal, Forms, Reports, and Discoverer 10*g* installation was upgraded to Oracle Access Manager, there are some requirements that must be met.

- For each subsequent Oracle Portal, Forms, Reports, and Discoverer 11*g* installation, you must maintain the original Oracle Single Sign-On 10*g* instance

and keep it actively running--in addition to new Oracle Access Manager 11*g* instance--while the additional Oracle Portal, Forms, Reports, and Discoverer 11*g* installations are performed.

This is necessary because Oracle Portal, Forms, Reports, and Discoverer 11*g* cannot be installed directly against Oracle Access Manager 11*g*.

■   After the subsequent classic installs are completed, the Oracle Single Sign-On 10*g* to Oracle Access Manager 11*g* upgrade procedure must be performed again. For more information, see "Upgrading Your Oracle Single Sign-On Environment" in the *Oracle Fusion Middleware Upgrade Guide for Oracle Identity Management*.

This procedure upgrades the new Oracle Portal, Forms, Reports, and Discoverer 11*g* instance to Oracle Access Manager 11*g*.

Note that these considerations apply only in an environment with Multiple Oracle Portal, Forms, Reports, and Discoverer 11*g* middle tiers that are installed or added to a your environment after the initial upgrade from Oracle Single Sign-On 10*g* to Oracle Access Manager 11*g*.

4.1.27 Using the Enterprise Deployment Guide for Oracle Identity Management with 11.1.1.4.0

Chapter 4, "Installing the Software," in the *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle Identity Management* describes how to install the Oracle Fusion Middleware software and apply some specific patches to your 11*g* Release 1 (11.1.1.3.0) Oracle Identity Management environment.

If you are planning to implement an Oracle Identity Management enterprise deployment using Oracle Fusion Middleware 11*g* Release (11.1.1.4.0), then note the following as you review the instructions in Chapter 4:

■   Before you review Section 4.5, "Installing Oracle Fusion Middleware," note that the process to install Oracle Identity Management 11*g* Release 1 (11.1.1.4.0) is as follows:

1.   Download and install Oracle Identity Management 11*g* Release 1 (11.1.1.2.0), which is a full installer you can use to install a new Oracle Identity Management 11.1.1.2.0 Oracle home inside the Middleware home you created when you installed Oracle WebLogic Server.

2.   Download and install the Oracle Identity Management 11*g* Release 1 (11.1.1.4.0) patch set, which is a patch set installer with updates your 11.1.1.2.0 Oracle home to 11.1.1.4.0.

■   The patches listed in Section 4.7, "Patching the Software," are not necessary if you install the 11.1.1.4.0 patch set, except in one scenario. Specifically, if your deployment uses Oracle Identity Manager, the following two procedures are necessary for an 11.1.1.4.0 enterprise deployment. For all other deployment scenarios, these are not required:

–   Section 4.7.7, "Creating the wlfullclient.jar File"

–   Section 4.7.8, "Provisioning the OIM Login Modules Under the WebLogic Server Library Directory"

4.2 Configuration Issues and Workarounds

This section describes configuration issues and their workarounds. It includes the following topics:

4.2.1 jca.retry.count Doubled in a Clustered Environment

In a clustered environment, each node maintains its own in-memory Hasmap for inbound retry. The jca.retry.count property is specified as **3** for the inbound retry feature. However, each node tries three times. As a result, the total retry count becomes 6 if the clustered environment has two nodes.

4.2.2 Cluster Time Zones Must Be the Same

All the machines in a cluster must be in the same time zone. WAN clusters are not supported by Oracle Fusion Middleware high availability. Even machines in the same time zone may have issues when started by command line. Oracle recommends using Node Manager to start the servers.

4.2.3 Fusion Middleware Control May Display Incorrect Status

In some instances, Oracle WebLogic Fusion Middleware Control may display the incorrect status of a component immediately after the component has been restarted or failed over.

4.2.4 Accumulated BPEL Instances Cause Performance Decrease

In a scaled out clustered environment, if a large number of BPEL instances are accumulated in the database, it causes the database's performance to decrease, and the following error is generated: MANY THREADS STUCK FOR 600+ SECONDS.

To avoid this error, remove old BPEL instances from the database.

4.2.5 Extra Message Enqueue when One a Cluster Server is Brought Down and Back Up

In a non-XA environment, MQSeries Adapters do not guarantee the only once delivery of the messages from inbound adapters to the endpoint in case of local transaction. In this scenario, if an inbound message is published to the endpoint, and before committing the transaction, the SOA server is brought down, inbound message are rolled back and the same message is again dequeued and published to the endpoint. This creates an extra message in outbound queue.

In an XA environment, MQ Messages are actually not lost but held by Queue Manager due to an inconsistent state. To retrieve the held messages, restart the Queue Manager.

4.2.6 Duplicate Unrecoverable Human Workflow Instance Created with Oracle RAC Failover

As soon as Oracle Human Workflow commits its transaction, the control passes back to BPEL, which almost instantaneously commits its transaction. Between this window, if the Oracle RAC instance goes down, on failover, the message is retried and can cause duplicate tasks. The duplicate task can show up in two ways - either a duplicate task appears in worklistapp, or an unrecoverable BPEL instance is created. This BPEL instance appears in BPEL Recovery. It is not possible to recover this BPEL instance as **consumer**, because this task has already completed.

4.2.7 Configuration Files Missing after Planned Administration Server Node Shutdown or Reboot

The following information refers to Chapter 10, "Managing the Topology," of the *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle SOA Suite*.

When performing a planned stop of the Administration Server's node (rebooting or shutting down the Admin Server's machine), it may occur that the OS NFS service is disabled before the Administration Server itself is stopped. This (depending on the configuration of services at the OS level) can cause the detection of missing files in the Administration Server's domain directory and trigger their deletion in the domain directories in other nodes. This can result in the framework deleting some of the files under `domain_dir/fmwconfig/`. This behavior is typically not observed for unplanned downtimes, such as machine panic, power loss, or machine crash. To avoid this behavior, shutdown the Administration Server before performing reboots or, alternatively, use the appropriate OS configuration to set the order of services in such a way that NFS service is disabled with later precedence than the Administration Server's process. See your OS administration documentation for the corresponding required configuration for the services' order.

4.2.8 No High Availability Support for SOA B2B TCP/IP

High availability failover support is not available for SOA B2B TCP/IP protocol. This effects primarily deployments using HL7 over MLLP. For inbound communication in

a clustered environment, all B2B servers are active and the address exposed for inbound traffic is a load balancer virtual server. Also, in an outage scenario where an active managed server is no longer available, the persistent TCP/IP connection is lost and the client is expected to reestablish the connection.

4.2.9 WebLogic Administration Server on Machines with Multiple Network Cards

When installing Oracle WebLogic Server on a server with multiple network cards, always specify a Listen Address for the Administration Server. The address used should be the DNS Name/IP Address of the network card you wish to use for Administration Server communication.

To set the Listen Address:

1. In the Oracle WebLogic Server Administration Console, select **Environment**, and then **Servers** from the domain structure menu.

2. Click the Administration Server.

3. Click **Lock and Edit** from the Change Center to allow editing.

4. Enter a Listen Address.

5. Click **Save**.

6. Click **Activate Changes** in the Change Center.

4.2.10 Additional Parameters for SOA and Oracle RAC Data Sources

In some deployments of SOA with Oracle RAC, you may need to set additional parameters in addition to the out of the box configuration of the individual data sources in an Oracle RAC configuration. The additional parameters are:

1. Add property `oracle.jdbc.ReadTimeout=300000` (300000 milliseconds) for each data source.

   The actual value of the `ReadTimeout` parameter may differ based on additional considerations.

2. If the network is not reliable, then it is difficult for a client to detect the frequent disconnections when the server is abruptly disconnected. By default, a client running on Linux takes 7200 seconds (2 hours) to sense the abrupt disconnections. This value is equal to the value of the `tcp_keepalive_time` property. To configure the application to detect the disconnections faster, set the value of the `tcp_keepalive_time`, `tcp_keepalive_interval`, and `tcp_keepalive_probes` properties to a lower value at the operating system level.

   > **Note:** Setting a low value for the `tcp_keepalive_interval` property leads to frequent probe packets on the network, which can make the system slower. Therefore, the value of this property should be set appropriately based on system requirements.

For example, set `tcp_keepalive_time=600` at the system running the WebLogic Server managed server.

Also, you must specify the `ENABLE=BROKEN` parameter in the `DESCRIPTION` clause in the connection descriptor. For example:

```
dbc:oracle:thin:@(DESCRIPTION=(enable=broken)(ADDRESS_LIST=(ADDRESS=(PRO
TOCOL=TCP)(HOST=node1-vip.mycompany.com)(PORT=1521)))(CONNECT_DATA=(SERVICE_
```

```
                        NAME=orcl.us.oracle.com)(INSTANCE_NAME=orcl1)))
```

As a result, the data source configuration appears as follows:

```
<url>jdbc:oracle:thin:@(DESCRIPTION=(enable=broken)(ADDRESS_LIST=(ADDRESS=(PRO
TOCOL=TCP)(HOST=node1-vip.us.oracle.com)(PORT=1521)))(CONNECT_DATA=(SERVICE_
NAME=orcl.us.oracle.com)(INSTANCE_NAME=orcl1)))</url>
    <driver-name>oracle.jdbc.xa.client.OracleXADataSource</driver-name>
    <properties>
      <property>
        <name>oracle.jdbc.ReadTimeout</name>
        <value>300000</value>
      </property>
      <property>
        <name>user</name>
        <value>jmsuser</value>
      </property>
      <property>
        <name>oracle.net.CONNECT_TIMEOUT</name>
        <value>10000</value>
      </property>
    </properties>
```

4.2.11 Message Sequencing and MLLP Not Supported in Oracle B2B HA Environments

Message sequencing and MLLP are not supported in Oracle B2B high availability (HA) environments.

4.2.12 Credentials not Propagated for Transport Protocols in B2B

The Oracle FMW credential store maintains usernames and passwords that you define for Transport protocols. If you use the default file store for these credentials, changes you make to usernames and passwords do not propagate across nodes. You must use a central LDAP for these credentials to be synchronized across nodes in a cluster, as described in, and required by, the Oracle Fusion Middleware High Availability Guide and Enterprise Deployment Guides.

4.2.13 Access Control Exception After Expanding Cluster Against an Extended Domain

The Oracle Identity Federation server has been observed to fail due to access control exceptions under the following circumstances:

1. You create a domain with no Identity Management components on host1.

2. On host2, you extend that domain in clustered mode, select all Identity Management components, and select Create Schema.

3. On host1, you expand the cluster and select all components.

Due to a bug, the file *DOMAIN_HOME*/config/fmwconfig system-jazn-data.xml on host1 is overwritten so that the <grant> element is removed, which causes the access control exceptions when the Oracle Identity Federation server is started.

To restore the <grant> element, you use the WLST grantPermission command.

On Linux, enter the following three commands at the bash prompt. Type each command on one line.

When typing the commands, replace *ORACLE_COMMON_HOME* with the path to the Oracle Common Home folder, located in the Middleware Home. When prompted for information to connect to WebLogic, enter the WLS Administrator Credentials and the location of the WebLogic Administration Server.

```
ORACLE_COMMON_HOME/common/bin/wlst.sh
ORACLE_COMMON_HOME/modules/oracle.jps_11.1.1/common/wlstscripts/grantPermissi
on.py -codeBaseURL
file:\${domain.home}/servers/\${weblogic.Name}/tmp/_WL_user/OIF_11.1.1.2.0/-
-permClass oracle.security.jps.service.credstore.CredentialAccessPermission
-permTarget context=SYSTEM,mapName=OIF,keyName=* -permActions read
```

```
ORACLE_COMMON_HOME/common/bin/wlst.sh
ORACLE_COMMON_HOME/modules/oracle.jps_11.1.1/common/wlstscripts/grantPermissi
on.py -codeBaseURL
file:\${domain.home}/servers/\${weblogic.Name}/tmp/_WL_user/OIF_11.1.1.2.0/-
-permClass oracle.security.jps.service.credstore.CredentialAccessPermission
-permTarget credstoressp.credstore -permActions read
```

```
ORACLE_COMMON_HOME/common/bin/wlst.sh
ORACLE_COMMON_HOME/modules/oracle.jps_11.1.1/common/wlstscripts/grantPermissi
on.py -codeBaseURL
file:\${domain.home}/servers/\${weblogic.Name}/tmp/_WL_user/OIF_11.1.1.2.0/-
-permClass oracle.security.jps.service.credstore.CredentialAccessPermission
-permTarget credstoressp.credstore.OIF.* -permActions read
```

On Windows, enter the following three commands at the command prompt. Type each command on one line.

When typing the commands, replace *ORACLE_COMMON_HOME* with the path to the Oracle Common Home folder, located in the Middleware Home. When prompted for information to connect to WebLogic, enter the WLS Administrator Credentials and the location of the WebLogic Administration Server.

```
ORACLE_COMMON_HOME\common\bin\wlst.cmd
ORACLE_COMMON_HOME\modules\oracle.jps_11.1.1\common\wlstscripts\grantPermiss
ion.py -codeBaseURL
file:${domain.home}/servers/\${weblogic.Name}/tmp/_WL_user/OIF_11.1.1.2.0/-
-permClass oracle.security.jps.service.credstore.CredentialAccessPermission
-permTarget context=SYSTEM,mapName=OIF,keyName=* -permActions read
```

```
ORACLE_COMMON_HOME\common\bin\wlst.cmd
ORACLE_COMMON_HOME\modules\oracle.jps_11.1.1\common\wlstscripts\grantPermiss
ion.py -codeBaseURL
file:${domain.home}/servers/${weblogic.Name}/tmp/_WL_user/OIF_11.1.1.2.0/-
-permClass oracle.security.jps.service.credstore.CredentialAccessPermission
-permTarget credstoressp.credstore -permActions read
```

```
ORACLE_COMMON_HOME\common\bin\wlst.cmd
ORACLE_COMMON_HOME\modules\oracle.jps_11.1.1\common\wlstscripts\grantPermiss
ion.py -codeBaseURL
file:${domain.home}/servers/${weblogic.Name}/tmp/_WL_user/OIF_11.1.1.2.0/-
-permClass oracle.security.jps.service.credstore.CredentialAccessPermission
-permTarget credstoressp.credstore.OIF.* -permActions read
```

4.2.14 Create a Protected Resource for Oracle Identity Navigator

To create a protected resource for Oracle Identity Navigator, log in to the Oracle Access Manager console at `http://admin.mycompany.com/oamconsole` using the `oamadmin` account. Then proceed as follows:

1. From the Navigation window expand: **Application Domains** > **IDMDomainAgent**.

2. Click **Resources**.

3. Click **Create** on the tool bar below the **Browse** tab).

   Enter the following information:

   - **Type**: `http`

   - **Host Identifier**: `IDMDomain`

   - **Resource URL**: `/oinav`

4. Click **Apply**.

5. From the Navigation window expand: **Application Domains** > **IDMDomainAgent** >**Authentication Policies**.

6. Click **Protected HigherLevel Policy**.

7. Click **Edit** on the tool bar below the **Browse** tab.

8. In the **Resources** box, click **+**.

9. From the list, select the resource **/oinav**.

10. Click **Apply**.

11. From the Navigation window expand: **Application Domains** > **IDMDomainAgent** >**Authorization Policies**.

12. Click **Protected Resource Policy**.

13. Click **Edit** on the tool bar below the **Browse** tab.

14. In the Resources box, click **+**.

15. From the list, select the resource **/oinav**

16. Click **Apply**.

4.2.15 Use Fully-Qualified Hostnames when Configuring Front-end Hosts in High Availability Configurations

Oracle recommends using the full name of the host, including the domain name, when configuring front-end hosts in Oracle Fusion Middleware high availability configurations. Use the host's full name instead of using only the host name.

For example, if myhost is the name of a frontend host in a high availability configuration, set the frontend host URL to the fully-qualified hostname, such as myhost.mycompany.com as DNS or local host name resolution files (for example, /etc/hosts) define.

4.2.16 Managed Server goes into Suspended Status After RAC Failover

The Managed Server wls_ods(x) can enter a suspended status in the following situations:

- A database connection in the data source is wrong or not complete.

- The host is not a fully-qualified host for the database.

To correct the status of the Managed Server wls_ods(x):

1. Under the data source, verify that the database connection is correct and complete with the domain.

2. Under the data source, verify that the host name for the database is a fully-qualified hostname with the domain.

3. Verify the connection by selecting the Test button.

4.2.17 Primary/Secondary Configuration Section of the Availability Tab is Not Visible

During the system component scale out process, the Primary/Secondary Configuration section in the Availability tab of the Capacity Management page in Fusion Middleware Control may not be visible in the browser. This issue occurs when you perform the scale out process using Microsoft Internet Explorer version 7.0.5730.11.

To avoid this issue, do not use the browser Microsoft Internet Explorer version 7.0.5730.11 to scale out; use another browser such as Google Chrome.

4.3 Testing Abrupt Failures of WebLogic Server When Using File Stores on NFS

Oracle strongly recommends verifying the behavior of a server restart after abrupt machine failures when the JMS messages and transaction logs are stored on an NFS mounted directory. Depending on the NFS implementation, different issues can arise post failover/restart. The behavior can be verified by abruptly shutting down the node hosting the Web Logic servers while these are running. If the server is configured for server migration, it should be started automatically in the failover node after the corresponding failover period. If not, a manual restart of the WebLogic Server on the same host (after the node has completely rebooted) can be performed. Specifically, if Oracle WebLogic Server does not restart after abrupt machine failure when JMS messages and transaction logs are stored on NFS mounted directory, the following errors may appear in the server log files:

```
<MMM dd, yyyy hh:mm:ss a z> <Error> <Store> <BEA-280061> <The persistent
store "_WLS_server_soa1" could not be deployed:
weblogic.store.PersistentStoreException: java.io.IOException:
[Store:280021]There was an error while opening the file store file
"_WLS_SERVER_SOA1000000.DAT"
weblogic.store.PersistentStoreException: java.io.IOException:
[Store:280021]There was an error while opening the file store file
"_WLS_SERVER_SOA1000000.DAT"
        at weblogic.store.io.file.Heap.open(Heap.java:168)
        at weblogic.store.io.file.FileStoreIO.open(FileStoreIO.java:88)
...
java.io.IOException: Error from fcntl() for file locking, Resource
temporarily unavailable, errno=11
```

This error is due to the NFS system not releasing the lock on the stores. WebLogic Server maintains locks on files used for storing JMS data and transaction logs to protect from potential data corruption if two instances of the same WebLogic Server are accidentally started. The NFS storage device does not become aware of machine failure in a timely manner; therefore, the locks are not released by the storage device. As a result, after abrupt machine failure, followed by a restart, any subsequent attempt by WebLogic Server to acquire locks on the previously locked files may fail. Refer to your storage vendor documentation for additional information on the locking of files stored in NFS mounted directories on the storage device. If it is not reasonably possible to tune locking behavior in your NFS environment, use one of the following two solutions to unlock the logs and data files.

Use one of the following two solutions to unlock the logs and data files.

Solution 1

Manually unlock the logs and JMS data files and start the servers by creating a copy of the locked persistence store file and using the copy for subsequent operations. To create a copy of the locked persistence store file, rename the file, and then copy it back to its original name. The following sample steps assume that transaction logs are stored in the `/shared/tlogs` directory and JMS data is stored in the `/shared/jms` directory.

```
cd /shared/tlogs
mv _WLS_SOA_SERVER1000000.DAT _WLS_SOA_SERVER1000000.DAT.old
cp _WLS_SOA_SERVER1000000.DAT.old _WLS_SOA_SERVER1000000.DAT
cd /shared/jms
mv SOAJMSFILESTORE_AUTO_1000000.DAT SOAJMSFILESTORE_AUTO_1000000.DAT.old
cp SOAJMSFILESTORE_AUTO_1000000.DAT.old SOAJMSFILESTORE_AUTO_1000000.DAT
mv UMSJMSFILESTORE_AUTO_1000000.DAT UMSJMSFILESTORE_AUTO_1000000.DAT.old
cp UMSJMSFILESTORE_AUTO_1000000.DAT.old UMSJMSFILESTORE_AUTO_1000000.DAT
```

With this solution, the WebLogic file locking mechanism continues to provide protection from any accidental data corruption if multiple instances of the same servers were accidently started. However, the servers must be restarted manually after abrupt machine failures. File stores will create multiple consecutively numbered .DAT files when they are used to store large amounts of data. All files may need to be copied and renamed when this occurs.

Solution 2

You can also use the WebLogic Server Administration Console to disable WebLogic file locking mechanisms for the default file store, a custom file store, a JMS paging file store, and a Diagnostics file store, as described in the following sections.

> **WARNING:** With this solution, since the WebLogic locking is disabled, automated server restarts and failovers should succeed. Be very cautious, however, when using this option. The WebLogic file locking feature is designed to help prevent severe file corruptions that can occur in undesired concurrency scenarios. If the server using the file store is configured for server migration, always configure the database based leasing option. This enforces additional locking mechanisms using database tables, and prevents automated restart of more than one instance of the same WebLogic Server. Additional procedural precautions must be implemented to avoid any human error and to ensure that one and only one instance of a server is manually started at any give point in time. Similarly, extra precautions must be taken to ensure that no two domains have a store with the same name that references the same directory.

Disabling File Locking for the Default File Store

Follow these steps to disable file locking for the default file store using the WebLogic Server Administration Console:

1. If necessary, click **Lock & Edit** in the Change Center (upper left corner) of the Administration Console to get an Edit lock for the domain.

2. In the **Domain Structure** tree, expand the **Environment** node and select **Servers**.

3. In the **Summary of Servers** list, select the server you want to modify.

4. Select the **Configuration > Services** tab.

5. Scroll down to the **Default Store** section and click **Advanced**.

6. Scroll down and deselect the **Enable File Locking** check box.

7. Click **Save** to save the changes. If necessary, click **Activate Changes** in the Change Center.

8. **Restart** the server you modified for the changes to take effect.

The resulting `config.xml` entry will look like the following:

```
<server>
  <name>examplesServer</name>
  ...
  <default-file-store>
    <synchronous-write-policy>Direct-Write</synchronous-write-policy>
    <io-buffer-size>-1</io-buffer-size>
    <max-file-size>1342177280</max-file-size>
    <block-size>-1</block-size>
    <initial-size>0</initial-size>
    <file-locking-enabled>false</file-locking-enabled>
  </default-file-store>
</server>
```

Disabling File Locking for a Custom File Store

Follow these steps to disable file locking for a custom file store using the WebLogic Server Administration Console:

1. If necessary, click **Lock & Edit** in the Change Center (upper left corner) of the Administration Console to get an Edit lock for the domain.

2. In the **Domain Structure** tree, expand the **Services** node and select **Persistent Stores**.

3. In the **Summary of Persistent Stores** list, select the custom file store you want to modify.

4. On the **Configuration** tab for the custom file store, click **Advanced** to display advanced store settings.

5. Scroll down to the bottom of the page and deselect the **Enable File Locking** check box.

6. Click **Save** to save the changes. If necessary, click **Activate Changes** in the Change Center.

7. If the custom file store was in use, you must restart the server for the changes to take effect.

The resulting `config.xml` entry will look like the following:

```
<file-store>
  <name>CustomFileStore-0</name>
  <directory>C:\custom-file-store</directory>
  <synchronous-write-policy>Direct-Write</synchronous-write-policy>
  <io-buffer-size>-1</io-buffer-size>
  <max-file-size>1342177280</max-file-size>
  <block-size>-1</block-size>
  <initial-size>0</initial-size>
  <file-locking-enabled>false</file-locking-enabled>
  <target>examplesServer</target>
</file-store>
```

Disabling File Locking for a JMS Paging File Store

Follow these steps to disable file locking for a JMS paging file store using the WebLogic Server Administration Console:

1. If necessary, click **Lock & Edit** in the Change Center (upper left corner) of the Administration Console to get an Edit lock for the domain.

2. In the **Domain Structure** tree, expand the **Services** node, expand the **Messaging** node, and select **JMS Servers**.

3. In the **Summary of JMS Servers** list, select the JMS server you want to modify.

4. On the **Configuration > General** tab for the JMS Server, scroll down and deselect the **Paging File Locking Enabled** check box.

5. Click **Save** to save the changes. If necessary, click **Activate Changes** in the Change Center.

6. **Restart** the server you modified for the changes to take effect.

The resulting `config.xml` file entry will look like the following:

```
<jms-server>
  <name>examplesJMSServer</name>
  <target>examplesServer</target>
  <persistent-store>exampleJDBCStore</persistent-store>
  ...
  <paging-file-locking-enabled>false</paging-file-locking-enabled>
  ...
</jms-server>
```

Disabling File Locking for a Diagnostics File Store

Follow these steps to disable file locking for a Diagnostics file store using the WebLogic Server Administration Console:

1. If necessary, click **Lock & Edit** in the Change Center (upper left corner) of the Administration Console to get an Edit lock for the domain.

2. In the **Domain Structure** tree, expand the **Diagnostics** node and select **Archives**.

3. In the **Summary of Diagnostic Archives** list, select the server name of the archive that you want to modify.

4. On the **Settings for [server_name]** page, deselect the **Diagnostic Store File Locking Enabled** check box.

5. Click **Save** to save the changes. If necessary, click **Activate Changes** in the Change Center.

6. **Restart** the server you modified for the changes to take effect.

The resulting `config.xml` file will look like this:

```
<server>
  <name>examplesServer</name>
  ...
  <server-diagnostic-config>
    <diagnostic-store-dir>data/store/diagnostics</diagnostic-store-dir>
    <diagnostic-store-file-locking-enabled>false</diagnostic-store-file-locking-
enabled>

<diagnostic-data-archive-type>FileStoreArchive</diagnostic-data-archive-type>
    <data-retirement-enabled>true</data-retirement-enabled>
    <preferred-store-size-limit>100</preferred-store-size-limit>
    <store-size-check-period>1</store-size-check-period>
  </server-diagnostic-config>
</server>
```

4.4 Documentation Errata

This section describes documentation errata. It includes the following topics:

- Section 4.4.1, "Documentation Errata for the Fusion Middleware High Availability Guide"

- Section 4.4.2, "Documentation Errata for the Fusion Middleware Enterprise Deployment Guide for Oracle WebCenter"

- Section 4.4.3, "Documentation Errata for the Fusion Middleware Enterprise Deployment Guide for Oracle Identity Management"

- Section 4.4.4, "Documentation Errata for the Oracle Fusion Middleware Enterprise Deployment Guide for Oracle Business Intelligence"

- Section 4.4.5, "Documentation Errata Affecting Multiple Enterprise Deployment Guides"

4.4.1 Documentation Errata for the Fusion Middleware High Availability Guide

This section contains Documentation Errata for *Oracle Fusion Middleware High Availability Guide*.

It includes the following topic:

- [Section 4.4.1.1, "Latest Requirements and Certification Information"](#)

4.4.1.1 Latest Requirements and Certification Information

Several manuals in the Oracle Fusion Middleware 11g documentation set have information on Oracle Fusion Middleware system requirements, prerequisites, specifications, and certification information.

- The latest information on Oracle Fusion Middleware system requirements, prerequisites, specifications, and certification information can be found in the following documents on Oracle Technology Network:

  http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html

  This document contains information related to hardware and software requirements, minimum disk space and memory requirements, and required system libraries, packages, or patches.

- Oracle Fusion Middleware Certification information at:

  http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html

  This document contains information related to supported installation types, platforms, operating systems, databases, JDKs, and third-party products.

4.4.2 Documentation Errata for the Fusion Middleware Enterprise Deployment Guide for Oracle WebCenter

This section contains Documentation Errata for *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle WebCenter*.

It includes the following topics:

- [Section 4.4.2.1, "Link to Section 8.1.3 is Missing"](#)
- [Section 4.4.2.2, "Additional Information for Discussions Forum Mulitcast to Unicast Conversion"](#)
- [Section 4.4.2.3, "Additional Discussion Connection Properties Explained in Administration Guide"](#)

4.4.2.1 Link to Section 8.1.3 is Missing

In Section 8.1, "Configuring the Discussion Forum Connection" of the *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle WebCenter*, the link to section 8.1.3, "Creating a Discussions Server Connection for WebCenter From EM" is missing.

4.4.2.2 Additional Information for Discussions Forum Mulitcast to Unicast Conversion

In section 6.14, "Converting Discussions Forum from Multicast to Unicast" of the *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle WebCenter*, the following information is missing from Step 3:

Step 3: Repeat steps 1 and 2 for WLS_Services2, swapping WCHost1 for WCHost2, and WCHost2 for WCHost1 as follows:

```
-Dtangosol.coherence.wka1=WCHost2 -Dtangosol.coherence.wka2=WCHost1
-Dtangosol.coherence.localhost=WCHost2 -Dtangosol.coherence.wka1.port=8089
-Dtangosol.coherence.wka2.port=8089
```

4.4.2.3 Additional Discussion Connection Properties Explained in Administration Guide

For additional Discussions Server connection properties associated with the procedure in Section 8.1.3 "Creating a Discussions Server Connection for WebCenter From EM" of the *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle WebCenter*, refer to section 12.3.1, "Registering Discussions Servers Using Fusion Middleware Control," in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.

4.4.3 Documentation Errata for the Fusion Middleware Enterprise Deployment Guide for Oracle Identity Management

This section contains Documentation Errata for *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle Identity Management*.

It includes the following topic:

- Section 4.4.3.1, "Errors in Post-Installation Steps for Expanding the Oracle Directory Integration Platform and ODSM Cluster"

4.4.3.1 Errors in Post-Installation Steps for Expanding the Oracle Directory Integration Platform and ODSM Cluster

The following errors exist in subsections of Section 9.2.2 "Post-Installation Steps."

- The title of Section 9.2.2.1 should be "Copying the DIP Application to wls_ods2."

- All reference to copying to `IDMHOST2` should be removed from Section 9.2.2.1. During `wls_ods2` startup, the application is automatically propagated to `IDMHOST2`.

- Perform the copy only on `IDMHOST1`. Copy the *MW_HOME*`/admin/IDMDomain/aserver/`*IDMDomain*`/config/fmwconfig/servers/wls_ods1/applications` directory to the *MW_HOME*`/admin/`*IDMDomain*`/aserver/`*IDMDomain*`/config/fmwconfig/servers/wls_ods2` directory on `IDMHOST1`. For example:

  ```
  cp -rp MW_HOME/admin/IDMDomain/aserver/IDMDomain/config/fmwconfig/servers/wls_
  ods1/applications  MW_
  HOME/admin/IDMDomain/aserver/IDMDomain/config/fmwconfig/servers/wls_
  ods2/applications
  ```

- Ignore the following sections, as they are no longer necessary:
  - Section 9.2.2.2, "Setting the Listen Address for the Managed Servers"
  - Section 9.2.2.3, "Starting the Managed Server on IDMHOST1"

4.4.4 Documentation Errata for the Oracle Fusion Middleware Enterprise Deployment Guide for Oracle Business Intelligence

This section contains documentation errata for *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle Business Intelligence*.

It includes the following topics:

Section 4.4.4.1, "Additional Step Must be Performed After Setting the Location of the BI Publisher Configuration Folder"

Section 4.4.4.2, "Corrections to the Setting the Location of the Shared Oracle BI Presentation Catalog Section"

4.4.4.1 Additional Step Must be Performed After Setting the Location of the BI Publisher Configuration Folder

After restarting Oracle BI Publisher when specifying the location of the configuration folder, as described in Section 6.5.3.1, "Setting the Location of the Shared Oracle BI Publisher Configuration Folder," you must copy the XML configuration file for Oracle BI Publisher from the Managed Server to the Administration Server location. Oracle BI Publisher reads its configuration from the Administration Server central location rather than from the Managed Server's configuration directory when the Managed Servers are restarted.

To do this, on APPHOST1, copy the file xmlp-server-config.xml from:

ORACLE_BASE/admin/*domain_name*/mserver/*domain_name*/config/bipublisher

to:

ORACLE_BASE/admin/*domain_name*/aserver/*domain_name*/config/bipublisher

4.4.4.2 Corrections to the Setting the Location of the Shared Oracle BI Presentation Catalog Section

The "Setting the Location of the Shared Oracle BI Presentation Catalog" section of the *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle Business Intelligence* should be replaced by the following section:

Each Presentation Services instance loads the Oracle BI Presentation Catalog from the catalog location specified in Fusion Middleware Control.

Perform the following steps:

1. Copy your existing (locally published) Oracle BI Presentation Catalog to the shared location. An example of a locally published catalog is:

    ```
    ORACLE_INSTANCE/bifoundation/OracleBIPresentationServicesComponent/
    coreapplication_obipsn/catalog/SampleAppLite
    ```

    You must perform this step before designating the **Catalog Location** from Fusion Middleware Control.

    If you plan to use the SampleAppLite catalog mentioned as an example in this section as the shared catalog, make sure to copy it from APPHOST1.

2. Log in to Fusion Middleware Control.

3. Expand the **Business Intelligence** node in the Farm_*domain_name* window.

4. Click **coreapplication**.

5. Click **Deployment**, then click **Repository**.

6. Click **Lock and Edit Configuration**.

7. Specify the **Catalog Location** for the shared Oracle BI Presentation Catalog.

    In a Windows environment, specify a UNC path name.

8. Click **Apply**.

9. Click **Activate Changes**.

4.4.5 Documentation Errata Affecting Multiple Enterprise Deployment Guides

This section describes documentation errata that affects multiple Enterprise Deployment Guides. Any Enterprise Deployment Guide that have the documentation

errata issue discussed in the release notes below should be updated as specified in that release note.

It includes these topics:

- Section 4.4.5.1, "Sections on Configuring Oracle Coherence for SOA Composites Need Fixes"

- Section 4.4.5.2, "Updates are Needed to Steps for Testing Server Migration"

- Section 4.4.5.3, "Steps for Updating Data Sources for Server Migration Need Updates"

- Section 4.4.5.4, "Clarification of the Procedure for Configuring the Analytics Collectors"

4.4.5.1 Sections on Configuring Oracle Coherence for SOA Composites Need Fixes

Several Enterprise Deployment Guide manuals have a "Configuring Oracle Coherence for Deploying Composites" section that includes a Note like the following:

> **Note:** The Coherence cluster used for deployment uses port 8088 by default. This port can be changed by specifying the `-Dtangosol.coherence.wkan.port` startup parameter.

This Note should read as follows:

> **Note:** The Coherence cluster used for deployment uses port 8088 by default. This port can be changed by specifying a different port (for example, 8089) with the `-Dtangosol.coherence.wkan.port` and `-Dtangosol.coherence.localport` startup parameters. For example:
>
> WLS_SOA1 (enter the following into the Arguments field on a single line, without a carriage return):
>
> ```
> -Dtangosol.coherence.wka1=soahost1vhn1
> -Dtangosol.coherence.wka2=soahost2vhn1
> -Dtangosol.coherence.localhost=soahost1vhn1
> -Dtangosol.coherence.localport=8089
> -Dtangosol.coherence.wka1.port=8089
> -Dtangosol.coherence.wka2.port=8089
> ```
>
> WLS_SOA2 (enter the following into the Arguments field on a single line, without a carriage return):
>
> ```
> -Dtangosol.coherence.wka1=soahost1vhn1
> -Dtangosol.coherence.wka2=soahost2vhn1
> -Dtangosol.coherence.localhost=soahost2vhn1
> -Dtangosol.coherence.localport=8089
> -Dtangosol.coherence.wka1.port=8089
> -Dtangosol.coherence.wka2.port=8089
> ```

4.4.5.2 Updates are Needed to Steps for Testing Server Migration

Several Enterprise Deployment Guide manuals have one or more subsections that describe how to test server migration.

The following Note should appear at the end of every section on testing server migration:

> **Note:** After a server is migrated, to fail it back to its original node/machine, stop the managed server from the Oracle WebLogic Administration Console and then start it again. The appropriate Node Manager will start the managed server on the machine to which it was originally assigned.

4.4.5.3 Steps for Updating Data Sources for Server Migration Need Updates

Several Enterprise Deployment Guide manuals have one or more subsections that describe how to update the data sources used for leasing when you configure server migration.

The following text appears in the instructions on how to update data sources for leasing as part of server migration configuration:

Use Supports Global Transactions, One-Phase Commit, and specify a service name for your database

That text should appear as follows:

Data sources do not require support for global transactions. Therefore, do *not* use any type of distributed transaction emulation/participation algorithm for the data source (do not choose the **Supports Global Transactions** option, or the **Logging Last Resource**, **Emulate Two-Phase Commit**, or **One-Phase Commit** options of the **Supports Global Transactions** option), and specify a service name for your database.

4.4.5.4 Clarification of the Procedure for Configuring the Analytics Collectors

Bug 10384373

Section 6.4.16, "Configuring the Analytics" in the *Oracle Fusion Middleware High Availability Guide* contains content that indicates that you must configure an analytic collector cluster. In fact, there is no need to configure the collectors themselves. Instead, the procedure in this section explains how to configure the Oracle WebCenter Spaces servers to communicate with the analytic collectors.

Further, for Oracle Fusion Middleware 11*g* Release 1 (11.1.1.4.0), clustered analytics collectors are not supported for collecting WebCenter events.

Part II

Oracle Development Tools

Part II contains the following chapters:

5

Oracle JDeveloper and Oracle Application Development Framework (ADF)

The latest known issues associated with Oracle JDeveloper and Application Developer Framework (ADF) are available on the Oracle Technology Network (OTN) at: `http://www.oracle.com/technetwork/developer-tools/jdev/index-101256.html`.

For more information and technical resources for Oracle JDeveloper and Application Developer Framework (ADF), visit the product center on the Oracle Technology Network at: `http://www.oracle.com/technetwork/developer-tools/jdev/overview/index.html`.

6

Oracle TopLink

This chapter describes issues associated with Oracle TopLink. It includes the following topics:

- Section 6.1, "General Issues and Workarounds"

6.1 General Issues and Workarounds

This section describes general issue and workarounds. It includes the following topic:

- Section 6.1.1, "TopLink Object-Relational Issues"
- Section 6.1.2, "TopLink Workbench Issues"
- Section 6.1.3, "Oracle Database Extensions with TopLink"
- Section 6.1.4, "Allowing Zero Value Primary Keys"
- Section 6.1.5, "Managed Servers on Sybase with JCA Oracle Database Service"
- Section 6.1.6, "Logging Configuration with EclipseLink Using Container Managed JPA"
- Section 6.1.7, "Grid Cache requires CacheLoader"

6.1.1 TopLink Object-Relational Issues

This section contains information on the following issues:

- Section 6.1.1.1, "Incorrect outer join SQL on SQLServer2005"
- Section 6.1.1.2, "UnitOfWork.release() not Supported with External Transaction Control"
- Section 6.1.1.3, "Returning Policy for UPDATE with Optimistic Locking"
- Section 6.1.1.4, "JDBC Drivers returning Timestamps as Strings"
- Section 6.1.1.5, "Proxy Authentication with Oracle Containers for Java EE (OC4J) Managed Data Sources"
- Section 6.1.1.6, "Unit of Work does not add Deleted Objects to Change Set"

6.1.1.1 Incorrect outer join SQL on SQLServer2005

TopLink generates incorrect outer join for SQL Server v2005. The outer join syntax generated is correct for earlier versions of this database. To work around this limitation, reconfigure the database compatibility (refer to the SQLServer documentation for details). Alternatively, you can use a custom TopLink database platform.

6.1.1.2 UnitOfWork.release() not Supported with External Transaction Control

A unit of work synchronized with a Java Transaction API (JTA) will throw an exception if it is released. If the current transaction requires its changes to not be persisted, the JTA transaction must be rolled back.

When in a container-demarcated transaction, call `setRollbackOnly()` on the EJB/session context:

```
@Stateless
public class MySessionBean
{    @Resource
    SessionContext sc;

    public void someMethod()
    {
        ...
        sc.setRollbackOnly();
    }
}
```

When in a bean-demarcated transaction then you call `rollback()` on the UserTransaction obtained from the EJB/session context:

```
@Stateless
@TransactionManagement(TransactionManagementType.BEAN)
public class MySessionBean implements SomeInterface
{
    @Resource
    SessionContext sc;

    public void someMethod()
    {
        sc.getUserTransaction().begin();
        ...
        sc.getUserTransaction().rollback();
    }
}
```

6.1.1.3 Returning Policy for UPDATE with Optimistic Locking

The returning policy, which allows values modified during INSERT and UPDATE to be returned and populated in cached objects, does not work in conjunction with numeric version optimistic locking for UPDATE. The value returned for all UPDATE operations is **1** and does not provide meaningful locking protection.

Do not use a returning policy for UPDATE in conjunction with numeric optimistic locking.

The use of returning policy for INSERT when using optimistic locking works correctly.

6.1.1.4 JDBC Drivers returning Timestamps as Strings

TopLink assumes that date and time information returned from the server will use Timestamp. If the JDBC driver returns a String for the current date, TopLink will throw an exception. This is the case when using a DB2 JDBC driver.

To work around this issue, consider using a driver that returns Timestamp (such as COM.ibm.db2.jdbc.app.DB2Driver) or change the policy to use local time instead of server time.

Another option is to use a query re-director on the `ValueReadQuery` used by the platform:

```
ValueReadQuery vrq = new ValueReadQuery(
    "SELECT to_char(sysdate, 'YYYY-MM-DD HH:MM:SS.SSSSS') FROM DUAL"
);
vrq.setRedirector(new TSQueryRedirector());
...
class TSQueryRedirector implements QueryRedirector
{
    public Object invokeQuery(DatabaseQuery query, Record arguments, Session session)
    {
        String value = (String)session.executeQuery(query);
        return ConversionManager.getDefaultManager().convertObject(
            value, java.sql.Timestamp.class
        );
    }
}
```

6.1.1.5 Proxy Authentication with Oracle Containers for Java EE (OC4J) Managed Data Sources

Proxy authentication does not work with OC4J managed data sources. Instead of using the data source provided by the application server, you must create a data source yourself.

Refer to the "Configuring Oracle Database Proxy Authentication" in the *Oracle Fusion Middleware Developer's Guide for Oracle TopLink* for more information.

For example, replace this code:

```
login.setConnector(
    new OracleJDBC10_1_0_2ProxyConnector(
        ((JNDIConnectorlogin.getConnector()).getName()
    )
);
```

with the following:

```
oracle.jdbc.pool.OracleDataSource ds = new oracle.jdbc.pool.OracleDataSource();
ds.setUser("MyMainUser");
ds.setPassword("MyPassword");
ds.setUrl("jdbc:oracle:thin:@MyServer:1521:MyDb");
login.setConnector(new OracleJDBC10_1_0_2ProxyConnector(ds));
```

6.1.1.6 Unit of Work does not add Deleted Objects to Change Set

When accessing the change set of a Unit of Work to determine what has changed, objects that are pending deletion (such as `uow.deleteObject( )` and `uow.deleteAllObjects( )`) will not be returned from the result set.

The objects pending deletion are only available through the Unit of Work `getDeletedObjects` call.

6.1.2 TopLink Workbench Issues

This section contains information on the following issues:

- Section 6.1.2.1, "Accessibility"
- Section 6.1.2.2, "Running the TopLink Workbench on Windows OS"

6.1.2.1 Accessibility

Due to an issue with Sun JDK 1.6, if NullPointExecption error dialog is generated when saving a file, the error dialog window is not in focus.

6.1.2.2 Running the TopLink Workbench on Windows OS

Due to an issue with certain configurations and versions of Windows operating systems, users that launch the TopLink Workbench with the `workbench.cmd` file may receive a dialog that states: *Could not find the main class.* This occurs because the classpath specified contains a directory path which has periods in it. The workaround is to rename the offending directory or change the classpath to use directory paths which do not contain periods.

6.1.3 Oracle Database Extensions with TopLink

This section contains information on the following issue:

- Section 6.1.3.1, "Template JAR for Spatial and XDB Support in Oracle WebLogic Server"

6.1.3.1 Template JAR for Spatial and XDB Support in Oracle WebLogic Server

To fully support Oracle Spatial and Oracle XDB mapping capabilities (in both standalone Oracle WebLogic Server and the Oracle JDeveloper integrated WebLogic Server), you must use the `toplink-spatial-template.jar` and `toplink-xdb-template.jar` to extend the WebLogic Server domain to support Oracle Spatial and XDB, respectively.

To extend your WebLogic Server domain:

1. Download the `toplink-spatial-template.jar` (to support Oracle Spatial) and `toplink-xdb-template.jar` (to support Oracle XDB) files from:

   - http://download.oracle.com/otn/java/toplink/111110/toplink-spatial-template.jar

   - http://download.oracle.com/otn/java/toplink/111110/toplink-xdb-template.jar

2. Use Table 6–1, " To Support Oracle Spatial" or Table 6–2, " To Support Oracle XDB" to determine which files to copy.

Table 6–1   To Support Oracle Spatial

Copy this file	From...[1]	To...[2]
sdoapi.jar	*<ORACLE_DATABASE_ HOME>*/md/jlib	*<WEBLOGIC_ HOME>*/server/lib

[1] These are the default locations. Your actual location may vary depending on your specific environment, installed options, and version.

[2] When using Oracle JDeveloper integrated WebLogic Server, the *<WEBLOGIC_HOME>* is located within the *<JDEVELOPER_HOME>* directory.

Table 6–2   To Support Oracle XDB

Copy this file	From...[1]	To...[2]
xdb.jar	*<ORACLE_DATABASE_ HOME>*/rdbms/jlib	*<WEBLOGIC_HOME>*/server/lib
xml.jar	*<ORACLE_DATABASE_HOME>*/lib	*<WEBLOGIC_HOME>*/server/lib

Table 6–2   (Cont.) To Support Oracle XDB

Copy this file	From...[1]	To...[2]
xmlparserv2.jar	*<ORACLE_DATABASE_HOME>*/lib	*<WEBLOGIC_HOME>*/server/lib
ori18n-mapping.jar [3]	*<ORACLE_DATABASE_HOME>*/jlib	*<WEBLOGIC_HOME>*/server/lib

[1] These are the default locations. Your actual location may vary depending on your specific environment, installed options, and version.

[2] When using Oracle JDeveloper integrated WebLogic Server, the *<WEBLOGIC_HOME>* is located within the *<JDEVELOPER_HOME>* directory.

[3] Use **orai18n-mapping.jar** for Oracle Database 11.2 and higher.

> **Note:**   Although the actual JAR file may be named differently in your **From** directory, the file must be named as shown, when copied to the **To** directory.

3. Launch the Config Wizard (*<WEBLOGIC_HOME>*/common/bin/config.sh (or .bat).

4. Select **Extend an existing WebLogic domain**.

5. Browse and select your WebLogic Server domain.

When using JDeveloper with integrated WebLogic Server, the typical WebLogic Server domain location may be similar to:

- In Windows environments:
  %APPDATA%\JDeveloper\systemXX.XX.XX.XX\DefaultDomain

  where XX.XX.XX.XX is the unique number of the product build.

  For Windows platforms, you must enable the **Show hidden files and folders** folder option.

- In non-Windows environments, the default location is under the current user's default home directory: *<$Home>*/DefaultDomain

Refer to the Oracle JDeveloper documentation for details.

6. Select **Extend my domain using an existing extension template**.

7. Browse and select the required template JAR (**toplink-spatial-template.jar** for Oracle Spatial, **toplink-xdb-template.jar** for Oracle XDB).

8. Complete the remaining pages of the wizard.

6.1.4 Allowing Zero Value Primary Keys

By default, EclipseLink interprets *zero* as *null* for primitive types that cannot be null (such as int and long) causing zero to be an invalid value for primary keys. You can modify this setting by using the allow-zero-id property in the persistence.xml file. Valid values are:

- **true** – EclipseLink interprets zero values as *zero*. This permits primary keys to use a value of zero.

- **false** (default) – EclipseLink interprets zero as *null*.

Refer the *EclipseLink User's Guide* at
http://wiki.eclipse.org/EclipseLink/UserGuide for more information.

6.1.5 Managed Servers on Sybase with JCA Oracle Database Service

When using a JCA service with the Oracle Database adapter in a cluster to perform database operations on a Sybase database, the managed nodes in the cluster process the messages and may attempt to perform duplicate operations.

Because supported versions of Sybase do not support Oracle TopLink record locking, Sybase allows the duplicate operation attempts.

6.1.6 Logging Configuration with EclipseLink Using Container Managed JPA

By default, EclipseLink users in container managed JPA will use the Oracle WebLogic Server logging options to report all log messages generated by EclipseLink. Refer to "Configuring WebLogic Logging Services" in *Oracle® Fusion Middleware Configuring Log Files and Filtering Log Messages for Oracle WebLogic Server*.

To use the EclipseLink native logging configuration, add the following property to your `persistence.xml` file:

```
<property name="eclipselink.logging.logger" value="DefaultLogger"/>
```

6.1.7 Grid Cache requires CacheLoader

An `oracle.eclipselink.coherence.integrated.EclipseLinkJPACacheLoader` must be configured for entities configured as Grid Cache to ensure the necessary TopLink Grid wrapper class is generated.

Part III

Web Tier

Part III contains the following chapters:

-
-

7

Oracle HTTP Server

This chapter describes issues associated with Oracle HTTP Server. However, there are no known issues at this time.

8

Oracle Web Cache

This chapter describes issues associated with Oracle Web Cache. It includes the following topics:

- Section 8.1, "Configuration Issues and Workarounds"

8.1 Configuration Issues and Workarounds

This section describes configuration issues and their workarounds. It includes the following topics:

- Section 8.1.1, "Reset the Random Password Generated When Installing Oracle Portal, Forms, Reports, and Discoverer"
- Section 8.1.2, "Running Oracle Web Cache Processes as a Different User Is Not Supported"

8.1.1 Reset the Random Password Generated When Installing Oracle Portal, Forms, Reports, and Discoverer

For enhanced security, no default hard-coded passwords are used for managing Oracle Web Cache.

When you install the Oracle Web Tier installation type, the Oracle Universal Installer prompts you to choose a password. The Web Cache Administrator page of the Oracle Universal Installer prompts you to enter a password for the `administrator` account. The `administrator` account is the Oracle Web Cache administrator authorized to log in to Oracle Web Cache Manager and make configuration changes through that interface.

When you install Oracle Portal, Forms, Reports, and Discoverer, the prompt for the `administrator` password is missing. Instead, the Oracle Portal, Forms, Reports and Discoverer install type uses a random value chosen at install time.

Regardless of the installation type, before you begin configuration, change the passwords for these accounts to a secure password. If you are configuring a cache cluster, all members of the cluster must use the same password for the `administrator` account.

To change the password, use the Passwords page of Fusion Middleware Control, as described in "Configuring Password Security" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Web Cache*.

8.1.2 Running Oracle Web Cache Processes as a Different User Is Not Supported

Running Oracle Web Cache as a user other than the installed user through the use of the `webcache_setuser.sh setidentity` command is not supported.

Specifically, you *cannot* change the user ID with the following sequence:

1. Change the process identity of the Oracle Web Cache processes in the Process Identity page using Oracle Web Cache Manager (**Properties** > **Process Identity**).

2. Use the `webcache_setuser.sh` script as follows to change file and directory ownership:

   ```
   webcache_setuser.sh setidentity user_ID
   ```

   `user_ID` is the user you specified in the **User ID** field of the Process Identity page.

3. Restart Oracle Web Cache using `opmnctl`.

   Oracle Web Cache will start and then immediately shut down.

   In addition, messages similar to the following are displayed in the event log:

   ```
   [2009-06-02T21:22:46+00:00] [webcache] [ERROR:1] [WXE-13212] [logging] [ecid: ]
   Access log file
   /scratch/webtier/home/instances/instance1/diagnostics/logs/WebCache/webcache1/a
   ccess_log could not be opened.
   [2009-06-02T21:22:46+00:00] [webcache] [WARNING:1] [WXE-13310] [io] [ecid: ]
   Problem opening file
   /scratch/webtier/home/instances/instance1/config/WebCache/webcache1/webcache.pi
   d (Access Denied).
   [2009-06-02T21:22:46+00:00] [webcache] [ERROR:1] [WXE-11985] [esi] [ecid: ]
   Oracle Web Cache is unable to obtain the size of the default ESI fragment page
   /scratch/webtier/home/instances/instance1/config/WebCache/webcache1/files/esi_
   fragment_error.txt.
   [2009-06-02T21:22:46+00:00] [webcache] [WARNING:1] [WXE-11905] [security]
   [ecid: ] SSL additional information: The system could not open the specified
   file.
   ```

For more information about the `webcache_setuser.sh` script, see "Running webcached with Root Privilege" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Web Cache*.

Part IV

Oracle WebLogic Server

Part IV contains the following chapters:

-

9

Oracle WebLogic Server

This chapter describes issues associated with Oracle WebLogic Server. It includes the following topics:

- [Section 9.27, "Security Issues and Workarounds"](#)

- [Section 9.28, "SNMP Issues and Workarounds"](#)

- [Section 9.29, "Spring Framework on WebLogic Server Issues and Workarounds"](#)

- [Section 9.30, "System Component Architecture (SCA) Issues and Workarounds"](#)

- [Section 9.31, "Upgrade Issues and Workarounds"](#)

- [Section 9.32, "Web Applications Issues and Workarounds"](#)

- [Section 9.33, "WebLogic Server Scripting Tool (WLST) Issues and Workarounds"](#)

- [Section 9.34, "Web Server Plug-Ins Issues and Workarounds"](#)

- [Section 9.35, "Web Services and XML Issues and Workarounds"](#)

- [Section 9.36, "WebLogic Tuxedo Connector Issues and Workarounds"](#)

- [Section 9.37, "Documentation Errata"](#)

> **Note:** For a list of bugs that are fixed in WebLogic Server 11*g* Release 1 (10.3.4), enter the following document ID in the Search Knowledge Base field. You must enter the entire document ID.
>
> 1240413.1
>
> The 10.3.4 list includes bugs that were fixed in the WebLogic Server 10.3.1, 10.3.2, 10.3.3, and 10.3.4 releases.
>
> The same list is also stored in your WebLogic Server installation in the following location:
>
> *WL_HOME*/bugsfixed/bugsfixed.htm

9.1 General Issues and Workarounds

This section describes the following issues and workarounds:

- [Section 9.1.1, "Oracle WebLogic Server Version Number"](#)

- [Section 9.1.2, "Oracle ojdbc14.jar File Has Been Changed to ojdbc6.jar"](#)

- [Section 9.1.3, "Strong Password Enforcement May Cause Issues With WLST Offline Scripts"](#)

- [Section 9.1.4, "In Turkish Locale, MDS Initialization Fails"](#)

- [Section 9.1.5, "Administration Server Reports a 'Too Many Open Files' Message on the EM Console"](#)

9.1.1 Oracle WebLogic Server Version Number

Oracle Fusion Middleware 11*g* contains Oracle WebLogic Server 11*g*. The version number of Oracle WebLogic Server is 10.3.4.

9.1.2 Oracle ojdbc14.jar File Has Been Changed to ojdbc6.jar

The Oracle `ojdbc14.jar` file has been changed to `ojdbc6.jar`, for use with JDK 5 or 6. As a result, any explicit references you make to `ojdbc14.jar` must be changed to `ojdbc6.jar`.

9.1.3 Strong Password Enforcement May Cause Issues With WLST Offline Scripts

With the implementation of strong password enforcement (8 character minimum with one numeric or special character) in this release of WebLogic Server, existing scripts could potentially encounter issues.

Workaround

Use either of the following workarounds to bypass the new password restrictions.

- Set the `BACKWARD_COMPAT_PW_CHECK` environment variable to `true`.

- Include the `-Dbackward.compat.pw.check=true` option when invoking WLST.

Oracle recommends that you change passwords to comply with the new password requirements, as this variable and option will be removed in a future release of WebLogic Server.

9.1.4 In Turkish Locale, MDS Initialization Fails

Any applications that use an MDS repository cannot be deployed or run with the JAXB version bundled with WebLogic Server as null values are returned for attributes named `id`.

Workaround

Start the server in English locale.

9.1.5 Administration Server Reports a 'Too Many Open Files' Message on the EM Console

The WebLogic Server Administration Server reports a `Too Many Open Files` message on the Enterprise Manager (EM) console when the maximum number of file descriptors configured for the Administration Server is less than 65535.

Workaround

Execute the following command to determine the maximum number of file descriptors currently configured:

```
cat /proc/sys/fs/file-max
```

If the value is less than 65535, perform the following steps:

1. Edit the file /etc/security/limits.conf with root permission:

    ```
    > sudo vi /etc/security/limits.conf
    ```

2. Append the following two lines, using a value of 65535 or greater:

    ```
    *              soft    nofile        65535
    *              hard    nofile        65535
    ```

3. Start a new terminal session.

4. Execute the `limit descriptors` command to verify that descriptors has been increased to the specified value (at least 65535).

    ```
    > limit descriptors
    descriptors  65535
    ```

9.2 Administration Console Issues and Workarounds

This section describes the following issues and workarounds:

- Section 9.2.1, "Cached JDBC Information is not Displayed"
- Section 9.2.2, "Pressing Browser Back Button Discards Context"
- Section 9.2.3, "Unsupported Work Manager Configurations Can Be Created"
- Section 9.2.4, "Server Status Table Reflects Inconsistent Information"
- Section 9.2.5, "Exceptions When Defining a Security Policy for an EJB"
- Section 9.2.6, "Administration Console Does Not Always Reflect External Changes Made in a Deployment Plan"
- Section 9.2.7, "Oracle OCI Driver Support"
- Section 9.2.8, "Data Takes a Long Time to Display on the Metric Browser Tab"
- Section 9.2.9, "Internal Monitors Incorrectly Displayed on Add/Remove Monitors Page"
- Section 9.2.10, "Unexpected Exception Page Is Displayed When Restarting a Server From the Console"

9.2.1 Cached JDBC Information is not Displayed

Information about cached JDBC statements is not displayed on the JDBC Monitoring pages.

9.2.2 Pressing Browser Back Button Discards Context

After a page flow completes in the Administration Console, it forwards to a different page, typically a table.

Pressing the browser Back button at this point results in an attempt to load the last JSP file in the completed assistant. At this point, all of the context for this assistant is discarded.

Workaround

Oracle recommends that you do not use the browser Back button to step back into an assistant once changes are cancelled or finished, and that you do not go back to a previous step in an assistant. Instead, use the navigation links and buttons in the Administration Console.

9.2.3 Unsupported Work Manager Configurations Can Be Created

The Administration Console permits the creation of Work Manager configurations that are not supported and do not function as intended. Incorrect Work Manager configurations may result in a number of exceptions being recorded in the server logs, most commonly `'Validation problems were found'` exceptions while parsing deployment descriptors.

Workaround

Follow the guidelines described in the online help for Work Manager configurations. Specifically, you can only assign one request class to any given Work Manager, and that request class must be of the same or a broader scope than the Work Manager. You should not assign an application-scoped request class to a global Work Manager, and

you should not create more than one application-scoped request class for an application-scoped Work Manager.

Correcting the Work Manager configurations to match the documented constraints resolves these issues.

9.2.4 Server Status Table Reflects Inconsistent Information

The Server Status table on the **Cluster: Monitoring: Summary** page includes two default columns: **Primary** and **Secondary Distribution Names**. These fields do not always reflect all of the replication statistics that are collected and displayed on the **Cluster: Monitoring: Failover** page, depending on the replication scenario.

Please refer to the **Cluster: Monitoring: Failover** page for definitive information.

9.2.5 Exceptions When Defining a Security Policy for an EJB

When defining security policies in the Administration Console for an EJB deployment that references types defined in a separate library deployment, exceptions can be observed if that library deployment is not available to the Console.

Workaround

All library deployments should be targeted at the WebLogic Server Administration Server as well as any Managed Servers needed to support referencing applications. This will ensure that when defining policies, the Console will have access to those library deployments so that referenced types can be class-loaded as needed.

9.2.6 Administration Console Does Not Always Reflect External Changes Made in a Deployment Plan

The Administration Console does not always reflect external changes made in a deployment plan. If a change is made in a deployment plan outside of the Console (for example, using Workshop, editing the plan text files directly, or updating a deployment with a new plan using WLST or webLogic.Deployer) while a Console user is also viewing that deployment plan, the Console user will not see those changes.

Workaround

Navigate to a configuration page for a different deployment, then navigate back to the original deployment again.

9.2.7 Oracle OCI Driver Support

The Oracle OCI driver is no longer explicitly listed as a preconfigured driver type in the Administration Console.

Workaround

The Oracle OCI driver remains a supported driver for application data connectivity, consistent with prior releases of Oracle WebLogic Server. However, users must now specify all required configuration properties manually, including the data base username.

9.2.8 Data Takes a Long Time to Display on the Metric Browser Tab

When using Internet Explorer 7 (IE 7) to display data on the Metric Browser tab of the Monitoring Dashboard, it takes an unusually long time for the data to display, and

during this time, the page is unresponsive. The amount of time it takes to display data on this tab depends on the size of the domain.

Workaround

If you need to display data on the Monitoring Dashboard > Metric Browser tab, open the Administration Console in a supported web browser other than IE 7, such as Internet Explorer 8 or greater, Firefox 3 or greater, or Safari 4 or greater.

9.2.9 Internal Monitors Incorrectly Displayed on Add/Remove Monitors Page

When using the WebLogic Server Administration Console to add diagnostic monitors to a diagnostic system module, the Administration Console lists several internal server managed monitors. These internal monitors are not intended to be generally visible. They also cannot be managed or used in any WLDF instrumentation module that you configure.

Configuring an internal monitor in a diagnostic module does not result in any run time issues. If you try to use an internal monitor, the only consequence is an error sent to the server log similar to the following:

```
Diagnostic monitor of unknown type Servlet_Invocation_Around_Low used in
instrumentation scope _WL_INTERNAL_SERVER_SCOPE.
```

When using the WebLogic Server Administration Console to configure instrumentation for a diagnostic system module, avoid adding an internal server managed monitor. An internal monitor has one of the following suffixes in its name:

- _Off
- _Low
- _Medium
- _High

9.2.10 Unexpected Exception Page Is Displayed When Restarting a Server From the Console

On the View Changes and Restarts table of the Administration Console Change Center, after selecting a server and clicking **Restart**, an Unexpected Exceptions page is occasionally displayed.

Workaround

If the domain is in Development Mode:

1. Click the **Preferences** link at the top of the page to access user preferences.
2. On the **User Preferences** tab, select the **Ask for confirmation in operations** check box.

If the domain is in Production Mode:

1. In the Domain Structure pane on the left, select **Environment > Servers**.
2. Select the **Control** tab.
3. Select the server or servers that require a restart.
4. Click **Stop** and wait for each server to reach the SHUTDOWN state.
5. Click **Start** to restart the servers.

9.3 Apache Beehive Support Issues and Workarounds

There are no known Apache Beehive Support issues in this release of WebLogic Server.

9.4 Clustering Issues and Workarounds

This section describes the following issue and workaround:

- Section 9.4.1, "Threads Are Blocked on Cluster Messaging in Unicast Mode"

9.4.1 Threads Are Blocked on Cluster Messaging in Unicast Mode

When using Unicast mode for cluster communication, many threads are blocked on cluster messaging, which may result in cluster members having difficulty sending heartbeat messages. In this situation, some cluster members drop out from the cluster and may take some time to rejoin the cluster.

Workaround

Set the following system property to resolve this issue:

```
-Dweblogic.unicast.HttpPing=true
```

9.5 Configuration Issues and Workarounds

This section describes the following issues and workarounds:

- Section 9.5.1, "NullPointerException Is Logged When an IOException Occurs During Server Startup"

- Section 9.5.2, "Directory For a Non-Existent Server Name Is Created"

- Section 9.5.3, "Abnormal Behavior in Terminal Window After Entering WebLogic Password"

- Section 9.5.4, "Creating and Updating Domains Takes Too Long"

- Section 9.5.5, "Password Field Is Not Editable When Configuring a New Domain"

9.5.1 NullPointerException Is Logged When an IOException Occurs During Server Startup

During server startup, if an `IOException` occurs when a Managed Server is attempting to connect to the Administration Server, a `NullPointerException` may be logged instead of the underlying `IOException`.

Workaround

Resolve the underlying `IOException`.

1. Verify that the Administration Server was running when the Managed Server was attempting to connect to it.

2. Verify that the Administration Server host and port are specified correctly.

9.5.2 Directory For a Non-Existent Server Name Is Created

If you attempt to connect to the WebLogic Server Administration Server with a non-existent server name, a directory for the non-existent server name is created under the *domain_name*/servers directory.

Workaround

Specify a valid server name when connecting to the Administration Server.

9.5.3 Abnormal Behavior in Terminal Window After Entering WebLogic Password

After pressing Ctrl-C to terminate the `startManagedWebLogic.sh` process immediately after entering the WebLogic password, abnormal behavior may be experienced in the terminal window. For example, when pressing Return, the prompt is tabbed instead of going to the next line, and any characters that are entered at the prompt are not displayed in the terminal.

Workaround

Either close the current xterm and start a new one, or enter `stty echo` into the xterm.

9.5.4 Creating and Updating Domains Takes Too Long

It can take a long time to create or update WebLogic Server domains when:

- Installing WebLogic Server on UNIX or Linux operating systems if the Server Examples are included in the installation.
- Using the WebLogic Server Configuration Wizard to create or update a domain.
- Using WLST to create or update a domain.

Workaround

Set the CONFIG_JVM_ARGS environment variable to the following value:

```
-Djava.security.egd=file:/dev/./urandom
```

9.5.5 Password Field Is Not Editable When Configuring a New Domain

On Linux systems, when creating a new domain in the Oracle Fusion Middleware Configuration Wizard, the **Password** and **Confirm Password** fields are sometimes not editable, and you cannot enter a password to create a domain.

Workaround

There are two ways to work around this issue:

- To work around the issue each time it happens, click the Close Window **X** button in the upper right corner of the Configuration Wizard. In the confirmation dialog that appears, click **No** to return to the Configuration Wizard. You can then enter and confirm the password for the domain.
- To fix this issue permanently:

   1. Kill all scim processes. For example:

      ```
      kill `pgrep scim`
      ```

   2. Modify (or create) the file `~/.scim/config` to include the following line (case-sensitive):

      ```
      /FrontEnd/X11/Dynamic = true
      ```

   3. If you are running VNC, restart the VNC server.

   4. Run the Configuration Wizard again.

9.6 Connector (Resource Adapter) Issues and Workarounds

There are no known Connector (Resource Adapter) issues in this release of WebLogic Server.

9.7 Console Extensions Issues and Workarounds

There are no known Extensions issues in this release of WebLogic Server.

9.8 Core Server and Core Work Manager Issues and Workarounds

This section describes the following issues and workarounds:

- Section 9.8.1, "Threads Become Stuck While Waiting to Get a Connection"
- Section 9.8.2, "Using IPv6-Formatted Addresses"
- Section 9.8.3, "Server Cannot Be Started After a Whole Server Migration"
- Section 9.8.4, "Object State is not Retained After Renaming Field"
- Section 9.8.5, "Forcing Unicast Messages To Be Processed in Order"
- Section 9.8.6, "Servers Configured to Listen on a Host Name Are Listening on a Different Host Name After Startup"
- Section 9.8.7, "Administration Server or Node Manager Cannot Track the Status of a Managed Server"
- Section 9.8.8, "Multicast Traffic Observed to be Unreliable During or After a Network Partition"

9.8.1 Threads Become Stuck While Waiting to Get a Connection

When a machine that is hosting one of the Managed Servers is abruptly shut down, a network cable is pulled, or its network interface card has issues, and any server attempts communication with that managed server, threads become stuck waiting to get a connection.

Workaround

This can currently be resolved by using a private flag:

```
-Dweblogic.client.SocketConnectTimeoutInSecs
```

and setting an appropriate timeout value that will release the thread attempting to make the connection and allow the request to fail quickly.

9.8.2 Using IPv6-Formatted Addresses

When using an IPv6-formatted address for WebLogic Server, the URL should include square brackets ('[' and ']') for the host address. Otherwise, WLST may fail to connect to the running server.

Workaround

Add square brackets to the host address. For example:

```
t3://[fe80:0:0:0:203:baff:fe2f:59e5]:9991
```

9.8.3 Server Cannot Be Started After a Whole Server Migration

If the WebLogic Server Administration Server is down when a Whole Server Migration occurs for a clustered server, and the server migrates to a machine on which it was never run before, the server cannot be started on the new machine.

Workaround

Use one of the following workarounds for this issue:

- Ensure that the Administration Server is up when the server migration is being performed.

- Use a shared disk/NFS for all the migratable servers in the cluster.

9.8.4 Object State is not Retained After Renaming Field

When FastSwap is enabled in a J2EE application, you can make certain types of changes to Java classes during development and expect to see the change without re-deploying, with all instance states of the Java object being retained.

One type of change that does NOT retain the object state is that when a field name is changed, it is treated as follows:

- the field with old name is deleted

- the field with new name is added

Thus, in this case, any state in the old field is not carried over to the renamed field.

Using the Workshop or FastSwap ant task, you may see a `FastSwap operation completed successfully` message, even when an instance field name change causes a value reset.

Workaround

You should expect an instance value to be reset when you change a field name.

9.8.5 Forcing Unicast Messages To Be Processed in Order

The following conditions can cause very frequent JNDI updates, and as a result, JMS subscribers may encounter a `java.naming.NameNotFoundException`:

1. Unicast messaging is being used for cluster communication.

2. The JMS topic connection is set with `setReconnectPolicy("all")`.

3. JMS durable subscribers on topic are created and removed very frequently.

Workaround

To fix this issue, a new property, `MessageOrderingEnabled`, has been added to the `ClusterMBean`. This property forces unicast messages to be processed in strict order. By default, this property is not enabled. To enable the property, add the following line manually to the `<cluster>` element in `config.xml`.

```
<message-ordering-enabled>true</message-ordering-enabled>
```

9.8.6 Servers Configured to Listen on a Host Name Are Listening on a Different Host Name After Startup

When using a host name to specify configuring the listen address on the WebLogic Server Administration Server or a Managed Server, machines that are configured with multiple Ethernet cards may listen on a different host name after startup. For example:

- The machine has 3 Ethernet cards

- Card 1 is mapped to `hostname1-s` (DNS registered host name)

- Card 2 is mapped to `hostname1-i` (DNS registered host name)

- Card 3 is mapped to `hostname1` (actual node's host name)

- You configure the server to listen on `hostname1`

- After starting the server, it is listening on `hostname1-s` because Windows resolves the actual node's host name to the first enabled Ethernet card address

Workaround

Use one of the following three workarounds for this issue:

1. Use the IP address, instead of the host name, as the listen address of the WebLogic Server Administration Server. On Managed Servers, use the IP address as the listen address, or configure the actual physical host name to the first Ethernet card in the machine.

2. Add the following entry to the C:\Windows\system32\drivers\etc\hosts file on the machine:

   ```
   <ip_address> <hostname>
   ```

3. Change the order of the network cards in the machine so that the card with the actual node's host name is Card 1.

9.8.7 Administration Server or Node Manager Cannot Track the Status of a Managed Server

If you start a managed server by providing an incorrect WebLogic Server Administration Server URL from the command line (that is, the Administration Server cannot be reachable at the provided URL), the managed server will start in Managed Server Independence (MSI) mode.

In this case, neither the Administration Server nor Node Manager can track the status of the managed server. The Administration Console will show the status of the managed server as UNKNOWN, but the server will actually be RUNNING in MSI mode.

9.8.8 Multicast Traffic Observed to be Unreliable During or After a Network Partition

During or after a network partition that causes a server migration to take place, multicast traffic has been observed to be unreliable. For example, one node may be receiving multicast traffic, but traffic originating from this node is not received on other nodes in the network. As a result, the migrated servers are not added to the cluster because their heartbeats were not received.

Workaround

Currently, the only known workaround is to use unicast cluster messaging.

9.9 Deployment Issues and Workarounds

This section describes the following issues and workarounds:

9.9.1 security-permission Element is not Available in weblogic-application.xml

The `security-permission` element is available in the `weblogic.xml` and `weblogic-ejb-jar.xml` deployment descriptors, but is not available in the `weblogic-application.xml` descriptor. Therefore, in an Enterprise application, you can only apply security policies to JAR files that are EJBs or Web applications.

9.9.2 Extraneous String Values Interpreted as File Specification

The weblogic.Deployer tool interprets any extraneous string values between command-line arguments as a file specification. For example, if you enter the command:

```
java weblogic.Deployer -activate –nostage true -name myname
–source c:\myapp\mymodule
```

the tool attempts to activate a file specification named true, because the `–nostage` option takes no arguments and `true` is an extraneous string value.

9.9.3 java.lang.NoClassDefFoundError is Displayed

While using the WebLogic Server Administration Console with applications or EJBs deployed on a Managed Server that depend on a deployed library, you may encounter a `java.lang.NoClassDefFoundError`.

Workaround

The WebLogic Server Administration Console needs access to any shared library deployments so that Java data types and annotations can be processed. Therefore, all shared library deployments should always be targeted to the WebLogic Server Administration Server in addition to any Managed Servers or clusters.

9.9.4 The restore Method Does Not Update the DConfig Bean With Plan Overrides

The restore method does not correctly update the DConfig Bean with the plan overrides. For example, given the following steps:

```
DeployableObject dObject =
```

```
        WebLogicDeployableObject.createDeployableObject(new File(appName));
    DeploymentConfiguration dConfig =
        WebLogicDeploymentManager.createConfiguration(dObject);
    dConfig.restore(new FileInputStream(new File(plan)));
```

the plan does not correctly override the DConfig Bean.

Workaround

Specify the plan when initializing the configuration for the application. For example:

```
    helper = SessionHelper.getInstance(
        SessionHelper.getDisconnectedDeploymentManager());
    helper.setApplication(app);
    helper.setPlan(new File(plan));
    helper.initializeConfiguration();
```

9.9.5 config-root *<directory>* not found Warning Is Displayed When Applying a Plan

If you use the Administration Console to make configuration changes to an application, a deployment plan will be generated. If external descriptors are generated as part of the deployment plan, they are placed in the config root plan directory. This directory will be set in the deployment plan 'config-root' attribute.

If no external descriptors are required, the config root directory will not be created, and a warning is displayed when you apply the deployment plan. This results in the following warning in the server output:

```
<Warning <WWebLogicDescriptorWL> <BEA-2156000><"config-root" C:\deployments\plan
was not found>.
```

Workaround

Create the plan directory manually.

9.9.6 Deployment Task Fails When a Large Application File Is Deployed

When a large application file is deployed using the `upload` option, the deployment task fails with the following error:

```
java.lang.OutOfMemoryError: Java heap space
```

To resolve this issue, a new system property, `weblogic.deploy.UploadLargeFile`, has been added. If you see this issue, include this flag in the `java` command you use to launch a deployment client.

If you are using the WebLogic Server patch releases 10.3.2, 10.3.3, or 10.3.4 this flag is not needed.

9.9.7 Application State Is Not Updated If the Server Starts in MSI Mode

A managed server will start in MSI mode if the WebLogic Server Administration Server is not available when the managed server starts. If you start the Administration Server later, the managed server will connect to the Administration Server. However, the state of each application deployed to the managed server is not updated to reflect the state of the applications on the managed server. Each application's state is displayed as NEW or PREPARED in the WebLogic Server Administration Console.

Workaround

There are two workarounds for this issue:

- Start the Administration Server before starting the managed server, or

- Redeploy the application after starting the Administration Server.

9.9.8 Attempting to Redeploy an Application Fails if the Application is Already Deployed Using a Different Source File Location

If you initially deployed an application using one source file location, then attempt to redeploy the application using a new location for the source file, the deployment fails with the following exception:

```
New source location <new_source_file_path> cannot be configured deployed to
configured application, <application_name>. The application source is at
original_source_file_path. Changing the source location is not allowed for a
previously attempted deployment. Try deploying without specifying the source.
```

This is due to a WebLogic Server deployment restriction. Once you specify the source file for a deployment, you cannot change it on a redeployment.

Workaround

Undeploy the application before attempting to redeploy it using a new source file location.

9.10 EJB Issues and Workarounds

This section describes the following issues and workarounds:

- Section 9.10.1, "Primary Key in Oracle Table is CHAR"

- Section 9.10.2, "No Available Annotation That Enables Creation of a Clusterable Timer"

- Section 9.10.3, "Kodo's MappingTool Cannot Generate Schemas"

- Section 9.10.4, "Extensions to the JPA Metadata Model Can Only Be Specified Via Annotations"

- Section 9.10.5, "Lookup Method Injection Not Supported by Spring"

- Section 9.10.6, "Deserializing a JDO PersistenceManagerFactory in a Managed Environment May Fail"

- Section 9.10.7, "Indexes Not Always Created During Schema Creation"

- Section 9.10.8, "OpenJPA throws an exception when @Id fields are also annotated as @Unique"

- Section 9.10.9, "Cache Hit and Miss Counts May Rise Unexpectedly"

- Section 9.10.10, "Open JPA Tries to Create a Table Even if the Table Exists"

- Section 9.10.11, "EJB Applications Fail During Serialization"

- Section 9.10.12, "Non-Transactional Message-Driven Bean Container Can Fail to Provide Reproducible Behavior For Foreign Topics"

9.10.1 Primary Key in Oracle Table is CHAR

The primary key in an Oracle table is a CHAR but the query field in the SQL table is a VARCHAR2.

Workaround

Change the database schema from CHAR to VARCHAR2. Using CHAR as a primary key is not recommended for the Oracle database.

9.10.2 No Available Annotation That Enables Creation of a Clusterable Timer

There is no annotation for EJB3 beans or `Ejbgen` that enables creation of a clusterable timer.

Workaround

Create a weblogic-ejb-jar.xml file and put the `<timer-implementation>` element and corresponding values into the file.

9.10.3 Kodo's MappingTool Cannot Generate Schemas

Kodo's MappingTool cannot generate schemas for classes that use BLOBs in their primary key. BLOBs can be used in a primary key, but the schema must be defined manually. Note that support for BLOB columns in primary keys is not mandated by either the JDO or JPA specifications.

9.10.4 Extensions to the JPA Metadata Model Can Only Be Specified Via Annotations

Extensions to the JPA metadata model can only be specified via annotations, and not via a structure similar to the orm.xml file defined by the specification.

Workaround

To specify Kodo-specific metadata for your object model, either:

- use the Kodo-specific annotations, or

- convert your XML-based metadata to the JDO metadata format, which does support XML specification of extensions.

9.10.5 Lookup Method Injection Not Supported by Spring

The Weblogic Spring injection extension model doesn't support lookup method injection.

9.10.6 Deserializing a JDO PersistenceManagerFactory in a Managed Environment May Fail

Deserializing a JDO `PersistenceManagerFactory` in a managed environment may fail. The exception states that the `javax.jdo.PersistenceManagerFactoryClass` property is missing. Note that serializing a `PersistenceManagerFactory` should not generally be necessary in a managed environment.

9.10.7 Indexes Not Always Created During Schema Creation

Indexes declared at the class level are not always created during schema creation.

Workaround

Create the indexes manually after running the schema generation tools.

9.10.8 OpenJPA throws an exception when @Id fields are also annotated as @Unique

OpenJPA throws an exception when `@Id` fields are also annotated as `@Unique` in some databases. Database primary keys are unique by definition. Some databases implement this by creating a unique index on the column.

Workaround

Do not specify both `@Id` and `@Unique` on a single field.

9.10.9 Cache Hit and Miss Counts May Rise Unexpectedly

The cache hit and miss counts may rise unexpectedly when manipulating entities without version data. The extra cache access occurs when the EntityManager closes and all contained entities are detached. Entities without version fields appear to the system to be missing their version data, and the system responds by checking their version in the cache before detachment.

Workaround

Entities with version fields or other version strategies do not cause extra cache access.

9.10.10 Open JPA Tries to Create a Table Even if the Table Exists

When using the MySQL database, and OpenJPA is configured to automatically run the mapping tool at runtime and create tables within the default schema (for example):

```
<property name='openjpa.jdbc.SynchronizeMappings' value='buildSchema'/>
<property name='openjpa.jdbc.Schema' value='MySQL database name' />
```

OpenJPA will try to create the table even if the table already exists in the database. A PersistenceException will be thrown to indicate that the table already exists and the table creation statement fails.

Workaround

To avoid this problem, if you are using the MySQL database, don't configure OpenJPA to automatically run the mapping tool at runtime and specify the default schema at the same time.

9.10.11 EJB Applications Fail During Serialization

EJB applications that use IIOP and send JPA entities from the server to the client will fail during deserialization if the entities are Serializable (but not Externalizable) and do not declare a `writeObject()` method.

Workaround

Add a `writeObject()` method to such entity classes. The write object can be trivial:

```
private void
writeObject(java.io.ObjectOutputStream out)
  throws IOException {
 out.defaultWriteObject();
}
```

9.10.12 Non-Transactional Message-Driven Bean Container Can Fail to Provide Reproducible Behavior For Foreign Topics

When using multi-threaded processing for non-transactional topic Message-Driven Beans (MDBs) that specify a foreign topic (non-WebLogic) JMS, the MDB container can fail to provide reproducible behavior. For example, if a `runtimeException` is thrown in the `onmessage()` method, the container may still acknowledge the message.

Workaround

Set the `max-beans-in-free-pool` attribute to 1 in the deployment descriptor.

9.11 Examples Issues and Workarounds

This section describes the following issues and workarounds:

-
-
-

9.11.1 Security Configuration in medrec.wls.config

The `medrec.wls.config` target in *SAMPLES_HOME*`/server/medrec/setup/build.xml` has a known issue with respect to security configuration.

9.11.2 HTML File not Created for StreamParser.java File

The `../xml/stax` example contains two files with the same root but different extensions: `StreamParser.java` and `StreamParser.jsp`. The samples viewer build, however, creates just one corresponding HTML file, rather than two for each type of file. In this case only the `StreamParser.jsp` file has an equivalent HTML file; the `StreamParser.java` file does not.

The problem occurs because of a setting in the build.xml file that controls the behavior of `java2html` to generate the files for the documentation.

When using `java2html`, the `useShortFileName="true"` parameter crops off the file extensions for the source files to create the file names for the HTML output files. If two files have the same name and different file extensions, whichever HTML file is generated last will overwrite previous ones.

Workaround

Set the `useShortFileName` parameter to "false". This setting generates HTML files with the file extensions included in the name. The drawback to this solution is that every link that points to the HTML output file needs to be revised, regardless of whether the files in question were affected by the bug.

9.11.3 Warning Message Appears When Starting Medrec or Samples Domain

When you start the medrec or samples domains, you may see a warning message similar to this:

```
<Warning> <WorkManager> <BEA-002919> <Unable to find a WorkManager with name
weblogic.wsee.mdb.DispatchPolicy. Dispatch policy
```

```
weblogic.wsee.mdb.DispatchPolicy will map to the default WorkManager for the
application bea_wls_async_response>
```

This warning message appears in the standard output of the Console while starting a WebLogic Server sample application with an asynchronous Web Service deployed.

Workaround

The warning is harmless and can be ignored.

9.12 HTTP Publish/Subscribe Server Issues and Workarounds

This section describes the following issues and workarounds:

- Section 9.12.1, "Authentication and Authorization of the Local Client is not Supported"
- Section 9.12.2, "Event Messages Published by Local Clients Cannot Be Received"
- Section 9.12.3, "Event Messages Published By Local Clients Do Not Go Through Filters"

9.12.1 Authentication and Authorization of the Local Client is not Supported

The HTTP Publish/Subscribe server does not support authentication and authorization of the local client. The local client has full permissions to operate on channels of the HTTP Publish/Subscribe server, which means the local client can create/delete channels and publish/subscribe events from channels.

9.12.2 Event Messages Published by Local Clients Cannot Be Received

In a clustering environment, event messages published by a local client on a server can be received only by subscribed clients connected to the same server. These messages cannot be received by subscribed clients connected to other servers in the cluster.

9.12.3 Event Messages Published By Local Clients Do Not Go Through Filters

Event messages published to a channel by a local client will not go through the Message Filters configured to that channel.

9.13 Installation Issues and Workarounds

This section describes the following issues and workarounds:

- Section 9.13.1, "Sybase JDBC Drivers Not Downloaded with Upgrade Installation"
- Section 9.13.2, "Improper Rollback to Previous Installation May Occur After Exiting an Upgrade Installation Prematurely"
- Section 9.13.3, "Unable to Upgrade to WebLogic Server 10.3.4 Using Smart Update"
- Section 9.13.4, "WebLogic Server Installer Fails With Insufficient Disk Space Error"
- Section 9.13.5, "WebLogic Server Installations Must Be Performed Using the Same User ID"
- Section 9.13.6, "Installation Fails with Fatal Error"
- Section 9.13.7, "Process to Install and Configure Oracle WebLogic Server"

- Section 9.13.8, "Patch for NoClassDefFoundError While Using JACC in AIX and zLinux"
- Section 9.13.9, "Patch for Incompatibility of IBM JDK Transformer Factory With Security SAML in AIX and zLinux"

9.13.1 Sybase JDBC Drivers Not Downloaded with Upgrade Installation

The Oracle WebLogic Server 11*g* Release 1 installer does not download the Sybase JDBC drivers. When you try to upgrade an existing WebLogic Server 10.3 installation using the latest installer, it does not remove the Sybase JAR files from the original installation. The installer upgrades only the `weblogic.jar` file.

The Sybase JAR files (jconn2.jar, jconn3.jar, and jConnect.jar) in the /server/lib or /server/ext/jdbc/sybase directories are removed from the manifest classpath in the upgraded weblogic.jar file. Therefore, if the classpath of a WebLogic Server application does not include Sybase JAR files and only includes weblogic.jar then after the upgrade installation, the application will throw a ClassNotFoundException.

To work around this issue, explicitly add Sybase JAR files in the WebLogic Server application classpath.

9.13.2 Improper Rollback to Previous Installation May Occur After Exiting an Upgrade Installation Prematurely

When using an Upgrade installer or Smart Update to upgrade an existing WebLogic Server 10.3.x installation to WebLogic Server 10.3.4, if you abort the upgrade before completion, the installation should automatically roll back to the prior installation. This may not always occur, resulting in an unusable installation.

9.13.3 Unable to Upgrade to WebLogic Server 10.3.4 Using Smart Update

You cannot use Smart Update to download and install the WebLogic 10.3.4 release over an existing WebLogic Server 10.3.x release. Instead, you must download the appropriate WebLogic Server Upgrade installer from My Oracle Support. Search Refer to the following patch numbers:

- **11060985**—WebLogic Server 10.3.4 Generic Upgrade Installer

  11060966—WebLogic Server 10.3.4 Upgrade Installer for Linux 32-bit systems

  11060958—WebLogic Server 10.3.4 Upgrade Installer for Windows 32-bit systems

  11060943—WebLogic Server 10.3.4 Upgrade Installer for Solaris 32-bit systems

You can still use Smart Update to download and install a patch set or maintenance pack for any supported release prior to WebLogic Server 10.3.4. You can also still use Smart Update to download individual patches for any supported release, including patches for WebLogic Server 10.3.4.

9.13.4 WebLogic Server Installer Fails With Insufficient Disk Space Error

The WebLogic Server installer can fail with an insufficient disk space error, even when there is a large amount of available disk space on the file system or disk.

Workaround

Use the `-Dspace.detection` property in the installation command to disable the available space check. For example:

```
java -Xmx1024M -Dspace.detection=false -jar installer_file_name
-mode=silent  -silent_xml=silent.xml
```

or

```
wls1034_linux.bin -Dspace.detection=false
```

9.13.5 WebLogic Server Installations Must Be Performed Using the Same User ID

When using a WebLogic Server Upgrade installer to upgrade an existing WebLogic Server installation, you must run the Upgrade installer using the same user ID as was used to perform the initial WebLogic Server installation.

9.13.6 Installation Fails with Fatal Error

The installer does not verify whether sufficient disk space is available on the machine prior to completing the installation. As a result, if an installation cannot be completed due to insufficient space, the installer displays the following error message and exits:

```
Fatal error encountered during file installation. The installer will now
cleanup and exit!
```

Workaround

If this problem occurs, restart the installer using the following command:

```
server103_linux32.bin -log=log.out -log_priority=debug
```

The preceding command generates a log of the installation procedure, providing details about the exact cause of the failure. If the cause is indeed insufficient space, the log file indicates it explicitly.

9.13.7 Process to Install and Configure Oracle WebLogic Server

To install and configure Oracle WebLogic Server 10.3.4, perform the following steps:

1. Download the IBM JDK 6 SR8PF1+IZ80785+IZ83273 from the following IBM ISV download site:

    https://www14.software.ibm.com/webapp/iwm/web/preLogin.do?lang=en_
    US&source=swg-ibmjavaisv

    Use the following access key to download: MJ3D7TQGMK

2. Install IBM Java 6 on your system.

3. Export $JAVA_HOME/bin into PATH where JAVA_HOME is the java installation path. For example:

    ```
    export PATH=$JAVA_HOME/bin:$PATH
    ```

4. Go to Oracle Technology Network.

    http://www.oracle.com/technology/software/products/ias/htdocs/wls_
    main.html

5. Download "Oracle WebLogic Server 11*g* R1 PS3 (10.3.4) - Package Installer" under "Additional Platforms" column.

> **Note:** For important information on downloading Oracle products see Notes 762254.1 and 763603.1 on My Oracle Support.
>
> Oracle WebLogic Server can also be downloaded from Oracle E-Delivery:
>
> http://edelivery.oracle.com/

6. Install Oracle WebLogic Server using the instructions in "Starting .jar Installation Programs in Console-Mode" of *Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server*. This section describes the process of installing .jar files in different modes.

7. Download and install the following patches using the Oracle Smart Update tool:

   - Patch ID: J1S7 Passcode: GW8HPB2F

     For more information on the Oracle Smart Update tool, refer to the *Smart Update Installing Patches and Maintenance Packs Guide*.

> **Note:** There is one JACC patch for each subsequent release. Download and install the following patch for installing Oracle WebLogic Server 10.3.1:
>
> - Patch ID: RDEQ Passcode: 8XI219W4
>
> Download and install the following patch for installing Oracle WebLogic Server 10.3.2:
>
> - Patch ID: 1MIS Passcode: KTNAX6H1
>
> Download and install the following patch for installing Oracle WebLogic Server 10.3.3:
>
> - Patch ID: E1WM Passcode: H2746UPL

9.13.8 Patch for NoClassDefFoundError While Using JACC in AIX and zLinux

In 11.1.1.4.0 Release, when JACC (Java Authorization Contract for Containers) enabled Oracle WebLogic Server 10.3.4 runs using Sun-specific PrincipalComparator, which is not supported on IBM JDK. It displays the NoClassDefFoundError.

Workaround

Download and install the following patch using the Oracle Smart Update tool to resolve the issue:

Patch ID: J1S7 Passcode: GW8HPB2F

For more information about Oracle Smart Update tool, refer to the "Smart Update Tool":

http://download.oracle.com/docs/cd/E14759_01/index.htm

9.13.9 Patch for Incompatibility of IBM JDK Transformer Factory With Security SAML in AIX and zLinux

In 11.1.1.4.0 Release, incompatibility of IBM JDK transformer factory with security SAML 2.0 module shows the following incompatibility exception:

```
FATAL ERROR:  'org.apache.xml.serializer.utils.WrappedRuntimeException:
org.apache.xml.serializer.ToXMLSAXHandler incompatible with
org.apache.xml.serializer.SerializationHandler':
org.apache.xml.serializer.ToXMLSAXHandler incompatible with
org.apache.xml.serializer.SerializationHandler
org.opensaml.xml.ConfigurationException: Configuration file does not validate
against schema at
org.opensaml.xml.XMLConfigurator.validateConfiguration(XMLConfigurator.java:33.1)
```

Workaround

Download and install the following patch using the Oracle Smart Update tool to resolve the issue:

Patch ID: `J1S7` Passcode: `GW8HPB2F`

For more information about Oracle Smart Update tool, refer to the "Smart Update Tool":

http://download.oracle.com/docs/cd/E14759_01/index.htm

9.14 Java EE Issues and Workarounds

This section describes the following issues and workarounds:

9.14.1 FastSwap May Relax the Access Modifiers of Fields and Methods

FastSwap may relax the access modifiers of fields and methods. Private and protected members may be made public at runtime. This changes the behavior of reflection and may affect reflection-based frameworks such as Struts.

9.14.2 FastSwap Does Not Support Redefinition of the Entity Bean and ejbClass

FastSwap does not support redefinition of the Entity bean and ejbClass (Session/MDB). Therefore, any updates to entity classes will cause redefinition errors.

Workaround

After updating an entity class, redeploy the application.

9.14.3 Classpath Order Is Not Guaranteed When There Are Multiple JARs in an EAR File

When you have an EAR file containing separate JAR files, and two or more of those JAR files have a class with the same name, it is not possible to predict from which of those JAR files WebLogic Server will instantiate the class. This is not an issue if the classes are the same, but if they are different implementations, the results are unpredictable.

Workaround

Currently there is no known workaround for this issue.

9.15 JDBC Issues and Workarounds

This section describes the following issues and workarounds:

- Section 9.15.1, "Queries Can Take Longer When Using Data Direct 4.0 MSSQL Driver"

- Section 9.15.2, "An Attempt to Access a Remote 10.3.2 or Later WLS Data Source Fails"

- Section 9.15.3, "BLOB Data Is Not Updating in the Database"

- Section 9.15.4, "ORA-01591 Errors Occur on SOA Servers Configured to Use Multiple Oracle RAC Nodes"

9.15.1 Queries Can Take Longer When Using Data Direct 4.0 MSSQL Driver

In WebLogic Server Release 10.3.2, our OEM DataDirect drivers were upgraded to 4.0. In order for the SQLServer driver to fully handle new DBMS data types, when running in it's default configuration, queries will take longer. If application access to new data types can be limited to `getString()`, the following configuration workarounds will restore the performance.

Workaround

Add the following driver property to the list of driver properties for the WebLogic data source's connection pool. From the Administration Console, select the **Configuration>Connection Pool** tab for the data source.

For a non-XA connection pool, add:

`ReportDateTimeTypes=false`

For an XA connection pool, add:

`ExtendedOptions=ReportDateTimeTypes=false`

Alternatively, you can accomplish the same result by adding the property to the data source's XML configuration file.

For non-XA:

```
<jdbc-driver-params>
   <properties>
      <property>
        <name>ReportDateTimeTypes</name>
        <value>false</value>
      </property>
```

For XA:

```
<jdbc-driver-params>
   <properties>
      <property>
        <name>ExtendedOptions</name>
        <value>ReportDateTimeTypes=false</value>
      </property>
```

9.15.2 An Attempt to Access a Remote 10.3.2 or Later WLS Data Source Fails

A new system property, `-Dweblogic.jdbc.remoteEnabled`, has been added to JDBC in Oracle WebLogic Server 10.3.2. For compatibility with prior releases of

WebLogic Server, the default setting of this property is `true`. When this property is set to `false`, remote JDBC access is turned off, and such access results in an exception.

Remote access may occur explicitly in an application, or implicitly during a global (XA/JTA) transaction with a participating non-XA data source that is configured with the LLR, 1PC or Emulate XA global transaction option. The following enumerates the cases when an exception will be thrown, and work-arounds for each case (if any).

An exception occurs in the following cases. A workaround (if any) for a given case is provided.

- When a stand-alone client application uses any type of data source.

- When an application that is hosted on WebLogic Server uses any type of data source, and the data source is not configured (targeted) locally. A potential workaround is to target the data source locally.

- When accessing a same named non-XA data source with a transaction option of LLR, 1PC or Emulate XA on multiple WebLogic Server instances in the same global transaction. In this case, there are two potential work-arounds:

  – Change data sources to use XA instead (this may lower performance), or

  – For the 1PC/emulateXA types, change the application to ensure the data source is accessed from a single server.

- When accessing a non-XA data source with the LLR transaction option on a server that is different than the transaction coordinator. For server-initiated transactions, the coordinator location is chosen based on the first participating resource in the transaction. In this case, there are two potential work-arounds: (a) change the data source to use XA instead (this may lower performance); or (b) change the application to ensure data source access on the transaction coordinator, as described in "Optimizing Performance with LLR" in Oracle Fusion Middleware Programming JTA for OracleWebLogic Server. The latter may not be possible in some cases; for example, when an MDB application receives messages from a remote WebLogic JMS server, the transaction coordinator will always be the WebLogic server that's hosting the JMS server, but it may not be possible to move the MDB application to the same WebLogic server.

  – Change the data source to use XA instead (this may lower performance), or

  – Change the application to ensure data source access on the transaction coordinator, as described in "Optimizing Performance with LLR" in *Oracle Fusion Middleware Programming JTA for Oracle WebLogic Server*. This workaround may not be possible in some cases. For example, when an MDB application receives messages from a remote WebLogic JMS server, the transaction coordinator will always be the WebLogic Server instance that is hosting the JMS server, but it may not be possible to move the MDB application to the same WebLogic Server instance.

9.15.3 BLOB Data Is Not Updating in the Database

When using a Data Direct MSSQL driver, and using the `updateBlob()` and `updateBinaryStream()` methods to update BLOB data in `RowSet` objects, the data is not being updated in the database.

9.15.4 ORA-01591 Errors Occur on SOA Servers Configured to Use Multiple Oracle RAC Nodes

On SOA servers using multiple Oracle RAC database nodes, when WebLogic Server multi data sources are configured for XA and load balancing, ORA-10591 errors can occur.

Workaround

Apply Oracle RAC database patch p7675269_111070_Linux-x86.zip. You can download this patch from http://aru.us.oracle.com:8080/ARU/ViewPatchRequest/process_form?aru=11860090. The ps9007079_111070_Linux-x86.zip patch is a super-set patch that includes the p7675269 patch.

9.16 JMS Issues and Workarounds

This section describes the following issues and workarounds:

- Section 9.16.1, "Deployment Descriptor Validation Fails"
- Section 9.16.2, "Exception When Multiple Producers Use the Same Client SAF Instance"
- Section 9.16.3, "Multi-byte Characters are not Supported in Store File and Directory Names"
- Section 9.16.4, "Generation of the Default UOO Name Has Changed"
- Section 9.16.5, "Testing Abrupt Failures of WebLogic Server When Using File Stores on NFS"
- Section 9.16.6, "JMS Message Consumers Will Not Always Reconnect After a Service Migration"
- Section 9.16.7, "Forcing Unicast Messages To Be Processed in Order"

9.16.1 Deployment Descriptor Validation Fails

Deployment descriptor validation fails when descriptor validation is enabled, and an EAR file contains only JMS modules.

Workaround

Make sure that there is at least one J2EE specification-compliant module in the EAR.

9.16.2 Exception When Multiple Producers Use the Same Client SAF Instance

When multiple JMS producers use the same JMS Client SAF instance (within a single JVM), depending on the timing of the JMS SAF client creation, you might receive the following exception:

```
Error getting GXA resource [Root exception is weblogic.jms.common.JMSException:
weblogic.messaging.kernel.KernelException: Error getting GXA resource]
```

Workaround

When using multiple JMS SAF client producers, try introducing a small delay between the creation of each new client.

9.16.3 Multi-byte Characters are not Supported in Store File and Directory Names

There is no support for multi-byte characters in WebLogic Store file and directory names. For instance, when the WebLogic Server name has multi-byte characters, the default store cannot be created, and WebLogic Server will not boot.

Workaround

Create WebLogic Server instances without multi-byte characters in the path name and use that path name for the default store configuration. Do not use multi-byte characters in the Weblogic Server name.

9.16.4 Generation of the Default UOO Name Has Changed

WebLogic Server 10.3.4 contains a fix for configurations that set a default unit-of-order (UOO) on a JMS regular destination, distributed destination, or template. This fix ensures that the default unit-of-order name stays the same even after a restart of the destination's host JMS server. The default UOO name is now based on the domain, JMS server, and destination names.

9.16.5 Testing Abrupt Failures of WebLogic Server When Using File Stores on NFS

Oracle strongly recommends verifying the behavior of a server restart after abrupt machine failures when the JMS messages and transaction logs are stored on an NFS mounted directory. Depending on the NFS implementation, different issues can arise post failover/restart. For more information, see Section 6.3, "Testing Abrupt Failures of WebLogic Server When Using File Stores on NFS."

9.16.6 JMS Message Consumers Will Not Always Reconnect After a Service Migration

JMS message consumers will not always reconnect after a service migration when an application's `WLConnection.getReconnectPolicy()` attribute is set to `all`. If the consumers do not get migrated, either an exception is thrown or `onException` will occur to inform the application that the consumer is no longer valid.

Workaround

The application can refresh the consumer either in the exception handler or through `onException`.

9.16.7 Forcing Unicast Messages To Be Processed in Order

Certain conditions can cause very frequent JNDI updates, and as a result, JMS subscribers may encounter a `java.naming.NameNotFoundException`. For more information, see Section 9.8.5, "Forcing Unicast Messages To Be Processed in Order."

9.17 JNDI Issues and Workarounds

There are no known JNDI issues in this release of WebLogic Server.

9.18 JSP and Servlet Issues and Workarounds

This section describes the following issues and workarounds:

- Section 9.18.1, "Deployment Plans Cannot Be Used To Override Two Descriptors"
- Section 9.18.2, "Spring Dependency Injection Not Supported on JSP Tag Handlers"

■ Section 9.18.3, "503 Error When Accessing an Application With a Valid sessionid"

9.18.1 Deployment Plans Cannot Be Used To Override Two Descriptors

Deployment plans cannot be used to override the following two descriptors during deployment of a Web application or a Web module:
WEB-INF/classes/META-INF/persistence.xml and
WEB-INF/classes/META-INF/persistence-configuration.xml. Deployment plans can otherwise be used to override any descriptor.

Workaround

Package WEB-INF/classes/META-INF/persistence.xml and
WEB-INF/classes/META-INF/persistence-configuration.xml (if present) along with related class files into a JAR file. The JAR file must then be placed in the WEB-INF/lib directory of the Web application or Web module. A deployment plan can be used to override the two descriptors in such a JAR file.

9.18.2 Spring Dependency Injection Not Supported on JSP Tag Handlers

With the Spring extension model enabled, WebLogic Server 10.3 or later does not support Spring Dependency Injection (DI) on JSP tag handlers for performance reasons.

Currently, WebLogic Server supports Spring DI on most Web components, for example, servlets, filters and listeners. Spring DI is not, however, presently supported on JSP tag handlers for performance reasons.

9.18.3 503 Error When Accessing an Application With a Valid sessionid

When a session is persistent and an older version of a servlet context is retired, accessing the application with a valid `sessionid` will cause a 503 error.

For example, the session-persistent type of a versioned Web application is 'file'. A user can access the application successfully. Later, version 2 of the application is redeployed and version 1 is retired. If the same user accesses the application, they will get a 503 error.

9.19 JTA Issues and Workarounds

There are no known JTA issues in this release of WebLogic Server.

9.20 Java Virtual Machine (JVM) Issues and Workarounds

This section describes the following issues and workarounds:

■ Section 9.20.1, "1.4 Thin Client Applet Cannot Contact WebLogic Server"

■ Section 9.20.2, "Applications Running on Some Processors May Experience Intermittent Time Issues"

■ Section 9.20.3, "JRockit JVM Appears to Freeze When Doing Long Array Copies"

■ Section 9.20.4, "Serial Version UID Mismatch"

■ Section 9.20.5, "JVM Stack Overflow"

■ Section 9.20.6, "Using AWT libraries May Cause a JVM Crash"

9.20.1 1.4 Thin Client Applet Cannot Contact WebLogic Server

Due to a known Sun Microsystems VM bug (513552), a 1.4 Thin Client Applet cannot contact WebLogic Server 9.0 or later. This is because the VM does not distinguish correctly between a client and a server connection. The VM creates a server-type connection and caches it. It then attempts to make a client-type connection, finds the cached connection and tries to use that, but then encounters an error because clients are not allowed to use server connections.

9.20.2 Applications Running on Some Processors May Experience Intermittent Time Issues

Applications that run on RH Linux on Intel G5 processors and that also directly or indirectly use system time calls may experience intermittent time issues if the `ClockSource` is set to `tsc` (the default). The standard POSIX C `gettimeofday()` call, and consequently also the Java `System.currentTimeMillis()` and `java.util.Date()` calls can intermittently return a value that is approximately 4400 seconds in the future, even in a single-threaded application.

This issue is not unique to WebLogic or Java, but applies to any application running on RH Linux on Intel G5 processors. Issues can occur for applications that either explicitly make a time call using standard Java, or explicitly by using any time-based application server services.

Possible symptoms include, but are not limited to, premature transaction timeouts, unexpected expiration of JMS messages, and incorrectly scheduled timers.

If you're interested in a standalone reproducer for this problem, contact Oracle and reference bug number 8160147.

Workaround

There is no known official patch for Linux. Instead, change the clock source from `tsc` to `hpet`. After making this modification on test systems, exceptions due to invalid `System.currentTimeMillis()/gettimeofday()` return values were no longer seen. To change the system clock from `tsc` to `hpet` on a trial basis, perform the following steps as `root`:

1. Disable ntpd (if running)

2. Echo 'hpet' > /sys/devices/system/clocksource/clocksource0/current_ clocksource

3. Enable ntpd

Note that this change will not survive a reboot. For more information, please see: http://www.gossamer-threads.com/lists/linux/kernel/813344

9.20.3 JRockit JVM Appears to Freeze When Doing Long Array Copies

The JRockit JVM appears to freeze when doing long array copies as part of unlimited forward rolling. This can happen when multiple server reboots occur due to `Out Of Memory` conditions.

Workaround

When booting the servers, include the following JRockit JVM flag:

```
-XXrollforwardretrylimit:-1
```

9.20.4 Serial Version UID Mismatch

A Serial Version UID Mismatch issue is encountered if you deploy an application on a latest JVM, but compiled with previous Service Release of IBM Java 6 JDK.

Workaround

To be compatible with the serialization of previously compiled applications, modify the *BEA_HOME*/wlserver_10.3/common/bin/commEnv.sh file to include the following command:

```
JAVA_OPTIONS="$JAVA_OPTIONS
-Dcom.sun.xml.namespace.QName.useCompatibleSerialVersionUID=1.0"
```

Alternatively, you can use the command line option:

```
export JAVA_
OPTIONS="-Dcom.sun.xml.namespace.QName.useCompatibleSerialVersionUID=1.0"
```

If you intend to deploy new applications with previously compiled applications, they must be recompiled as necessary to have the same Serial Version UID.

9.20.5 JVM Stack Overflow

You might encounter a JVM stack overflow error or exception while running WebLogic Server. This issue applies to Oracle Enterprise Linux 4, 5, 5.1 on AMD64 and 64-bit Xeon platforms.

Workaround

Increase the stack size from the default 128k to 256k.

9.20.6 Using AWT libraries May Cause a JVM Crash

You might encounter a JVM crash when using GUI libraries such as AWT or javax.swing (which often delegates to AWT).

Workaround

Start the server using the following flag:

```
-Djava.awt.headless=true
```

9.21 Monitoring Issues and Workarounds

This section describes the following issue and workaround:

- Section 9.21.1, "MBean Attributes Not Explicitly Marked as @unharvestable Appear as Harvestable"

- Section 9.21.2, "The BEA Prefix in Message IDs Will Be Changed in a Future Release"

- Section 9.21.3, "Events Generated By the JVM Level Are Not Generated at Low Volume"

- Section 9.21.4, "WLDF Performance Issues Can Occur When JVM Events Are Enabled"

9.21.1 MBean Attributes Not Explicitly Marked as @unharvestable Appear as Harvestable

The `@unharvestable` tag is not being honored at the interface level. If MBean attributes are not explicitly marked as `@unharvestable`, they are considered to be harvestable and will appear as harvestable in the WebLogic Administration Console.

Workaround

You can explicitly mark MBean attributes as `@unharvestable`.

9.21.2 The BEA Prefix in Message IDs Will Be Changed in a Future Release

In an upcoming release of WebLogic Server, the current default prefix for catalog and non-catalog Message IDs will be changed from the current BEA prefix to WL.

Workaround

You should be prepared for this future change. In the interim, here are some guidelines to consider:

- Avoid depending on BEA for Message ID prefixes in scripts, filter expressions, etc.
- For log messages such as the following:

```
<Jan 30, 2009 12:51:49 AM CST> <Notice> <WebLogicServer> <BEA-000365>
<Server state changed to STARTING>
```

  it is better for you to filter on `000365` and not on the BEA prefix itself.

- Your log parsing scripts should be updated to look for both BEA and WL, instead of filtering only on BEA.

9.21.3 Events Generated By the JVM Level Are Not Generated at Low Volume

In WebLogic Server 10.3.3, the default WLDF diagnostic volume setting was Off. As of WebLogic Server 10.3.4, the default diagnostic volume setting is Low Volume, and events generated by the JVM level are not being generated at the Low Volume setting in WebLogic Server 10.3.4 (JVM-level events were generated at the Low Volume setting in WebLogic Server 10.3.3). The JVM-level events are still generated at the High Volume and Medium Volume settings in WebLogic Server 10.3.4.

Workaround

Use one of the following workarounds to cause the JVM-level events to be generated:

- Increase the WLDF diagnostic volume to the Medium or High level.
- Use JRMC, JRCMD, or the JRockit command line settings to activate a separate flight recording in the WebLogic Server instance. By doing so, JVM will cause JVM events to be present at all WLDF diagnostic volume settings (Off, Low, Medium, and High).

9.21.4 WLDF Performance Issues Can Occur When JVM Events Are Enabled

When JVM events are enabled, WLDF performances issues may occur in the following situations:

- If there are no other JRockit flight recordings enabled, performance can degrade when the WLDF diagnostic volume is set to Medium or High level.

- If other JRockit flight recordings are enabled, performance can degrade at all WLDF diagnostic volume levels (Off, Low, Medium, and High).

9.22 Node Manager Issues and Workarounds

There are no known Node Manager issues in this release of WebLogic Server.

9.23 Operations, Administration, and Management Issues and Workarounds

There are no known Operations, Administration, and Management issues in this release of WebLogic Server.

9.24 Oracle Kodo Issues and Workarounds

There are no known Oracle Kodo issues in this release of WebLogic Server.

9.25 Protocols Issues and Workarounds

There are no known Protocols issues in this release of WebLogic Server.

9.26 RMI-IIOP Issues and Workarounds

This section describes the following issue and workaround:

- Section 9.26.1, "Ant 1.7 rmic Task Incompatibility"

9.26.1 Ant 1.7 rmic Task Incompatibility

Calls to the Ant version 1.7 `rmic` task automatically add a `-vcompat flag`, which is not compatible with `rmic` for Oracle WebLogic Server.

Workaround

Use either of the following workarounds if your rmic call is of the form:

```
rmic classname="com.bea.crmsimulation.legacyra.LegacyAdapter"
   base="${module_location}/core-legacy-ra/classes"
   classpath="${core.classes}" compiler="weblogic" />
```

- Add a `stubversion`

  ```
  <rmic classname="com.bea.crmsimulation.legacyra.LegacyAdapter"
     base="${module_location}/core-legacy-ra/classes"
     classpath="${core.classes}" compiler="weblogic"
     stubversion="1.2"/>
  ```

- Remove the `compiler` flag

  ```
  <rmic classname="com.bea.crmsimulation.legacyra.LegacyAdapter"
     base="${module_location}/core-legacy-ra/classes"
     classpath="${core.classes}"
  ```

9.27 Security Issues and Workarounds

This section describes the following issues and workarounds:

9.27.1 StoreBootIdentity Works Only if the Appropriate Server Security Directory Exists

The option -Dweblogic.system.StoreBootIdentity works only if the appropriate server security directory exists. This directory is usually created by the Configuration Wizard or upgrade tool.

However, the appropriate server security directory could be absent in domains checked into source-control systems.

9.27.2 Boot Time Failure Occurs With SecurityServiceException

A WebLogic Server instance can experience a boot time failure with a SecurityServiceException when the RDBMS Security Data Store is configured for a DB2 database using the DB2 driver supplied with WebLogic Server.

Workaround

When RDBMS Security Data Store is using the AlternateId connection property for a DB2 database, you must also set the additional property BatchPerformanceWorkaround as true when using the DB2 driver supplied with WebLogic Server.

9.27.3 Authentication Failure After Upgrading a Domain From WLS 6.1

After upgrading a domain from WLS 6.1, the WebLogic Server instance will not boot due to an authentication failure.

Workaround

A system user password must be set up in the WLS 6.1 domain before or after the upgrade process in order for the WebLogic Server instance to boot properly.

9.27.4 InvalidParameterException Message Generated and Displayed

After you configure either the Identity Provider or Service Provider services for SAML 2.0 and attempt to publish the SAML 2.0 services metadata file, an InvalidParameterException message may be generated and displayed in the Administration Console.

Workaround

When configuring the SAML 2.0 federation services for a WebLogic Server instance, be sure to enable all binding types that are available for the SAML role being configured. For example, when configuring SAML 2.0 Identity Provider services, you should enable the POST, Redirect, and Artifact bindings. When configuring SAML 2.0 Service Provider services, enable the POST and Artifact bindings. Optionally, you may choose a preferred binding.

9.27.5 Enabling Both the Authentication and Passive Attributes In SML 2.0 Service Provider Services Is an Invalid Configuration

When configuring SAML 2.0 Service Provider services, enabling both the Force Authentication and Passive attributes is an invalid configuration that WebLogic Server is unable to detect. If both these attributes are enabled, and an unauthenticated user attempts to access a resource that is hosted at the Service Provider site, an exception is generated and the single sign-on session fails.

Note that the Force Authentication attribute has no effect because SAML logout is not supported in WebLogic Server. So even if the user is already authenticated at the Identity Provider site and Force Authentication is enabled, the user is not forced to authenticate again at the Identity Provider site.

Avoid enabling both these attributes.

9.27.6 Authentication May Fail When Group Membership Caching Is Enabled

When configuring any of the authentication providers included in WebLogic Server, setting **Group Membership Searching** to "limited" may result in authentication failures if **Enable Group Membership Lookup Hierarchy Caching** is enabled. Authentication may succeed or fail depending on the current content of the group membership cache.

In the authentication provider configuration page of the WebLogic Server Administration Console, the **Group Membership Searching** attribute is available from the **Provider Specific** tab, and the **Enable Group Membership Lookup Hierarchy Caching** attribute is available from the **Performance** tab.

Note that the default settings for these attributes are as follows:

- **Group Membership Searching** is set to "unlimited".

- **Enable Group Membership Lookup Hierarchy Caching** is enabled.

Workaround

These two configuration settings should not be used together. When configuring an authentication provider, use either of the following methods to avoid this problem:

1. Avoid setting **Group Membership Searching** to "limited".

2. If you must use the "limited" setting, disable the **Enable Group Membership Lookup Hierarchy Caching** setting. Note that disabling the group membership cache typically results in slower system performance.

9.27.7 Running the WebLogic Full Client in a Non-Forked VM

If the WebLogic Full Client is running in a non-forked VM, for example by means of a `<java>` task invoked from an Ant script without the `fork=true` attribute, the following error might be generated:

```
java.lang.SecurityException: The provider self-integrity check
failed.
```

This error is caused by the self-integrity check that is automatically performed when the RSA Crypto-J library is loaded. (The Crypto-J library, `cryptoj.jar`, is in the `wlfullclient.jar` manifest classpath.)

This self-integrity check failure occurs when the client is started in a non-forked VM and it uses the Crypto-J API, either directly or indirectly, as in the following situations:

- The client invokes the Crypto-J library directly.

- The client attempts to make a T3S connection, which triggers the underlying client SSL implementation to invoke the Crypto-J API.

When the self-integrity check fails, further invocations of the Crypto-J API fail.

Workaround

When running the full client in a `<java>` task that is invoked from an Ant script, always set the `fork` attribute to `true`.

For more information about the self-integrity check, see "How a Provider Can Do Self-Integrity Checking" in How to Implement a Provider in the Java™ Cryptography Architecture, available at the following URL:

http://download.oracle.com/javase/6/docs/technotes/guides/security/crypto/HowToImplAProvider.html#integritycheck

9.27.8 Random Number Generator May Be Slow on Machines With Inadequate Entropy

In order to generate random numbers that are not predictable, SSL security code relies upon "entropy" on a machine. Entropy is activity such as mouse movement, disk IO, or network traffic. If entropy is minimal or non-existent, then the random number generator will be slow, and security operations may time out. This may disrupt activities such as booting a Managed Server into a domain using a secure admin channel. This issue generally occurs for a period after startup. Once sufficient entropy has been achieved on a JVM, the random number generator should be satisfied for the lifetime of the machine.

For further information, see Sun bugs 6202721 and 6521844 at:

http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6202721

http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6521844

Workaround

On low-entropy systems, you can use a non-blocking random number generator, providing your site can tolerate lessened security. To do this, add the `-Djava.security.egd=file:///dev/urandom` switch or `file:/dev/./urandom` to the command that starts the Java process. Note that this workaround should not be used in production environments because it uses pseudo-random numbers instead of genuine random numbers.

9.28 SNMP Issues and Workarounds

There are no known SNMP issues in this release of WebLogic Server.

9.29 Spring Framework on WebLogic Server Issues and Workarounds

This section describes the following issues and workarounds:

- Section 9.29.1, "OpenJPA ClassFileTranformer Does Not Work When Running on JRockit"

- Section 9.29.2, "petclinic.ear Does Not Deploy on WebLogic Server"

9.29.1 OpenJPA ClassFileTranformer Does Not Work When Running on JRockit

The OpenJPA `ClassFileTranformer` does not work when running WebLogic Server on JRockit.

Workaround

Use an alternative method of applying enhancements at build time through an OpenJPA enhancer compiler; do not use the `LoadTimeWeaver`.

9.29.2 petclinic.ear Does Not Deploy on WebLogic Server

For the SpringSource `petclinic` sample, the `petclinic.war` deploys without any problems. The `petclinic.ear` will not deploy on WebLogic Server because it is not packaged correctly. A request has been sent to SpringSource to fix the `petclinic.ear` packaging.

9.30 System Component Architecture (SCA) Issues and Workarounds

There are no known SCA issues in this release of WebLogic Server.

9.31 Upgrade Issues and Workarounds

This section describes the following issue:

- Section 9.31.1, "Domains Created on WebLogic Server 10.3.1 Cannot Be Run on WebLogic Server 10.3"

9.31.1 Domains Created on WebLogic Server 10.3.1 Cannot Be Run on WebLogic Server 10.3

If you create a domain using WebLogic Server 10.3.1, then roll back to WebLogic Server 10.3, you will not be able to start the servers that you created in that domain. This is a known restriction, as the `config.xml` file contains references to newer schema definitions (`xmlns.oracle.com`) that did not exist in WebLogic Server 10.3.

9.32 Web Applications Issues and Workarounds

This section describes the following issues and workarounds:

- Section 9.32.1, "Administration Console Fails to Implement session-timeout Changes"

- Section 9.32.2, "Connection Pool Connection Reserve Timeout Seconds Value is Overridden"

- Section 9.32.3, "Database Connections Become Unstable When a PoolLimitSQLException Occurs"

■ Section 9.32.4, "Web Page Fails to Open When Accessing It Using the SSL Port"

9.32.1 Administration Console Fails to Implement session-timeout Changes

If the `session-timeout` is configured in the `web.xml` file, any changes made to change the `session-timeout` using the Administration Console do not take effect.

Workaround

Use a deployment plan to override the `session-timeout` setting.

9.32.2 Connection Pool Connection Reserve Timeout Seconds Value is Overridden

When using a JDBC session, the value of Connection Reserve Timeout Seconds for a connection pool is changed to be one of the following:

■ the JDBC connection timeout seconds, which is defined in the session descriptor (either in `weblogic.xml` or `weblogic-application.xml`)

■ the default value of 120 seconds

Workaround

Configure `jdbc-connection-timeout-secs` in the session descriptor.

9.32.3 Database Connections Become Unstable When a PoolLimitSQLException Occurs

When a `PoolLimitSQLException` occurs during a JDBC persistence session, connections to the database become unstable, and may fail with recovery or fail without recovery. This results in the loss of session data. Either an older session or null is returned.

9.32.4 Web Page Fails to Open When Accessing It Using the SSL Port

When accessing a Web page using the SSL port, the page fails to open and the following error is reported:

```
Secure Connection Failed

An error occurred during a connection to <hostname>.

You have received an invalid certificate. Please contact the server
administrator or email correspondent and give them the following information:

Your certificate contains the same serial number as another certificate
issued by the certificate authority. Please get a new certificate containing a
unique serial number.
```

Workaround

The following workaround can be used for Firefox.

If you have received this error and are trying to access a web page that has a self-signed certificate, perform the following steps in Firefox:

1. Go to **Tools** > **Options** >**Advanced** > **Encryption tab** > **View Certificates**.

2. On the **Servers** tab, remove the certificates.

3. On the **Authorities** tab, find the Certificate Authority (CA) for the security device that is causing the issue, and then delete it.

If you are using Internet Explorer or other web browsers, you can ignore the Warning page that appears and continue to the web page.

9.32.5 Unable to View the Output of SVG files in Internet Explorer 7

When a page using Scalar Vector Graphics is deployed and is then accessed using Internet Explorer 7 (IE7), the source is displayed instead of the page's graphic contents. This occurs in both normal and osjp.next modes.

Workaround

Application developers should avoid using SVG graphics in their applications, as it is not natively supported in IE7. If used, a warning similar to the following should be added:

```
All current browsers, with the exception of Internet Explorer, support SVG
files. Internet Explorer requires a plug-in to display SVG files. The plug-ins
are available for free, for example, the Adobe SVG Viewer at
 http://www.adobe.com/svg/viewer/install/.
```

9.33 WebLogic Server Scripting Tool (WLST) Issues and Workarounds

This section describes the following issues and workarounds:

- Section 9.33.1, "Property Names Containing '.' Characters Are Not Supported by loadProperties"

- Section 9.33.2, "Invalid cachedir Created by Jython Causes WLST to Error Out"

- Section 9.33.3, "WLST returnType='a' Option Returns Child Management Objects"

9.33.1 Property Names Containing '.' Characters Are Not Supported by loadProperties

The WLST `loadProperties` command does not support loading a property with a name that contains "." characters. For example, if the property `myapp.db.default` is present in the property file, WLST throws a name exception:

```
Problem invoking WLST - Traceback (innermost last):
  File "<iostream>", line 7, in ?
  File "<iostream>", line 4, in readCustomProperty
NameError: myapp
```

This is a system limitation of Python and the `loadProperties` command. WLST reads the variable names and values and sets them as variables in the Python interpreter. The Python interpreter uses "." as a delimiter to indicate module scoping for the namespace, or package naming, or both. Therefore, the properties file fails because `myapp.db.default.version=9i` is expected to be in the `myapp.db.default` package. This package does not exist.

Workaround

Use variable names that do not have periods. This will allow you to load the variables from the property file and refer to them in WLST scripts. You could use another character such as "_" or lowercase/uppercase character to delimit the namespace.

As an alternative, you can set variables from a properties files. When you use the variables in your script, during execution, the variables are replaced with the actual values from the properties file. For example:

```
myapp.py
var1=10
var2=20
import myapp
print myapp.var1
10
print myapp.var2
20
```

This will work for one level of namespaces (myapp.var1, myapp.var2). It will not work for top level variables that share the same name as the namespace (for example, myapp=oracle and myapp.var1=10). Setting the myapp variable will override the myapp namespace.

If you need multiple levels, then you can define a package namespace using directories. Create a myapp/db/default directory with a vars.py file as follows:

```
var1=10
var2=20
```

Then import:

```
import myapp.db.default.vars
print myapp.db.default.vars.var1
10
```

You may need to add __init__.py files to the subdirectories. Refer to the Python documentation for more information on packages:

http://docs.python.org/tut/node8.html

9.33.2 Invalid cachedir Created by Jython Causes WLST to Error Out

The default cachedir created by Jython 2.2 is not a valid directory. If you are using Jython directly from weblogic.jar, this causes WLST to error out.

Workaround

There are two workarounds for this issue:

- When invoking WLST, specify the -Dpython.cachedir=<*valid_directory*> parameter, or

- Install Jython 2.2.1 separately instead of using the partial Jython that is included in weblogic.jar.

9.33.3 WLST returnType='a' Option Returns Child Management Objects

The WLST returnType='a' option should only return attributes from the specified directory. Instead it also returns child management objects. For example:

```
ls('Server')
drw-    AdminServer
drw-    worker01

ls('Server', returnMap='true', returnType='a')
drw-    AdminServer
drw-    worker01

ls('Server', returnMap='true',returnType='c')
drw-    AdminServer
drw-    worker01
```

The `ls` with `returnType='a'` should not list any child management objects, but `AdminServer` and `worker01` are children.

Workaround

When processing the output from `ls(returnType='a')`, check to see if the returned entry is a directory.

9.34 Web Server Plug-Ins Issues and Workarounds

This section describes the following issue:

- Section 9.34.1, "MOD_WLS_OHS Does Not Fail Over"

9.34.1 MOD_WLS_OHS Does Not Fail Over

Currently, `mod_wl` and `mod_wl_ohs` only support container level failover and not application level failover. `mod_wl_ohs` continues to route requests to a down application as long as the managed server is up and running. In the clustered case, requests continue to go to the container where the original session started even when the application is shutdown, typically resulting in the http error 404.

9.35 Web Services and XML Issues and Workarounds

This section describes the following issues and workarounds:

- Section 9.35.1, "Sparse Arrays and Partially Transmitted Arrays Are Not Supported"

- Section 9.35.2, "WSDL Compiler Does Not Generate Serializable Data Types"

- Section 9.35.3, "Use of Custom Exception on a Callback"

- Section 9.35.4, "Cannot Use JMS Transport in an Environment That Also Uses a Proxy Server"

- Section 9.35.5, "clientgen Fails When Processing a WSDL"

- Section 9.35.6, "JAX RPC Handlers in Callback Web Services Are Not Supported"

- Section 9.35.7, "Message-level Security in Callback Web Services Is Not Supported"

- Section 9.35.8, "Handling of Java Method Arguments or Return Parameters That Are JAX-RPC-style JavaBeans"

- Section 9.35.9, "IllegalArgumentException When Using a Two-Dimensional XML Object in a JWS Callback"

- Section 9.35.10, "Using SoapElement[] Results in Empty Array"

- Section 9.35.11, "FileNotFound Exception When a Web Service Invokes Another Web Service"

- Section 9.35.12, "Client Side Fails to Validate the Signature on the Server Response Message"

- Section 9.35.13, "xmlcatalog Element Entity Cannot Be a Remote File or a File in an Archive"

- Section 9.35.14, "Catalog File's public Element Is Not Supported When Using XML Catalogs"

9.35.1 Sparse Arrays and Partially Transmitted Arrays Are Not Supported

WebLogic Server does not support Sparse Arrays and Partially Transmitted Arrays as required by the JAX-RPC 1.1 Spec.

9.35.2 WSDL Compiler Does Not Generate Serializable Data Types

The Web Service Description Language (WSDL) compiler does not generate serializable data types, so data cannot be passed to remote EJBs or stored in a JMS destination.

9.35.3 Use of Custom Exception on a Callback

WebLogic Server does not support using a custom exception on a callback that has a package that does not match the target namespace of the parent Web Service.

Workaround

Make sure that any custom exceptions that are used in callbacks are in a package that matches the target namespace of the parent Web service.

9.35.4 Cannot Use JMS Transport in an Environment That Also Uses a Proxy Server

You cannot use JMS transport in an environment that also uses a proxy server. This is because, in the case of JMS transport, the Web Service client always uses the t3 protocol to connect to the Web Service, and proxy servers accept only HTTP/HTTPS.

9.35.5 clientgen Fails When Processing a WSDL

`clientgen` fails when processing a WSDL that uses the complex type `http://www.w3.org/2001/XMLSchema{schema}` as a Web Service parameter.

9.35.6 JAX RPC Handlers in Callback Web Services Are Not Supported

WebLogic Server 9.2 and later does not support JAX RPC handlers in callback Web Services.

Workaround

If JAX RPC handlers were used with Web Services created with WebLogic Workshop 8.1, then such applications must be redesigned so that they do not use callback handler functionality.

9.35.7 Message-level Security in Callback Web Services Is Not Supported

WebLogic Server 9.2 and later does not support message-level security in callback Web Services.

Workaround

Web Services created with WebLogic Workshop 8.1 that used WS-Security must be redesigned to not use message-level security in callbacks.

9.35.8 Handling of Java Method Arguments or Return Parameters That Are JAX-RPC-style JavaBeans

WebLogic Server does not support handling of Java method arguments or return parameters that are JAX-RPC-style JavaBeans that contain an `XmlBean` property. For example, applications cannot have a method with a signature like this:

```
void myMethod(myJavaBean bean);
```

where `myJavaBean` class is like:

```
public class MyJavaBean {
  private String stringProperty;
  private XmlObject xmlObjectProperty;

  public MyJavaBean() {}
  String getStringProperty() {
    return stringProperty;
  }
  void   setStringProperty(String s) {
    stringProperty = s;
  }
  XmlObject getXmlObjectProperty() {
    return xmlObjectProperty;
    }
  void      getXmlObjectProperty(XmlObject x) {
    xmlObjectProperty = x;
  }
}
```

Workaround

Currently there is no known workaround for this issue.

9.35.9 IllegalArgumentException When Using a Two-Dimensional XML Object in a JWS Callback

Using a two dimensional `XmlObject` parameter (`XmlObject[][]`) in a JWS callback produces an `IllegalArgumentException`.

Workaround

Currently there is no known workaround for this issue.

9.35.10 Using SoapElement[] Results in Empty Array

Using `SoapElement[]` as a Web Service parameter with `@WildcardBinding(className="javax.xml.soap.SOAPElement[]", binding=WildcardParticle.ANYTYPE)` will always result in an empty array on the client.

Workaround

Do not use the `@WildcardBinding` annotation to change the default binding of `SOAPElement[]` to `WildcardParticle.ANYTYPE`. The `SOAPElement[]` default binding is set to `WildcardParticle.ANY`.

9.35.11 FileNotFound Exception When a Web Service Invokes Another Web Service

When Web Service A wants to invoke Web Service B, Web Service A should use the `@ServiceClient` annotation to do this. If Web Service B needs a custom policy file that is not attached to the WSDL for Web Service B, then Web Service A will fail to run. Web Service A will look for the policy file at `/Web-Inf/classes/policies/`*`filename`*`.xml`. Since no policy file exists at that location, WebLogic Server will throw a 'file not found' exception.

Workaround

Attach the custom policy file to Web Service B, as in this example:

```
@Policy(uri="CustomPolicy.xml",
        attachToWsdl=true)
public class B {
  ...
}
```

9.35.12 Client Side Fails to Validate the Signature on the Server Response Message

When the security policy has one of these Token Assertions, the client side may fail to validate the signature on the server response message.

```
<sp:WssX509PkiPathV1Token11/>
<sp:WssX509Pkcs7Token11/>
<sp:WssX509PkiPathV1Token10/>
<sp:WssX509Pkcs7Token10/>
```

In addition, when there are more than two certifications in the chain for X509 certification for <sp:WssX509Pkcs7Token11/> or <sp:WssX509Pkcs7Token10/> Token Assertion, the server side may fail to validate the signature on the incoming message.

A policy such as the following policy is not supported, unless the entire certificate chain remains on the client side.

```
<sp:AsymmetricBinding>
   <wsp:Policy>
      <sp:InitiatorToken>
         <wsp:Policy>
            <sp:X509Token
               sp:IncludeToken='. . ./IncludeToken/AlwaysToRecipient'>

            <wsp:Policy>
```

```
            <sp:WssX509Pkcs7Token11/>
         </wsp:Policy>
       </sp:X509Token>
    </wsp:Policy>
    </sp:InitiatorToken>
    <sp:RecipientToken>
    <wsp:Policy>
    <sp:X509Token sp:IncludeToken='. . ./IncludeToken/Never'>
         <wsp:Policy>
            <sp:WssX509Pkcs7Token11/>
         </wsp:Policy>
       </sp:X509Token>
    </wsp:Policy>
    </sp:RecipientToken>
. . .
      </wsp:Policy>
  </sp:AsymmetricBinding>
```

Workaround

Use either of the following two solutions:

1. Configure the response with the `<sp:WssX509V3Token10/>` Token Assertion, instead of `WssX509PkiPathV1Token11/>`. The policy will look like this:

```
<sp:AsymmetricBinding>
   <wsp:Policy>
     <sp:InitiatorToken>
        <wsp:Policy>
        <sp:X509Token sp:IncludeToken='. . ./IncludeToken/AlwaysToRecipient'>
           <wsp:Policy>
              WssX509PkiPathV1Token11/>
           </wsp:Policy>
        </sp:X509Token>
        </wsp:Policy>
     </sp:InitiatorToken>
     <sp:RecipientToken>
        <wsp:Policy> sp:IncludeToken='. . ./IncludeToken/Never'>
        <sp:X509Token
           <wsp:Policy>
              <sp:WssX509V3Token10/>
           </wsp:Policy>
        </sp:X509Token>
        </wsp:Policy>
     </sp:RecipientToken>
. . .
      </wsp:Policy>
   </sp:AsymmetricBinding>
```

2. Configure the response with the `WssX509PkiPathV1Token11/>` token assertion, but include it in the message. The policy will look like this:

```
 <sp:AsymmetricBinding>
   <wsp:Policy>
     <sp:InitiatorToken>
        <wsp:Policy>
        <sp:X509Token sp:IncludeToken='. . ./IncludeToken/AlwaysToRecipient'>
        <wsp:Policy>
           WssX509PkiPathV1Token11/>
        </wsp:Policy>
        </sp:X509Token>
     </wsp:Policy>
```

```
                    </sp:InitiatorToken>
                    <sp:RecipientToken>
                       <wsp:Policy>
                       <sp:X509Token sp:IncludeToken='. . ./IncludeToken/AlwaysToInitiator'>
                          <wsp:Policy>
                             WssX509PkiPathV1Token11/>
                           </wsp:Policy>
                       </sp:X509Token>
                       </wsp:Policy>
                    </sp:RecipientToken>
             . . .
               </wsp:Policy>
            </sp:AsymmetricBinding>
```

When there are multiple certifications in the X509 Certificate chain, `WssX509PkiPathV1Token11/>` or `<sp:WssX509PkiPathV1Token10/>` should be used, instead of `<sp:WssX509Pkcs7Token11/>` or `<sp:WssX509Pkcs7Token10/>`.

9.35.13 xmlcatalog Element Entity Cannot Be a Remote File or a File in an Archive

For the `xmlcatalog` element in `build.xml`, the location of an entity must be a file on the local file system. It cannot be a remote file (for example, `http:`) or a file in an archive (for example, `jar:`).

Workaround

If necessary, define the remote element as an entity in a catalog file instead.

9.35.14 Catalog File's public Element Is Not Supported When Using XML Catalogs

The `public` element in a catalog file is not supported when using the XML Catalogs feature. It is not supported to be consistent with JAX-WS EntityResolver implementation. WebLogic Server only supports defining the `system` element in a catalog file.

9.35.15 Local xmlcatalog Element Does Not Work Well

The local `xmlcatalog` element does not work well due to an Ant limitation.

Workaround

In the ant `build.xml` file, you have to define a local element above a `clientgen(wsdlc)` task when you are in the same target, or define the element out of any targets.

9.35.16 JAXRPC Client Does Not Encode the HTTP SOAPAction Header With Multi-byte Characters

The WebLogic Server Web Service JAXRPC client doesn't encode the HTTP SOAPAction header with multi-byte characters, but WebLogic Server only supports ASCII for HTTP headers.

Workaround

Change the SOAP action to ASCII in the WSDL.

9.35.17 External Catalog File Cannot Be Used in the xmlcatalog Element of clientgen

An external catalog file cannot be used in the `xmlcatalog` element of a `clientgen` task. For example, this snippet of an ant build file will not work:

```
<clientgen ...
  <xmlcatalog>
    <catalogpath>
      <pathelement location='wsdlcatalog.xml'/>
    </catalogpath>
  </xmlcatalog>
```

This is a limitation of the Ant XML Catalog.

Workaround

Resource locations can be specified either in-line or in an external catalog file(s), or both. In order to use an external catalog file, the `xml-commons` resolver library (`resolver.jar`) must be in your classpath. External catalog files may be either plain text format or XML format. If the `xml-commons` resolver library is not found in the classpath, external catalog files, specified in `<catalogpath>` paths, will be ignored and a warning will be logged. In this case, however, processing of inline entries will proceed normally.

Currently, only `<dtd>` and `<entity>` elements may be specified inline. These correspond to the OASIS catalog entry types PUBLIC and URI respectively.

9.35.18 Exceptions When Running Reliable Messaging Under Heavy Load

When running a Web services reliable messaging scenario under heavy load with file based storage that has the `Direct-Write` synchronous write policy setting, you may encounter IO exceptions similar to the following in the WebLogic Server log:

```
weblogic.store.PersistentStoreRuntimeException: [Store:280029]The
persistent store record <number> could not be found
```

or

```
Could not load conversation with id uuid:<some ID> -> Conversation read
failed:
    ...
  weblogic.wsee.jws.conversation.StoreException:
    Conversation read failed: id=uuid:<some ID>
      weblogic.store.PersistentStoreException: [Store:280052]The
      persistent store was not able to read a record.
        java.io.OptionalDataException
```

These exceptions are known to occur only when using Web Services reliable messaging. They indicate a failure to read a record from the file store and are considered 'fatal' data access errors.

The underlying issue causing these errors will be addressed in a future release.

Workaround

The following workarounds are available for this issue:

- Change the file store synchronous write policy to `Direct-Write-With-Cache`

  or

- Change the file store synchronous write policy to `Cache-Flush`.

or

- Keep the Direct-Write synchronous write policy and add the following Java system property to your WebLogic server startup scripts:

  `-Dweblogic.store.AvoidDirectIO=true`

Note: The `-Dweblogic.store.AvoidDirectIO` system property has been deprecated in WebLogic Server 10.3.4. Oracle recommends configuring the store synchronous write policy to `Direct-Write-With-Cache` instead.

The `Direct-Write-With-Cache` option may improve performance; it creates additional files in the operating system's temporary directory by default.

The `Cache-Flush` and `AvoidDirectIO` workarounds may lead to some performance degradation; it may be possible to reduce or eliminate the degradation by configuring a different block-size for the file store.

For important information about these settings and additional options, see "Tuning File Stores" in *Oracle Fusion Middleware Performance and Tuning for Oracle WebLogic Server*.

9.35.19 ClassNotFound Exception Occurs When Using wseeclient.jar

Stand-alone JAX-WS clients are not supported in this release.

Workaround

Use the client-side JAX-WS 2.1 that is integrated with the Java Standard Edition Release 6 (JDK 1.6), Update 4 and later. This requires using the JAX-WS API instead of any WebLogic Server specific APIS.

Current releases of JDK 1.6 are available for download at http://java.sun.com/javase/downloads/index.jsp. For information about writing a standalone JAX WS 2.1 client application, see the *JAX-WS Users Guide* on the JAX-WS 2.1 Reference Implementation Web site at https://jax-ws.dev.java.net/.

9.35.20 Incomplete Configuration When Adding Advanced Web Services Component to SOA Domain

An incomplete configuration can result when you use the Configuration Wizard to add the WebLogic Server Advanced Web Services component to a newly created SOA domain. If you create a cluster that contains only the default 'out-of-the-box' soa_server1 server definition, the resulting cluster does not include the resources needed to run WebLogic Server Web Services in that cluster.

Workaround

Use either of the following workarounds for this issue:

1. While running Configuration Wizard, create a second server in the cluster:

   a. On the **Select Optional Configuration** screen, select **Managed Servers, Clusters, and Machines**.

   b. On the **Configure Managed Servers** screen, add a managed server.

    c. On the **Assign Servers to Clusters** screen, add this server to the cluster in which the default soa_server1 server resides.

2. On the **Configuration Wizard Target Services to Servers or Clusters** screen, target Web Services resources (for example, WseeJmsServer, WseeJmsModule) to the cluster.

Either of these workarounds will cause the Configuration Wizard to apply the resources for the WebLogic Server Advanced Web Services component to the cluster.

9.35.21 Exception Occurs During Invocation of Clientside Policy Applied to a Service

After upgrading from WebLogic Server 10.3.1 to WebLogic Server 10.3.2 or later, if the value of the name attribute of `@WebParam(header=true)` is different from the Java parameter name in the JWS method, a WSDL part name exception may occur.

Workaround

Run `clientgen` against the service to rebuild the client artifacts.

9.35.22 WS-AT Interoperation Issues With WebSphere and WebLogic Server

Web Services Atomic Transactions (WS-AT) 1.1 interoperation using WebSphere as the client and either WebLogic Server or JRF as the service does not work.

WS-AT 1.1 interoperation does work when WebSphere is the service and either WebLogic Server or JRF is the client. In this case, interoperation works only if you have WebSphere 7 with Fix/Feature Pack 7.

9.35.23 First Response From an SCA Application Takes a Long Time

When a WebLogic Server SCA service and reference are packaged in the same SCA application, and the very first request to the deployed application arrives together with a large number of simultaneous requests, the very first response is delayed significantly, sometimes for up to 10 minutes (depending on the actual volume).

Workaround

Use one of the following two workarounds to resolve this issue:

- When SCA services and references are packaged in the same application, use local wiring whenever possible. This can be done by specifying the `default` property on the `sca:reference`, with a value equal to the name of the SCA service declared in the same Spring context file. For example:

```
<sca:reference name="scareference" ...  default="scaservice">
```

> **Note:** You can use this workaround only when the service is in the same composite (that is, same Spring context file) as the reference.

- Package the services and references in different applications, and use application-level Work Managers.

9.35.24 WsrmClient.getMostRecentMessageNumber() Always Returns Zero

The `weblogic.wsee.reliability2.api.WsrmClient.getMostRecentMessageNumber()` method is intended to return the message number associated with the most

recent invocation on an RM-enabled client instance. This number should initially be 0, after the first invocation should be 1, followed by 2, and so on.

9.35.25 WsrmClient.reset() Fails to Reset All Necessary States

The `weblogic.wsee.reliability2.api.WsrmClient.reset()` method, which should clear any sequence context from a client instance (port or Dispatch) so that the client instance can be reused without fear of referencing the old sequence, does not clear the CLIENT_CURRENT_SEQUENCE_ID_PROP_NAME property from the client instance's request context.

9.36 WebLogic Tuxedo Connector Issues and Workarounds

This section describes the following issue and workaround:

- Section 9.36.1, "View Classes are not Set on a Per Connection Basis"

9.36.1 View Classes are not Set on a Per Connection Basis

View classes are not set on a per connection basis.

A shared WebLogic Tuxedo Connector hash table can cause unexpected behavior in the server if two applications point to the same VIEW name with different definitions. There should be a hash table for the view classes on the connection as well as for the Resource section.

Workaround

Ensure that all VIEW classes defined across all your WebLogic Workshop applications are consistent, meaning that you have the same VIEW name representing the same VIEW class.

9.37 Documentation Errata

This section describes documentation errata:

- Section 9.37.1, "Japanese Text Displays in Some Search Results Topics Avitek Medical Records"

- Section 9.37.2, "Some Interfaces to SAML2 Are Not Documented in the MBean Reference"

- Section 9.37.3, "WS-AT Code Example Is Not Listed on the Examples Page"

- Section 9.37.4, "HTML Pages For Downloaded Libraries Do Not Display Properly"

- Section 9.37.5, "Oracle Database Requirement for One-Phase Commit Optimization"

- Section 9.37.6, "Clarification of Interoperability with Microsoft WCF/.NET for WS-ReliableMessaging"

- Section 9.37.7, "Evaluation Database Component Is Not Listed For silent.xml"

9.37.1 Japanese Text Displays in Some Search Results Topics Avitek Medical Records

The samples viewer **Search** function may sometimes return topics that display the Japanese and English versions of some Avitek Medical Records topics simultaneously.

9.37.2 Some Interfaces to SAML2 Are Not Documented in the MBean Reference

The WebLogic Server 10.3.1 MBean Reference does not document the interfaces to the SAML 2.0 Identity Asserter and SAML 2.0 Credential Mapping provider. Instead, Javadoc for these MBean interfaces is provided in the *WebLogic Server 10.3.1 MBean API Reference Guide*.

9.37.3 WS-AT Code Example Is Not Listed on the Examples Page

When displaying the WebLogic Server Code Examples web page, the topic "Using Web Services Atomic Transaction" is not listed in the Web Services section of the Table of Contents (under **WebLogic Server Examples > Examples > API > Web Services**).

Workaround

To display this topic, enter the following URL in your web browser:

```
WL_HOME\samples\server\examples\src\examples\webservices\jaxws\wsat\
instructions.html
```

where *WL_HOME* is the WebLogic Server installation directory (the default is `C:\Oracle\Middleware\wlserver_10.3`).

9.37.4 HTML Pages For Downloaded Libraries Do Not Display Properly

After extracting the WebLogic Server documentation library ZIP files that are available from http://www.oracle.com/technetwork/middleware/weblogic/documentation/index.html, the HTML pages may not display properly in some cases for the following libraries:

- E12840_01 (WebLogic Server 10.3.0 documentation library)

- E12839_01 (Weblogic Server 10.3.1 documentation library)

- E14571_01 (WebLogic Server 10.3.3 documentation library)

Workarounds

For library E12840-01, after extracting the E12840_01.zip library file, if the HTML pages are not formatting correctly, perform the following steps:

1. Go to the directory in which you extracted the zip file.

2. Locate the `/global_resources` directory in the directory structure.

3. Copy the `/global_resources` directory to the root directory of the same drive.

For libraries E12839-01 and E14571-01, this issue occurs only on Windows operating systems. If the HTML pages of the extracted library are not formatting correctly, try extracting the ZIP file using another extraction option in your unzip utility. For example, if you are using 7-Zip to extract the files, select the **Full pathnames** option. Note that you cannot use the Windows decompression utility to extract the library ZIP file.

9.37.5 Oracle Database Requirement for One-Phase Commit Optimization

In "Read-only, One-Phase Commit Optimizations" in *Oracle Fusion Middleware Programming JTA for Oracle WebLogic Server*, please note that read-only, one-phase commit optimization requires Oracle DB 11.1.0.7.3PSU or above.

9.37.6 Clarification of Interoperability with Microsoft WCF/.NET for WS-ReliableMessaging

To clarify what is stated in the documentation, within the section "Interoperability with Microsoft WCF/.NET" in *Introducing WebLogic Web Services for Oracle WebLogic Server*, Oracle has tested the following features combinations for WS-ReliableMessaging:

- WS-ReliableMessaging 1.2 and WS-Addressing 1.0 (JAX-WS)

- WS-ReliableMessaging 1.1 and WS-Addressing 1.0 (JAX-WS)

- WS-ReliableMessaging 1.1 and WS-Addressing 0.9 and 1.0 (JAX-RPC)

- WS-ReliableMessaging 1.0 and WS-Addressing 0.9 and 1.0 (JAX-RPC)

9.37.7 Evaluation Database Component Is Not Listed For silent.xml

In the *WebLogic Server Installation Guide*s for WebLogic Server 10.3.3 and 10.3.4, the Evaluation Database is not listed as an installable component in Table 5-1 of Chapter 5, "Running the Installation Program in Silent Mode.:" The following entry should be included in the Component Paths row:

```
WebLogic Server/Evaluation Database
```

The Evaluation Database component is automatically installed if the Server Examples component is included in `silent.xml`. Therefore, it does not have to be explicitly included in `silent.xml`. If, however, you do not install the Server Examples, but you want to install the Evaluation Database, you must include `WebLogic Server/Evaluation Database` in `silent.xml`.

Part V

Oracle WebCenter

Part V contains the following chapter:

10

Oracle WebCenter

This chapter describes issues associated with Oracle WebCenter. It includes the following topic:

- Section 10.1, "General Issues and Workarounds"

10.1 General Issues and Workarounds

This section describes general issues and workarounds. It includes the following topics:

- Section 10.1.1, "Using Oracle WebLogic Communications Server"
- Section 10.1.2, "Using Jive Forums Documentation"
- Section 10.1.3, "Application Role Names Cannot Include Thai Characters"
- Section 10.1.4, "Pagelet Producer Failover Support"
- Section 10.1.5, "File Upload Browse Button Not Selectable with Enter Key (Accessibility Issue)"
- Section 10.1.6, "Configuring a Client Security Policy for Oracle Content Server Connections"
- Section 10.1.7, "Importing Space Templates with Public Access"
- Section 10.1.8, "Task Flow Customizations Saved Automatically"
- Section 10.1.9, "Option to Create a Portal Resource Displayed for Design-Time Task Flows"
- Section 10.1.10, "Reading Items in the Resource Catalog (Accessibility Issue)"
- Section 10.1.11, "Connections Network Task Flow on System Pages Not Supported"
- Section 10.1.12, "Cannot Log In to WebCenter Spaces if Oracle BPM is Down"
- Section 10.1.13, "SQL Query with NCHAR Data Type Throws Exception"
- Section 10.1.14, "Modifying Default Resource Strings for Language Support"
- Section 10.1.15, "Setting Up WNA-Based SSO Using JDK 1.6.22 Produces an Error"
- Section 10.1.16, "Unable to Edit General Options Through WebCenter Spaces Administration"
- Section 10.1.17, "Cannot Navigate to the Current Page Using Out-of-the-Box Navigation Task Flows in WebCenter Portal Applications"
- Section 10.1.18, "Login Outcome Fails to Navigate to Privileged Pages"

10.1.1 Using Oracle WebLogic Communications Server

Oracle WebLogic Communications Server (OWLCS) is provided as a sample for development only. It should not be used for production deployments.

10.1.2 Using Jive Forums Documentation

Oracle WebCenter Discussions (Jive Forums) is an optional component of Oracle WebCenter. Complete documentation for Jive Forums is included for reference. However, Jive software installations and upgrades outside of the WebCenter product installation are not supported.

10.1.3 Application Role Names Cannot Include Thai Characters

In this release, application role names cannot contain Thai characters.

10.1.4 Pagelet Producer Failover Support

Oracle WebCenter Pagelet Producer supports failover in a clustered configuration. However, the in-flight data (unsaved or pending changes) is not preserved. On failover, administrators must reestablish their administrative session. End users may also need to reestablish the session if the proxy is required to have a state. If SSO is configured, credentials are automatically provided, and the session is reestablished.

10.1.5 File Upload Browse Button Not Selectable with Enter Key (Accessibility Issue)

In Internet Explorer 7 or Firefox, when you select the Upload action on the Documents page or in a Documents service task flow, you are not able to specify a file by pressing the Enter key to select the Browse button:

- In Internet Explorer 7, this action opens the File Upload dialog to select a file, but when you select the Upload button, an error message displays "Please verify your upload data" and the selected file is removed from the Document to Upload field.

- In Firefox: This action has no effect.

As a workaround in both Internet Explorer 7 and Firefox, press the spacebar to select the Browse button.

10.1.6 Configuring a Client Security Policy for Oracle Content Server Connections

If your environment supports Global Policy Attachments (GPA), leave the Client Security Policy property blank when you configure the Oracle Content Server connection. The hint text and online help indicates that you must enter the value 'GPA' but this information is not correct. See also, the table "Oracle Content Server Connection Parameters" in *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.

10.1.7 Importing Space Templates with Public Access

When a Space template with public access is imported into another instance of WebCenter Spaces, the template appears as public but the grants are not imported properly. Creating a Space based on this template by using the UI works fine, but creating a Space by using the WebService call fails with an exception.

As a workaround, in the Spaces UI, revoke the public access from the template, and then grant the public access again.

10.1.8 Task Flow Customizations Saved Automatically

Customizations made to task flows created at runtime are base document edits, and therefore, cannot be reset. Consequently, when editing a task flow created at runtime in Oracle Composer, customizations are saved even if you do not explicitly click Save.

Although the Reset Task Flow button is displayed for runtime task flows, it is does not reset customizations.

10.1.9 Option to Create a Portal Resource Displayed for Design-Time Task Flows

You can bring runtime task flows into JDeveloper, edit them, and export them back to the deployed application. However, Oracle recommends that you not expose task flows created in JDeveloper as portal resources. When you create an ADF task flow inside the /oracle/webcenter/portalapp folder, the context menu on the task flow definition file displays the Create Portal Resource option. Do not use this option to expose a design-time task flow as a portal resource. Task flows typically involve multiple files. When you export a new task flow from JDeveloper, all files may not be exported properly, and this may result in the task flow being broken post deployment.

10.1.10 Reading Items in the Resource Catalog (Accessibility Issue)

If you use a screen reader, when you are adding resources from the Resource Catalog, JAWS announces all Resource Catalog items as "Add". This makes it difficult to identify the selected resource. To work around this issue, press the Tab key to get to the Add link for the resource, then press the Down Arrow key. JAWS then reads the description of the resource.

10.1.11 Connections Network Task Flow on System Pages Not Supported

If you include the Connections Network task flow in a custom Resource Catalog and use that catalog in your application, and then try to add this task flow to a system page, you get an error. This error prevents you from editing any other task flow on the page. To work around this issue, click the Restore Default link on the system page to undo all changes made to the page, including removal of the Connections Network task flow.

10.1.12 Cannot Log In to WebCenter Spaces if Oracle BPM is Down

If the WebCenter domain has been extended using the Oracle BPM Spaces template, and Process Spaces has been installed, any attempt to log in to WebCenter Spaces throws exceptions if the Oracle BPM server is down.

10.1.13 SQL Query with NCHAR Data Type Throws Exception

When using a SQL data control, you may encounter an error if the query contains a column with the `NCHAR` data type. As a workaround, you can use the `to_char(NCHAR_COLUMN NAME)` function.

10.1.14 Modifying Default Resource Strings for Language Support

In a WebCenter Portal application, to provide language support for component properties edited at runtime, Oracle Composer enables users to edit resource strings for properties that take String values. At runtime, when you try to override the default content in the resource bundle by directly entering values in the Select Text Resource dialog, the changes do not take effect and the page may appear blank.

The workaround is to create a new resource string instead of directly entering values in the Select Text Resource dialog. To create a new resource string, use the Create link in the Select Text Resource dialog and enter the required values in the search results table. Clicking the Use button in the last column selects this string for use as the current property value. For information, see the "Edit Resource Strings" section in *Oracle Fusion Middleware Developer's Guide for Oracle WebCenter*."

10.1.15 Setting Up WNA-Based SSO Using JDK 1.6.22 Produces an Error

Setting up Windows Native Authentication-based single sign-on using SUN JDK 1.6.22 produces an error. Use the jrockit JDK instead of the Sun JDK, or contact Oracle Support to get a backport request for bug 10631797.

10.1.16 Unable to Edit General Options Through WebCenter Spaces Administration

If you upgrade a WebCenter Spaces application in which the display order of business role pages was customized, you may find that you cannot edit options on the Administration-General page. To workaround this issue:

1. Use WLST to export the base document `webcenter-config.xml`:

    ```
    exportMetadata(application='webcenter', server='WC_Spaces',
    toLocation='/tmp/mydata',
    docs='/oracle/webcenter/webcenterapp/metadata/webcenter-config.xml')
    ```

2. Delete or comment out the : `<br-pages-sequence>` node.

    For example, remove:

    ```
    <webcenter:br-pages-sequence>
    /oracle/webcenter/page/scopedMD/s8bba98ff_4cbb_40b8_beee_
    296c916a23ed/businessRolePages/ActivityStreamMainView.jspx
    /oracle/webcenter/page/scopedMD/s8bba98ff_4cbb_40b8_beee_
    296c916a23ed/businessRolePages/DocumentsMainView.jspx
    /oracle/webcenter/page/scopedMD/s8bba98ff_4cbb_40b8_beee_
    296c916a23ed/businessRolePages/SpacesMainView.jspx
    /oracle/webcenter/page/scopedMD/s8bba98ff_4cbb_40b8_beee_
    296c916a23ed/businessRolePages/SpaceTemplatesMainView.jspx
    /oracle/webcenter/page/scopedMD/s8bba98ff_4cbb_40b8_beee_
    296c916a23ed/businessRolePages/MyProfileMainView.jspx
    ```

```
/oracle/webcenter/page/scopedMD/s8bba98ff_4cbb_40b8_beee_
296c916a23ed/businessRolePages/TagCenterMainView.jspx
/oracle/webcenter/page/scopedMD/s8bba98ff_4cbb_40b8_beee_
296c916a23ed/businessRolePages/AnalyticsConsoleMainView.jspx
</webcenter:br-pages-sequence>
```

3. Save the changes.

4. Use WLST to import the modified file back to MDS.

```
importMetadata(application='webcenter', server='WC_Spaces',
fromLocation='/tmp/mydata',
docs='/oracle/webcenter/webcenterapp/metadata/webcenter-config.xml')
```

10.1.17 Cannot Navigate to the Current Page Using Out-of-the-Box Navigation Task Flows in WebCenter Portal Applications

Navigating to the same page as the current page with the out-of-the-box navigation task flows fails in WebCenter Portal applications.

The workaround for this issue is to extend the `CustomPortalNavigation` class and register it in `web.xml`.

1. Create a new Java class in your Portal project that extends `oracle.webcenter.portalframework.sitestructure.PreferencesBean`.

For example:

```
package portal;

import oracle.webcenter.portalframework.sitestructure.PreferencesBean;

public class CustomPortalNavigation extends PreferencesBean {
    public CustomPortalNavigation () {
        super();
    }
}
```

2. Register this new Java class in `web.xml` with the navigation framework as a `CustomPortalNavigation` as follows:

```
<context-param>
  <param-name>
   Oracle.webcenter.portalframework.sitestructure.CustomPortalNavigationImpl
  </param-name>
  <param-value>portal.CustomPortalNavigation</param-value>
</context-param>
```

10.1.18 Login Outcome Fails to Navigate to Privileged Pages

If an application is configured to automatically navigate to a page that is accessible only to authenticated users, login to the application fails to navigate to the target page. The browser either shows an empty popup or 404 error.

The workaround for this issue is as follows:

1. Create a Java class in the application that extends the framework's `CustomViewHandler` and overload the `getActionURL` method, for example:

```
package portal;

import java.beans.Beans;
import javax.faces.application.ViewHandler;
import javax.faces.context.FacesContext;
import oracle.webcenter.portalframework.sitestructure.SiteStructure;
import oracle.webcenter.portalframework.sitestructure.SiteStructureContext;
import oracle.webcenter.portalframework.sitestructure.SiteStructureResource;
import oracle.webcenter.portalframework.sitestructure.SiteStructureUtils;
import
oracle.webcenter.portalframework.sitestructure.handler.CustomViewHandler;

public class ApplicationViewHandler extends CustomViewHandler {

  public ApplicationViewHandler(ViewHandler viewHandler) {
    super(viewHandler);
  }

  /*
  * Extend to address issue with bug 11076967 involving login
  */

  @Override
  public String getActionURL(FacesContext fctx, String viewId) {
    String urlStr = viewId;

    if (Beans.isDesignTime()) {
      return m_baseHandler.getActionURL(fctx, urlStr);
    }

    // Only perform the pretty url lookup if the request was from our
    // navigation processAction
    if (isRequestDrivenByNavigation(fctx)) {
      SiteStructure model =
        SiteStructureContext.getInstance().getCurrentModel();
      if (model != null) {
        SiteStructureResource resource = model.getCurrentSelection();
        if (resource != null) {
          // Bug 11076967
          // Only translate to pretty URL if the viewId is that of the
          // resource.
          // There is a usecase (bug 11076967) where the viewId is
          // the login_success outcome in which case, we shouldn't touch it
          String resourceViewId = findTargetViewId(fctx, resource);
          if (resourceViewId != null &&
              resourceViewId.equals(viewId))
              urlStr = "/" +
                SiteStructureUtils.encodeUrl(resource.getPrettyUrl());
        }
      }
    }

    // Get the base handler to tag on anything else that might be needed
    // which includes the _adf.ctrl-state
    String ret = m_baseHandler.getActionURL(fctx, urlStr);

    return ret;
  }
}
```

2. Register the above view handler with JSF in `faces-config.xml`, replacing the existing `oracle.webcenter.portalframework.sitestructure.handler.Custom ViewHandler` entry:

```
<faces-config version="1.2" xmlns="http://java.sun.com/xml/ns/javaee">
  <application>
    <default-render-kit-id>oracle.adf.rich</default-render-kit-id>
    <view-handler>portal.ApplicationViewHandler</view-handler>
  </application>
  ...
```

10.1.19 Links in Page Templates to the Administration Page No Longer Work on an Upgraded 11.1.1.3.0 Instance

The URL for the Administration Page has changed in 11.1.1.4.0, therefore any hardcoded links in page templates that point to the Administration Page must be changed to use the new URL:

```
/oracle/webcenter/webcenterapp/view/pages/admin/WebCenterAdmin-Communities.jspx
```

Alternatively, create a new page template and use the Administration link Spaces component to link to the Administration Page without having to explicitly provide a URL.

10.1.20 Space Language Does Not Take Effect

If users change their language preference, it overrides the language selected for the Space. To display the language selected for the Space, users must clear the browser cookies and reload the Space.

10.1.21 Performing Security-Related Operations on Business Role Pages

Seeded business role pages, such as Activities and Spaces, are available to all users by default. Currently, the WebCenter Spaces UI does not provide a means of performing security-related operations on seeded business role pages. This means you cannot hide seeded business role pages from all users through the WebCenter Spaces UI. However, there is a workaround:

1. Export the `pages.xml` files for `anonymous-role` and `authenticated-role` from MDS.

```
exportMetadata(application='webcenter',server='WC_
Spaces',toLocation='/scratch/mdsdump',
      docs='/oracle/webcenter/page/scopedMD/s8bba98ff_4cbb_40b8_beee_
296c916a23ed/role/anonymous-role/pages.xml')
exportMetadata(application='webcenter',server='WC_
Spaces',toLocation='/scratch/mdsdump',
      docs='/oracle/webcenter/page/scopedMD/s8bba98ff_4cbb_40b8_beee_
296c916a23ed/role/authenticated-role/pages.xml')
```

2. Go through these `pages.xml` files and, based on your requirement, mark business role pages hidden or shown:

```
<!-- Business Role Pages -->
    <pageDef
        id="Page_2eb852ac_10f5902cb2f__7ff7"
          contentMRef="/oracle/webcenter/page/scopedMD/s8bba98ff_4cbb_40b8_
beee_296c916a23ed/businessRolePages/ActivityStreamMainView.jspx"
```

```
                                 shared="false"
                                  hidden="false"
                       />...
```

- Set `hidden="true"` for the pages that should not be shown.

- Set `hidden="false"` for pages that should be shown.

3. Upload the changed files back to the repository.

```
importMetadata(application='webcenter',server='WC_
Spaces',fromLocation='/scratch/mdsdump',
      docs='/oracle/webcenter/page/scopedMD/s8bba98ff_4cbb_40b8_beee_
296c916a23ed/role/anonymous-role/pages.xml')
importMetadata(application='webcenter',server='WC_
Spaces',fromLocation='/scratch/mdsdump',
      docs='/oracle/webcenter/page/scopedMD/s8bba98ff_4cbb_40b8_beee_
296c916a23ed/role/authenticated-role/pages.xml')
```

10.1.22 Unable to Access SSL-Protected WebCenter Endpoints

An Oracle WebCenter Source (for searching WebCenter Spaces objects, such as lists, pages, Spaces, and people connections profiles) currently cannot access SSL-protected WebCenter endpoints. Oracle is working on a patch for this.

10.1.23 Unable to Export Content to Excel by using a Custom ADF Taskflow

In a WebCenter Portal application that contains a custom ADF taskflow that enables you to generate a downloadable Excel spreadsheet, the export operation may fail when you click the Export to Excel button for the first time. If you encounter this problem, try to export the content to Excel again.

10.1.24 Errors for Activity Graph Queries When the Activity Graph Engines are Running

The process of building and storing similarity scores for Activity Graph can consume a large amount of temporary and undo table space when the size of the graph grows large. To prevent errors, ensure that the temporary and undo tablespaces assigned to the Activities schema are configured to auto-extend.

10.1.25 Page Not Found Error When Clicking Back to Portal Link

The **Back to Portal** link redirects to `http://server:port/contextroot`. The default value in `web.xml` for this is `/index.html` and the default value in `index.html` redirects to `./faces/pages_home`. If there is no `pages_home` node in the selected default navigation model for the application, this results in a page not found error. To resolve this issue, update `web.xml` and `index.html` to reflect the structure of your application.

If your application uses dynamically created navigations at runtime, it is advisable to change the landing page to be a `.jsp` page. This enables you to drive the actual node to redirect to within the navigation from a backing bean. The bean can either choose to go to the first navigable page, or can navigate to a node based on an external ID. In the latter case, you must set the external ID in the navigation model.

10.1.26 Turning Off Automatic Event Listening in WebCenter Spaces

In WebCenter Spaces, when a portlet is added to a page, the portlet binding is configured to automatically listen for parameters and events generated on the page. Currently, there is no way to turn off this automatic parameter and event listening in the WebCenter Spaces UI.

To turn off automatic parameter and event listening:

1. Export the Space.

2. In JDeveloper, open the page definition for the page containing the portlet.

3. Edit the portlet binding to set the `listenForAutoDeliveredPortletEvents` and `listenForAutoDeliveredParameterChanges` attributes to `false`:

```
<portlet id="p2_1"
        ...
        listenForAutoDeliveredPortletEvents="false"
        listenForAutoDeliveredParamtersChange="false"
        ...
/>
```

4. Import the Space back into WebCenter Spaces.

10.1.27 Applying Item Level Security On WebCenter Spaces Content

In WebCenter Spaces, using ILS as the primary security mechanism for a Space may become difficult to administer when the number of users grow. Moreover, ILS may not be as efficient as the Space security model. Therefore, Oracle recommends using ILS only to define security for the documents or folders that do not fit within the Space security model. For example, documents and folders to which only a restricted set of users have access. For information about security, see the section "Managing Roles and Permissions for a Space" in *Oracle Fusion Middleware User's Guide for Oracle WebCenter Spaces*.

Part VI

Oracle SOA Suite and Business Process Management Suite

Part VI contains the following chapters:

11

Oracle SOA Suite and Oracle BPM Suite Common Functionality

This chapter describes runtime and common functionality issues associated with Oracle SOA Suite and Oracle Business Process Management (BPM) Suite. It includes the following topics:

- Section 11.1, "General Issues and Workarounds"
- Section 11.2, "Configuration Issues and Workarounds"
- Section 11.3, "Documentation Errata"

> **Note:** The issues and workarounds listed here are those that were known at the time of the product's initial release to the public. Additional issues and workarounds may have been discovered since the initial release. To view the latest known issues associated with Oracle SOA Suite, BPM Suite, and related SOA technologies, go to the Oracle Technology Network (OTN) at:
>
> http://www.oracle.com/technetwork/middleware/docs/aiasoar elnotes-196861.html

11.1 General Issues and Workarounds

This section describes general issue and workarounds. It includes the following topics:

- Section 11.1.1, "Schemas Imported by WSDL Are Not Copied into the Local Project"
- Section 11.1.2, "Enabling Payload Changes in Fault Recovery"
- Section 11.1.3, "Permissible Purge States"
- Section 11.1.4, "Purge Scripts Do Not Delete Spring Component Rows in Nonproduction Environments"
- Section 11.1.5, "Recommendation to Configure Either All on No Managed Servers with SSL"
- Section 11.1.6, "Changes to Shared Artifacts Require Redeployment of Existing Composites"
- Section 11.1.7, "WSDL Interface and EJB Version 2 are Not Supported During Runtime"
- Section 11.1.8, "MTOM Attachments with Spring Service Component Are Not Supported"

11.1.1 Schemas Imported by WSDL Are Not Copied into the Local Project

When you attempt to use a WSDL file that is not part of the current project, the Localize Files dialog is displayed and prompts you with the option to copy the WSDL file and its dependent artifacts to the current project. If you select this option, the schemas imported by the WSDL file fail to be copied into the current project.

This also happens in two other situations:

- In the Create Web Service dialog, when you check **copy wsdl and its dependent artifacts into the project**.

- In the Type Chooser dialog, when you select a schema, choose to import a WSDL file, and select the **copy to project** checkbox.

As a workaround, manually copy the schema files into the project. However, ensure that you copy the schema files to the correct relative (to the WSDL) location.

11.1.2 Enabling Payload Changes in Fault Recovery

When you attempt a fault recovery in Oracle Enterprise Manager Fusion Middleware Control Console, any payload changes made to the input variable during recovery do not take effect until after the instance is recovered. This is because the input variable is treated as read-only until the time when it is not used in the `to-spec` part of the copy rules. Therefore, a fault recovery with changed input data is not possible unless you perform one of the following workarounds:

- Use the read-only input variable in a dummy assign activity and initiate the input reassigned to itself.

- Include a `bpelx:exec` activity, which turns off read-only variable optimization.

11.1.3 Permissible Purge States

Instances in the following states can be purged with the purge scripts.

- Completed successfully

- Faulted

- Terminated by user

- Stale

Purging of the following instance states is not supported:

- Instances pending recovery at the BPEL process service engine level or SOA composite application level

- Running instances

To purge these instances, you must first move them to one of the instance states supported by the purge scripts.

For more information about the purge scripts, see chapter "Managing Database Growth" of *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite and Oracle BPM Suite*.

11.1.4 Purge Scripts Do Not Delete Spring Component Rows in Nonproduction Environments

In nonproduction environments (for example, when selecting **Development** from the **Audit Level** list on the SOA Infrastructure Common Properties page in Oracle

Enterprise Manager Fusion Middleware Control Console), the purge scripts do not delete rows related to the spring service component from the following database tables:

- `xml_document`

- `instance_payload`

- `component_instance`

For information about the purge scripts, see Chapter "Managing Database Growth" of *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite and Oracle BPM Suite*.

11.1.5 Recommendation to Configure Either All on No Managed Servers with SSL

As a best practice, Oracle recommends that you configure either *all* managed servers or *no* managed servers with SSL (SOA, BAM, and so on). Configuring some managed servers with SSL, while not configuring others, may lead to undesirable results in Oracle BPM Worklist and Oracle Web Services Manager (OWSM). For example, if there is an SSL-configured managed server (bam_server), servers not configured with SSL are not be used by OWSM. In cases in which an SSL-configured server is down, it causes OWSM to be in a down state, which in turn causes Oracle BPM Worklist to be in a down state.

11.1.6 Changes to Shared Artifacts Require Redeployment of Existing Composites

When MDS shared artifacts such as WSDL and XSD files are modified using Oracle JDeveloper and redeployed to the SOA-MDS from Oracle JDeveloper, the previously deployed composites using the old WSDL and XSD files can fail to execute from Oracle Enterprise Manager Fusion Middleware Control Console.

This is because changes to MDS shared artifacts are not picked up by previously deployed composites that reference them until the referencing composites are redeployed. As a best practice, redeploy the dependent referencing composites.

If you do not follow the best practice of redeploying the dependent composites along with the changed shared artifacts, a best effort is made to keep the existing composites running. Best effort means that there are cases in which they can fail. For production environments, the best practice of redeployment must be followed.

11.1.7 WSDL Interface and EJB Version 2 are Not Supported During Runtime

The Create EJB Service dialog enables you to select the following combination:

- The **WSDL** radio button selection in the **Interface** section.

- The **EJB2** selection from the **Version** dropdown list.

This combination is not supported during runtime.

11.1.8 MTOM Attachments with Spring Service Component Are Not Supported

You cannot send a Message Transmission Optimization Mechanism (MTOM) attachment with a spring service component.

11.1.9 ant Compilation Error with SOA Composite Applications on Linux

You can receive the following compilation error when using `ant` to compile a SOA composite application.

```
Error(12,61): Parse of component type files failed, check the adf-config.xml
file : "java.lang.NoSuchMethodError:
org.apache.xerces.impl.xs.XMLSchemaLoader.loadGrammar([Lorg/apache/xerces/xni/
parser/XMLInputSource;)V:
org.apache.xerces.impl.xs.XMLSchemaLoader.loadGrammar([Lorg/apache/xerces/xni/
parser/XMLInputSource;)V"
```

This can occur if you have a `.ant` directory with older versions of JAR files that gets added to the classpath. The `${user.home}/.ant/lib` directory is a standard location used by `ant` that is always added to the classpath when running `ant`.

As a workaround, perform one of the following steps:

- Rename the `.ant` directory (for example, to `.ant_old`).

- Specify the `-nouserlib` option when running `ant` from the Linux command prompt. In Oracle JDeveloper, this option is accessible by right-clicking your project, selecting **Project Properties** > **Ant** > **Classpath**, and deselecting the **Include Jar Files from User Home** checkbox.

The composite then compiles successfully.

11.1.10 Composite Instance is Flagged as Faulted Even After Fault is Caught

After manually recovering a fault, a composite instance state in Oracle Enterprise Manager Fusion Middleware Control Console can still display as faulted. For example, assume you perform the following steps:

1. Deploy a SOA composite application.

2. Test the web service from the Test Page in Oracle Enterprise Manager Fusion Middleware Control Console by deliberately passing a float value for an input string.

   A fault is correctly generated and the fault policy is applied. The composite instance is in a state requiring recovery.

3. Recover the fault by modifying the payload and passing an integer value for input.

   The composite instance state changes to faulted.

4. Check the flow trace and it shows that the fault has actually recovered.

The instance tracking infrastructure does not maintain the relationship of upstream and downstream components. When an upstream component recovers from the *recovery required* state and a downstream component is in the faulted state, the faulted state cannot be reset; only the recovery required state is reset by the component of the recovery required instance. The downstream component of the faulted instance does not know that the message is replayed; therefore, the composite instance is not reset from the faulted state.

11.1.11 Releasing Locks to Resolve ADF Task Form EAR File Deployment Errors

If you deploy a SOA composite application JAR file and ADF task form EAR file, and the SOA JAR file is deployed successfully, but while deploying the EAR file, the following errors are displayed:

```
[wldeploy] weblogic.management.ManagementException: [Deployer:149163]The
domain edit lock is owned by another session in non-exclusive mode - this
deployment operation requires exclusive access to the edit lock and hence
cannot proceed. If you are using "Automatically Aquire Lock and Activate
```

```
Changes" in the console, then the lock will expire shortly so retry this
operation.
```

This means you must first release the lock from Oracle WebLogic Server
Administration Console to successfully deploy the EAR file.

1. Log in to the Oracle WebLogic Server Administration Console.

2. Below the console banner at the top of the page, click **Preferences** > **User Preferences**.

3. Deselect **Automatically Acquire Lock and Activate Changes**.

4. Click **Save** and note that buttons such as **Lock and Edit** and **Release Configuration** are visible.

    Note the following description that is displayed in the Oracle WebLogic Server
    Administration Console:

    ```
    Automatically acquire the lock that enables configuration editing and
    automatically activate changes as the user modifies, adds and deletes items
     (for example, when the user clicks the 'Save' button). This feature is not
      available in production mode.
    ```

Note that this error can occur regardless of the deployment method you are using (for
example, deploying through Oracle JDeveloper or through `ant` scripts).

11.1.12 SOA Infrastructure State in Oracle WebLogic Server Administration Console

The state of the SOA Infrastructure application displays as *Warning* in the Oracle
WebLogic Server Administration Console. However, there is no loss of functionality
because of this state being displayed.

11.1.13 Importing Shared Schema from MDS Does Not Copy the Schema Imports

If you import shared schema from MDS (with schema imports within), only the base
schema is copied and the schema imports are ignored.

As a workaround, manually localize the schema.

11.1.14 Composites with Large While Loop Cases Cause Time Outs and Memory Errors

If your SOA composite application includes large while loop cases, you can receive
time outs and out-of-memory errors due to large numbers of audit events
accumulating. To support these environments, you can decouple the audit trail from
the BPEL process service engine transaction by tuning the following properties at the
BPEL process service engine level:

■   **auditFlushEventThreshold**: Controls how often the service engine flushes the
    audit events. When the audit event limit is reached, the service engine triggers a
    store call. Tune this size based on the application. The default value is `300` audit
    events.

■   **auditFlushByteThreshold**: Controls the approximate size of the batch. After each
    event, the size is calculated, including the details size. If the sum of the batch byte
    size exceeds the value of this property, a flush is triggered. The default value is `2`
    MB.

To set this property at the BPEL process service engine level:

1. Right-click **soa-infra** and select **SOA Administration** > **BPEL Properties**.

2. Click **More BPEL Configuration Properties**.

3. Click the properties described above.

4. In the **Value** field, specify an appropriate value and click **Apply**.

> **Note:** These properties only impact the BPEL process audit trail. Human workflow, business rules, and Oracle Mediator are not affected by these settings.

11.1.15 Extra Business Event with Oracle Database 11.2.0.1 and One and Only One Level

If you subscribe to a business event with Oracle Mediator, select a consistency level of **one and only one**, and use a release 11.2.0.1 Oracle database for the SOA Infrastructure schema, the first event published produces two business events.

For example, if 20 messages are published, the subscriber receives 21 messages.

This issue occurs only with release 11.2.0.1 of the Oracle database and only one time after a restart of both the SOA Infrastructure database and the SOA Server. After that, the correct number of business events are inserted.

11.1.16 Inconsistent States for SOA Composite Application Instances in Recovery

When a SOA composite application instance is being recovered, callback messages and activities are displayed as **Running**, but invocation messages are displayed as **Faulted** in the **State** column of the **Dashboard** tab of a SOA composite application.

11.1.17 Manual Recovery of Wait and OnAlarm Branch of Pick Activities Is Unsupported

You cannot manually recover wait activities or the OnAlarm branch of pick activities from the **Recovery** tab of the BPEL process service engine in Oracle Enterprise Manager Fusion Middleware Control Console. There is nothing restricting you from retrieving these pending activities and then attempting a recovery. However, recovery is not successful.

Instead, these pending activities are automatically scheduled and retried by the BPEL process service engine as part of the daily auto recovery or by restarting the SOA server.

11.1.18 Recovery Error Message Displayed in the Audit Trail

The following error message appears when a transaction is displayed as rolled back in the **Audit Trail** tab of Oracle Enterprise Manager Fusion Middleware Control Console.

```
The transaction was rolled back. The work performed for bpel instance "instance_
number" was rolled back to the previous dehydration point, but the audit trail has
been saved. You can recover the instance from the recovery console by
resubmitting the callback message or activity for execution
```

This message does not specifically state whether recovery should happen on either the activity or the callback. This is the intended behavior. Oracle recommends that you do not recover each instance through the audit messages. Instead, set up automatic recovery to recover these instances.

11.1.19 SOAP 1.2 <stackTrace> Fault Element is Not Returned to the Caller

A fault from a SOAP 1.2 Web service contains a `<stackTrace>` element as part of the `<exception>` element. The `<stackTrace>` element provides debug information and assistance in understanding a fault. If you invoke a Web service directly from a client and a fault occurs, the `<stackTrace>` element is provided.

However, if a SOA composite application invokes a Web service (for example, through a BPEL process or Oracle Mediator) and a fault occurs, the `<stackTrace>` element is not passed back to the caller.

This is the expected behavior.

11.1.20 Faulted Instances Waiting for Manual Recovery are Shown as Running

Faulted instances that are waiting for manual recovery are shown when you search for running instances. For example, if you go to the Instances page of the SOA composite application and specify a search criteria to find running instances, the faulted instances waiting for manual recovery are shown.

11.1.21 Composites Calling Other Composites with Concrete WSDL Files

If you use concrete WSDL files, be aware that the order of startup for SOA composite applications is not guaranteed.

For example, if one SOA composite application calls a second SOA composite application with a concrete WSDL file, and the first SOA composite application gets started before the second SOA composite application, an error occurs. This is because the first SOA composite application cannot load the second SOA composite application's WSDL file.

11.1.22 Transactional Adapter Status Displays as Complete Even If Rollback Occurs

If a transaction rollback occurs because of a business fault or exception, the instance trial for a transactional adapter does not indicate whether or not there was a rollback.

For example, assume you have an asynchronous BPEL process invoking a database adapter service. An assert expression is defined in the invoke activity. If the assert expression returns false, then all transactional invocations should roll back. However, the flow trace shows a status of completed for the database adapter service.

11.1.23 Accessing Components from SSO-Enabled Oracle Enterprise Manager

If you log in to an SSO-enabled Oracle Enterprise Manager Fusion Middleware Control Console and click the links to the following components, you are directed to non-SSO URLs for these components, and prompted to log in again.

- Oracle BPM Worklist

- Oracle B2B

- Oracle BAM

- SOA Composer

11.1.24 Composite State Not Updated After BPEL Recovery Of Faulted Instance

The state of a failed SOA composite application instance is not updated after you successfully perform a recovery from the Recovery page of the BPEL service engine. For example, assume you perform the following steps.

1. Enable payload validation on the SOA Infrastructure Common Properties page in Oracle Enterprise Manager Fusion Middleware Control Console.

2. Invoke an instance of a SOA composite application. If payload validation fails (for example, because required elements in the schema are missing), a failure occurs at the BPEL service component level during execution of an invoke activity.

   The instance is displayed as faulted in the Dashboard and Instances pages of the composite.

3. Go to the Recovery page of the BPEL service engine and note that the same instance is pending recovery.

4. Disable payload validation on the SOA Infrastructure Common Properties page.

5. From the Recovery page of the BPEL service engine, select the instance and click **Recover**. This recovers the instance.

6. View the completed instance in the flow trace. However, note that the instance state is not updated and is still shown as faulted, whereas the instance has actually recovered and completed successfully.

   This is the expected behavior. BPEL recovery created a new BPEL instance, which completed successfully. However, the previous BPEL instance (the one that failed schema validation) is still shown as faulted. The overall composite instance is counted as faulted, since one of its two component instances (the previous BPEL instance) is faulted.

11.1.25 Removing Extra Set Text Dialog Characters

Adding `&` to the **Text** field of the Edit Text dialog in Oracle JDeveloper adds extra characters to the XSL file. For example, perform the following steps:

1. In the XSLT Mapper, right-click a string element in the target pane.

2. Select **Set Text** > **Enter Text**.

3. In the Edit Text dialog, enter `&` in the **Text** field, and click **OK**.

4. Go to the **Source** view of the XSL file, and see that an extra `amp;` is appended.

   ```
   <xsl:text disable-output-escaping="no">&amp;amp;</xsl:text>
   ```

As a workaround, in **Source** view of the XSL file, remove the extra character `amp;` that was appended in the previous steps. The source view now looks as follows:

```
<xsl:text disable-output-escaping="no">&amp;</xsl:text>
```

11.1.26 Failure to Add and Update WSDL Binding After Migration

When you open Oracle JDeveloper and attempt to migrate a 10.1.3 application that includes WSIF binding information to version 11*g*, migration creates a web service reference with no WSDL binding information (`binding.wsif`) in the `composite.xml` file. When you then attempt to update the reference with the same WSDL in Oracle JDeveloper, the binding information is not saved, and you receive a compilation error.

This is because Oracle JDeveloper is handling the typical migration use case in which the reference is updated with a new WSDL location (same WSDL, but in a different location). Therefore, when you do not change the WSDL location, nothing happens.

As a workaround, perform either of the following steps:

1. Delete the reference and create a new one using the same WSDL.

2. (Easiest) Copy the WSDL to a different file name, but do not change its contents. Then, update the reference using this WSDL copy. This changes the location of the WSDL and correctly creates the `binding.ws`.

11.1.27 Storing Artifacts in Source Control and Deploying Them with the ant Utility

If you store application artifacts in a source control system that you later want to reuse for deployment with `ant`, the following changes are required if the application has metadata service (MDS)-based references.

Assume the original Oracle JDeveloper application has file-based MDS references, such as the following:

```
<metadata-store-usage id="mstore-usage_1">
            <metadata-store
class-name="oracle.mds.persistence.stores.file.FileMetadataStore">
              <property value="${oracle.home}/integration"
                        name="metadata-path"/>
              <property value="seed" name="partition-name"/>
            </metadata-store>
```

Modify this code to use database-based MDS references in the *Application_ Directory*`/.adf/META-INF/adf-config.xml` file, as shown below:

```
<metadata-store-usage id="mstore-usage_1">
            <metadata-store
class-name="oracle.mds.persistence.stores.db.DBMetadataStore">
              <property name="jdbc-userid" value="${mdsuser}"/>
 <property name="jdbc-password" value="${mdspassword}"/>
              <property name="jdbc-url"
value="jdbc:oracle:thin:@${db.host.name}:${db.host.port}:${db.sid}"/>
               <property name="partition-name" value="soa-infra"/>
            </metadata-store>
```

Check the modified application with these `adf-config.xml` entries into a source control system. The following concrete example of a modified `adf-config.xml` file is provided.

```
 <metadata-store-usage id="mstore-usage_1">
            <metadata-store
class-name="oracle.mds.persistence.stores.db.DBMetadataStore">
              <property name="jdbc-userid" value="soainfra_mds"/>
              <property name="jdbc-password" value="soainfra_mds"/>
              <property name="jdbc-url"
value="jdbc:oracle:thin:@myhost56.us.oracle.com:15739:db2825"/>
              <property name="partition-name" value="soa-infra"/>
            </metadata-store>
```

You can use a variable for the user ID and password and replace the values prior to `ant` deployment in the application.

If the MDS database has a JNDI name, then use the following entries in `adf-config.xml`:

```
<metadata-store
  class-name="oracle.mds.persistence.stores.db.DBMetadataStore">
    <property name="jndi-datasource" value="${db.jndi.name}"/>
    <property name="partition-name" value="soa-infra"/>
</metadata-store>
```

11.1.28 Understanding BPEL Global Transaction and Adapter Local Transaction Issues

BPEL processes run in global transactions, while other Oracle SOA Suite components, such as adapters, run in local transactions. This can cause inconsistencies with the information displayed in Oracle Enterprise Manager Fusion Middleware Control Console.

For example, assume you have a main synchronous BPEL process that invokes an asynchronous BPEL process. There is one database adapter insert in the main synchronous BPEL process before the invocation of the asynchronous BPEL process. There is a second database adapter insert in the asynchronous BPEL process, at which point a fault is expected to be thrown.

The expected behavior is as follows:

- An initial insert into the database is performed from the main process that completes successfully as expected.

- The second insert also executes in the asynchronous process, but after encountering the fault, the BPEL process rolls back the initial insert.

However, in Oracle Enterprise Manager Fusion Middleware Control Console, the second database insert also shows as having completed successfully, instead of the having faulted.

This is because the database adapter invocation is logged (instance tracked) in a local transaction that is not part of the global BPEL JTA transaction. Therefore, the database adapter invocation completes successfully, but the subsequent BPEL process incurs a global rollback.

```
<invoke name="Invoke_1" inputVariable="Invoke_1_insert_InputVariable"
   partnerLink="db" portType="ns1:db_ptt" operation="insert"/>
. . .
. . .
   <throw name="Throw_2" faultName="bpelx:rollback"/>
```

At that point, instance tracking has already recorded the outbound invocation as successful (in a local transaction). If the adapter throws an exception, instance tracking logs this as a fault. Also note that some partner links may invoke a file adapter, which cannot be rolled back, even if the BPEL process later throws a `bpelx:rollback`.

11.1.29 Descriptions for Data Source JNDI Fields are Interchanged

In the SOA Infrastructure Common Properties page of Oracle Enterprise Manager Fusion Middleware Control Console, the descriptions for **Server Data Source JNDI** and **Server Transaction Data Source JNDI** are interchanged. However, the **Configure** links go to the correct locations.

11.1.30 Granting the Same Role to the Same User Twice Causes Unclear WLST Message

1. Create a domain with Oracle WebCache and extend it with Oracle SOA Suite.

2. Associate the Oracle WebCache application with LDAP and grant the admin role to a user (for example, user name `test`) in Oracle Internet Directory using the WebLogic Scripting Tool (WLST).

3. Grant the same role (admin role) to the same user again (`test`).

   You expect to see a WLST error message such as the following:

   ```
   This particular user already has admin role to access your application
   ```

Instead, you receive the following message, which is inaccurate:

```
Command FAILED, Reason: Cannot add principal to application role
```

11.1.31 Mediator Instances Can Display as Running After Transaction Completion

An Oracle Mediator service component relies on a successful commit of a local transaction to know whether an instance is recoverable. Even if a graceful shutdown is correctly implemented, and all transactions are allowed to complete (within the given time out window), there can still be a local transaction that is denied because it fails to occur within the time out window. For example, assume the following:

1. A database adapter posts a message.

2. An Oracle Mediator service component receives the message, sets its state to running, and invokes a BPEL process service component, whose state is also set to running.

3. A JMS adapter is invoked, and encounters and throws an exception. The reference fault tables are updated.

4. The BPEL process receives the exception, marks its state as completed with a fault, and rethrows the exception to the Oracle Mediator.

5. The BPEL process triggers an asynchronous persistence of its audit information as the global transaction is rolled back.

6. Oracle Mediator receives the exception and persists the fault information in its error tables (in a separate local transaction).

7. Oracle Mediator sets its state to faulted.

If the server is shut down before the transaction can complete (for example, between Steps 5 through 7), the Oracle Mediator instance can remain in a running state. The corresponding composite instance whose state is inferred from the components also displays as running. As the global transaction is rolled back, the message can be retried and reprocessed by the inbound adapter. Note that in this scenario, no mediator instances are lost.

11.1.32 Handling Business and Remote Faults in the Calling BPEL Processes

Oracle recommends that you handle both business and remote faults in BPEL processes during design time. If remote exceptions are not handled in the calling BPEL process, you can see discrepancies in the overall SOA composite application instance state and the server component instance states associated with the composite. For example, assume the composite instance is in a faulted state, while the service component instances are in a completed state. If the caller handles the remote exceptions, then the states of composite and component instances are accurate.

11.2 Configuration Issues and Workarounds

This section describes configuration issues and their workarounds. It includes the following topics:

- Section 11.2.1, "Flow Trace Fails to Load with Numerous Correlated Composite Instances"

- Section 11.2.2, "Resolving Database Connection Pool Timeout Errors"

- Section 11.2.3, "Stopping and Starting the Managed Server Instead of the SOA Infrastructure"
- Section 11.2.4, "Querying the Status of Bulk Fault Recovery Jobs"
- Section 11.2.5, "Message Schema in UTF-16 Encoding Can Cause a Runtime Exception"
- Section 11.2.6, "Demo Certificate Reference Removal When Using Your Own SSL Certificates"
- Section 11.2.7, "Resolving Thread-Blocking and Slow Performance in Composite Applications"
- Section 11.2.8, "Increasing the XA Transaction Timeout Value"
- Section 11.2.9, "PermGen Space Out-of-Memory Error"

11.2.1 Flow Trace Fails to Load with Numerous Correlated Composite Instances

The flow trace in Oracle Enterprise Manager Fusion Middleware Control Console can fail to load in scenarios in which you have numerous correlated composite instances (for example, 100). This is because multiple midprocess receive activities result in separate ECIDs. Creating a consolidated audit trail involves sending separate requests for each ECID (for example, 100 separate queries for audit trails).

As a workaround, perform the following steps to increase the transaction timeout parameter.

1. Open the `fabric-ejb.jar` file.

2. Within this JAR file, open the `weblogic-ejb-jar.xml` file.

3. Set the transaction timeout parameter to a higher value.

11.2.2 Resolving Database Connection Pool Timeout Errors

If you deploy a SOA composite application and create multiple instances that use multiple connection threads (for example, numerous threads for worklist approvals in Oracle BPM Worklist), you may receive many connection pool timeout errors, such as the following.

```
[EL Warning]: 2009-05-02 21:27:08.101--UnitOfWork(58549762)--Exception
[EclipseLink-4002] (Eclipse Persistence Services - 1.1.1.v20090407-r3867):
org.eclipse.persistence.exceptions.DatabaseException
Internal Exception: java.sql.SQLException: Internal error: Cannot obtain
@ XAConnection weblogic.common.resourcepool.ResourceDeadException:
@ 0:weblogic.common.ResourceException: Got minus one from a read call
Error Code: 0
Query:
InsertObjectQuery(com.collaxa.cube.persistence.dto.DeliveryDocumentRef@8cf1b90
)
```

When these errors occur, the database terminates its connection.

As a workaround, set the `oracle.net.CONNECT_TIMEOUT` property that is defined for `SOADataSource` to a larger value (for example, `20000` milliseconds) in the data source file.

```
<property>
  <name>oracle.net.CONNECT_TIMEOUT</name>
  <value>20000</value>
</property>
```

11.2.3 Stopping and Starting the Managed Server Instead of the SOA Infrastructure

As a best practice, stop and start the managed server of Oracle SOA Suite instead of stopping and starting the SOA Infrastructure application. Stopping and starting the SOA Infrastructure application can cause problems with Oracle Enterprise Manager Fusion Middleware Control Console correctly loading.

11.2.4 Querying the Status of Bulk Fault Recovery Jobs

You can query the status of bulk fault recovery jobs (for example, scheduled, in-progress, failed, results recorded, and so on) through log messages by configuring the `oracle.soa.management.util.async.AsynchronousJobScheduler` logger.

1. Within the Oracle WebLogic Server Administration Server domain home, open `$DOMAIN_HOME/config/fmwconfig/servers/AdminServer/logging.xml`.

   where `$DOMAIN_HOME` is the directory path to your domain.

2. Add the `oracle.soa.management.util.async.AsynchronousJobScheduler` logger.

3. Set the log level to `TRACE:1` to output job status updates.

   The syntax looks as follows:

   ```
   <loggers>
       ...
       <logger name='oracle.soa.management.util.async.AsynchronousJobScheduler'
    level="TRACE:1" />
   </loggers>
   ```

4. Restart the Oracle WebLogic Server Administration Server for the changes to take effect.

   Logging output similar to the following is generated:

   ```
   [2010-04-21T16:32:30.128-07:00] [AdminServer] [TRACE] []
    [oracle.soa.management.util.async.AsynchronousJobScheduler] [tid: SOA Fabric
    Asynchronous Job Processor] [userId: weblogic] [ecid: 0000IWYhmvq1FgB_
   JXc9yf1BnsUK00002B,1:28285] [SRC_CLASS:
    oracle.soa.management.util.async.AsynchronousJobScheduler] [APP: em] [dcid:
    63062c26f939c426:-245c1ca7:12822aa19a3:-8000-00000000000000ee] [SRC_METHOD:
    processJob] Processing asynchronous BulkFaultRecovery job
    105ab343-7fbd-4a82-a167-7d794f0801e4
   [2010-04-21T16:32:30.131-07:00] [AdminServer] [TRACE] []
    [oracle.soa.management.util.async.AsynchronousJobScheduler] [tid: SOA Fabric
    Asynchronous Job Processor] [userId: weblogic] [ecid: 0000IWYhmvq1FgB_
   JXc9yf1BnsUK00002B,1:28285] [SRC_CLASS:
    oracle.soa.management.util.async.AsynchronousJobScheduler] [APP: em] [dcid:
    63062c26f939c426:-245c1ca7:12822aa19a3:-8000-00000000000000ee] [SRC_METHOD:
    updateJobStatus] Updated status for asynchronous job
    105ab343-7fbd-4a82-a167-7d794f0801e4 : incomplete

   [2010-04-21T16:32:39.790-07:00] [AdminServer] [TRACE] []
    [oracle.soa.management.util.async.AsynchronousJobScheduler] [tid: SOA Fabric
    Asynchronous Job Processor] [userId: weblogic] [ecid: 0000IWYhmvq1FgB_
   JXc9yf1BnsUK00002B,1:28285] [SRC_CLASS:
    oracle.soa.management.util.async.AsynchronousJobScheduler] [APP: em] [dcid:
    63062c26f939c426:-245c1ca7:12822aa19a3:-8000-00000000000000ee] [SRC_METHOD:
   ```

```
updateJobStatus] Updated status for asynchronous job
105ab343-7fbd-4a82-a167-7d794f0801e4 : complete
```

11.2.5 Message Schema in UTF-16 Encoding Can Cause a Runtime Exception

You may encounter the following runtime parsing error if a message schema is encoded in UTF-16.

```
Unable to parse schema <name>.xsd
```

To resolve this error, change the schema encoding to UTF-8. In **Source** view in Oracle JDeveloper, set the encoding declaration in the XML prologue to `encoding='UTF-8'` for the message schema.

11.2.6 Demo Certificate Reference Removal When Using Your Own SSL Certificates

If you use your own certificates for SSL, you must remove references to the demo certificates by removing the following line from the `setDomainEnv` file for your version of the operating system.

```
-Djavax.net.ssl.trustStore=${WL_HOME}/server/lib/DemoTrust.jks
```

Otherwise, Oracle BPEL Process Manager cannot access the external SOAP endpoint.

11.2.7 Resolving Thread-Blocking and Slow Performance in Composite Applications

If your thread dumps indicate that threads are being blocked and performance is slow, try setting the following JRockit Java Virtual Machine options in the `$DOMAIN_HOME/bin/setSOADomainEnv.sh` file.

```
-Xmx:1536M -Xms:1536M -Xgc:genpar
```

where:

- `-Xmx` is the maximum heap size.

- `-Xms` is the minimum heap size.

- `-Xgc:genpar` is the static garbage collector (GC) running generational and parallel collection strategies.

11.2.8 Increasing the XA Transaction Timeout Value

If you send notifications for parallel task assignments in human workflow, you can see the transaction close, SQL exceptions appear, and notification processing take a long time at runtime. If this occurs, increase the XA transaction timeout for an XA data source in Oracle WebLogic Server Administration Console. When set, this value overrides the value of the global transaction timeout.

1. Click **Lock and Edit**.

2. Choose **Services** > **Data Sources**.

3. Click the specific data source.

4. Click the **Transaction** tab.

5. Select **Set XA Transaction Timeout**.

6. In the **XA Transaction Timeout** field, specify the value of the transaction timeout.

7. Click **Save**.

8. Log into SQL*Plus.

9. Set the `distributed_lock_timeout` value.

   ```
   SQL> alter system set distributed_lock_timeout=value scope=spfile;
   ```

   Oracle recommends that you set `distributed_lock_timeout` to a value greater than or equal to that set in Step 6.

10. Shut down and restart your database after running this command.

11. Verify that the setting has changed.

    ```
    SQL> show parameter distributed_lock_timeout;
    ```

12. Set this parameter to the same value for all instances in an Oracle Real Application Cluster.

11.2.9 PermGen Space Out-of-Memory Error

If you get Permgen Space Out-of-Memory errors in the SOA managed server, perform these steps:

1. Open the `$DOMAIN_HOME/bin/setSOADomainEnv.sh` file.

2. Increase the following values:

   ```
   if [ "${JAVA_VENDOR}" != "Oracle" ] ; then
     DEFAULT_MEM_ARGS="${DEFAULT_MEM_ARGS} -XX:PermSize=128m
   -XX:MaxPermSize=256m"
     PORT_MEM_ARGS="${PORT_MEM_ARGS} -XX:PermSize=256m -XX:MaxPermSize=512m"
   fi
   ```

   to these values:

   ```
   if [ "${JAVA_VENDOR}" != "Oracle" ] ; then
     DEFAULT_MEM_ARGS="${DEFAULT_MEM_ARGS} -XX:PermSize=512m
   -XX:MaxPermSize=1024m"
     PORT_MEM_ARGS="${PORT_MEM_ARGS} -XX:PermSize=512m -XX:MaxPermSize=1024m"
   fi
   ```

11.3 Documentation Errata

This section describes documentation errata. It includes the following topic:

- Section 11.3.1, "updateType Argument of sca_exportComposite Command Is Missing a Value"

11.3.1 updateType Argument of sca_exportComposite Command Is Missing a Value

The syntax described in Chapter "Oracle SOA Suite Custom WLST Commands" of *WebLogic Scripting Tool Command Reference* for using the `updateType` argument of the `sca_exportComposite` command is missing a value for one of the types of postdeployment changes you can export. In addition to the `all`, `property`, and `runtime` values, you can also specify the `none` value to export the original composite without any postdeployment changes (including property changes and runtime changes).

12

Oracle Adapter for Oracle Applications (Oracle E-Business Suite Adapter)

This chapter describes issues associated with Oracle Adapter for Oracle Applications (Oracle E-Business Suite Adapter) and the *Oracle Fusion Middleware Adapter for Oracle Applications User's Guide*. It includes the following topics:

- Section 12.1, "General Issues and Workarounds"
- Section 12.2, "Configuration Issues and Workarounds"
- Section 12.3, "Documentation Errata"

> **Note:** The issues and workarounds listed here are those that were known at the time of the product's initial release to the public. Additional issues and workarounds may have been discovered since the initial release. To view the latest known issues associated with Oracle SOA Suite, BPM Suite, and related SOA technologies, go to the Oracle Technology Network (OTN) at:
> http://www.oracle.com/technetwork/middleware/docs/ai asoarelnotes-196861.html.

12.1 General Issues and Workarounds

This section describes general issues and workarounds. It includes the following topics:

- Section 12.1.1, "Populating Default Values for Record Types While Using PL/SQL APIs"
- Section 12.1.2, "Re-creating Wrapper Packages While Using Existing PL/SQL SOA Composites Against a Different Release Instance"

12.1.1 Populating Default Values for Record Types While Using PL/SQL APIs

Certain PL/SQL APIs exposed from Oracle E-Business Suite take record types as input. Such APIs expect default values to be populated for parameters within these record types for successful execution.

The default values are `FND_API.G_MISS_CHAR` for characters, `FND_API.G_MISS_DATE` for dates, and `FND_API.G_MISS_NUM` for numbers. Adapter for Oracle Applications can default these values when the parameters within the record type are passed as nil values, as shown in the following example:

```
<PRICE_LIST_REC>
```

```
<ATTRIBUTE1 xsi:nil="true"/>
<ATTRIBUTE2 xsi:nil="true"/>
<ATTRIBUTE3 xsi:nil="true"/>
...
</PRICE_LIST_REC>
```

This can be achieved with the help of a function in a Transform activity, or by directly passing the XML input with nil values and then assigning them to the record types within an Assign activity.

12.1.2 Re-creating Wrapper Packages While Using Existing PL/SQL SOA Composites Against a Different Release Instance

When a user has a SOA composite of a PL/SQL API created against an Oracle E-Business Suite Release 11i instance and intends to use it against the Release 12 instance or vice versa, for the compatibility in the target instance, the wrapper package of the SOA composite must be recreated. This approach updates the signature in the generated wrapper SQL file for the target instance and avoids the possible confusion whether the signature is the same or has changed in the target instance.

12.2 Configuration Issues and Workarounds

There are no known configuration issues at this time.

12.3 Documentation Errata

This section describes documentation errata for *Oracle Fusion Middleware Adapter for Oracle Applications User's Guide*. It includes the following topics:

- Section 12.3.1, "Removing Interfaces Definitions Annotated at Design Time"

- Section 12.3.2, "Removing "One-time Workaround for Concurrent Programs and E-Commerce Gateway Interfaces""

- Section 12.3.3, "Correcting Schema Definition Selection for Business Event Payload"

12.3.1 Removing Interfaces Definitions Annotated at Design Time

In the section "Support for Oracle Integration Repository" of Chapter 2 "Adapter for Oracle Applications Features", the last sentence of the first paragraph reads:

"These interfaces are exposed because their definitions were annotated at design time as required by Oracle Integration Repository."

This is incorrect and should be removed from the section.

12.3.2 Removing "One-time Workaround for Concurrent Programs and E-Commerce Gateway Interfaces"

In the section "General Issues and Workarounds" of Appendix B, Troubleshooting and Workarounds, the following bullet point reads:

- **One-time Workaround for Concurrent Programs and E-Commerce Gateway Interfaces**

When working with Concurrent Programs and E-Commerce Gateway interfaces, you must perform the following workaround exactly once for a given E-Business Suite instance.

> **Note:** This is to work around the known issue with the Adapter Configuration wizard being unable to preserve DEFAULT clauses for PL/SQL wrappers that it generates underneath the covers.

Load the following SQL file into the apps schema (using SQL*Plus) before launching the Adapter Configuration Wizard to create services for either Concurrent Programs or E-Commerce Gateway Interfaces.

```
ORACLE_
HOME\bpel\samples\tutorials\150.AppsAdapter\OrderImportConcur
rentProgram\bpel\XX_BPEL_FND_REQUEST_SUBMIT_REQUEST.sql
```

Since Concurrent Programs and E-Commerce Gateway interfaces work fine without the need of loading SQL file, this one-time workaround needs to be removed.

12.3.3 Correcting Schema Definition Selection for Business Event Payload

In the section "Creating a Partner Link" of Chapter 5 "Using Business Events", the selection of schema definition for business event payload given in the example is updated with the following changes:

- Schema definition selection is changed from 'Specify Schema' to 'No Schema' in the WFEvent Schema Definition window from the Adapter Configuration Wizard.

- The detailed step-by-step instructions on how to specify schema location and element when the 'Specify Schema' option is chosen are therefore removed.

This is because APPS_WF_EVENT_T.xsd schema is for the overall business event rather than the schema for the event specific payload (such as "oracle.apps.po.event.xmlpo" event). Therefore, when the 'No Schema' or 'Any Schema' option is selected, there is no need to further specify the schema information for the selected business event.

13

Oracle Application Adapters for Oracle WebLogic Server

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

- 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

> **Note:** The issues and workarounds listed here are those that were known at the time of the product's initial release to the public. Additional issues and workarounds may have been discovered since the initial release. To view the latest known issues associated with Oracle SOA Suite, BPM Suite, and related SOA technologies, go to the Oracle Technology Network (OTN) at http://www.oracle.com/technetwork/middleware/docs/aiasoarelnotes-196861.html.

This chapter includes the following topics:

- Section 13.1, "Oracle Application Adapters: New Features"
- Section 13.2, "Oracle Application Adapters: General Issues and Workarounds"
- Section 13.3, "Application Explorer"
- Section 13.4, "Oracle Application Adapter for PeopleSoft: Issues and Workarounds"
- Section 13.5, "Oracle Application Adapter for SAP R/3: Issues and Workarounds"
- Section 13.6, "Oracle Application Adapter for Siebel: Issues and Workarounds"
- Section 13.7, "Oracle Application Adapter for J.D. Edwards OneWorld: Issues and Workarounds"

13.1 Oracle Application Adapters: New Features

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

- Section 13.1.1, "Oracle Application Adapter for SAP R/3"

13.1.1 Oracle Application Adapter for SAP R/3

SAP Java Connector (JCo) Version 3.x is supported.

13.2 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 13.2.1, "Testing Outbound BPEL and Mediator Processes"

Section 13.2.2, "Certified Repository"

Section 13.2.3, "HTTP Repository Connection"

Section 13.2.4, "File Repository Usage"

Section 13.2.5, "Using Business Services Engine for Inbound Processing"

Section 13.2.6, "Synchronous Events"

Section 13.2.7, "Ports Option for Inbound Processing"

Section 13.2.8, "Supported Custom Objects"

Section 13.2.9, "Adapter Compatibility"

Section 13.2.10, "Unsupported Configuration"

Section 13.2.11, "Encoding Support"

Section 13.2.12, "J2CA Components"

Section 13.2.13, "Invoking a Run-Time Message When BSE Is Unavailable"

Section 13.2.14, "Invoking Outbound BPEL Process at Run Time Using BSE"

Section 13.2.15, "Java Command Error in iwae.sh"

Section 13.2.16, "Using the J2CA Test Tool for Outbound Only"

Section 13.2.17, "BSE Web Services Browser Pages Do Not Support DBCS Input"

Section 13.2.18, "Adapter Language Certification"

Section 13.2.19, "File Channel"

Section 13.2.20, "JDK Version Support for Application Explorer"

Section 13.2.21, "Unsupported Adapter Functionality"

13.2.1 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*

13.2.2 Certified Repository

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.

13.2.3 HTTP Repository Connection

HTTP repository connections are not supported for 11*g* Release 1 (11.1.1.3.0), 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.

13.2.4 File Repository Usage

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

13.2.5 Using Business Services Engine for Inbound Processing

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

13.2.6 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.

13.2.7 Ports Option for Inbound Processing

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

13.2.8 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.

13.2.9 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.

13.2.10 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.

13.2.11 Encoding Support

The Oracle Application Adapters support only UTF-8 encoding.

13.2.12 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, and Mediator 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.

13.2.13 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.

13.2.14 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>
```

13.2.15 Java Command Error in iwae.sh

When the **iwae.sh** file is executed, the "Java command is not found" error is generated.

As a workaround, you must set the JAVACMD path in the **iwae.sh** file to *OracleAS_home*/jdk/bin/.

For example:

```
C:\oracle\product\11.1.0\db_1\jdk\bin
```

13.2.16 Using the J2CA Test Tool for Outbound Only

The J2CA Test Tool must be used only for outbound (services). Inbound (events) activity options available in the tool are not supported.

13.2.17 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.

13.2.18 Adapter Language Certification

iWay Adapters are certified with the English language. The following adapters for 11*g* Release 1 (11.1.1.3.0) are certified with the Japanese language:

- Oracle Application Adapter for SAP R/3 (using SAP JCo 2.1.x and 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.

13.2.19 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.

13.2.20 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)
```

13.2.21 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.

13.3 Application Explorer

The following topics discuss issues that pertain to Application Explorer:

- Section 13.3.1, "Environment Variable and Permission Settings"
- Section 13.3.2, "Unable to Connect to Remote Machines Using File or DB Repositories for J2CA Configurations"

■ Section 13.3.3, "Unsupported JMS Disposition"

13.3.1 Environment Variable and Permission Settings

When starting Application Explorer, add the executable permission as follows:

```
chmod u+x $ORACLE_HOME/soa/thirdparty/ApplicationAdapters/tools/iwae/bin/iwae.sh
```

13.3.2 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. If you need to use Application Explorer to connect to the SOA Suite on a remote machine, then configure an HTTP repository instead. For more information on how to create a connection using an HTTP repository, see Section 13.2.3, "HTTP Repository Connection".

13.3.3 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 11*g* do not support the JMS disposition. This message is recorded in the log file as a result.

13.4 Oracle Application Adapter for PeopleSoft: Issues and Workarounds

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

■ Section 13.4.1, "PeopleSoft LDAP Authentication Incompatible"

■ Section 13.4.2, "Automatic Reconnect to PeopleSoft"

■ Section 13.4.3, "HTTPS Protocol"

■ Section 13.4.4, "PeopleSoft Messages"

■ Section 13.4.5, "Limitation with Level 2 Scrolls"

■ Section 13.4.6, "Limitation with Level 3 Scrolls"

■ Section 13.4.7, "Limitation with Effective Dated Scrolls"

■ Section 13.4.8, "Limitation When Inserting a Second Row for Level 1, 2, or 3 Scrolls"

■ Section 13.4.9, "Limitation when Creating a Schema for Multilevel Component Interfaces"

■ Section 13.4.10, "PeopleTools Date Format"

■ Section 13.4.11, "Generating Java APIs"

■ Section 13.4.12, "Differences Between Component Interface Functionality and Adapter Functionality"

- Section 13.4.13, "Missing Field Errors When Using a Component Interface"
- Section 13.4.14, "Support for Related Display Fields"
- Section 13.4.15, "Differences Between Component Interface Functionality and Adapter Functionality"
- Section 13.4.16, "Multiple Effective Dated Scrolls"
- Section 13.4.17, "Debug Message"
- Section 13.4.18, "LOCATION Component Interface"
- Section 13.4.19, "Component Interface Names"
- Section 13.4.20, "Component Interface Java API Compilation Errors (People Tools 8.46)"

13.4.1 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.

13.4.2 Automatic Reconnect to PeopleSoft

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

Workaround

None.

13.4.3 HTTPS Protocol

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

Workaround

None.

13.4.4 PeopleSoft Messages

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

Workaround

None.

13.4.5 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.

13.4.6 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.

13.4.7 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.

13.4.8 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.

13.4.9 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*

13.4.10 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.

13.4.11 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.

13.4.12 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.

13.4.13 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.

13.4.14 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.

13.4.15 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.

13.4.16 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.

13.4.17 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.

13.4.18 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.

13.4.19 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.

13.4.20 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.

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

The following topics discuss issues that pertain to both versions of Oracle Application Adapter for SAP R/3 (using SAP JCo 2.1.x and 3.x).

- Section 13.5.1, "Considerations for SAP R/3 (Using SAP JCo 2.1.x) and SAP R/3 (Using SAPJCo 3.x)"
- Section 13.5.2, "Oracle JRockit JVM Not Supported"
- Section 13.5.3, "Supported Versions and Platforms for SAP JCo 2.1.9"
- Section 13.5.4, "Supported Versions and Platforms for for SAP JCo 3.0.5"
- Section 13.5.5, "Native IDoc Format Support"
- Section 13.5.6, "XML With CDATA"
- Section 13.5.7, "SAP R/3 4.6C Support"
- Section 13.5.8, "SAP Java Connector (SAP JCo) Version Support"
- Section 13.5.9, "Date and Time Field Mapping"
- Section 13.5.10, "Intermediate Documents (IDocs) During Inbound Processing"
- Section 13.5.11, "SAP IDoc Data With DBCS (Japanese, Chinese, etc.) Characters Overflows and Truncates Characters"
- Section 13.5.12, "No Values Set for Code and Details in Binding Fault"
- Section 13.5.13, "SAP R/3 Adapter Exceptions"
- Section 13.5.14, "Behavior With Multiple Channels"
- Section 13.5.15, "Connections Not Listed in SAP Gateway Monitor"
- Section 13.5.16, "Multithreading Functionality With the Outbound Listener"
- Section 13.5.17, "Single Sign-On"
- Section 13.5.18, "Metadata Support"

13.5.1 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 (where x is the sub version number) 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 on migrating existing application artifacts (BPEL, Mediator, ESB, and OSB) and installing the Oracle 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 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. Customers are encouraged 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 is separately announcing the advanced notification of End Of Support (EOS) for the SAP R/3 adapter (using SAP JCo 2.1.x) effective 12/31/2011. 11*g* 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 for customers to begin migrating to the SAP R/3 adapter (using SAP JCo 3.x) starting with 11*g* 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.

13.5.2 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.

13.5.3 Supported Versions and Platforms for SAP JCo 2.1.9

The following SAP ERP platforms are supported by Oracle Application Adapter for SAP R/3 (using SAP JCo 2.1.9):

- SAP R/3 Enterprise 47x100

- SAP R/3 Enterprise 47x200

- mySAP ERP Central Component (ECC) 6.0, deployed on SAP NetWeaver 7.0 (2004s)

- mySAP ERP Central Component (ECC) 6.0, deployed on SAP NetWeaver 7.1 (EHP1)

For the current release status of the SAP Java Connector, refer to SAP note 549268 in the SAP Service Marketplace.

> **Note:** Release versions may vary by product component. In addition, SAP functions may vary by SAP product version and support package.

13.5.4 Supported Versions and Platforms for for SAP JCo 3.0.5

The following SAP ERP platforms are supported by the Oracle Application Adapter for SAP R/3 (using SAP JCo 3.0.5):

- 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 3.0.5):

- 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.

13.5.5 Native IDoc Format Support

The native IDoc format for inbound processing is not currently supported for 11g Release 1 (11.1.1.3.0). This issue will be resolved by applying a patch in a future release.

13.5.6 XML With CDATA

XML with the CDATA option is not supported by Oracle Application Adapter for SAP R/3 (using SAP JCo 3.0.5).

13.5.7 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.

13.5.8 SAP Java Connector (SAP JCo) Version Support

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 SAP note 1257539 in the SAP Service Marketplace.

For 11g Release 1 (11.1.1.3.0), the Oracle Application Adapter for SAP R/3 supports SAP JCo Version 2.1.9.

SAP JCo Version 2.1.x (2.1.9) is not supported on the Windows 64-bit platform. The JCo API does not support this platform.

13.5.9 Date and Time Field Mapping

Both versions of Oracle Application Adapter for SAP R/3 (using SAP JCo 2.1.9 and 3.0) only handle 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.

13.5.10 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.

13.5.11 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.

13.5.12 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.

13.5.13 SAP R/3 Adapter Exceptions

During outbound processing, the following type of exception from the BPEL or Mediator layer may occur in certain situations:

```
failed due to: Error in processing the input document.; nested exception is:
javax.resource.ResourceException: Error in processing the input document.
```

At the same time, the JCA log file that is generated by the adapter shows the exact error message. 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 JCA log file:

```
MySAP response error: BapiError: Company code 1010 does not exist
```

Workaround

Perform the following steps:

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>
```

13.5.14 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 anther 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.

13.5.15 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.

13.5.16 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.

13.5.17 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.

13.5.18 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.

13.6 Oracle Application Adapter for Siebel: Issues and Workarounds

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

- Section 13.6.1, "Additional Configuration in the Siebel Environment"
- Section 13.6.2, "Service and Integration Nodes"
- Section 13.6.3, "Automatic Reconnect to Siebel"
- Section 13.6.4, "Updating or Deleting Siebel Records Using Oracle Application Adapter for Siebel"
- Section 13.6.5, "Adapter Exception Error If Siebel Request Document Contains Japanese Characters"
- Section 13.6.6, "HTTPS Protocol"
- Section 13.6.7, "Multi-Value Groups"

13.6.1 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.

13.6.2 Service and Integration Nodes

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

13.6.3 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.

13.6.4 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.

13.6.5 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.

13.6.6 HTTPS Protocol

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

Workaround

None.

13.6.7 Multi-Value Groups

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

Workaround

None.

13.7 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 13.7.1, "J.D. Edwards OneWorld Unit Of Work (UOW)"

13.7.1 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 11*g* namespace requirements. Manually add the namespace, target namespace, and other items that are required for SOA 11*g*.

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.

14

Oracle Application Server Legacy Adapters

This document contains the following release information regarding Oracle WebLogic Server Legacy Adapters Version 11.1.1:

- Notes and Limitations

Note: The issues and workarounds listed here are those that were known at the time of the product's initial release to the public. Additional issues and workarounds may have been discovered since the initial release. To view the latest known issues associated with Oracle SOA Suite, BPM Suite, and related SOA technologies, go to the Oracle Technology Network (OTN) at

http://www.oracle.com/technetwork/middleware/docs/aiasoarelnotes-196861.html

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14.1 Notes and Limitations

The following are the limitations for Oracle WebLogic Server Legacy Adapters Version 11.1.1:

Component	Description
CDC Adapters	When implementing a CDC solution that you created in Oracle Studio in JDeveloper, you must add the following information to the composite.xml:
	In the `binding` section of the composite.xml, add the name of the operation. For example:
	`operation=<name>`

Component	Description
CICS Adapter	OracleWLS fails to work against an interaction when the input and output records of the interaction have a field of the same complex type.
	Workaround: In Oracle Studio, find the Tuxedo adapter you are working with and open it in the Metadata Explorer. Under **Schema**, copy the record that is used in both records, then paste it into the schema with a new name. Open one of the records and replace the field type with the copy instead of the duplicated record name.
	For example:
	■ There is an interaction called `findDog` that includes `findDogInput` as the input record and `findDogResponse` as the output record.
	■ The `findDogResponse` record includes a field with a `findDogInput` type.
	■ In the **Schema** section, copy `findDogInput` and then paste it with a new name, such as `findDogInputCopy`.
	■ Right-click **findDogResponse** and select **Edit**. In the **Type** column, change **findDogInput** to **findDogInputCopy**.
Tuxedo Adapter	Interaction outputs must contain wrapping record that includes the actual interaction output. This record is automatically created by Oracle Studio, however if the user manually edits the interaction and does not use the wrapping record, an error is returned.
VSAM CICS Driver	Wrong results may be returned when executing a query with a less than (<) filter expression on an integer index segment. For example:
	`SELECT * FROM account where accountno < 10;`
	This occurs when the query processor accesses the table by the index.
	Workaround use the `<access(scan)>`: as shown in the example below to avoid accessing the table by index.
	`SELECT * FROM account <access(scan)> where accountno < 10;`
Oracle Studio	On Linux systems, the Studio shortcut in the Start menu does not work. To access Oracle Studio, Activate the Studio file in the Oracle Studio installation directory.
Solution Perspective	When selecting the server and staging area machines for a CDC solution, it is not possible to select a language and code page for the machines. English is used as the default language.
Solution Perspective	The CDC captured table list is not refreshed in the Solution Perspective.
	Workaround: Redefine the data source.
Solution Perspective	The **Activate workspaces** and **Deactivate workspaces** buttons are active without regard to whether the requested operation was carried out successfully.
	If the network is disconnected already, and you click **Deactivate workspaces**, an error is reported, and the **Activate Workspaces** command is available. However, the workspaces are still active.
Solution Perspective	In the CDC Stream Service CDC, when you get to the end and click **Back** to make corrections, the table column filters may become corrupt.
	To ensure that the columns you want are selected, in the Select Tables and Columns Filter page, expand the tables and make sure the correct columns are selected. If not, select or clear the columns and then proceed to the final page and select **Finish**.

Component	Description
Solution Perspective	When entering a staging-area machine in the Solution perspective, you must make sure to enter the path or other information correctly. For example, if you are using a UNIX machine, use a forward slash (/) separator. Oracle Studio does not verify that the information you entered is correct for the machine you are using. Therefore if you use the wrong information, the solution will not work.
Solution Perspective	The Access Service Manager in the Solution Perspective that is used to customize the staging area workspace is not working. The values that are set in this wizard are not saved and not deployed as part of the solution. **Workaround**: Make workspace customizations after the solution is deployed using the workspace editor in the Configuration view.
Solution Perspective	When selecting **Connect with fixed NAT**, the CDC solution fails on deployment with a connection error.
Solution Perspective	If you open the Design Step wizard when editing a CDC solution, the values for the **Client Type** and **Staging Area** are reset to their default values. Do not open the Design Step wizard to ensure that these values do not return to the default value. If you need to enter the Design Step wizard, make sure to reset these values.
Solution Perspective	If you change the name of a data source created in a CDC solution to a name that is used by another data source in the NAV binding, an error is returned. You should use a unique name for the data source.
Solution Perspective	If a CDC solution is imported and then deployed, Studio marks the solution as deployed, however it is not actually deployed on the server.
Solution Perspective	The link to open the replication script for MS SQL Server ODBC does not work on Linux computers. To open this file, copy it to a location on your Linux computer and open it from a text editor.
Design Perspective	When you create a CDC solution in the Solution perspective and disable the solution workspace, the workspace will be shown as active when you view it in the Design perspective. The status also remains as active after carrying out an update.
Design Perspective	Oracle Studio may lose the server connection without the possibility to refresh the connection from the Configuration view. Restart Oracle Studio to regain the connection.
Design Perspective	The Oracle Studio Test option for the Tuxedo Gateway adapter does not work.
Design Perspective	If you try to delete a cached table that was defined in the Metadata View for a relational data source an error is received. Changing between native metadata and cached metadata views does not work, and no error is returned.
Design Perspective	When selecting **Connect with fixed NAT**, the test adapter fails.
Design Perspective	When exporting the metadata for a data source by using the **Export XML definitions** option, all of the metadata is exported. If you want to export the definitions only, then export the XML through the binding. You can then remove the definitions for any data source included in the binding that you do not need.

Component	Description
Import Managers	The import enqueue and post interaction output are incorrect.
	For enqueue interactions, the output is always set as `ENQ_OUT_HEADER` struct.
	The post interaction is sync-send only, which means that when you import a post interaction there will be no output and the interaction mode is set to `sync-send`.
Import Managers	The Tuxedo adapter, Tuxedo Queue adapter, and Tuxedo Gateway import manager wizards do not have a validation mechanism and will accept any data entered.
Import Managers	If you select Finish in the Database adapter metadata import wizard before reaching the final step (called Import the Metadata), incorrect metadata is generated.
Import Manager	In a Tuxedo import, when you retrieve the input files from an FTP connection, an error is returned when you go the next step in the import wizard.
Utilities	The `NAV_UTIL service with param` option is not recognized.
Utilities	Executing the NAV_UTIL command without parameters in Linux causes the utility to shut down.
Utilities	When calling a procedure which returns at least one result set, the SQL Utility doesn't return the first row of the first record set.
Security	If the daemon is set to be used by a specific user and the database being accessed requires a user and password for access, the CDC solution fails.
Installation	When Uninstalling with an open application that uses NAV_UTIL or other Oracle dlls, an error is displayed. You can ignore this error.
Installation	When upgrading from version 10.1.3.3, you must use the upgrade option in the installation wizard. Do not uninstall Version 10.1.3.3 and then install the newer version. If you do this, you will lose all data in the Def directory
Installation	You cannot install Oracle Connect version 11.1.1 side-by-side with version 10.1.3.3 and earlier.
MS SQL Server CDC	The MS SQL CDC only supports a single bit Column in tables.
MS SQL Server CDC	Connection errors are returned when working with a CDC solution for MS SQL Server with Windows authentication and no authentication information is entered for the CDC adapter.

15

Oracle Technology Adapters

This chapter describes issues associated with Oracle Technology Adapters and the *Oracle Fusion Middleware User's Guide for Technology Adapters*. It includes the following topics:

- Section 15.1, "General Issues and Workarounds"
- Section 15.2, "Configuration Issues and Workarounds"

The issues and workarounds listed here are those that were known at the time of the product's initial release to the public. Additional issues and workarounds may have been discovered since the initial release. To view the latest known issues associated with Oracle SOA Suite, BPM Suite, and related SOA technologies, go to the Oracle Technology Network (OTN) at:
http://www.oracle.com/technetwork/middleware/docs/aiasoarelnotes-196861.html.

15.1 General Issues and Workarounds

This section describes general issues and workarounds. It includes the following topics:

- Section 15.1.1, "Oracle JCA Adapters Issues and Workarounds"
- Section 15.1.2, "Oracle JCA Adapter for Files/FTP Issues and Workarounds"
- Section 15.1.3, "Oracle JCA Adapter for AQ Issues and Workarounds"
- Section 15.1.4, "Oracle JCA Adapter for JMS Issues and Workarounds"
- Section 15.1.5, "Oracle JCA Adapter for Database Issues and Workarounds"
- Section 15.1.6, "Oracle JCA Adapter for MQ Series Issues and Workarounds"
- Section 15.1.7, "Oracle JCA Adapter for Socket Issues and Workarounds"
- Section 15.1.8, "Native Format Builder Issues and Workarounds"

15.1.1 Oracle JCA Adapters Issues and Workarounds

This section describes issues and workarounds that are applicable to all adapters: Oracle AQ Adapter, Oracle JMS Adapter, Oracle Files/FTP Adapter, Oracle MQ Series Adapter, Oracle Database Adapter, and Oracle Socket Adapter.

This section includes the following issue:

- Section 15.1.1.1, "ECID Propagation Is Not Supported by Oracle Technology Adapters"

15.1.1.1 ECID Propagation Is Not Supported by Oracle Technology Adapters

The ECID is used to keep track of message flow in Oracle Enterprise Manager. The ECID is not preserved when two composites communicate via adapters over an external protocol, like fro example, a file system or sockets since these protocols do not have support for headers to, for example, hold the ECID.

15.1.1.2 Outbound Adapter Does Not Perform an Outbound Retry If the Outbound Adapter Throws an Exception with GLOBAL_RETRY

If an outbound adapter throws an exception with GLOBAL_RETRY, then the retry configured at the outbound adapter level will not take effect. The retry falls back to the caller which could be a BPEL process. The retry happens from the inbound to the BPEL process (caller of BPEL process) in either of the following transaction semantics in Oracle BPEL process:

Scenario 1:

```
<property name="bpel.config.transaction">requiresNew</property>
<property name="bpel.config.oneWayDeliveryPolicy">sync</property>
```

Scenario 2:

```
<property  name="bpel.config.transaction">required</property>
<property name="bpel.config.oneWayDeliveryPolicy">sync</property>
```

If the adapter throws a LOCAL_RETRY, then the retry configured at the outbound adapter level will take effect.

Note that for the inbound retry to work, Oracle BPEL process must not have any dehydration points.

15.1.1.3 JCA Binding Component Error Messages During Forceful Shutdown

During forceful shutdown of Oracle WebLogic Server, if the severs are processing data, then you may see JCA Binding Component error messages. These messages are benign.

15.1.1.4 Manual Edits to WSDL Lost When Re-running the Adapter Configuration Wizard

Every time you use the Adapter Configuration Wizard to edit an adapter, the wizard uses the data you enter to recreate the adapter WSDL. If you made manual edits to the WSDL before, the Adapter Configuration Wizard will discard those changes the next time you edit the adapter.

The workaround for this issue is to make the same manual edits each time you use the Adapter Configuration Wizard.

15.1.1.5 Setting the Payload Threshold in MBean for DB Adapter Outbound Operations

You can set the payload threshold in MBeans for DB Adapter Outbound operations such as Select, Pure SQL, and the Stored Procedure Adapter's Select Operations. However, values you set in the MBean might not take effect dynamically; when you change the value in the Mbean, you need to redeploy the SOA composite. This release note is specific to both Windows and Linux operating system platforms.

You can use the following procedure to set the payload threshold in Mbeans:

1. Deploy a composite with a threshold value in the composite.xml file.This value in the composite.xml overrides the value in MBean defined in EM Console.

2. If the value in the Mbean is changed, and if that value is the value that is to take effect, you must redeploy the composite application.

3. For the outbound Select, whenever the threshold value is changed, whether in Mbean or in the composite.xml, it is safe to redeploy the composite.

15.1.2 Oracle JCA Adapter for Files/FTP Issues and Workarounds

This section describes the following issues and workarounds related to Oracle File and FTP Adapters:

It includes the following sections:

- Section 15.1.2.1, "Files Lost During an SOA Server Failover"
- Section 15.1.2.2, "DOM Parsing Exception at Run Time"
- Section 15.1.2.3, "JCA Property Updates from Enterprise Manager Console Are Not Applied If a Logical Directory Is Used"
- Section 15.1.2.4, "Prerequisite for Oracle FTP Adapter Debatching Scenarios on FTPS"
- Section 15.1.2.5, "Editable Append Property With Dynamic File Name"
- Section 15.1.2.6, "Data Lost During Read Operation from an Input File with Errors"
- Section 15.1.2.7, "Attachments and Payload Validation are Incompatible"

15.1.2.1 Files Lost During an SOA Server Failover

The Oracle File Adapter picks up a file from an inbound directory, processes the file, and sends the processed file to an output directory. However, during this process if a failover occurs in an SOA managed server, then the file may be lost because of the nontransactional nature of Oracle File Adapter. As a result, some files read by the inbound adapter may not be sent to the output directory. You must configure the Oracle File Adapter for high availability, to ensure that files are not lost during a failover.

15.1.2.2 DOM Parsing Exception at Run Time

When Oracle File and FTP Adapters read a Unicode XML file with byte order mark (BOM), a DOM parsing exception is thrown at runtime. If the Unicode XML file does not use BOM, then an exception is not thrown.

15.1.2.3 JCA Property Updates from Enterprise Manager Console Are Not Applied If a Logical Directory Is Used

If Oracle File and FTP Adapters use logical directories for inbound or outbound operations, then JCA property updates from Oracle Enterprise Manager Console are not applied.

15.1.2.4 Prerequisite for Oracle FTP Adapter Debatching Scenarios on FTPS

If the FTP server returns error code 421 (service not available), it can mean that the FTP server is becomng overwhelmed with requests and you might need to throttle the inbound adapter; one easy way of doing so is to model the inbound service as a synchronous one.

15.1.2.5 Editable Append Property With Dynamic File Name

The ability to append to a file while maintaining a dynamic file naming convention is possible. There are cases where one would like to implement similar functionality to a "rolling file appender" with a convention like "log_%yyMMdd%.txt" where each day a new file is created, all entries are appended to that file and as the day rolls over the log file does also.

When a dynamic file name is specified for an output file, the `Append` property must not be edited. However, the Oracle Enterprise Manager Fusion Middleware Control Console allows you to edit the `Append` property even when you specify a dynamic file name for an output file.

When using a dynamic file name the value of the `Append` property must be `false`. By default, the value of the `Append` property is `false` and this must not be edited while using a dynamic file name.

15.1.2.6 Data Lost During Read Operation from an Input File with Errors

When an Oracle File Adapter processes a file with some invalid records, the entire file is actually copied to an error-archive-folder (if one is specified with the PhysicalErrorArchiveDirectory) or to a default error-archive if such a parameter is not configured.

To ensure that no data is lost, input files with invalid data must be sent to the error archive queue. You must set the following properties in the WSDL file for the Read file operation to ensure that input files with errors are sent to the error archive queue:

```
PhysicalErrorArchiveDirectory="physical_directory_ path"
LogicalErrorArchiveDirectory="logical_directory_path"
```

15.1.2.7 Attachments and Payload Validation are Incompatible

If you enable payload validation when using attachments, the Oracle FTP Adapter fails with a `java.lang.NullPointerException` and logs an error like: "FtpIn FtpInAdapter Service FtpIn was unable to perform delivery of inbound message to the composite".

When using attachments, disable payload validation. For Attachments, payload validation is unnecessary.

15.1.3 Oracle JCA Adapter for AQ Issues and Workarounds

This section describes the following issue and workaround related to Oracle JCA Adapter for AQ:

It includes the following section:

- Section 15.1.3.1, "Oracle JCA Adapter for AQ Does Not Dequeue Messages from Queues in Oracle E-Business Suite Applications"

- Section 15.1.3.2, "Oracle AQ Adapter No More Data to Read- Apply Patches"

- Section 15.1.3.3, "XMLTYPE PAYLOAD GREATER THAN 4KB IS NOT PROCESSED CORRECTLY"

15.1.3.1 Oracle JCA Adapter for AQ Does Not Dequeue Messages from Queues in Oracle E-Business Suite Applications

It is recommended that you use Oracle Adapter for Oracle Applications to dequeue from queues in E-Business Suite Applications and *not* Oracle JCA Adapter for AQ.

15.1.3.2 Oracle AQ Adapter No More Data to Read- Apply Patches

When the AQ Adapter is run against the Oracle® Database 11g Release 1 (11.2.01 on the LINUX.X64 platform) , you might see the following error while the AQAdapter tries to dequeue a message from a queue:

```
java.sql.SQLRecoverableException: No more data to read from socket
```
To resolve the above exception, you need to apply the patches listed below for the Oracle® Database 11g Release 1 (11.2.01):

- ARU: 11.2.0.1.0 ARU 11998753 completed for Linux x86

- ARU: 11.2.0.1.0 ARU 11998754 completed for Linux x86-64

15.1.3.3 XMLTYPE PAYLOAD GREATER THAN 4KB IS NOT PROCESSED CORRECTLY

Currently the size of XMLType payload that can be processed by the Oracle AQ adapter is restricted to a 4KB limit. As a possible workaround, you can replace XMLType with CLOB (conversion might be needed) to overcome the current limitation.

15.1.4 Oracle JCA Adapter for JMS Issues and Workarounds

This section describes the following issues and workarounds related to Oracle JMS Adapter:

- Section 15.1.4.1, "Example of Flow Control Settings for Oracle JMS Adapter"

- Section 15.1.4.2, "Oracle JMS Adapter Re-entrant Wizard Displays a Warning Message When the Destination and JNDI Names Are Invalid"

- Section 15.1.4.3, "Distributed Topic in Clustered Environment Creates Extra Messages"

- Section 15.1.4.4, "Consumer Not Found Exception"

- Section 15.1.4.5, "AQJMS Dequeue Failed Error When Redeployed By Adding Durable Subscription"

15.1.4.1 Example of Flow Control Settings for Oracle JMS Adapter

Anytime the exception weblogic.messaging.kernel.QuotaException: Quota blocking time exceeded and no quota available is encountered, WLS JMS provider allows flow control settings that you can tweak to control the number of messages that are produced/consumed.

For more information about tweaking the control settings, see

(http://download.oracle.com/docs/cd/E13222_01/wls/docs90/ConsoleHelp/pagehelp/JMSjmsconnectionjmsconnectionfactoryconfigflowcontroltitle.html)

The following is an example of the flow control settings used and the various thresholds for a message carrying a payload size of 5k:

```
Config JMSServer:
    Message Buffer Size:5000

Config JMSConnectionFactory:
    Flow Control:
    Flow Maximum: 30
    Flow Minimum: 1
    Flow Interval: 10
    Flow Step: 10

check Flow Control Enabled
    Default Delivery: Send Timeout: 3000000

Config JMS Destinations:
        Bytes Threshold High: 50000
        Bytes Threshold Low:  50
        Messages Threshold High: 100
        Messages Threshold Low: 1
        Set Quota
```

15.1.4.2 Oracle JMS Adapter Re-entrant Wizard Displays a Warning Message When the Destination and JNDI Names Are Invalid

While migrating a project from one environment to another, Oracle JMS Adapter Wizard populates the Destination and JNDI name fields in edit mode in the following pages:

- Consume Operation Parameters page
- Produce Operation Parameters page
- Request Operation Parameters page
- Reply Operation Parameters page
- Request/Reply Operation Parameters page

However, if you click **Next**, the Adapter Configuration Wizard validates whether this is a valid destination, and accordingly, displays a warning message if found to be invalid. You have the option to proceed or enter a valid destination.

15.1.4.3 Distributed Topic in Clustered Environment Creates Extra Messages

When you use Oracle JMS adapter with a distributed topic deployed in a cluster, the scenario would result in more messages processed than the actual number of messages passed to the topic.

Each subscriber to the topic is handed a copy of the message to be processed by WLS JMS. So, the number of processed messages will be equal to the number of active subscribers on the distributed topic. This is a known behavior of Oracle WebLogic JMS in Oracle WebLogic Application Server 10.3.

15.1.4.4 Consumer Not Found Exception

Adapter logs might occasionally log the following error when you are using the JMS adapter during stress and failover scenarios:

```
    JmsConsumer_run:[destination = XXXX, subscriber = null]: A resource
exceptionoccurred while waiting for inbound messages: Consumer not found.
```

The above exception stating `Consumer Not Found` is encountered at the time of consumer creation and occurs as a result of an invalid connection/session that is used in the poller thread. The Adapter ensures that the exception is captured (by logging the error), and at the same time it takes corrective measure by removing the invalid connection from connection pool, thereby resulting in successful consumer creation in the next recovery cycle.

15.1.4.5 AQJMS Dequeue Failed Error When Redeployed By Adding Durable Subscription

When an AQJMS Topic inbound process. without a durable subscription , is already deployed to the server, is redeployed adding a durable subscription to the InboundTopic the following error occurs at the time of dequeing the message:

```
Caused by: oracle.jms.AQjmsException: JMS-120: Dequeue failed
at oracle.jms.AQjmsError.throwEx(AQjmsError.java:315)
at oracle.jms.AQjmsConsumer.jdbcDequeue(AQjmsConsumer.java:1620)
at oracle.jms.AQjmsConsumer.receiveFromAQ(AQjmsConsumer.java:1035)
at oracle.jms.AQjmsConsumer.receiveFromAQ(AQjmsConsumer.java:960)
at oracle.jms.AQjmsConsumer.receiveFromAQ(AQjmsConsumer.java:938)
at oracle.jms.AQjmsConsumer.receive(AQjmsConsumer.java:790)
```

15.1.5 Oracle JCA Adapter for Database Issues and Workarounds

This section describes the following issues and workarounds related to Oracle Database Adapter:

- Section 15.1.5.1, "Distributed Polling Using MarkReservedValue Disabled by Default"
- Section 15.1.5.2, "XMLTYPE PAYLOAD GREATER THAN 4KB IS NOT PROCESSED CORRECTLY"

15.1.5.1 Distributed Polling Using MarkReservedValue Disabled by Default

In this release, Oracle recommends that you use the new distributed polling approach based on skip locking. When editing an Oracle Database Adapter service which has a `MarkReservedValue` set, that value will be removed to enable the new best practice.

To use the old distributed polling approach based on a reserved value, select the value from the drop down menu.

15.1.5.2 XMLTYPE PAYLOAD GREATER THAN 4KB IS NOT PROCESSED CORRECTLY

Currently the size of XMLType payload that can be processed by the Oracle AQ adapter is restricted to a 4KB limit. As a possible workaround, you can replace XMLType with CLOB (conversion might be needed) to overcome the current limitation.

15.1.6 Oracle JCA Adapter for MQ Series Issues and Workarounds

This section describes the following issues and workarounds related to Oracle MQ Series Adapter:

- Section 15.1.6.1, "Oracle MQ Series Adapter Does Not Support Asynchronous Request-Response Pattern"

- Section 15.1.6.2, "Oracle MQ Series Adapter Does Not Perform an Outbound Retry If the Outbound Resource Is XA"

- Section 15.1.6.3, "Adding Additional Encoding Not Supported"

- Section 15.1.6.4, "Using MQ Series version 7.0.0.2 and XA Transactions"

- Section 15.1.6.5, "MQ Adapter:Async Req-Response(Non-solicit) Always Requires Fallback Queue"

15.1.6.1 Oracle MQ Series Adapter Does Not Support Asynchronous Request-Response Pattern

Oracle MQ Series Adapter does not support asynchronous request-response pattern. The Asynchronous Request-Response pattern is not applicable to any adapter (including MQSeries adapter)

15.1.6.2 Oracle MQ Series Adapter Does Not Perform an Outbound Retry If the Outbound Resource Is XA

If you select the outbound resource as XA, then the Oracle MQ Series Adapter throws an exception and does not retry because it does not support an outbound retry with outbound resource as XA. On the other hand, if the outbound resource is non-XA, then the retry happens correctly. If the outbound MQSeries adapter is configured with XA, then Section 15.1.1.2, "Outbound Adapter Does Not Perform an Outbound Retry If the Outbound Adapter Throws an Exception with GLOBAL_RETRY" applies since this is treated by the framework as a GLOBAL_RETRY.

15.1.6.3 Adding Additional Encoding Not Supported

Standard Java encodings and their mappings are provided with the MQ Series Adapter but the Adapter Configuration Wizard does not support addition of additional Java encodings that you may require.

To add support for the standard Java encodings that are not provided in the list, you can perform the following steps:

1. Extract the `MQSeriesAdapter.jar` file from the `MQSeriesAdapter.rar` file.

2. Extract the `mq.properties` file from the MQSeriesAdapter.jar file.

3. Add the entry in the `mq.properties` file. This file has two entries for a mapping between MQ Series encoding and Java encoding. For each new encoding that you require, you must make two entries to the `mq.properties` file. Make an entry for the MQ Series encoding to the corresponding Java encoding and the other entry for the Java encoding to the corresponding MQ Series encoding.

15.1.6.4 Using MQ Series version 7.0.0.2 and XA Transactions

Oracle JCA Adapter for MQ Series is certified with MQ Series version 7.0.0.2. If you are using XA transactions, then you must configure the server connection channel with a level of conversation sharing set to 0.

15.1.6.5 MQ Adapter:Async Req-Response(Non-solicit) Always Requires Fallback Queue

In the MQ Adapter Wizard, if the user does not provide the Fallback Queue, but does provide a valid Reply Queue, it complains about Illegal Reply queue; but, if the user provides the Fallback Queue, and also provides the Reply Queue, then the adapter replies properly to the Reply Queue.

This happens when you have Message Type as "Normal" and not "Request". As a workaround, the user can enter some dummy queue for the Fallback Queue, if the intention is not to use the Fallback Queue.

15.1.7 Oracle JCA Adapter for Socket Issues and Workarounds

This section describes the following issue and workaround related to Oracle Socket Adapter:

- Section 15.1.7.1, "Oracle Socket Adapter Not Supported On a Cluster-Based Environment"

- Section 15.1.7.2, "Inbound Operation Hostname Should Be an IP Address for a Multiple-NIC Host"

15.1.7.1 Oracle Socket Adapter Not Supported On a Cluster-Based Environment

Oracle Socket Adapter is not supported on a cluster-based environment. If you try to deploy an inbound Oracle Socket Adapter in a clustered environment, then one of the managed servers throws an error message that the server's port is already in use. You will see this issue if you are trying to deploy onto a cluster where one or more managed servers are on the same physical machine.

15.1.7.2 Inbound Operation Hostname Should Be an IP Address for a Multiple-NIC Host

When configuring the Oracle Socket Adapter using the Adapter Configuration Wizard, at step 4 of 7, if you select either of:

- **Inbound Synchronous Request/Reply**

- **Inbound Receive**

Then, at Adapter Configuration Wizard step 5 of 7, note the following:

- If you want to override the default port for the given socket connection JNDI name, check **Specify Host and Port**.

- If you check **Specify Host and Port**, you must enter a value for **Host Name**. Note the following:

  - If your host is associated with only one IP address, that is, if it has only one Network Interface Card (NIC), enter `localhost`.

  - If your host is associated with more than one IP address, that is, has more than one NIC, enter the one IP address you want the Oracle Socket Adapter to listen on.

    The Oracle Socket Adapter can listen on only one specific IP address. The Oracle Socket Adapter cannot listen on multiple IP addresses.

15.1.8 Native Format Builder Issues and Workarounds

This section describes the following issues and workarounds related to the Native Format Builder:

- Section 15.1.8.1, "Delimited by White Space Option Not Supported in NXSD"
- Section 15.1.8.2, "Payload Validation Fails for Payloads Greater Than 10 MB in Size"

15.1.8.1 Delimited by White Space Option Not Supported in NXSD

In the Specify Delimiter's page of the Native Format Builder wizard, the `White space (any number of tab, space)` option in the Delimited by list is not supported.

15.1.8.2 Payload Validation Fails for Payloads Greater Than 10 MB in Size

When payload validation is enabled, it may fail with a `java.lang.ClassCastException` for payloads greater than 10 MB in size.

For more information, see "Payload Validation" in the *Oracle Fusion Middleware User's Guide for Technology Adapters*.

15.2 Configuration Issues and Workarounds

There are no known configuration issues at this time.

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Oracle B2B

This chapter describes issues associated with Oracle B2B. It includes the following topics:

- Section 16.1, "General Issues and Workarounds"
- Section 16.2, "Configuration Issues and Workarounds"
- Section 16.3, "Documentation Errata"

The issues and workarounds listed here are those that were known at the time of the product's initial release to the public. Additional issues and workarounds may have been discovered since the initial release. To view the latest known issues associated with Oracle SOA Suite, BPM Suite, and related SOA technologies, go to the Oracle Technology Network (OTN) at:
http://www.oracle.com/technetwork/middleware/docs/aiasoarelnotes-196861.html.

16.1 General Issues and Workarounds

This section describes general issues and workarounds. It includes the following topics:

- Section 16.1.1, "Using Oracle B2B Online Help"
- Section 16.1.2, "Oracle B2B Supports Third Party JMS Providers"
- Section 16.1.3, "IBM WebSphere Not Supported For Deployment"
- Section 16.1.4, "Non-administrator Users Can Perform Certain Administrative Tasks"
- Section 16.1.5, "replyToAppMessageId Incorrectly Set in Acknowledgement Notifications"
- Section 16.1.6, "Incorrect User Information for Receipt Notification (AS2 MDN) to AQ"
- Section 16.1.7, "Application Message Report Displays Incorrect Document Type"
- Section 16.1.8, "Generated MDN Incorrectly Uses Name Identifier in Inbound Agreement"
- Section 16.1.9, "Oracle B2B Signs MDN Using the Algorithm Set in the Agreement Delivery Channel"
- Section 16.1.10, "Sending an Unknown AS2 From-Header Is Not Recognized as an Error"

16.1.1 Using Oracle B2B Online Help

Allow pop-ups (disable the browser pop-up blocker) to use the Oracle B2B online help.

16.1.2 Oracle B2B Supports Third Party JMS Providers

Oracle B2B works with third party JMS providers. IBM WebSphere application server has been validated as a JMS provider for Oracle B2B.

16.1.3 IBM WebSphere Not Supported For Deployment

Oracle B2B is not supported on IBM WebSphere. The B2B user interface will not be deployed on IBM WebSphere.

16.1.4 Non-administrator Users Can Perform Certain Administrative Tasks

Although the Save button is not displayed on the Agreement page for remote partner administrators, these users can update and save agreements by editing the agreement name on non-deployed agreements, and then updating and saving the agreements. Oracle B2B does not check the user authorization in this case.

16.1.5 replyToAppMessageId Incorrectly Set in Acknowledgement Notifications

Oracle B2B offers a notification of an Acknowledgement (AS2-MDN or EDI-FA) that is sent back to a composite or AQ (IP_IN_QUEUE) if configured using the Oracle B2B interface (Administration > Configuration page). The received Acknowledgement notification appears similar to the following:

```
<Acknowledgment xmlns="http://integration.oracle.com/B2B/Acknowledgment"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<replyToB2BMessageId>0AB1FE0211FE9335702000001120666E0</replyToB2BMessageId>
```

```
<replyToAppMessageId>0AB1FE0211FE933570200000120666E0</replyToAppMessageId>
<ackB2BMessageId>0AB1FE0211FE9338CB80000012066930-1</ackB2BMessageId>
</Acknowledgment>
```

Note, however, that the `replyToAppMessageId` is always incorrectly set to be the same as the `replyToB2BMessageId`.

16.1.6 Incorrect User Information for Receipt Notification (AS2 MDN) to AQ

When delivering a receipt notification (AS2 MDN) to AQ, Oracle B2B incorrectly sets the user information to the document routing ID (if the outbound document has a document routing ID set) instead of b2backuser.

16.1.7 Application Message Report Displays Incorrect Document Type

The application message report in the Oracle B2B interface incorrectly displays document types. Specifically, the application message report displays the following:

- For receipt messages, the displayed document type is for the outbound message. If you want to collect metric data on the number of inbound application messages for a specific document type, the issue can cause queries to report incorrect data.

- For FA messages, the displayed document type is the same as the FA message type.

16.1.8 Generated MDN Incorrectly Uses Name Identifier in Inbound Agreement

In synchronous AS2 mode, the generated MDN uses the AS2 Identifier set in the inbound agreement. If no AS2 Identifier is defined in the agreement, then the generated MDN incorrectly uses the name identifier. The workaround is to set the expected AS2 Identifier in the inbound agreement.

16.1.9 Oracle B2B Signs MDN Using the Algorithm Set in the Agreement Delivery Channel

In AS2, a request for a signed MDN from the recipient can specify the algorithm to use for signing. Oracle B2B, however, incorrectly signs the MDN with the algorithm set in the agreement delivery channel. This algorithm may be different from the requested algorithm.

16.1.10 Sending an Unknown AS2 From-Header Is Not Recognized as an Error

When receiving an EDI document over an AS2 exchange, if Oracle B2B fails to identify the trading partner using the AS2 From Identifier, Oracle B2B tries to identify the partner using the EDI Interchange and Group ID. The failure to identify the partner by the AS2 Identifier is ignored.

16.1.11 Incorrect URL in the Wire Message for a Received Synchronous MDN

The synchronous MDN received by the host server in response to an AS2 message sent over SSL shows an incorrect URL in the wire message. Specifically, the URL indicates the HTTPS protocol while the port information is for the HTTP listen port.

16.1.12 Invalid EDI Interchange ID Qualifier or Function Group Identifier Is Not Recognized as an Error

Setting an invalid EDI Interchange ID Qualifier or an invalid Function Group Identifier (not part of the default ECS Qualifier Standard Code List_105 or Function Identifier Code Standard Code List_479 respectively) is not signalled as a MSG_ ERROR in the outbound case. Oracle B2B instead delivers the message to the configured endpoint without error.

16.1.13 Oracle Enterprise Manager Shows Incorrect Error Count Following Successful Resubmit

When a B2B channel is configured to retry following an error (such as a transport channel being unavailable) and the message is subsequently successfully delivered, Oracle Enterprise Manager fails to adjust the corresponding error count.

16.1.14 XEngine Is Not Installed on the Second Node in a Clustered Environment

In a clustered environment, the XEngine is not installed on the second node when the node is on another computer. This is because the XEngine extraction occurs only when you run the Configuration Wizard (which is not run automatically on the second node). The workaround is to perform the XEngine extraction manually and then restart the server.

16.1.15 EDI Batching Results in Incorrect Average Message Size on Metrics Page

When Oracle B2B batches multiple messages into a single message, the native message size for each business message is recorded as the size of all messages in the batch. This results in Oracle B2B reporting an incorrect average message size on the Metrics pages of the Oracle B2B interface.

16.1.16 Test Page for B2BMetadataWSPort Is Not Found

The test page for B2BMetadataWSPort results in a "404 Not Found" error. The workaround is to change the port number in the URL for the link from the managed server port to the admin server port (7001) and try again.

16.1.17 Use the Oracle B2B Interface Instead of Command-Line Utilities in a Clustered Environment

In a clustered environment, do not use the B2B command-line utilities for purging data, importing data, and exporting data. Use the Oracle B2B interface for these functions.

16.1.18 ebMS Negative Acknowledgments for Decryption and Signature Failures

For ebMS documents, negative acknowledgments for decryption and signature failures are sent as security severity errors. For all other negative ebMS acknowledgments, the error is set as UnknownError.

16.1.19 Issues When Resubmitting Messages Using the AS2 Exchange

Under certain circumstances, resubmitting an asynchronous AS2 inbound wire message does not work as expected. For example, change the state of an inbound agreement to inactive. On receiving a message, a negative acknowledgment is

generated and sent back. The sender sees the message state as MSG_ERROR on receipt of the negative acknowledgment. Resolve the issue on the inbound side by changing the agreement state from inactive to active. Now two scenarios for resubmitting the asynchronous message exist:

Scenario A: Resubmit the wire message at the sender's side. Because the message was already processed at the receiver's end, this results in a duplicate error message.

Scenario B: Resubmit the wire message at the receiver's end. This passes at the receiver's end and pushes back a positive acknowledgment message. However, the state of the message on the sender's side is not changed. Although scenario A can be expected, scenario B should have worked. However, because the state of the message is MSG_ERROR, the incoming positive acknowledgment is ignored. This results in inconsistency in reporting at the two ends. The inbound side passes the message to the back-end successfully, whereas the outbound side has the message in the MSG_ ERROR state.

16.1.20 XSLTCallout Is Not Available

The predefined callout, `XSLTCallout`, is not available in this release.

16.1.21 JTA Settings Based on Loads

Based on the database load and the application server load, tune the transaction timeout setting in the Oracle WebLogic Server Administration Console. Select JTA from the home page and increase the default setting of 30 to a higher value.

16.1.22 Settings for Large Payloads When Using Enqueue Scripts

Set the following properties in the `enqueue.properties` file when enqueuing large payloads:

```
payload=payload_filename_with_absolute_path
eventName=LARGE_PAYLOAD=true
```

Because the full directory path must be provided, use the local computer for this operation.

16.1.23 FTPS Connection Times Out with Implicit SSL Encryption

Implicit SSL encryption is not supported in the transport layer.

16.1.24 %ACTIONNAME% Filename Format Is Not Recognized

The `%ACTIONNAME%` filename format is not recognized when used with the File, FTP, and SFTP transport protocols.

16.1.25 RosettaNet Message Encoded in UTF-16 Fails at the Receiver's End

Oracle B2B is unable to process an inbound RosettaNet message encoded as UTF-16. A document protocol identification error is returned.

16.1.26 Save Autogenerated Agreements Before Deployment

Save autogenerated agreements at least once before the agreements are deployed. The agreement parameter settings for translation/validation and FA are generated in the agreement only when you save an agreement and not when it is autogenerated.

Although the interface may show the default values, they are not captured in the agreement metadata and are ignored at run time; that is, the inbound EDI message may not be translated.

16.1.27 FTP Listening Channel Does Not Have Proxy Support

The Generic FTP-1.0 protocol for a listening channel does not have proxy support.

16.1.28 b2bpurge Command-Line Utility May Not Terminate Listening Threads for Inactive Channels

When using the `b2bpurge` command-line utility, if inactive channels exist, then those listening threads are not terminated. The workaround is to repeat the `b2bpurge` call two or three times until the listening threads for the inactive channels are terminated.

16.1.29 ebMS Delivery Channel Is Required for ebMS Inbound Agreements with Asynchronous Ack Mode

For an inbound agreement that uses an ebMS exchange with the Ack Mode parameter set to asynchronous, an ebMS delivery channel is required.

16.1.30 Even with the Log Level Set to Default, Details Are Written to the Log File

Normally the default log level suppresses details in the log file. However, for RosettaNet deployments, log details are not suppressed even with the default log level setting.

16.1.31 Using Document Definition Names with Multibyte Characters in JDeveloper

When working with document definition names with multibyte characters (MBCS-named document definitions) in the B2B Configuration Wizard in JDeveloper, you may see the error "Invalid UTF8 encoding" at the step where the document definitions are loading for you to select the document definition for the service. This occurs when JDeveloper is running in a non-UTF-8 environment (for example, in Windows, using Simplified Chinese Win2k3, or in a native encoding Linux OS, using zh_CN.gb18030). However, in a Linux environment with UTF-8 encoding, such as zh_CN.utf8, MBCS-named document definitions load correctly. After loading, the MBCS-named document definition becomes the name of the document XSD folder in JDeveloper.

To ensure that MBCS-named document definitions load and display correctly in the B2B Configuration Wizard, do the following:

- When using JDeveloper in a Linux environment, first set the `LANG` and `LC_All` environment variables to a locale with the UTF-8 character set. This enables the operating system to process any characters in Unicode. Then start JDeveloper.

- When using JDeveloper in a Windows environment, start JDeveloper using UTF-8 encoding with `jdev -J-Dfile.encoding=utf-8`.

16.1.32 Suppressing Validation Errors on Extra Elements in HL7 Messages

For HL7 messages, set `HL7.AllowExtraData` to false in `XERegistry.xml` to suppress validation errors on extra elements.

The `XERegistry.xml` file is located in the following directory:

> *SOA_HOME*\thirdparty\edifecs\XEngine\config

16.1.33 Oracle B2B in High Availability Environments

See Section 4.2.11, "Message Sequencing and MLLP Not Supported in Oracle B2B HA Environments," for more information.

16.1.34 Methods for Recovering Messages in High-Stress Environments

Use the following solutions to recover messages that would otherwise be lost in high-stress environments involving outbound messages with multiple instances of Oracle B2B running, each with multiple threads.

Situation 1: Duplicate File Names

In situations where all message file names, *TPname_timestamp*, are sent to the same directory, the timestamps include milliseconds; thus, in normal situations, all file names are unique. However, in high-stress environments, duplicate file names can occur, resulting in files being overwritten by a later file with the same name.

The solution is to append the unique MSG_ID value to file names. In the B2B interface, go to the Partners link and select a remote trading partner. Go to Channels > Transport Protocol Parameters. For channels where the **Filename format** parameter is applicable, add %MSG_ID% as a filename format macro. All file names will then be unique.

Situation 2: Exhausted Message Redelivery Attempts

If you see the message java.lang.RuntimeException: AppMessage is null:*msg_id*, a race condition may be indicated. A race condition occurs when a JMS event has been enqueued and dequeued for processing, but the corresponding message is not committed in the run-time repository. The B2B engine will retry the transaction, but it may fail if retry occurs immediately. If all retry attempts are exhausted, the event delivery transaction is rolled back and an exception message is sent to the configured exception queue, if an exception queue is configured.

To configure the exception queue and to resubmit exhausted redelivered messages from the exception queue to B2BEventQueue, use Oracle WebLogic Server Administration Console.

Do the following:

1. Create a queue and name it something like B2BEventException.

2. In the console, go to the settings for B2BEventQueue (Home > JMSModules > SOAJMSModule) and click the Configuration > Delivery Failure tab.

3. For Expiration Policy, select Redirect.

4. For Error Destination, select the queue you created in step 1 (for example, B2BEventException).

   The messages that cannot be processed by B2B for the given redelivery count are forwarded to this error destination queue.

5. Move the messages from the configured error destination queue to B2BEventQueue to resubmit the messages for processing.

   See the Oracle Fusion Middleware Oracle WebLogic Server Administration Console Online Help topic, "Manage queue messages," for how to move messages.

16.1.35 Inbound ebMS Messages Checked Irrespective of Duplicate Elimination Setting

According to ebMS standards, Oracle B2B must check for duplicate inbound ebMS messages *only* if the DuplicateElimination tag is present in the ebMS message. However, currently, B2B tries to detect duplicate inbound ebMS messages irrespective of whether the DuplicateElimination tag is present or not in the ebMS message.

16.1.36 SOA Infrastructure Schema Prevents the Use of Edition-Based Redefinition

Edition-based redefinitions are not supported for SOA B2B in the current release.

16.1.37 Transport Callouts Are Not Available for Listening Channels

Transport callouts are not available for listening channels.

16.1.38 B2B User/Role Provisioning

In a multiple-node SOA server domain, the JMX framework propagates local changes to a file-based policy to each run-time environment, so that the data is refreshed based on caching policies and configuration.

In a multiple-node server environment, it is recommended that the domain policy and credential stores be centralized in an LDAP-based store. Otherwise, if they are file-based, then local changes to user privileges made in the B2B UI will not be properly propagated and can end up in error situations.

See *Oracle Fusion Middleware Security Guide* for more information.

16.1.39 Fault Repair and Resubmission From Oracle Enterprise Manager Facility Is Not Available

In Oracle Enterprise Manager, there is no fault repair for Binding Components such as Oracle B2B. It is only available for service engines such as BPEL and Mediator.

16.1.40 Create Separate Batch Criteria For Document Type With Varying Application References

Different EDIEL document types (DELFOR and MSCONS) having different interchange APPLICATION REFERENCE settings, when batched together within a single interchange, used the setting for APPLICATION REFERENCE field from only the first document to be batched.

To avoid this issue it is suggested that if documents have varying interchange Application References, then users should create separate batching criteria for these documents, that is do not batch them together.

16.1.41 Multiple Sender ID Support Required Redeployment After Addition of New ID

The current Oracle B2B implementation to support multiple sender interchange ID requires users to redeploy the agreements after the addition of the new interchange ID. If deployment of agreements is not done, then the interchange IDs that were present at the time of the initial deployment are the only ones that are considered during validation check.

16.1.42 FTP Listening Channel Does Not Support Proxy

FTP listening channel does not support proxy.

16.1.43 Clicking on Reports Displays Spurious Warnings in the Managed Server Console Log

Clicking on the Reports tab (defaults to Business Message Report) results in several instances of the following warning in the Managed Server Console log (from where the managed Server is started):

Could not find selected item matching value "" ...

16.1.44 Duplicated GUID in EDI Batched Outbound Messages Causes All to Error

If there are two messages with same GUID value in a set of batched outbound EDI messages, then the XEngine will error out all the messages in that batch. In earlier releases, the behavior was to error out only the duplicate message, the other messages would pass through.

16.1.45 CPP/CPA Conversion to B2B Metadata With BPSS Document Has Limitations

The CPP/CPA `cpaimport` command line utility option, when executed with `-Dstandard=true` has some known limitation in converting to B2B metadata. It is not supported if CPP/CPA contains references to BPSS documents.

16.1.46 B2B Metadata Service Allows Anonymous Access

To work around, the following URL should not be exposed outside of a company network.

`http://<server>:<port>/integration/services/b2b/B2BMetadataWSPort`

16.1.47 TPAConfigRequest Web Service Returns All TPAs Without DUNS Identifier

In TPAConfigRequest Web service, if DUNs identifier is passed, it returns all the agreements which do not have DUNS identifier. It should get only those agreements having DUNS number in Trading Partner Agreement.

16.1.48 ebMS 1.0 Does Not Support Sync Ack Request

ebMS 1.0 requires a syncReply attribute under the Via element. B2B is adding a separate element called syncReply, which is not per the expectations of the 1.0 version specification for ebMS exchange. Due to the incorrect usage, the Receiving party will not understand that Sender is requesting syncAck and would send an Async Ack response.

16.1.49 ebMS Compression Not Supported

The ebMS exchange does not support compression. ebMSoutbound:compression wire-message does not show compressed headers.

The ebMS delivery channel shows compression flag in the user interface. This flag is no longer functional for ebMS.

16.1.50 Custom Inbound Folder Support Not Available For Mail With Pop3

E-mail Channel Support for Inbound with a different folder is not supported for POP3 configuration.

16.1.51 Document Retry Not Supported With Batching

Document retry feature is not supported with batching of EDI/x12.

16.1.52 Incorrect Interchange Sender/Receiver ID for x12 Caused Failure to Generate FA

If we receive an inbound X12 4010 850 message with the Interchange sender (or receiver ID) not matching with the configured setting in the agreement (with validation), the negative FA is not generated. The message fails as expected, however the FA does not get generated. The FA generation issue is not seen for Group level Identifier failure.

A similar case in EDIFACT has the FA generated for both Interchange and Group level failures.

16.1.53 Sequence Report Not Available

Currently there is no provision to query for messages that are part of a certain sequence from the B2B user interface. The workaround is to query the database. The following is a sample query to list all messages stuck in the sequence manager table:

```
SELECT sm.SEQUENCE_TARGET,bm.MESSAGE_ID,bm.SENDER_NAME,bm.RECEIVER_
NAME,bm.DOCTYPE_NAME,bm.DOC_PROTOCOL_VERSION FROM  b2B_sequence_MANAGER sm,B2B_
Business_message bm WHERE bm.MESSAGE_ID=sm.MESSAGE_ID
```

16.1.54 Sequence Stacked/Processed Messages Store Transport Details With Processed Message

When channel related details are updated and deployed, use Application message resubmit for outbound messages to reprocess the message, since Wire Message resubmit of outbound messages will simply post the packed and do look at the updated metadata.

Similarly for reprocessing of inbound messages based on new deployed metadata, use Wire Message resubmit and not application message resubmit.

16.1.55 Removing Xpath Identification Expression From Document Definition Requires Restart

When we change the xpath identification expression, then a redeployment takes the new xpath expression set in the definition. However, if we remove the xpath expression and deploy, the change is not reflected and user must restart before the change works.

16.1.56 Obfuscated Payloads Cannot Be Retrieved Using Java Instance Message API

If obfuscation is enabled then B2B Instance Message API returns encrypted Wire payload and does not return Business message payload.

16.1.57 Only Identifiers Used in the First Agreement Are Added Into the CPA Export

If the B2B metadata to be used in CPA export utility is an entire repository export, then there might be a scenario where the identifiers set in different agreements could have a variation. Under such conditions, it is observed that only identifiers used in the first agreement are extracted as partyId elements. If there are other identifiers in

additional agreements which are part of the export, these are not added to the CPA XML.

16.1.58 Internal E-mail Listening Channel Not Supported

In the Oracle B2B Console, internal e-mail listening channel can be configured using internal flag in Administration>Listening Channel>Generic Email-1.0>Channel Attributes; however, there is no support available for internal e-mail listening channel.

16.1.59 JTA Timeout Must Be Set When Using b2b.maxtimeinaquiredstate

b2b.MaxTimeinAquiredState does not work for inbound message if JTA times out. Set the JTA timeout to provide enough time for b2b.MaxTimeinAquiredState.

16.1.60 B2B Data Cannot Be Purged Using SOA Purge Script

B2B related data cannot be purged using a standard SOA purge script. To purge B2B related data use the B2B purge utility. See "Purging Data" in *Oracle Fusion Middleware User's Guide for Oracle B2B* for information about the utilities. It is recommended that this purge be done with the exact same criteria that was used for the SOA purge.

16.1.61 Incorrect GUID Brings Down the Server

This issue applies only to the Linux 64-bit platform.

When a message with an incorrect GUID format for EDI XML is enqueued, B2B server goes down and is unable to start up again going into NOT_RESTARTABLE state.

For example, a good GUID looks like:

```
"{2AFCF387-AC9E-11DF-AC03-005056A618D7}"
```

A bad GUID looks like:

```
"2d31343138303235343433333337333537"
```

Possible workarounds:

1. Correct the GUID to the expected format.

2. Do not pass any GUID at all.

16.1.62 Conversation ID Not Working Separately With JMS

1. The outbound JMS property, `jca.jms.JMSProperty.INREPLYTO_MSG_ID`, does not work in ebMS if the property `jca.jms.JMSProperty.MSG_TYPE` is not set to 1. This is not required when using AQ or Fabric.

2. The outbound setting of JMS property, `jca.jms.JMSProperty.CONVERSATION_ID`, does not set the conversation ID in the outbound message.

Workaround:

This must be passed along with the property

```
jca.jms.JMSProperty.INREPLYTO_MSG_ID
```

Pass it in this way:

```
jca.jms.JMSProperty.INREPLYTO_MSG_ID=MSGID_OF_THE_REFERRED_MSG:CONVERSATION_ID
```

The `MSGID_OF_THE_REFERRED_MSG` is the business message ID of the message to which the enqueued message is responding.

`CONVERSATION_ID` is the conversation ID that is required to be set in the outbound ebMS message.

If no message is being referenced, it can be left out and just the conversation ID can be passed after the colon.

16.1.63 CPA Export Does Not Clean Up Older Data Before Unzip

When running the CPA export utility, the B2B metadata is unzipped into the export folder before conversion of the same to CPA file. The unzip does not clean up older data in that location which causes problems in the CPA export utility. To work around this issue, clean up older data when running the CPA export utility to avoid interference.

16.1.64 cpa import does not bring in encryption settings

CPA with encryption setting of a channel should be set the same in the B2B model; however, when running the CPA import utility to generate the B2B model, the CPA import utility is not bringing the same back into the B2B `soa.zip` created.

16.1.65 Policy Store, Identity Store and CSF Must Be OID Based

Using the default XML-based store for making updates from B2B, which could be on a managed server, can cause inconsistent results leading to unpredictable errors. It is recommended that all stores (identity, policy, csf) be LDAP-based external OID stores when used with B2B.

16.1.66 Error ORA-01461 in E-mail Attachment Use Case

The issue occurs in cases where AttachmentsDirectory property is not defined, and the e-mail body contains message body content and also has an attachment.

To avoid this error, define the AttachmentsDirectory property, which specifies the location where e-mail attachments are saved.

16.1.67 Login to Oracle B2B Console Throws "Redirecting Request" Error in Firefox

Using the Firefox web browser, if an Oracle WebLogic Server-created B2B Monitor role user which does not have an assigned trading partner in B2B tries to login to the Oracle B2B console, then that user may see an error that "Firefox has detected that the server is redirecting the request for this address in a way that will never complete. This problem can sometimes be caused by disabling or refusing to accept cookies."

To log in to B2B console after seeing this error, remove cookies in the Firefox browser using Tools>Options>Privacy>Show Cookies>Remove Cookies.

16.1.68 B2B Utility b2benqueue is not Supported

The B2B utility `b2benqueue` is not supported in Oracle B2B release 11.1.1.4.0.

16.1.69 Async MDN Not Returned If Inbound Message Processing Error Occurs

In the case of an inbound message processing error, B2B does not send an Async AS2 MDN (ack) back to remote trading partner.

16.1.70 Property b2b.checkDuplicate May Cause Infinite Loop

If `b2b.checkDuplicate` is set to false (default is true), then there could be a situation where B2B starts sending repeated messages to itself in a never ending loop.

The workaround is to stop the server and start it up again.

16.1.71 Large Payload Issue for Inbound Generic HTTP on Microsoft Windows Platforms

When receiving a large payload over Generic HTTP on a Microsoft Windows environment, the payload is stored in the configured large payload folder (as set in the Configuration of B2B console). If the incoming message ID contains characters such as : < > and so on, it could cause a problem creating the payload file in the folder.

Note that when using JMS, the message ID created does contain such characters in the message ID.

16.1.72 B2B Does Not Validate the Incoming MIC in MDN

Normally, an AS2 MDN should report the MIC hash calculated by the receiving end. The MIC reported in the MDN must be same as the MIC calculated when sending the outbound message. This validation in necessary to confirm that there was no message tampering in between.

B2B does not validate the MIC and hence will accept non-matching MIC values without errors.

16.1.73 Unsigned Message With Signed MDN Reports Incorrect MIC

Normally, upon receiving an unsigned message with a request for signed MDN, the receiving party is supported to calculate the MIC and report the same in the MDN under the field RECEIVED-CONTENT-MIC. The MIC is verified by the sending to ensure that there was no message tampering.

Actual Behavior: On receiving the unsigned message, the MIC calculated and reported back to the sender does not seem to be correct.

16.1.74 Outbound Stacked Message Does Not Attempt Wire Message Resubmit

When running messages under the document sequencing mode, any error for a message will block subsequent messages from delivery until the message with the error is cleared. To clear this error (if it was a delivery failure due to an unavailable endpoint) ideally a wire message resubmit should work. However, the wire message resubmit does not work for outbound stacked messages in sequence.

16.1.75 Failure Delivery on Document Retry Attempt Does Not Initialize Pending Retries

Normally, if there is delivery failure on a document retry attempt, the failure should be handled by Channel retry; however, the failure in a document retry attempt is not handled by the remaining channel retries nor by the remaining document retries.

The following line should not be in the B2B documentation:

"Cases involving no channel retry, Document retry will be triggered after Document retry interval."

16.1.76 DynamicIP Property Does Not Work With JMS

The property `jca.jms.JMSProperty.DynamicIP` does not work.

The workaround is to use the use `actionName` parameter to set DynamicIP.

16.1.77 Updating Document-level Interchange/Group ECS Requires Validation

The EDI Interchange and Group ECS files can be uploaded in two places:

1) When creating new Document Protocol Version from the links Administration>Documents in the B2B console.

2) These ECS files can be overridden at the Trading Partner level by going to Partners>Documents in the B2B console and selecting the checkbox for **Override Version Param**.

If you upload new Interchange/Group ECS files, as in step(1), the Trading Partner level ECS files are removed and dangling references are created in the MDS repository. This error is not detected until runtime.

If you make any such changes, you must to go to all Trading Partner configurations, uncheck **Override Version Param**, and then check it again. This will fix the dangling ECS file references.

16.2 Configuration Issues and Workarounds

This section describes configuration issues and workarounds. It includes the following topics:

- Section 16.2.1, "Functional Ack Internal Properties Setting Ignored for HL7"
- Section 16.2.2, "Unable To Specify Separate Parameters for Remote Trading Partner Sender and Receiver"
- Section 16.2.3, "Unable To Set Ack Requested Field for Interchange"
- Section 16.2.4, "Overriding Defaults in a Host Document Not Carried to the Remote Trading Partner"
- Section 16.2.5, ""Query Sent to an Unactivated UnitOfWork" Exception"
- Section 16.2.6, "Limitation of b2b.addcorrelatedfainfoinexceptionxml Property"
- Section 16.2.7, "Enable Auto Search Feature Does Not Function"
- Section 16.2.8, "Use the ACTION_NAME Parameter to Pass JMS Interop Parameters"
- Section 16.2.9, "Saving Trading Partner With Large Number of Identifiers and Agreements Takes A Long Time"

16.2.1 Functional Ack Internal Properties Setting Ignored for HL7

For HL7, setting the Functional Ack internal property (FAInternalProperty) to false using the Administration > Configuration page in the Oracle B2B interface causes Oracle B2B to nevertheless use the payload header FA internal properties instead of the design-time parameters.

When the FAInternalProperty is set to true and there are different payload and design-time parameter values, you may see an error in the Ack message. Therefore, it is recommended that you do not set the FAInternalProperty to true for HL7.

16.2.2 Unable To Specify Separate Parameters for Remote Trading Partner Sender and Receiver

Although the metadata for a remote trading partner stores separate information for the sender and the receiver for the same document definition, you cannot specify these differences using the Oracle B2B interface.

The workaround is to create a new document definition and use the two definitions to specify the parameters for the sender and receiver separately.

16.2.3 Unable To Set Ack Requested Field for Interchange

The Oracle B2B interface does not offer the ability to set the Ack Requested field for Interchange.

16.2.4 Overriding Defaults in a Host Document Not Carried to the Remote Trading Partner

When creating a host document, including specifying the version, type, and definition, Oracle B2B assigns default values to certain fields that can be overridden by the user. If you override one or more nonmandatory fields by making them blank and then add the definition to the remote trading partner, the default values that you intentionally left blank reappear for the remote trading partner.

To resolve this issue, manually make the nonmandatory fields blank again for the remote trading partner.

16.2.5 "Query Sent to an Unactivated UnitOfWork" Exception

When using any document protocol, the following exception appears in the seller's soa.log file:

```
oracle.toplink.exceptions.QueryException
Exception Description: Query sent to an unactivated UnitOfWork.
```

The workaround is to increase the JTA timeout from 30 to a higher value using Oracle WebLogic Server Administration Console.

16.2.6 Limitation of b2b.addcorrelatedfainfoinexceptionxml Property

When enabled, the property b2b.addCorrelatedFAInfoInExceptionXML sets exception message with detail of the Correlated FA message that indicated error for the outbound EDI document. This additional information is passed only to the AQ exception message and not to the Fabric exception message.

16.2.7 Enable Auto Search Feature Does Not Function

In the Oracle B2B interface, the Enable Auto Search parameter (on the Administration > Configuration page) does not function in this release.

16.2.8 Use the ACTION_NAME Parameter to Pass JMS Interop Parameters

Several parameters are used to communicate to/from B2B using JMS. Currently the following parameters are not directly available for JMS so you must use ACTION_NAME to pass the parameters.

FILENAME (Fabric (In Memory) parameter - b2b.filename)

CONTENTTYPE (Fabric (In Memory) parameter - b2b.contentType)

GROUPING (Fabric (In Memory) parameter - b2b.toTradingPartnerGroup)

TARGET (Fabric (In Memory) parameter - b2b.sequencingTarget)

CONNMODE (Fabric (In Memory) parameter - b2b.connMode)

CUSTOMHEADER (Fabric (In Memory) parameter - b2b.customHeader)

DYNAMICIP (Fabric (In Memory) parameter - b2b.toDynamicIP)

CONVERSATIONIDSEPERATOR (Fabric (In Memory) parameter - b2b.conversationIdSeperator)

16.2.9 Saving Trading Partner With Large Number of Identifiers and Agreements Takes A Long Time

In the B2B console, saving a trading partner with a large number of indentifiers and agreements can take a very long time.

16.3 Documentation Errata

This section describes documentation errata. It includes the following topics:

- Section 16.3.1, "TRADACOMS Preview Feature For 11.1.1.4.0"
- Section 16.3.2, "Oracle Fusion Middleware User's Guide for Oracle B2B Has More Information Than Online Help"
- Section 16.3.3, "Default Value for the b2b.r1ps1 Property Is True"
- Section 16.3.4, "B2B Configuration Wizard Tooltip in JDeveloper Incorrectly Refers to OC4J"
- Section 16.3.5, "Outbound File/FTP/SFTP Changes to Default File Name Format"
- Section 16.3.6, "New Section: Monitoring Oracle B2B Faults and Rejected Messages"
- Section 16.3.7, "FA for Batched EDIEL Documents With Some Errors Indicates Accepted"
- Section 16.3.8, "New Property b2b.addCorrelatedFAInfoInExceptionXML"
- Section 16.3.9, "Additional Fabric Application Interface Parameter Details"
- Section 16.3.10, "Use b2b.hl7docidentification To Extract Document Information"
- Section 16.3.11, "Additional Information About Translation Web Service Request Attribute @type"
- Section 16.3.12, "Transport Protocol Parameter Timestamp Format Specification"
- Section 16.3.13, "Name Identifier Removed at ebMS Run Time; Use b2b.ebmsname=true Property"
- Section 16.3.14, "CPP/CPA Import and Export Performance Optimization"
- Section 16.3.15, "System Validates Saved Data"
- Section 16.3.16, "Oracle B2B Samples Location on OTN"
- Section 16.3.17, "Oracle B2B Document Editor MapBuilder Component Not Supported"
- Section 16.3.18, "Supported MIME Types"

- Section 16.3.19, "Batch Messages and Batch Schedules"
- Section 16.3.20, "User Deleted Using Oracle WebLogic Console Continues to Appear in Oracle B2B Interface for Several Minutes"
- Section 16.3.21, "Do Not Purge Instance Metadata When Messages Are Being Processed"
- Section 16.3.22, "Some Listening Channel Details Are Not Relevant for the Selected Protocol"
- Section 16.3.23, "Exporting Multiple Agreements That Include Agreement Names That Use a Multibyte Character Language"
- Section 16.3.24, "Enabling Multibyte Support for EDIFACT and HL7 Documents"
- Section 16.3.25, "Tablespace Configuration Recommendation for Production Environments"
- Section 16.3.26, "Updates to Trading Partner Configuration Documentation"
- Section 16.3.27, "Updates to Scheduling Trading Partner Downtime Documentation"
- Section 16.3.28, "Updates to Document Sequencing Configuration Documentation"
- Section 16.3.29, "Updates to Command-line Tools Documentation"
- Section 16.3.30, "Updates to Enqueue and Dequeue Utilities Documentation"
- Section 16.3.31, "B2B Configuration Properties"
- Section 16.3.32, "Enabling FTP Document Sequencing"
- Section 16.3.33, "JMS Parameters"

16.3.1 TRADACOMS Preview Feature For 11.1.1.4.0

The use of the TRADACOMS protocol is a developer preview feature for 11.1.1.4.0. To use TRADACOMS you must create the following identifiers through B2BConsole in Administration>Types tab:

TRADACOMS Name

TRADACOMS Code

16.3.2 Oracle Fusion Middleware User's Guide for Oracle B2B Has More Information Than Online Help

See *Oracle Fusion Middleware User's Guide for Oracle B2B* for more complete information than what is available from the **Help** link in Oracle B2B. In particular, the guide includes descriptions of the Active Document Types fields and Active Trading Partners fields (Table 17-1) and the Summary fields (Table 17-2) that are not found in the online help.

16.3.3 Default Value for the b2b.r1ps1 Property Is True

In Figure 30-3, "Configuring B2B Attributes," in *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite and Oracle BPM Suite*, the value displayed for the b2b.r1ps1 property in the Element_1 node is incorrect. The default value for this property is true, not false.

16.3.4 B2B Configuration Wizard Tooltip in JDeveloper Incorrectly Refers to OC4J

The descriptive text (tooltip) that pops up when you move the cursor over the **Test B2B** button on the Application Server Connection page of the B2B Configuration Wizard in Oracle JDeveloper incorrectly refers to the SOA OC4J HTTP port. Clicking this button tests the B2B server connection.

16.3.5 Outbound File/FTP/SFTP Changes to Default File Name Format

The outbound File/FTP/SFTP channel has the file name format changed in 11gR1 PS2 as follows,

```
ToParty_YearMonthDay_Hr_Min_Sec_millisec_<Threadhashvalue>_<VMID>.dat
```

For example,

```
GlobalChips_850_4010_2009FEB23_03_22_07_321_238_245 .dat
```

Threadhashvalue - executing threads value.

VMID - virtual machines unique identifier.

Note: the original format is `ToParty_<timestamp>.dat`.

16.3.6 New Section: Monitoring Oracle B2B Faults and Rejected Messages

The Oracle Enterprise Manager Fusion Middleware Control Recent Faults area lists the faults, including details such as the error message, time of the fault, and the associated composite instance ID. Faults can be logged on the incoming messages processed by a service binding component, or on the outgoing messages processed by a reference binding component.

Note that while all errors will appear in the Oracle B2B console, only a subset of faults will appear in Oracle Enterprise Manager Fusion Middleware Control. This subset includes all inbound messages containing an error after trading partner identification in Oracle B2B.

See Chapter 4, "Monitoring the SOA Infrastructure,"and Chapter 38, "Monitoring Service and Reference Binding Components," in *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite and Oracle BPM Suite* for more information.

Note the following:

1) Oracle B2B faults and rejected messages can be monitored from the composite home or domain home page.

2) Oracle B2B error messages can be seen in the Error Message column, and you can use the error link to see the error details and Oracle B2B message payload (if authorized).

3) Recovery details indicates that these faults are not recoverable from Oracle Enterprise Manager, however you can see the error details and payload (if authorized) to identify the problem. And in the Oracle B2B console, you can resubmit these rejected messages if necessary.

4) Composite instance IDs are not are shown for Oracle B2B faults (Unavailable), because in these cases no SOA composite instance was created.

5) Click on Logs to see the correlated Oracle B2B log messages.

16.3.7 FA for Batched EDIEL Documents With Some Errors Indicates Accepted

In EDIEL, because the UCM segment is not used in the CONTRL messages, the error for individual messages (received as part of a complete batched inbound message) do not get reported back. The interchange level acknowledgment will indicate status as 7, which is the accepted status message.

16.3.8 New Property b2b.addCorrelatedFAInfoInExceptionXML

If the property `b2b.addCorrelatedFAInfoInExceptionXML` is set to `true`, then Oracle B2B will add the Business Message ID of the Functional Ack message which holds error information for the outbound EDI message.

Without this information, because the error contains only information of the outbound message that went to error state, the user is unable to quickly correlate the outbound message to the Functional Ack message.

16.3.9 Additional Fabric Application Interface Parameter Details

In the *Oracle Fusion Middleware User's Guide for Oracle B2B*, Appendix C "Back-End Applications Interface," the following B2B Fabric application interface parameter details are to be added:

In Oracle Fusion Middleware 10g, Oracle B2B utilizes `ACTION_NAME` in `IP_MESSAGE_TYPE` to provide some special and dynamic features for the back end application to communicate with Oracle B2B. In Oracle Fusion Middleware 11g, Oracle B2B users can also use normalized message properties to achieve the same functionality as described in Table 16–1.

Table 16–1 Oracle B2B 10g IP_MESSAGE_TYPE Mappings to Oracle Fusion Middleware 11g SCA/Fabric Normalized Message Properties

Feature	Description	ACTION_NAME (IP_MESSAGE_TYPE)	SCA/Fabric	Protocol
Dynamic IP	Value of IP address to be dynamically overridden.	DYNAMICIP:<IP Address> example: DYNAMICIP:GlobalChips:10.177.255.212:12345	b2b.toDynamicIP example: GlobalChips:10.177.255.212:12345	HL7/MLLP
Dynamic EMail	Email address to be dynamically overridden.	DynamicEmail:<email address> example: DynamicEmail:admin@oracle.com	b2b.toDynamicEmail example: admin@oracle.com	Generic Email
Email Subject	Email subject to be dynamically overridden.	EmailSubject:<subject> example: EmailSubject:PurchaseOrder	b2b.toEmailSubject example: PurchaseOrder	Generic Email
File Name	File Name of the message. This is used typically for File name Preserve.	filename:<file name> example: filename:salesorder.xml	b2b.fileName example: salesorder.xml	AS2
Content Type	Content Type of the message.	contentType:<content type> example: contentType:text/xml	b2b.contentType example: text/xml	AS2
Broadcast	Group Name of the trading partner for which the message to be broadcast.	Grouping:<group name> example: Grouping:InventoryRequest	b2b.toTradingPartnerGroup example: InventoryRequest	-

Table 16–1   (Cont.) Oracle B2B 10g IP_MESSAGE_TYPE Mappings to Oracle Fusion Middleware 11g SCA/Fabric Normalized Message Properties

Feature	Description	ACTION_NAME (IP_MESSAGE_ TYPE)	SCA/Fabric	Protocol
Sequencing	sequenceTarget associated with the message.	TARGET:<target> example: TARGET:PatientId123	b2b.sequencingTarget example: PatientId123	HL7/MLLP
Large Payload		LARGE_PAYLOAD	payload field in NM	All protocols
Action	EBMS Action name associated with the message.	ACTION:<Action name> example: ACTION:ebMSRequest	b2b.action example: ebMSRequest	EBMS Generic File FTP SFTP
Service	EBMS Service associated with the message.	SERVICE:<Service name> example: SERVICE:FileTransfer	b2b.ebms.Service example: FileTransfer	EBMS
Service Type	EBMS Service Type associated with the message.	SERVICETYPE:<Service Type> example: SERVICETYPE:String	b2b.ebms.ServiceType example: String	EBMS
From Role	EBMS From Role associated with the message.	FROMROLE:<From Role> example: FROMROLE:Buyer	b2b.ebms.FromRole example: Buyer	EBMS
To Role	EBMS To Role associated with the message.	TOROLE:<To Role> example: TOROLE:Seller	b2b.ebms.ToRole example: Seller	EBMS
Overriding ConnectionMode	Connection Mode associated with the message.	CONNMODE:<ConnectionMode> example: CONNMODE:Permanent	b2b.connMode example: Permanent	MLLP
Custom Header	CUSTOM HEADER associated with the message.	CUSTOM_HEADER:<Value> example: CUSTOM_HEADER: SequenceId	b2b.customHeader example: SequenceId	MLLP

16.3.10 Use b2b.hl7docidentification To Extract Document Information

If you enqueue an HL7 document without specifying a document type name and revision, it should be able to extract that information from the HL7 payload. To retrieve the document type name and version if it is not specified in the out queue by the application, set the following property in Oracle Enterprise Manager Fusion Middleware Console.

```
b2b.HL7DocIdentification=true
```

16.3.11 Additional Information About Translation Web Service Request Attribute @type

The following information belongs in Table 19-4 "Translation Web Service Request" in *Oracle Fusion Middleware User's Guide for Oracle B2B*.

@type

This attribute is applicable for both `from` and `to`. The value expected for `from` and `to` are the name of the Trading Partner. If you want to use different identifiers instead of `Name` you can supply a value against attribute `@type`.

The following example holds the name of the trading partner:

```
<from>Acme</from>
```

The following example holds the DUNS ID of the trading partner. Note that because the example uses DUNS ID, it is mentioned explicitly against type. (This example applies also applies to the to element.)

```
<from type="DUNS">11111111</from>
```

16.3.12 Transport Protocol Parameter Timestamp Format Specification

The following information belongs in *Oracle Fusion Middleware User's Guide for Oracle B2B*, Table 5-3 "Transport Protocol Parameters," in the Filename Format row.

For outbound and inbound processing using generic exchange, the generated file name contains a time stamp of the default format (that is, YYYYMMMdd_HH_mm_ss_SSS).

In 11gR1 PS2, Filename Format provides the ability to provide a different timestamp format in the Transport Protocol Parameter: Filename Format, by entering the desired time stamp format in between square brackets ([]).

For example:

```
%FROM_PARTY%_%TIMESTAMP[YYYYMMMdd_HH_mm_ss_SSS]%.dat
```

would generate a file name like this:

```
Acme_2010MAR20_12_34_231.dat
```

16.3.13 Name Identifier Removed at ebMS Run Time; Use b2b.ebmsname=true Property

In PS2, the name identifier that is always present in an ebMS agreement is not sent as part of PartyId at runtime. You must add an ebMS Identifier for every ebMS agreement using the property b2b.ebMSName=true. This property can be set using the configmbeanutil utility.

16.3.14 CPP/CPA Import and Export Performance Optimization

The following information belongs in sections 18.9 "CPP/CPA Import" and 18.10 "CPP/CPA Export" in *Oracle Fusion Middleware User's Guide for Oracle B2B*.

In 11gR1 PS2, the Oracle B2B command line utility for CPP/CPA import and export, a new command line argument was added to optimize performance. The new property is

```
-Dstandard=true
```

When CPP/CPA import is performed using -Dstandard=true, then CPP/CPA export must be performed with -Dstandard=true.

For example:

```
 ant -f ant-b2b-util.xml b2bcpaimport -Dpropfile="<property-file>"
-Dstandard=true
 ant -f ant-b2b-util.xml b2bcpaexport -Dpropfile="<property-file>"
-Dstandard=true
```

If CPP/CPA import is performed using the -Dstandard=true flag, then for runtime to utilize this you must set b2b.useCPAid=true.

Outbound enqueue example:

eventName=ACTION:ebmsaction1;SERVICE:ebmsservice;SERVICETYPE:String;CPAI
D:myc

paid12343;

Similarly, for the inbound Trading Partner side, set `b2b.useCPAid=true` if
CPP/CPA import is performed using `-Dstandard=true`.

The CPA export/import utility will not support `standard=false` option in the
command line utility.

16.3.15 System Validates Saved Data

When validating an agreement, Oracle B2B validates the saved data. Oracle B2B does
not validate any unsaved changes that you make to an agreement.

16.3.16 Oracle B2B Samples Location on OTN

```
http://www.oracle.com/technology/sample_
code/products/b2b/index.html
```

16.3.17 Oracle B2B Document Editor MapBuilder Component Not Supported

The MapBuilder component of Oracle B2B Document Editor is neither certified nor
supported.

16.3.18 Supported MIME Types

The list of MIME types in the documentation for the Additional MIME Types
configuration property in Table 16-1 is incorrect. The correct list for version 11.1.1.3.0
is `application/xml : application/octet-stream :
application/EDIFACT : application/EDI-X12 : application/jpg :
application/gzip : application/x-gzip :
application/pkcs7-signature`.

16.3.19 Batch Messages and Batch Schedules

Note the following:

- If an exception occurs during an outbound batch, the batch is not cleared from the
  repository. This is true even if a trigger has been fired. In this case, you must
  manually delete the scheduled batch entry using the Administration > Manage
  Batch page in the Oracle B2B interface.

- If you disable a single time invocation batch schedule, any messages set in WAIT_
  BATCH mode remain in this mode if the schedule is not re-enabled before the
  expiry time. Furthermore, a new batch schedule created for the same document
  will not process these messages. The workaround is to resend the message using
  the resubmit application message option.

16.3.20 User Deleted Using Oracle WebLogic Console Continues to Appear in Oracle B2B Interface for Several Minutes

After deleting a user using Oracle WebLogic Server Administration Console, the user
continues to appear in the Oracle B2B interface for approximately five minutes. This is
because the user information remains cached in the managed server (Oracle B2B) for a
user-configurable period of time. Performing certain operations, such as provisioning
this user, can generate an error.

The workaround is to wait for longer than five minutes after deleting a user using Oracle WebLogic Server Administration Console.

Alternatively, you can specify the following system property in the `setDomain.sh` file to disable the cache:

`-Dweblogic.security.identityAssertionTTL=-1`

16.3.21 Do Not Purge Instance Metadata When Messages Are Being Processed

Do not purge instance metadata (using the Purge Instance Metadata button on the Administration > Purge tab) when messages are being processed. Doing so can result in messages in progress being lost. Instead, use the `b2bpurge` command-line utility, which accepts a date range and message state as arguments. When using the `b2bpurge` command, remove messages in the Completed state only (unless you have a specific reason for doing otherwise).

16.3.22 Some Listening Channel Details Are Not Relevant for the Selected Protocol

On the Listening Channel tab, some parameter fields that are displayed in the Channel Details area based on your protocol selection are not relevant to that protocol. Entering a value for these parameters has no effect. Table 16–2 lists the parameter fields that are *not* relevant.

Table 16–2 Fields That Display but Are Not Relevant for the Selected Protocol

If you select this protocol...	Then you can ignore these parameter fields...
AS1-1.0	Subject, Send as attachment, Ack Mode, Response Mode, Retry Count, Retry Interval, all fields on the Security tab
Generic File-1.0	Retry Count, Retry Interval
Generic AQ-1.0	Retry Count, Retry Interval
Generic FTP-1.0	Use Proxy, Retry Count, Retry Interval
Generic SFTP-1.0	Retry Count, Retry Interval
Generic JMS-1.0	Retry Count, Retry Interval
Generic Email-1.0	Subject, Send as attachment, Retry Count, Retry Interval

16.3.23 Exporting Multiple Agreements That Include Agreement Names That Use a Multibyte Character Language

If you select multiple agreements to export (from Administration > Import/Export), and any of those agreement names are in a multibyte character language, then in the export ZIP file, which contains a separate ZIP file for each agreement, the ZIP file names for the agreement names with the multibyte characters are garbled. The ZIP files with the garbled names are corrupted and cannot be successfully imported. However, a single agreement name (or repository name) in a multibyte character language is exported correctly.

16.3.24 Enabling Multibyte Support for EDIFACT and HL7 Documents

For documents using the XEngine, such as EDIFACT and HL7 documents, when you have a payload with multibyte characters that are not in the EDIFACT and HL7 document character set registry, you may see the error, "A data element contains characters not listed in the allowed character set."

To avoid this error, create a custom character set (CS) file in Oracle B2B Document Editor called `user.cs`:

1. In Oracle B2B Document Editor, click **Tools** > **Character Set Registry**.

2. In the Character Set Registry window, select the character set you want to override.

   For example, you may want to override EDIFACT UNOB CS or HL7 CS.

3. Click the **Duplicate** icon.

4. In the Duplicate Character Set Properties window, accept the defaults and add the specific multibyte characters at the end of the Charset blank; then click **OK**.

5. With the duplicated file still selected, click the **Export** icon.

6. Name the file `user.cs` and save it.

7. Copy `user.cs` to

   `ORACLE_HOME/soa/thirdparty/edifecs/Common`

Now documents such as EDIFACT and HL7 will use the `user.cs` file instead of the default CS file to verify the payload file.

16.3.25 Tablespace Configuration Recommendation for Production Environments

Increase the default tablespace configuration in production environments to prevent error conditions that can occur when processing a large number of messages.

16.3.26 Updates to Trading Partner Configuration Documentation

In Table 5-3 "Transport Protocol Parameters," the following `Filename format` property values are supported in addition to those listed: `%CONVERSATION_ID%`, `%INREPLYTO_MSG_ID%`.

16.3.27 Updates to Scheduling Trading Partner Downtime Documentation

The following is an addition to the new chapter on scheduling trading partner downtime in the *Oracle Fusion Middleware User's Guide for Oracle B2B*.

12.5. Throttling

The dispatcher is used to dispatch messages that are stacked after the trading partner downtime. Once the trading partner is available to receive messages, B2B sends the messages from the application along with the stacked messages.

There is a chance that stacked messages:

a. Affect the outbound message flow from an application.

b. Swamp the trading partner with the stacked messages that are scheduled during downtime.

To prevent these issues, you can set a dispatch interval, which is the delay in the dispatcher after every dispatch, so that application messages have a higher priority without swamping the trading partner with stacked messages.

Guidelines for Setting the Dispatch Interval

For a delay of 1 second, the dispatcher sends 1 message per second. Depending on the number of messages per second, the dispatcher interval should be set for production

usage. It is also required to consider memory, CPU usage, load, and so on, in arriving at the optimal setting.

The configuration property is set in Oracle Enterprise Manager Fusion Middleware Console as

```
b2b.OutboundDispatchInterval = milliseconds
```

16.3.28 Updates to Document Sequencing Configuration Documentation

In section 15.5 "Configuring Document Sequencing," note the following updates:

There are two options available to enable document sequencing for an AQ or JMS Trading Partner-facing listening channel.

- The Trading Partner can send messages with sequence target if inbound message sequencing is desired at the receiving end.

- The host Trading Partner can enable the sequencing option in the AQ or JMS Trading Partner-facing listening channel to sequence inbound messages. In this case, by default, B2B picks the queue name as sequence target.

16.3.29 Updates to Command-line Tools Documentation

The following are additions to the B2B Command-Line Tools documentation

16.3.29.1 Prerequisites for Running the Command-line Tools

In step 1 of the procedure the example is updated:

```
set ORACLE_HOME=C:\oracle\wls_home
set ANT_HOME=%ORACLE_HOME%\modules\org.apache.ant_1.7.1
set JAVA_HOME=%ORACLE_HOME%\jdk160_21
```

16.3.29.2 B2B Command line parameter validation

For any wrong key the command line user interface throws an error message. This is applicable to all the command line utilities in B2B.

For example, if the following command is entered:

```
ant -f ant-b2b-util.xml b2bschedule -Dfromdate="18/08/2010 1:50PM"
-Dtodate="18/08/2010 1:55 PM" -Dschedulename="Load" -Dtp=GlobalChips
-Dchannelname=GlobalChips_File_Endpoint -Dexten=true
```

The error thrown is:

```
" Could not complete the operation due to invalid option - exten allowed options
[mode, tp, schedulename, fromdate, todate, channelname, extend] "
```

For any key=<no value>, the command line interface throws the error

```
"Invalid key: channelname value: null"
```

16.3.29.3 Managing deployments

Agreement ID/CPAID-based activating/deactivating agreement.

This option will activate/deactivate the agreements for the CPAID provided as

```
-Dagreementid argument
```

For example:

```
ant -f ant-b2b-util.xml b2bmanagedeploy -Dagreementid=Acme_Oracle_CPA
-Dstate=active/inactive
```

It is also possible to activate/deactivate based on the agreement name by using the option in this example:

```
ant -f ant-b2b-util.xml b2bmanagedeploy -Dagreement=Acme_Oracle_CPA
-Dstate=inactive/active
```

16.3.29.4 Finding Duplicate Agreement IDs

This feature lets you check the availability of agreement for a given agreement ID or CPAID and trading partner. Based on the result, you can further import the agreement with option overwrite=True|False.

For example:

```
ant -f ant-b2b-util.xml b2bcheckcpaid -Dargs="my_file.zip"
```

16.3.29.5 Updates to Purge Utility Documentation

In Table 19-2 "Options for b2bpurge utility," note the following updates:

Option	Description	Domain	Required
cascadedelete	DT mode. Deletes agreement/ tp and its dependencies.	true/false	If tp option is given without agreementid, then cascadedelete must be true.
agreementid	DT mode. agreementid option must used with tp option. All the agreements exist for given tp and agreementid get purged. if cascadedelete=true and its dependencies like supported document definition and document type not referred in any other agreement then, supported document definition entry in trading partner and document type also be purged. After all these operation, if given tp does not have at least one supported document definition then tp also be purged.	-	No
fromdate	(no change)	Date format: dd/MM/yyyy hh:mm AM/PM	No
todate	(no change)	Date format: dd/MM/yyyy hh:mm AM/PM	No

16.3.29.6 Updates to Deploy Utility Documentation

The tp and agreementid options are available to use with the b2bdeploy utility.

16.3.29.7 Updates to Import Utility Documentation

Import Option for ebMS

It is possible to import a CPA (Collaboration Profile Agreement) using the command-line with following options:

Metadata such as Action, service, service type, From Role, To Role, and CPAID, which are the key attributes that define the uniqueness for any ebMS document.

Use of `overwrite` **flag in B2B import:**

As part of the optimizing the run-time performance, which includes validation of ebMS headers against CPA, Oracle B2B creates an index out of CPA and the same is stored in Document Type parameters.

Only with `overwrite=true` can this CPA Index can be rebuilt. For any change in the core ebMS metadata it is always required to use `overwrite=true`.

B) All other metadata, such as Trading Partner Identifiers, delivery channel information with a different name, and so on, is appended with `overwrite=false`.

Effect of `overwrite` **flag on various B2B artifacts**

1. Party Information/Trading Partner Identifiers

For Trading Partner Identifiers, the effect of `overwrite = true/false` is the same, that is, the Identifier is appended to the trading partner in either case.

Assume the trading partner has a DUNS Identifier with value 1234, for a change in CPA with DUNS value 4567, it is appended to the trading partner and only 4567 is used as part of the Agreement. Even while CPA exports DUNS value of 4567 is used.

It is possible for the user to switch between DUNS 4567 and 1234 without performing a CPA import.

2. Certificate does not have any impact on the `overwrite` flag as it is stored outside B2B repository in JKS file.

3. Delivery channel details are overwritten only with `overwrite=true`. When `overwrite=false` the delivery channel with the same name is ignored but all the other delivery channels are appended.

All the attributes of the delivery channel such as duplicate elimination, Certificate Alias, security credentials, and so on, follow the same pattern as in delivery channel.

4. When `overwrite=true`, any attribute of any granularity in the core metadata is replaced.

16.3.29.8 Updates to cpp_cpa.properties Documentation

The property `oracle.tip.b2b.ebms.BPSSDocument` is no longer available.

Additional common properties include:

Back End Application to Oracle B2B (AQ/JMS/FILE/FTP/SFTP):

```
oracle.tip.b2b.ebms.internalDeliveryChannel.protocol=JMS
```

JMS:

```
oracle.tip.b2b.ebms.internalDeliveryChannel.JMS.destinationname=jms/b2b/B2B_IN_
QUEUE
oracle.tip.b2b.ebms.internalDeliveryChannel.JMS.connectionfactory=jms/b2b/B2BQueue
ConnectionFactory
```

```
oracle.tip.b2b.ebms.internalDeliveryChannel.JMS.pollinginterval=5
oracle.tip.b2b.ebms.internalDeliveryChannel.JMS.msgType=TEXT
oracle.tip.b2b.ebms.KeystoreLocation=/tmp/JKS/Acme.jks
oracle.tip.b2b.ebms.KeystorePassword=password
oracle.tip.b2b.ebms.validate=/tmp/b2b/CPA/cpp-cpa-2_0.xsd
```

Additional option for use with `b2bcpaimport` and `b2bcpaexport`:

Option: standard

Description: Way to import the cpa in an optimized mode

Value: true (Note: Value as `false` is not supported)

Required: Yes

16.3.29.9 Updates to Resubmit Utility Documentation

Additional options for `b2bresubmit` utility:

Option	Description	Value	Required
mode	Simulates the command without execution by either giving the rows affected or the count.	list,count	No
	To list and show the count of messages for the selected criteria. It does not delete the messages, but just lists the information		
exclresubmit	Excludes the already resubmitted message	Default: false	No
exclstate	Excludes a specific message state	-	No
exclmsgid	Excludes specific messageId	-	No
maxcount	Limits the maximum number of messages to be resubmitted for the selected criteria.	-	No
	To offer resubmission in batch.		
oldcpaid	Resumbmission for a changed cpaID case. This is achieved by providing both the cpa ids oldcpaid and newcpaid	-	No

16.3.30 Updates to Enqueue and Dequeue Utilities Documentation

The following properties are also available when the JMS enqueue utility, `oracle.tip.b2b.data.JMSEnqueue` (in addition to Table 22-3 JMS Enqueue Properties):

Table 16–3   Additional JMS Enqueue Properties

Name	Description
fromIdType	Identifier type to be used. This is required only if the value provided against "from" is other than the identifier type "Name".
toIdType	Identifier type to be used. This is required only if the value provided against "to" is other than the identifier type "Name".

16.3.31 B2B Configuration Properties

The property `b2b.certificateValidation` has this update to the documentation:

Certificates are used for signing and encryption of the ebMS messages and must be valid, active certificates. This feature validates the certificates during runtime and raises an exception in case of expiry. To disable the certificate validation, set `b2b.certificateValidation=false`. The default value is `true`.

The properties in Table 16–4 can be set in Oracle Enterprise Manager Fusion Middleware Control Console in addition to those listed in Appendix B "Setting B2B Configuration Properties in Fusion Middleware Control" in *Oracle Fusion Middleware User's Guide for Oracle B2B*.

Table 16–4   Additional Oracle B2B Properties in Oracle Enterprise Manager Fusion Middleware Control

Property	Description
b2b.TPAbasedebMSIdValidateAndOverride	This property enables:
	1. Trading partner Identifier sent from Middleware or Trading partner is validated against the configured Identifiers in the Agreement for both inbound and outbound flow.
	2. Override the Identifiers configured in the Agreement using the Identifier sent from back-end application or from trading partner.
	The default value is `false`.
	If b2b.TPAbasedebMSIdValidateAndOverride= true:
	1. Agreement is configured with Identifier ID1, ID2 and inbound message has Identifier ID2, then ID2 would be sent to the back-end application.
	Note: this applies to outbound messages.
	2. Agreement is configured with Identifier ID1, ID2 and inbound message has Identifier ID3, even though the trading partner is configured with Identifier ID3, there is a failure in Agreement Identification.
	3. For any outbound message without a specific Identifier type, Name identifier is used in ebMS message header.
	If b2b.TPAbasedebMSIdValidateAndOverride= false:
	The Identification is done against the configured Identifier in the profile, and the configured Identifier in the Agreement is used in ebMS headers.

Table 16–4   (Cont.) Additional Oracle B2B Properties in Oracle Enterprise Manager Fusion Middleware Control

Property	Description
b2b.ebMSHeaderValidation	This property enables the ebMS header validation against CPA for both inbound and outbound. The ebMS headers which are validated are Action, service, serviceType, FromRole, ToRole.
	As a pre-requisite, set: b2b.useCPAid= true.
	By default, ebMS header validation is performed during message exchange. Set the property b2b.ebMSHeaderValidation=false to disable the validation.
	A negative Acknowledgement is sent for any failure in the validation during inbound scenario. Similarly, for an outbound scenario, an exception is raised with the state of the message changed to ERROR.

16.3.32 Enabling FTP Document Sequencing

To enable FTP sequencing you must configure an FTP listening channel with following parameters:

- Sequencing

- TimeStamp Format

- TimeStamp Offset

- TimeStamp Source

Note that selecting only the Sequencing flag does not work.

If sequencing is enabled, also note that:

- The order in which files are copied to the folder is the order in which it they are processed.

- If a large payload is copied, the trading partner has to wait until their large payload copy is complete before sending the next file, as sequencing works based on the last-modified-timestamp on the file.

Note that SFTP transport does not have TimeStamp Format, TimeStamp Offset, and TimeStamp Source parameters; therefore, the above does not apply to SFTP.

16.3.33 JMS Parameters

1. The correct names of the parameters are as following:

jca.jms.JMSProperty.FILENAME

jca.jms.JMSProperty.CONTENTTYPE

jca.jms.JMSProperty.GROUPING

jca.jms.JMSProperty.TARGET

jca.jms.JMSProperty.CONNMODE

jca.jms.JMSProperty.CUSTOM_HEADER

jca.jms.JMSProperty.DynamicIP

2. jca.jms.JMSProperty.FILENAME is only applicable for AS2.

3. jca.jms.JMSProperty.CONNMODE is only applicable to Generic MLLP.

17

Oracle BPEL Process Manager

This chapter describes issues associated with Oracle BPEL Process Manager. It includes the following topic:

- Section 17.1, "General Issues and Workarounds"

Note: The issues and workarounds listed here are those that were known at the time of the product's initial release to the public. Additional issues and workarounds may have been discovered since the initial release. To view the latest known issues associated with Oracle SOA Suite, BPM Suite, and related SOA technologies, go to the Oracle Technology Network (OTN) at:

http://www.oracle.com/technetwork/middleware/docs/aiasoar
elnotes-196861.html

17.1 General Issues and Workarounds

This section describes general issue and workarounds. It includes the following topics:

- Section 17.1.1, "Oracle BPEL Process Manager 2.0 Limitations"
- Section 17.1.2, "Checkpoint Activity Wrongly Appears in Oracle BPEL Designer Context Menu"
- Section 17.1.3, "Second XSD Created for API-Created, PL/SQL Partner Links with Complex Parameters"
- Section 17.1.4, "Audit Trail Details Display in Server Language Instead of Browser Language"
- Section 17.1.5, "Do Not Specify the wsa and bpel Property Prefixes with the bpelx:property"
- Section 17.1.6, "Selecting the Key for an Entity Variable in the Browse Entity Variable Dialog"
- Section 17.1.7, "MIME Type for Voice Notification in BPEL Voice Activity Requires Modification"
- Section 17.1.8, "Client Java API Is Not Backward Compatible"

17.1.1 Oracle BPEL Process Manager 2.0 Limitations

The following BPEL 2.0 features are not implemented in Oracle BPEL Process Manager:

- Termination handlers

- Message exchanges

- Fault handlers and termination handlers in an invoke activity. (This is the same as the BPEL 1.1 implementation of Oracle BPEL Process Manager.) As a workaround, include the invoke activity in a scope activity.

- Atomic assign activities. If an error occurs in the middle of an assign activity, all the changes roll back. This is the same as the BPEL 1.1 implementation of Oracle BPEL Process Manager.

17.1.2 Checkpoint Activity Wrongly Appears in Oracle BPEL Designer Context Menu

If you right-click inside your BPEL process in Oracle BPEL Designer and select **Insert Into** > **Activities**, note that **checkpoint** is incorrectly displayed in the list of activities. This activity is not supported, and selecting it does not insert it into the BPEL process.

The checkpoint activity has been replaced by the dehydrate activity, which is also available for selection in the same context menu.

17.1.3 Second XSD Created for API-Created, PL/SQL Partner Links with Complex Parameters

If you create a PL/SQL partner link with complex parameters from the API, a new XSD file is generated. If you then open the partner link in Oracle JDeveloper and make no modifications other than completing the flow and clicking the **Apply** button in the Edit Partner Link dialog, a second XSD file is also created.

You must use the second XSD file.

17.1.4 Audit Trail Details Display in Server Language Instead of Browser Language

Audit trail information for a BPEL instance displays in the language of your server instead of the language of your web browser.

17.1.5 Do Not Specify the wsa and bpel Property Prefixes with the bpelx:property

Tables H-1 and H-2 of Appendix H, "Normalized Message Properties" of the *Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite* describe the Oracle BPEL Process Manager and Oracle Web Services Addressing properties.To use these properties correctly with the `bpelx:property` in activities such as a receive activity, ensure that you do *not* include the `wsa.` or `bpel.` prefixes. For example:

```
<receive name="receiveInput" partnerLink="bpelprocessb_client"
portType="client:BPELProcessB" operation="process" variable="inputVariable"
 createInstance="yes">
        <bpelx:property name="action" variable="v1"/>
        <bpelx:property name="messageId" variable="v2"/>
        <bpelx:property name="relatesTo" variable="v3"/>
        <bpelx:property name="replyToAddress" variable="v4"/>
        <bpelx:property name="replyToPortType" variable="v5"/>
        <bpelx:property name="replyToService" variable="v6"/>
</receive>
```

17.1.6 Selecting the Key for an Entity Variable in the Browse Entity Variable Dialog

When selecting the local part of an entity key by browsing entity variables, entity icons display in the expanded element tree. These icons are identified by a blue x inside

parentheses, and indicate which elements include entity keys. Selecting these elements does not update the **Key Local Part** or **Key Namespace URI** fields in the Specify Key dialog. Instead, you must expand these elements to select the actual key to get the key's local part and namespace. For example:

1. In the Bind Entity dialog, click the **Add** icon to invoke the Specify Key dialog.

2. To the right of the **Key Local Part** field, click the **Browse Entity Variable** icon.

3. Note that a blue x inside parentheses indicates which elements include entity keys. Do *not* select these elements.

4. Expand these elements to display the entity keys available for selection.

5. Select an entity key, and click **OK**.

   The **Key Local Part** and **Key Namespace URI** fields of the Specify Key dialog are populated with information about your selection.

17.1.7 MIME Type for Voice Notification in BPEL Voice Activity Requires Modification

In a BPEL voice activity, the MIME type for message content generated in the source code is in `text/vxml` format. However, the message sent from the composite to the voice XML driver must be in `text/plain` format. This is because the voice XML driver adds the voice XML wrapper to the message before sending it to the destination point.

If the message content sent to the driver is in `text/vxml` format for the MIME type, a message delivery failure occurs. Therefore, manually change the MIME type for the voice payload content to be `text/plain` in **Source** mode in Oracle JDeveloper.

```
<scope name="VoiceApproval">
. . .
. . .
   <copy>
      <from expression="string('text/plain')"/>
      <to variable="varNotificationReq" part="VoicePayload"
      query="/VoicePayload/ns1:Content/ns1:MimeType"/>
   </copy>
. . .
. . .
</scope>
```

17.1.8 Client Java API Is Not Backward Compatible

Custom applications coded with the Oracle BPEL Process Manager 10.1.3 Client Java API cannot currently be upgraded to the 11*g* Release 1 11.1.1.3 and 11.1.1.4 Client Java API. Programs coded to the Oracle BPEL Process Manager 10.1.3 API must be rewritten. In addition, the current API is not compatible with the versions of the 11*g* Release 1 11.1.1.1 and 11.1.1.2 API, although the differences are minimal.

The version of the API in 11*g* Release 1 11.1.1.3 has been finalized. It has been fully supported since that release and is backward compatible from that release onwards.

Visit the following URL for details:

http://www.oracle.com/technology/products/soa/bpel/collateral/documentation.html

18

Oracle Business Activity Monitoring

This chapter describes issues associated with Oracle Business Activity Monitoring. It includes the following topics:

The issues and workarounds listed here are those that were known at the time of the product's initial release to the public. Additional issues and workarounds may have been discovered since the initial release. To view the latest known issues associated with Oracle SOA Suite, BPM Suite, and related SOA technologies, go to the Oracle Technology Network (OTN) at:
`http://www.oracle.com/technetwork/middleware/docs/aiasoarelnotes-196861.html`.

18.1 General Issues and Workarounds

This section describes general issue and workarounds. It includes the following topics:

18.1.1 Oracle BAM Client System Requirements

Platforms:

Microsoft Windows Intel x86-32:

■ Microsoft Windows XP Professional, Service Pack 2 or higher

■ Microsoft Windows Vista

Web Browsers:

■ Microsoft Internet Explorer 7.x

■ Microsoft Internet Explorer 8.x

Hardware:

■ 1 CPU at 2 GHz or faster minimum (a faster processor may be necessary to view complex dashboards)

- 1 GB RAM minimum
- 5 MB of free disk space

Display:

- Oracle BAM Active Studio requires 1024 x 768 minimum resolution
- Oracle BAM Active Viewer requires 800 x 600 or higher resolution

Additional Requirements for Optional Excel View in Oracle BAM Active Viewer or Oracle BAM Active Studio:

The Oracle BAM Excel view type requires that Microsoft Excel version XP, 2003, or 2007 is installed on the client computer.

Notes:

If you are using the Microsoft Windows pop-up blocker, or any other tool that blocks pop-up browser windows, you must configure it to allow pop-up windows while using the Oracle BAM Web applications. Turn off pop-up blockers in Microsoft Internet Explorer for the URL on which the Oracle BAM Web applications are hosted.

The Microsoft Internet Explorer installation on client systems must be a standard version, and it must not include customizations such as add-in tool bars or hot bars for other Web sites.

18.1.2 Some Product Features Previews Only

Preview features are for evaluation only.

Error handling for Enterprise Message Sources (see Section 18.2.1, "Preview Feature: Enterprise Message Source Error Handling").

ICommand Web Service is a preview feature.

Saving reports in MHT format is a preview feature. Save Offline, e-mailing rendered reports, and e-mailing a report in Alerts save the report in the MHT format.

The following report views are preview versions: Columnar, Matrix, Excel, Column Group, and Row Group.

18.1.3 Accessibility Compliance Limitation

This version of Oracle BAM does not comply with accessibility standards provided in other Oracle products. Future versions plan to comply with these standards.

18.1.4 Active Studio Tabs Display Incorrectly With Microsoft Internet Explorer 8

If you are using Microsoft Internet Explorer 8, and Oracle BAM Active Studio, or any of the Oracle BAM Web Applications, does not open properly (for example, some of the main user interface tabs do not appear), refresh your web browser or reload Oracle BAM Active Studio.

If that workaround does not resolve the issue, close Oracle BAM Active Studio, and clear your Internet Explorer browser cache (go to **Tools** > **Internet Options** > **Browser history** > **Delete** > **Temporary Internet Files** > **Delete files**), then reopen Oracle BAM Active Studio.

If the above workarounds do not resolve the issue, follow these steps to add the Oracle BAM web server to Microsoft Internet Explorer's Trusted sites:

1. Go to **Tools** > **Internet Options** > **Security** > **Trusted sites** and click **Sites**.

2. Uncheck **Require server verification (https:) for all sites in this zone** if necessary (it is necessary unless you have Oracle BAM set up for SSL).

3. Add the Oracle BAM URL to the list:

```
http://<bam_hostname>
```

18.1.5 Active Studio View Editor Tabs Display Incorrectly With Some Versions of Sun JDK

Some versions of the Sun JDK cause the Active Studio View Editor tabs to display incorrectly. The View Editor tabs may appear empty without any tab text. This issue can occur with any version of Oracle BAM.

To resolve this issue, the Oracle BAM Server requires the Sun JDK patch that fixes JDK bug 6940416. Generally, Sun JDK version 1.6.0_24 or later will resolve the issue.

18.1.6 Charts and KPIs Display Incorrectly Due to Interaction Between Microsoft Internet Explorer Update and McAfee Host Intrusion Prevention

An interaction between McAfee Host Intrusion Prevention 7 and Microsoft Internet Explorer update KB2416400 causes Charts and KPIs to display incorrectly.

If you are using McAfee Host Intrusion Prevention and this issue occurs, you can resolve it using one of the following workarounds:

1. Uninstall the Microsoft Internet Explorer KB2416400 update.

or

2. Disable Signature 3776 for McAfee Host Intrusion Prevention. Ask your IT Administrator if applicable.

Links:

MS10-090: Cumulative security update for Internet Explorer

http://support.microsoft.com/kb/2416400/

KB70810: Host Intrusion Prevention Signature 3776 triggers after applying Microsoft security update MS10-090

https://kc.mcafee.com/corporate/index?elq_mid=4718&elq_cid=372908&page=content&id=KB70810

18.1.7 Optional Upgrade Procedure for Oracle BAM Monitor Express Sample

Note that this upgrade is optional. It is not a required step for customers migrating from Oracle BAM 11gR1 PS2 to PS3.

Customers not upgrading from PS1 are not affected.

The existing *FMW_HOME*/AS11gR1SOA/bam/samples/bam/monitorexpress/README.txt file provides instructions on how to reinstall the Monitor Express samples.

Only customers in Oracle BAM 11gR1 PS1 that have manually ran the scripts as described in *FMW_HOME*/AS11gR1SOA/bam/samples/bam/monitorexpress/README.txt (samples are not installed by default during Oracle BAM installation) might want to upgrade those to fix minor user interface issues.

18.1.8 Database Must Be Started Before Oracle BAM

Oracle BAM applications are not functional if the database on which Oracle BAM depends is started few minutes later than Oracle BAM Server.

18.1.9 Microsoft Internet Explorer Knowledge Base Update Causes Charts and KPIs to Display Incorrectly

Microsoft Internet Explorer KB2416400 update causes Charts and KPIs to display incorrectly. To work around this issue, uninstall the Microsoft Internet Explorer KB2416400 update.

18.1.10 Negative Scale When Adding Number Field While Defining External Data Source

Negative scale of -127 is set for Number data types when creating external data source. To workaround change the data type to Float and save the external data source definition.

18.1.11 Error in Chart Views When Using Continuous Streaming of Data

Reports with multiple charts using continuous time series and Active Now, with a short time interval, might require user to disable the chart movement during transition feature (called animation) or make sure that the report is viewed on hardware which can handle fast processing.

To disable the chart movement during transition feature (animation), follow the steps below for all chart views in the report :

1. Open the report in edit mode in Oracle BAM Active Studio.

2. Select the view (chart type) you want to edit and click on **Edit View** in the **View tasks/Option**s frame in the left hand side of the window.

3. Click on the properties icon and select the **Active Data** tab.

4. Check the option **Disable Chart movement on transition**.

5. Click **OK** and save the report.

alternatively, you can also make sure that the client system on which the report will be viewed has good processing power to handle these kind of performance intensive reports. The requirement for reports might differ based on the complexity of the report.

18.1.12 Exception Logged During Restart After BAM Data Control Application Deployment to Remote Admin Server

On restarting Admin Server, where a BAM data control application is deployed to the Admin Server, there is a "PS-01520: Cannot initialize identity store." exception seen in the logs.

18.1.13 DB2 Does Not Allow Conversion From Datetime Field to Integer

In DB2, the datatype change from datetime field to integer is not allowed. Currently the system does not prompt the user that this change is not allowed. If the user wants to make the change, the user should drop the column and re-add a different column. The data will be lost in this case.

18.1.14 Batched Messages Lost on BPEL Server Restart

An Oracle BAM sensor action cannot be notified of BPEL events, and the messages sent to Oracle BAM from the BPEL server are only stored in memory; therefore, when the BPEL server restarts, all the messages still on the BPEL side are lost.

This behavior is by design, and there is no workaround.

18.1.15 Limitations With Single EAR and Two Oracle BAM Targets in Oracle Enterprise Manager Fusion Middleware Control

Oracle BAM presents the following limitations because in this release Oracle BAM Web applications and Oracle BAM Server are only deployed in a single EAR, but are represented in Oracle Enterprise Manager Fusion Middleware Control using two separate targets:

- Along with two custom targets, Oracle BAM Server and Oracle BAM Web applications, The Oracle BAM application also appears as a generic J2EE application in the Application Deployments list in Oracle Enterprise Manager Fusion Middleware Control navigation tree, and in the Farm home page. It is recommended that the user only use custom Oracle BAM targets (`OracleBAMServer` and `OracleBAMWeb`), the internal application target (`oracle-bam`) should not be used.

  Additional information about the generic `oracle-bam` J2EE application target: The generic J2EE application target (oracle-bam) despite being an internal application, still appears under parent Application Deployments and not in the sub-folder Internal Applications of Application Deployments. Moving oracle-bam generic J2EE application target to Internal Applications folder has been deferred.

- The Stop and Start commands in the Oracle BAM Server and Oracle BAM Web applications menus in Oracle Enterprise Manager Fusion Middleware Control pages does not stop or start the corresponding target only, it stops the entire Oracle BAM application (Oracle BAM Server and Oracle BAM Web applications).

- Viewing any J2EE metrics in the context of Oracle BAM Server or Oracle BAM Web applications actually presents the view for entire J2EE application. (From performance page and Oracle WebLogic Server page the user gets access to the J2EE application metric).

- Oracle WebLogic Server (Managed Server) home page shows three deployed applications for each Oracle BAM install (two custom targets and one generic J2EE application target). Corresponding to each target there are few J2EE application metrics shown. Because J2EE metrics correspond to each deployment, the metrics values get repeated for all of the Oracle BAM targets. The workaround is displaying metric values only against one target and the other two showing n/a.

18.1.16 Oracle Enterprise Manager Fusion Middleware Control MBean Browser Does Not Validate Values

The MBean browser in Oracle Enterprise Manager Fusion Middleware Control does not have any validation in place to check whether the entered value is correct or not.

18.1.17 Unable To Extend Tablespace

When you see the `Unable to extend tablespace` error message, you can do the following:

- Increase the tablespace size.

■ If you cleared a large amount of data from a data object, and expect the tablespace to have more data, you might still see this error. The table space release is not synchronous, and you must run command ALTER TABLE *table_name* SHRINK SPACE.

18.1.18 Unable to Create or View Report With User With No Permissions on System Folder

A user assigned to a non-Administrator role may be unable to create or view reports, but has the privileges to do so, and gets the following error:

DATAOBJECTPERMISSIONMISSINGEXCEPTION_ACTIVESTUDIO_ REPORTEDITOR_EDITREPORT

Exception Message BAM-01257: Insufficient permission to perform the requested action.

This is due to the user not having at least Read permissions on the /System folder in Oracle BAM Architect.

18.1.19 Opening Report on Two Systems Causes Language Mix

The same user opening a report on two different computers with different language settings causes a language mix in the Oracle BAM user interface.

A single user should not log in simultaneously on different computers with two different language settings.

18.1.20 Oracle BAM Event Engine Cannot Call WS-Security-Enabled Web Services

As part of an Oracle BAM alert action, Oracle BAM Event Engine can call external Web services. However, for secure Web services, Oracle BAM Event Engine supports calling only HTTP Basic authentication protected Web services. Configuring an alert action to call WS-Security enabled Web services is not supported.

The Web service alert action now supports a couple of basic OWSM security policies namely oracle/wss_http_token_client_policy and oracle/wss_ username_token_client_policy. These policies could be used to invoke Web services which are protected by corresponding server side OWSM policies. By default, all secure Web service invocations (requiring user name and password to be passed) would use oracle/wss_http_token_client_policy which essentially makes client to go through BASIC HTTP authentication.

18.1.21 Use Single Quotation Marks in ICommand Web Service Export Command

Using double quotation marks (") around the file value in ICommand export does not work.

Use single quotation marks (') instead of double quotation marks to specify the file value.

```
<?xml version="1.0" encoding="utf-8"?><IstanteCommands><export name='/Samples/Film
Sales' file='c:\do_with_data.xml' type="dataobject"/></IstanteCommands>
```

18.1.22 Alert Fires Multiple Times Using COUNTDISTINCT Aggregate

When operation COUNTDISTINCT-based aggregate is chosen in Group filters in data object and report based alerts, the user might see the alert firing multiple times, even if

the alert criterion was satisfied only once in the data. This behavior is seen when bulk data object operations are performed. That is, if multiple rows are inserted, deleted, updated, or upserted in the data object at one time.

18.1.23 Select Higher Time Groupings in Crosstab Views

Grouping by Week in a Crosstab or Chart view could cause group values for Day of Month or Day of Week to be calculated incorrectly for weeks that include the end of one month and the beginning of another.

Include Day of Year in the grouping along with Day of Month or Day of Week.

18.1.24 Invoking an Oracle Data Integrator Scenario With Date Input From Oracle BAM Alert Rule

When you must pass a date input through an Oracle BAM alert rule invocation to an Oracle Data Integrator scenario, it is recommended that you set up the Oracle Data Integrator scenario to use an `alphanumeric` type variable instead of `date` type. Using a `date` type variable may lead to a parse exception within the Oracle Data Integrator agent which results in a failure to invoke the scenario successfully.

When this `alphanumeric` type variable is used within the definition of the Oracle Data Integrator interface, use the `TO_DATE` function along with the format in which the date is expected. For example, with a project level variable named `alphVariableName`, the function usage would be:

```
TO_DATE('#alphVariableName','YYYY-MM-DD')
```

Within the Oracle BAM alert rule definition (for the **Run an ODI scenario** action), pass the date to be input in the same format.

18.1.25 Chart View Displays Text Instead of a Chart When the Window is Not Initially Maximized

When report is opened in sub-maximal sized Web browser window, a chart view area may display the message "The view area is too small to represent the current data." When the Web browser window is maximized, the message might not be replaced by the expected chart view.

To work around this issue, always launch Oracle BAM reports in maximized Web browser windows.

18.1.26 SSL Connection to Oracle BAM Is Not Supported for Monitor Express

Deployment to Oracle BAM Monitor Express data objects through an SSL connection is not supported.

18.1.27 Failure to Send Message to Oracle BAM is Not Reported on Oracle Fusion Middleware Control Console

The Oracle BAM-BPEL integration is supported with the use of Oracle BAM Adapter (such as with Oracle BAM sensor actions and BPEL Monitor features). For BPEL processes and other services that attempt to send messages to Oracle BAM, the true status of whether such Oracle BAM invocations succeeded or failed cannot be determined by studying the audit trail for that process instance on the Oracle Enterprise Manager Fusion Middleware Control Console. It is intentionally designed such that a failure to send sensor/monitor data to Oracle BAM should not cause the

regular processing of input request (within a BPEL process) to be halted/failed. Accordingly, the console will therefore only report the status for the instance based on the non-Oracle BAM related activities. The Oracle BAM Server invocation failures, if any, will be noticeable in the SOA server diagnostic logs.

18.1.28 Input of Numbers Is Not Localized As Per Browser Locale

Float format (decimal separator) is decided by server locale, rather than the user's local Web browser language setting.

For example, when Oracle BAM Server is running on an operating system whose language is using dot (.) as the decimal separator (such as English, Chinese, or Japanese), and the user's local Web browser is set to a language using a comma (,) decimal separator (such as French, German, or Italian), input of number using a comma separator results in the following message:

```
The value specified is not a valid float
```

Some of the places where the suer can input numbers are:

1. Filter expression in Oracle BAM Active Studio View Editor.

2. Editing data object content in Oracle BAM Architect.

18.1.29 Unique Constraint Error in Oracle Data Integrator After Moving a Data Object

When the underlying schema (structure) of an Oracle BAM data source is changed (for example, by moving a data object from one folder to another), you must: 1) re-reverse engineer the model which references this data source; 2) manually modify the model so that it accurately reflects the current schema.

If you create a data object in Oracle BAM Architect, and Reverse Engineer it in Oracle Data Integrator Designer, then, in Oracle BAM Architect, create a new folder and move the data object into it, and attempt Reverse Engineer again, the new folder is created in Oracle Data Integrator, but the data object does not move to new location.

In Oracle Data Integrator Operator, the operation fails with the unique constraint error during the Get MetaData step.

18.1.30 AssignTask Action Form Template Must Be Edited Before Using It

The AssignTask template provided for the Action Form view in Oracle BAM is not usable as it is. To use the AssignTask template in an Action Form, and have input fields for mapping and association, those input fields must have an attribute named `rtsEnabledID`. None of the input fields in the AssignTask template (seeded in the /System/Views/Action Form Templates data object) have the `rtsEnabledID` attribute in them, therefore none of them are available for mapping and association in the Action Form View Editor.

An example of an input field with the `rtsEnabledID` attribute is shown here:

```
<input type="text" name="text223222" size="49" style="width:300px"
rtsEnabledID="OtherRecipient" />
```

If you want to use the AssignTask template, you must manually edit the template to add the `rtsEnabledID` attribute to the input fields you want available in the Action Form for mapping and association, and then update the template in the Action Form Templates data object.

Here the steps to perform this task:

1. Access the Oracle BAM instance you have and login into it using the Oracle BAM Start Page.

2. On the Oracle BAM Start Page, click **Architect**.

3. In the Architect page, in the data object browser, select the **Data Object/System/Views/Action Form Template** data object.

4. Click the **Contents** link on the top of right-hand frame.

5. Click **Edit Contents**.

6. Scroll to the right end of the data object contents, and click **Edit** on the row that contains the template with name **AssignTask**.

7. Copy the contents of the **FormInput** column for this row and paste it into a text editor.

8. Select the inputs that you want to make available in the Action Form for mapping and association, and add the attribute `rtsEnabledID` to the element as shown in the following example. The value for this attribute must be a unique ID. For example, for the text area for the Description in the template, after adding the attribute will look like

   ```
   <textarea name="textarea" cols="51" rows="6" wrap="virtual"
   class="PSLONGEDITBOX" style="width:600px"
   rtsEnabledID="TaskDescription"></textarea>
   ```

   Make sure that the template HTML does not contain any line breaks.

9. After making the changes, paste the template back in the **FormInput** column of the template, and click **Save**.

18.2 Documentation Errata

This section describes documentation errata. It includes the following topics:

- Section 18.2.1, "Preview Feature: Enterprise Message Source Error Handling"

  Section 18.2.2, "Null Out Values Using DataObjectOperationsByID Web Service"

- Section 18.2.3, "Active Now Interval Must be Greater Than Active Data Interval"

- Section 18.2.4, "Wildcard in Some Filters on DateTime not Supported on Calculated or Lookup Fields"

- Section 18.2.5, "Web Service Configuration Parameters"

- Section 18.2.6, "JDBC Data Source Statement-Cache-Size Must Be Set to Zero For Oracle BAM"

- Section 18.2.7, "Floats Are Indeterminate For Comparisons"

- Section 18.2.8, "Group By in Calculations Not Supported for Views That Already Have Grouping"

18.2.1 Preview Feature: Enterprise Message Source Error Handling

A new set of fault configuration options in Oracle BAM Architect definition handles errors in handling the Oracle BAM Enterprise Message Source (EMS) payload in a number of ways: logging to log file, inserting a row into a data object, or publishing the error message to a JMS topic or queue.

To configure fault handling, open Oracle BAM Architect, and select or create a new EMS. At the bottom of the configuration screen are a set of Faults options: **Log faulted messages** and **Write faulted messages**. You can select one or both options.

Select **Log faulted messages** to send error messages to the log, and select Include payloads to include the payload with the message.

Select **Write faulted messages** to write the message to an Oracle BAM data object or a JMS topic. You can select only one of the write options.

Select **To Data Objects** to insert the message in a data object, and provide the data object name and the field to which to write the error message.

Select **JMS Queue/Topic** to write the message to JMS, and provide the appropriate values for each required field.

The following example is the format of the published message:

```
EMS <<EMS Name>> failed to process the payload: <<payload>> with the following
exception:<<Exception details>>.
```

For example:

An EMS, MyInsertEMS, failed to process the payload: `<testems><test>abcd</test1>` with the following exception:

```
The end-tag for element type "test" must end with a '>' delimiter.
```

Use caution while designing the fault handling when the error message is pushed to a JMS topic or queue. If this topic or queue is in turn configured for another (or the same) EMS, then that EMS will pull the same message again which fails recursively. Although Oracle BAM has taken care of the message by encoding that message with a CDATA, there might be other issues such as SQL exceptions that might fail recursively.

18.2.2 Null Out Values Using DataObjectOperationsByID Web Service

In the XML input to DataObjectOperationsByID Web service:

If an element is empty, for example `<_Sales_Area></_Sales_Area>`, in the payload, then the corresponding column is made null. This is in synch with 10.1.3.x behavior.

18.2.3 Active Now Interval Must be Greater Than Active Data Interval

In filter expressions, do not set the Active Now interval to be less than the Active Data Interval.

18.2.4 Wildcard in Some Filters on DateTime not Supported on Calculated or Lookup Fields

Filters created using the **is like** or **is not like** operation on DateTime type fields can contain the wildcard character (%) in the comparison value in the filter expression. However, use of this wildcard character is not supported when the field used in the filter is a calculated field or lookup filed that evaluates to the DateTime or Timestamp type. This wildcard character is only supported for regular record fields.

Also, **Compare Date Only** is supported for regular DateTime or Timestamp type fields only. It is not supported for Calculated or Lookup fields evaluating to DateTime or Timestamp data type.

18.2.5 Web Service Configuration Parameters

Some Oracle BAM Web service configuration parameters (detailed below) are new in 11.1.1.3.0.

The parameters are configured in the following location:

```
$MW_HOME/user_projects/domains/<domain-name>/servers/<bam-server-name>/tmp/_WL_
user/oracle-bam_11.1.1/1o1igs/APP-INF/classes/config/BAMWebConfig.xml
```

The `1o1igs` directory in the path above is created when Oracle BAM Server is started and does not have a static name.

Hence the user needs to search for `BAMWebConfig.xml` file under the following location, and then edit the file to add the parameters described below.

```
$MW_HOME/user_projects/domains/<domain-name>/servers/<bam-server-name>/tmp/_WL_
user/oracle-bam_11.1.1
```

Webservices_Batching_Is_Enabled

Type: Boolean

Valid values: true/false

Default value: false

Description: Determines if Oracle BAM Web services should use Active Data Cache API batching.

Webservices_Batching_Limit_Upper

Type: Integer

Default value: 500

Description: Batch size upper limit when Active Data Cache API batching is used.

Webservices_Batching_Limit_Lower

Type: Integer

Default value: 100

Description: Batch size lower limit when Active Data Cache API batching is used.

Webservices_Batching_Timeout

Type: Integer

Default value: 50

Explanation: Batch time-out when Active Data Cache API batching is used.

18.2.6 JDBC Data Source Statement-Cache-Size Must Be Set to Zero For Oracle BAM

For single instance database installs, the statement cache size will already be set to 0 (zero) by default. Do not change this to a non-zero value.

For installs against an Oracle RAC database, the statement cache size must manually be set to 0 for each Oracle RAC data source; otherwise, data corruption may occur and the Oracle BAM Active Data Cache may need to be restored from a backup (or reinitialized if no backups are available).

18.2.7 Floats Are Indeterminate For Comparisons

Testing equality on Float type values is indeterminate because Float values are approximations (in general, not just in Oracle BAM), so they should never be used for equality checks in filters (the **is equal to** and **is not equal to** comparisons).

The alternative is to use Decimal or some other data type. However, if the Float data type must be used, the equality test must be bounded by two ANDed filters of **is greater than or equal to** and **is less than**.

This belongs in the documentation as a note in the *Oracle Fusion Middleware User's Guide for Oracle Business Activity Monitoring* "Filtering Data" section, and in the Oracle BAM Troubleshooting Guide.

18.2.8 Group By in Calculations Not Supported for Views That Already Have Grouping

In the Oracle BAM Active Sutio view editor, in the calculations tab, the Group By button is grayed out for views other than List and Excel, and is not usable. This feature is not supported for views which already have some grouping in them, such as charts and crosstabs.

19

Oracle Business Process Management

This chapter describes issues associated with Oracle Business Process Management (BPM). It includes the following topics:

- Section 19.1, "General Issues and Workarounds"
- Section 19.2, "Configuration Issues and Workarounds"
- Section 19.3, "Documentation Errata"

> **Note:**   The issues and workarounds listed here are those that were known at the time of the product's initial release to the public. Additional issues and workarounds may have been discovered since the initial release. To view the latest known issues associated with Oracle SOA Suite, BPM Suite, and related SOA technologies, go to the Oracle Technology Network (OTN) at:
> http://www.oracle.com/technetwork/middleware/docs/ai asoarelnotes-196861.html.

19.1 General Issues and Workarounds

This section describes general issues and workarounds. It includes the following topics:

- Section 19.1.1, "Oracle BPM Studio Issues"
- Section 19.1.2, "Oracle BPM Process Composer Issues"
- Section 19.1.3, "Oracle BPM Workspace and Process Spaces Issues"
- Section 19.1.4, "Oracle BPMN Administration"

19.1.1 Oracle BPM Studio Issues

This section describes issues and workarounds for Oracle BPM Studio. It includes the following topics:

- Section 19.1.1.1, "Do Not Edit the BPMN Process WSDLs directly"
- Section 19.1.1.2, "Cannot Edit Link Between BPMN Process and Business Rules in composite.xml"
- Section 19.1.1.3, "Deleting Services or References from the SOA Composite Does Not Delete the Customized Service or Reference"
- Section 19.1.1.4, "The XPath Data Association Editor Does Not Validate Expressions"

19.1.1.1 Do Not Edit the BPMN Process WSDLs directly

You must always use the Process Editor to edit a BPMN process. Do not edit the BPMN process WSDLs directly. Doing so does not allow you to save the changes and causes multiple error messages.

19.1.1.2 Cannot Edit Link Between BPMN Process and Business Rules in composite.xml

The business rules task is used to incorporate Oracle Business Rules within a BPMN process. You can specify the business rule used as part of the configuration properties for the business rules task.

However, you cannot edit this property in composite.xml. Use the Oracle BPM Studio user interface to edit or remove the reference to the business rule.

19.1.1.3 Deleting Services or References from the SOA Composite Does Not Delete the Customized Service or Reference

When you delete a customized service or a reference from the SOA Composite, Oracle BPM Studio does not delete the customized component from the business catalog. Before building the BPM project you must manually delete the customized component from the business catalog.

19.1.1.4 The XPath Data Association Editor Does Not Validate Expressions

The XPath Data Association Editor does not validate the expressions you use to assign values to arguments and data objects. You must ensure that the XPath expressions you use in an XPath data association are valid. Using invalid XPath expressions causes errors at run time.

19.1.1.5 Deleting a Reference from the SOA Composite Does Not Remove It from the Human Task Payload Configuration

Deleting a reference from the SOA Composite does not delete the reference from the payload of the Human Tasks that use the reference.

After you delete a reference, you must remove the deleted reference from the Human Tasks using it.

19.1.1.6 Data Associations for Elements of a Collection Are Not Available

Data associations for elements of a collection are not available in this release. To assign a value to an element of a collection, use XLS transformations.

19.1.1.7 Do Not Define Multiple Catch Events for the Same Error or Message

Do not define multiple catch events for the same error or message. Only the first catch event fires; the remaining catch events are ignored.

19.1.1.8 Changes to a Deployed Organizational Unit Not Supported

When a BPM Project is deployed, any organizational units that do not exist are created. However, when redeploying a project, if any existing organizational units are changed, the changes will not be updated.

These changes must be made by a business administrator using Oracle BPM Workspace as described in *Oracle Fusion Middleware User's Guide for Oracle Business Process Management*.

19.1.1.9 enableAutoClaim Property Is Set to True in Human Tasks Created Using Oracle BPM Suite

When you create a Human Task using Oracle BPM Suite, the enableAutoClaim property is set to true by default.

19.1.1.10 Configuring Data Associations for XML Schema Elements Based on Simple Data Types

When configuring data associations for a flow object, you can map simple XML elements based on simple types to compatible basic data objects.

19.1.1.11 The Initiator Node List Shows the Names of the Possible Initiator Flow Objects

In the implementation properties of message events and send and receive tasks, the Initiator Node list shows the name of the initiator flow object. A BPMN process might contain multiple flow objects with the same name. It is a good practice to use a different name for all of the flow objects in the process. Not doing so causes the Initiator Node list to contain multiple items with the same name, making it difficult to identify the one you want to select.

19.1.1.12 The Pushback Task Operation Is Not Supported In an Aggregation Context

The Approval Management pushback task operation is not supported in an aggregation context. Use the request for information task operation instead.

19.1.1.13 Must Assign Application Roles from the OracleBPMProcessRolesApp Context

Using Oracle BPM Studio, you can map the roles defined in your process to application roles defined by Oracle WebLogic Server.

However, you must ensure that the application roles you use are defined as part of the OracleBPMProcessRolesApp application context. Only application roles defined in OracleBPMProcessRolesApp are used at run time.

19.1.1.14 Adding Counter Marks to Subprocesses is Not Available

Adding counter marks to subprocesses is not available for this release.

The available workaround is to add the counter mark to add an activity immediately after the start event in the subprocess and add a counter mark to this activity.

19.1.1.15 You Must Manually Remove Additional Slashes from the XSD file When Defining Human Tasks Assignments Based on Business Rules

In BPM Suite if you define a human task assignments based on Business Rules, then you must edit the XSD of the decision service to remove the additional slashes from the import statements.

For example, you must replace the following statement:

```
schemaLocation="oramds:///soa/shared/workflow/TaskEvidenceServic
e.xsd"
```

with the following import statement:

```
schemaLocation="oramds:/soa/shared/workflow/TaskEvidenceService.
xsd"
```

19.1.1.16 The Number of Business Indicators Per Project is Limited

You must not define more than twenty business indicators per project. The average length of the name of the business indicator must be 15 characters.

19.1.1.17 Oracle BPM Studio Permits Users to Assign Invalid Application Roles to Swimlanes

When assigning roles to swimlanes using Oracle BPM Studio, users can assign roles based on application roles that are not part of OracleBPMProcessRolesApp. This causes errors when deploying the Oracle BPM project.

As a workaround, you should ensure that the application roles you assign to swim lane roles uses OracleBPMProcessRolesApp only.

19.1.1.18 Cannot Import a BPEL Process to a BPA Server Multiple Times

You can only import a BPEL process to a BPA server one time. After you import a BPEL process to a BPA Server, it is associated to that particular BPA instance.

19.1.1.19 Starting an Event Subprocess from the BPM Process That Contains It Is Not Supported

You cannot start an event subprocess by sending a message event from within the BPM process that contains the event subprocess. Because this release does not support correlations, a process instance cannot send event messages to itself.

If you start an event subprocess by sending a message event from within the BPM process that contains it, then the BPM Engine does not run the event subprocess and it may stop responding.

19.1.1.20 Sorting the Process Instances in a Guided Business Process by Instance ID Does Not Order Them in Numerical Order

Sorting the list of process instances in a guided business process by their ID does not order them in numerical order.

The sorting algorithm used to order process instances in guided business processes does not compare the whole number. It compares the first digit in the number ID.

For example, sorting he following list of process IDs: 1, 2, 3, 5, 11, 12

produces the following result: 1, 11, 12, 20, 3, 5

19.1.1.21 Timer Start Events that Specify Dates Previous or Equal to the Deployment Date Are Not Triggered

The BPM Engine does not trigger timer start events that specify a date previous or equal to the deployment date.

19.1.1.22 Limitations When Calling a BPMN Process from a Spring Component

The following limitations apply when calling a BPMN process from a Spring component:

- You cannot call a BPMN process from a Spring component that does not declare an interface.

- You cannot create a Spring component reference based on a BPMN process interface. Currently Oracle BPM Studio does not provide a way to create Java classes based on BPMN process instances.

- You must name the WSDL used to represent the Java interface of a Spring component with the same name of the Java interface. For example, if the name of the Java interface is `SpringInterface.java` then the name of the WSDL must be `SpringInterface.wsdl`.

- The option **Append Suffix** in the **Update WSDL Interface** action is not supported because the name of the WSDL must match the name of the Java interface. If the user selects this option, then BPM Studio shows an error message stating this feature is not enabled.

19.1.1.23 Patching an SOA Application with Shared Resource Bundles

You can patch an SOA application with shared resource bundles so that you can reference resources in a shared location, instead of creating new resource bundles.

To patch an SOA application with shared resource bundles:

1. Create the java resource bundle files containing key-value pairs of the display fields.

2. Compile the files and bundle the resource bundle classes into a jar.

   The following example shows a packaging structure:

   ```
   resource/oracle/bpel/activityguide/resource/AGResourceBundle.class
   resource/oracle/bpel/activityguide/resource/AGResourceBundle_fr.class
   ```

3. Deploy the resource bundle to MDS:

   a. In Oracle JDeveloper, create a new Project deployment profile of archive type Jar.

   b. In the **Contributors** section, add the resource bundle you created.

   c. Save the profile.

   d. Create a new application deployment profile of archive type SOA Bundle.

   e. In the Contributors section, add the Jar profile you created to this SOA Bundle.

      If required, combine with SOA-SAR profile for combined deployment.

   f. Save the profile.

   g. Deploy the SOA bundle from Oracle JDeveloper to an SOA Server.

      > **Note:** For details on how to deploy a resource bundle to MDS, see "Deploying and Using Shared Metadata Across SOA Composite Applications in Oracle JDeveloper" in Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite.

4. In Oracle JDeveloper edit the `composite.xml` file.

5. In the **Structure** window, right click the composite element.

6. Select **Insert Inside Composite**.

7. Select **Property**.

8. Set name of the property to `oracle.soa.composite.classloader.ext.dir` and the value of the property to the package structure of the jar you created.

   The following XML fragment shows how to set the required property:

   ```
   <property name="oracle.soa.composite.classloader.ext.dir">
           /apps/resource
   </property>
   ```

9. Localize the display fields of the Guided Business Process in Oracle JDeveloper.

   - Choose External option during translation to indicate that an external resource bundle is used.

   - Provide the fully qualified name of the class in the resource bundle field. For example:
     `oracle.bpel.activityguide.resource.AGResourceBundle`

19.1.2 Oracle BPM Process Composer Issues

This section describes issues and workarounds for Oracle BPM Process Composer. It includes the following topics:

19.1.2.1 Deploy Option Not Available in Approval WorkFlow Browser

When you specify an approver who also has deployment permissions, the user will not initially see the deployment option. To be able to deploy the Oracle BPM project, the project must first be approved for deployment using the Oracle BPM WorkSpace application. Once the approval workflow is complete, the option to deploy the project is available.

19.1.2.2 Chinese, Korean, and Character Input Problems in Flow Object Labels

The Adobe Flash Player has a bug related to input for Chinese, Korean, and Japanese characters. This causes problems in Oracle Business Process Composer when editing flow object labels within the process editor.

For more information see: http://bugs.adobe.com/jira/browse/FP-501.

To resolve this issue, use Microsoft Internet Explorer version 7.

19.1.2.3 Initiator Pattern Not Permitted within a Subprocess

You should not use a user task with an initiator pattern within a subprocess. This is currently allowed during design and deployment using Oracle Business Process Composer and Oracle BPM Studio. Oracle BPM WorkSpace will show a link within a running process, but this link is invalid.

19.1.2.4 Supported Version of Adobe Flash on Linux Systems

Some Oracle Business Process Composer user interface elements are not displayed when using Linux.

As a workaround, you must install Adobe Flash, version 10.1 or greater.

19.1.2.5 Text Field Does Not Display Full Value for Participant Names

When creating or editing human tasks using Oracle Business Process Composer, the text filed displaying the Value column is not wide enough to display the all the data.

As a workaround, you can view the full text by positioning the mouse over the cell to display the tooltip.

19.1.2.6 Calling a BPMN Process from a Spring Component Is Not Supported

Currently you cannot use Oracle Business Process Composer to define how a Spring component calls a BPMN process.

19.1.3 Oracle BPM Workspace and Process Spaces Issues

This section describes issues and workarounds for Oracle BPM Workspace and Process Spaces. It includes the following topics:

- Section 19.1.3.1, "Process Workspace Login Error When Using External LDAP Directory"

- Section 19.1.3.2, "Taskflow Links for Undeployed Processes Are Visible in Process Workspace"

- Section 19.1.3.3, "Process Workspace Does not Open a New Window for Newly Created Task"

- Section 19.1.3.4, "Oracle WebCenter 11g Patchset 2 with Process Spaces Does Not Work with Process Workspace Patchset 3"

- Section 19.1.3.5, "When Documentation Server is Down, Launching a Group Space for an Instance Causes Error "Instance 'null' is not available""

- Section 19.1.3.6, "File Size Limit for Process Attachment Is 2 MB"

- Section 19.1.3.7, "For Large Number of Users Set Timeout to 5 Minutes Maximum"

19.1.3.1 Process Workspace Login Error When Using External LDAP Directory

If you are using an external LDAP directory, you may receive the following error message when logging in to Process Workspace: "No Role found matching the criteria".

This may occur under the following conditions:

- You have used Oracle WebLogic Server Console to configure a user base and a group base to search for and authenticate users.

- The user base or group base has a referral to another user base or group base.

In this case, the Process Workspace identity service does not list the users or groups and, as a result, the login to Process Workspace fails to authenticate the user.

This can occur when there are two bases to be searched, one for users and one for groups, but the UR API is not properly set.

To resolve this, in the Oracle WebLogic Server Console, provide a root-level search base for both users and groups so that referrals are resolved automatically since you are providing a higher node in the search tree.

If this solution degrades performance as a result of a substantially larger search base, you can limit this search by editing specific property in the `jps-config.xml` located at *domain-home*/config/fmwconfig/.

The following is an example of an edited `jps-config.xml`file:

```
jps-config.xml
<extendedProperty>
<name>user.search.bases</name>
<values>
<value>cn=users1,dc=us,dc=oracle,dc=com</value>
<value>cn=users2,dc=us,dc=oracle,dc=com</value>
...........
</values>
</extendedProperty>
<extendedProperty>
<name>group.search.bases</name>
<values>
```

```
<value>cn=groups1,dc=us,dc=oracle,dc=com</value>
<value>cn=groups2,dc=us,dc=oracle,dc=com</value>
..................
</values>
</extendedProperty>
```

19.1.3.2 Taskflow Links for Undeployed Processes Are Visible in Process Workspace

If a project is deployed with its taskflows and then it is undeployed, it remains visible in the Applications panel of Oracle Business Process Management Workspace. To make it no longer visible, clear it from either Oracle Enterprise Manager Fusion Middleware Control Console or the WFTASKDISPLAY table in the SOAINFRA schema.

19.1.3.3 Process Workspace Does not Open a New Window for Newly Created Task

This problem occurs under the following conditions:

- Your browser is set to use either Portuguese or Italian

- You as an administrator set the Work Items panel to display the language specified by the browser

- You launch a new process instance from the Applications panel of Process Workspace

The window for that process instance does not appear in the right pane.

To resolve this problem, do the following:

1. Go to the Weblogic console, deployments and look for the oracle.bpm.client library and check the path to the jar file of the library.

2. In that path there is another jar oracle.bpm.web-resources.jar that contains the localized resource messages; make a backup copy of it.

3. Unpack `oracle.bpm.web-resources.jar` using unzip or tar command and edit both of the following files:

   - oracle/bpm/workspace/model/msg/WorkspaceMsg_pt_BR.properties

   - oracle/bpm/workspace/model/msg/WorkspaceMsg_pt.properties

4. Look for a label `CANNOT_OPEN_POPUP` and correct the message by replacing `\n` with `\\n`.

   The label should look like this:

```
CANNOT_OPEN_POPUP:      N\u00E3o foi poss\u00EDvel abrir a janela pop-up de
execu\u00E7\u00E3o.\\nSe seu browser for configurado para bloquear pop-ups,
voc\u00EA deve adicionar uma exce\u00E7\u00E3o a esta
aplica
\u00
E7\u00E3o.\nUma ins
t\u00
E2ncia que pode ter sido criada apesar do
fluxo de tarefas associado n\u00E3o ter sido executado.
```

5. Create the JAR file—using either Winzip or the `tar` command—with the changes and replace the original version of the JAR.

6. Restart Oracle WebLogic Server.

19.1.3.4 Oracle WebCenter 11g Patchset 2 with Process Spaces Does Not Work with Process Workspace Patchset 3

Both components must be 11g Patchset 3.

19.1.3.5 When Documentation Server is Down, Launching a Group Space for an Instance Causes Error "Instance 'null' is not available"

If you have a Process Spaces group space open and you bring down the documentation service, then, when you launch instance group space for an instance, you see that an instance group space is created. However, when you open the instance group space, you receive the error message "Instance 'null' is not available". This happens because the newly created group space does not have the custom attribute `instanceId`.

For the workaround, the administrator should do the following:

1. Navigate to Settings in the process instance group space.

2. Navigate to custom attributes.

3. Create the custom attribute `instanceId` and associate the process instance identifier as the value.

19.1.3.6 File Size Limit for Process Attachment Is 2 MB

If you attach a file to a process, the file must be no larger than two megabytes.

19.1.3.7 For Large Number of Users Set Timeout to 5 Minutes Maximum

If you have a large number of users, set the timeout to no more than 5 minutes. To do this, expand the BPM Workspace `.ear` file, open the `web.xml` file, and update the timeout parameter.

19.1.4 Oracle BPMN Administration

This section describes issues and workarounds for Oracle BPMN Administration. This section contains the following:

- Section 19.1.4.1, "ORA-00001: unique constraint (SH_SOAINFRA.BPM_AUDIT_QUERY_PK) violated when exceeding the Quota"

- Section 19.1.4.2, "Discrepancy Between Message Recovery Status and Composite Status"

19.1.4.1 ORA-00001: unique constraint (SH_SOAINFRA.BPM_AUDIT_QUERY_PK) violated when exceeding the Quota

If you encounter the following error in the log file:

```
java.sql.SQLIntegrityConstraintViolationException: ORA-00001:
unique constraint (SH_SOAINFRA.BPM_AUDIT_QUERY_PK) violated when
exceeding the Quota
```

then increase the quota by doing the following:

1. Run the following SQL command:

   ```
   update BPM_AUDIT_SEQUENCE set seq_count = ( select max(query_
   id) from bpm_audit_query) +1 where seq_name = 'AUDIT_QUERY_
   SEQ';
   ```

2. Restart the server.

19.1.4.2 Discrepancy Between Message Recovery Status and Composite Status

In some contexts, when a message recovery is performed successfully, the composite status displayed in Oracle Enterprise Manager is still show as **Faulted**.

This occurs in the following context:

1. Process A calls Process B with the DenyAll policy attached.

2. Process A is invoked, but any messages to Process B are not delivered due to the DenyAll setting.

3. The DenyAll policy on Process B is disabled, and the errors are recovered.

4. The audit trail shows that the recovery was successful, however the composite status is still marked as Faulted.

There is no workaround for this issue.

19.2 Configuration Issues and Workarounds

There are no known configuration issues or workarounds for Oracle Business Process Management at this time.

19.3 Documentation Errata

There are no known documentation errata for Oracle Business Process Management at this time.

20

Oracle Business Rules

This chapter describes issues associated with Oracle Business Rules. It includes the following topics:

- Section 20.1, "General Issues and Workarounds"
- Section 20.2, "Configuration Issues and Workarounds"

The issues and workarounds listed here are those that were known at the time of the product's initial release to the public. Additional issues and workarounds may have been discovered since the initial release. To view the latest known issues associated with Oracle SOA Suite, BPM Suite, and related SOA technologies, go to the Oracle Technology Network (OTN) at:

http://www.oracle.com/technetwork/middleware/docs/aiasoarelnotes
-196861.html.

20.1 General Issues and Workarounds

This section describes general issues and workarounds. It includes the following topics:

- Section 20.1.1, "Migration of Common Java Classes with Aliases Applied"
- Section 20.1.2, "Alias and Visibility Settings Not Always Applied to Migrated Dictionary"
- Section 20.1.3, "Manual Updates Required for Release 10.1.3.x Migrated Dictionaries"
- Section 20.1.4, "Migrator Does not Migrate Certain Java Fact Type Properties"
- Section 20.1.5, "Migrator Throws a RUL-05003 Warning in Some Cases"
- Section 20.1.6, "Hiding Certain Properties When Using Classes with Misbehaving Methods"
- Section 20.1.7, "Length of Rules Repository Path Should be Less Than 70 Characters"
- Section 20.1.8, "Oracle Business Rules Expressions: New Options and Built-in Functions"
- Section 20.1.9, "Audit Trail for Upgraded AS11 Rules Components Shows Only Basic Information"
- Section 20.1.10, "Non-English Rule Names Are Displayed as Garbled When Oracle JDeveloper is Started in Native Encoding"

20.1.1 Migration of Common Java Classes with Aliases Applied

In Oracle Fusion Middleware 11g Release 1 (11.1.1), there is the concept of the "built-in" dictionary which is linked to by all other dictionaries. The built-in dictionary includes fact types for several common Java classes, including: `Object`, `String`, `BigInteger`, `BigDecimal`, `Calendar`, `XMLGregorianCalendar`, `List`, and `JAXBElement`.

There is a limitation when you are migrating a Release 10.1.3.x dictionary to Oracle Fusion Middleware 11g Release 1 (11.1.1). In Oracle Business Rules Release 10.1.3.x, all classes had to be imported into each dictionary, including `Object` which was imported by default. Thus, a user could import the common Java class fact types and change the aliases for properties, methods, and fields. In Oracle Fusion Middleware 11g Release 1 (11.1.1), for such classes users cannot specify custom aliases and these fact types are not migrated from a Release 10.1.3.x dictionary that is being migrated to Oracle Fusion Middleware 11g Release 1 (11.1.1). Thus, if an alias is applied for a common Java class that is part of the built-in dictionary, in Oracle Fusion Middleware 11g Release 1 (11.1.1) these aliases are discarded and the aliases are not available to use in rules.

Workaround:

There is no workaround for this issue.

20.1.2 Alias and Visibility Settings Not Always Applied to Migrated Dictionary

During dictionary migration from Oracle Business Rules Release 10.1.3.x, Java classes are imported into the new Oracle Fusion Middleware 11g Release 1 (11.1.1) dictionary and then aliases and visibility settings are applied. A bug in the migration prevents the identification of some methods so that alias and visibility settings can be applied.

Workaround:

In such cases, the alias and visibility settings that applied for the Oracle Business Rules Release 10.1.3.x dictionary must be manually applied to the destination Oracle Fusion Middleware 11g Release 1 (11.1.1) dictionary.

20.1.3 Manual Updates Required for Release 10.1.3.x Migrated Dictionaries

Restricted Simple Types

Oracle Business Rules Release 10.1.3.x uses JAXB 1.0. In JAXB 1.0 restricted simple types do not have any special support in the generated Java classes, and are mapped

to a property with the same type as the simple type. Oracle Business Rules for Oracle Fusion Middleware 11g Release 1 (11.1.1) uses JAXB 2.0. In JAXB 2.0, restricted simple types of string type are transformed into Java `enum` values. Because of this difference, after migrating a Release 10.1.3.x dictionary, places in the dictionary that previously used raw strings to represent the restricted values must be manually updated to use the Java enum values.

xsd:dateTime in Migrated Dictionaries

Oracle Business Rules Release 10.1.3.x uses JAXB 1.0. In JAXB 1.0, `xsd:dateTime` types are mapped to `java.util.Calendar`. Oracle Business Rules for Oracle Fusion Middleware 11g Release 1 (11.1.1) uses JAXB 2.0. In JAXB 2.0, `xsd:dateTime` types are mapped to `XMLGregorianCalendar`, which more accurately contains the values of an `xsd:dateTime` element. Thus, in a dictionary migrated from Release 10.1.3.x, comparisons between properties may no longer function correctly because `Calendar` implements a method `compareTo` and `XMLGregorianCalendar` implements a method `compare`. Manual changes are required in the dictionary to change the comparisons. Alternatively, in Oracle Fusion Middleware 11g Release 1 (11.1.1) you can use a `Duration` to compare most common date and time formats. Making this change in a migrated dictionary requires manual changes to the data model and to the rules that use the imported fact types.

Invalid Expressions in Migrated Dictionary

Oracle Business Rules for Oracle Fusion Middleware 11g Release 1 (11.1.1) supports rich type-checking that invalidates some expressions migrated from Release 10.1.3.x. For example, if an instance of `Integer` is referenced to call the `intValue()` method, this may produce a validation warning if `Integer` has not been imported into the data model. The solution to this issue is to import `Integer` into the data model.

Index-based or Iterator-based Iteration in Collections with RL Functions

In Release 10.1.3.x, it was necessary in functions and RL actions to use index-based or iterator-based iteration over collections with raw RL. In Oracle Fusion Middleware 11g Release 1 (11.1.1), the pre-defined action type "for" implements the for-each iteration loop construct and can replace most uses of these older iteration constructs.

Calling Functions to Return New Variable Instances

In Release 10.1.3.x, it was not possible to invoke a constructor in the initialization expression for a variable. In Oracle Fusion Middleware 11g Release 1 (11.1.1) variables are called globals. Due to this Release 10.1.3.x limitation, in some Release 10.1.3.x dictionaries, there are function calls to initialize expressions and to invoke the constructor and return the new instance. In Oracle Fusion Middleware 11g Release 1 (11.1.1), you can use the `new` operator in initialization expressions.

20.1.4 Migrator Does not Migrate Certain Java Fact Type Properties

In Release 10.1.3.x, a property was created for a fact type if the fact type had either a setter or getter. In Oracle Fusion Middleware 11g Release 1 (11.1.1), a property is created only if there is both a setter and a getter for the property.

20.1.5 Migrator Throws a RUL-05003 Warning in Some Cases

In Oracle Fusion Middleware 11g Release 1 (11.1.1), there is a requirement that Java and XML fact types in a dictionary have a single-inheritance chain as determined by visible fact types. This limitation prevents multiple-inheritance chains, including interfaces, from causing runtime exceptions in the engine. The user must specify a

single-inheritance chain by marking classes which should not be considered in an inheritance chain as non-visible. When a multiple-inheritance chain is detected during validation, the follow warning is returned:

```
RUL-05003: The visible fact type "Foo" should only inherit from one visible fact
type, but inherits from visible fact types "Bar" and "Baz".
```

In this case, marking either `Bar` or `Baz` as non-visible will fix this warning.

20.1.6 Hiding Certain Properties When Using Classes with Misbehaving Methods

When asserting instances of some classes exceptions may be thrown because of misbehaving methods. When a fact is asserted, the fact is "shadowed" inside the rules engine. This shadowing requires the rules engine to invoke the accessors for all properties with the **Visible** checkbox selected (for all visible properties). If an accessor throws an exception when it is invoked, this exception propagates out of the rules engine.

A specific example of this limitation is the `java.sql.Date` class. This class includes several deprecated methods, for example `getYears` and `setYears`. These methods always throw an `IllegalArgumentException` when they are invoked. In Oracle Business Rules, if an instance of the `Date` class is asserted, an exception is thrown. This exception is due to the `getYears` method being called when the fact instances are shadowed inside the rules engine.

When using Oracle Business Rules, the `Date` class should not be asserted, but this assert may be out of the control of the user. For example the `Date` class is asserted when a large object graph contains a list of `Date` instances and you are using assert tree on the object graph.

Workaround:

You must mark all properties that include misbehaving methods as non visible. To do this you must deselect the **Visible** checkbox for the properties that cause an exception. For example, in the `java.sql.Date` class., the workaround is to deselect the **Visible** checkbox for the properties "years", "hours", and "minutes" for the `java.sql.Date` fact type in the datamodel.

20.1.7 Length of Rules Repository Path Should be Less Than 70 Characters

While configuring the rules repository path, it is recommended to limit the length of the path to 70 characters. If the length exceeds 70 characters, you would encounter problems after any DT/RT changes from Oracle SOA Composer.

So, as a best practice, after you design the rules, ensure that the repository path length is less than 70 characters.The following path taken from a sample rule.decs file fails after DT/RT changes at run time:

```
<path>OrderBookingComposite/oracle/rules/com/example/globalcompa
ny/orderbooking/approvalrule/RequiresApprovalRule.rules</path>
```

20.1.8 Oracle Business Rules Expressions: New Options and Built-in Functions

Oracle Business Rules expressions used in Rules Designer and Oracle Oracle SOA Composer support the following:

1. Expressions support the new RL syntax. For example,

    ```
    (assign new) Driver d = new Driver(name: "Tom", age: 45)
    ```

2. Expressions support the `instanceof` keyword: For example,

```
if (vehicle instanceof Car) {
  (assign new) Car car = (Car)vehicle;
}
else if (vehicle instanceof Truck) {
  (assign new) Truck truck = (Truck)vehicle;
}
```

3. Expressions support the list type built-in functions, including the following:

```
RL.list.intersect
RL.list.reverse
RL.list.insertBefore
RL.list.concatenate
RL.list.union
RL.list.append
RL.list.except
RL.list.distinctValues
RL.list.remove
RL.list.indexOf
RL.list.create
```

For more information, see the descriptions in `oracle.rules.rl.extensions.RL`, in Oracle Fusion Middleware Java API Reference for Oracle Business Rules Javadoc.

4. Expressions can support a variable number of arguments. As in the Java Language, when the last parameter to a function or method is an array, then an expression can call the function or method with a variable number of arguments. For example, using the built-in `RL.list.create` function in an expression:

```
RL.list.create(Object[] items) returns List
```

The built-in `RL.list.create()` can be called as follows:

```
(assign new) List myList = RL.list.create(1, 2.0, "three")
```

In this example, the `myList` result contains three Objects: an Integer, a Double, and a String.

5. Expressions support locale-sensitive formatted number strings.

For example, in English locales:

```
(assign new) BigDecimal i = "1,000,000.1"
```

In German locales:

```
(assign new) BigDecimal i = "1.000.000,1"
```

The locale-insensitive number format would have been:

```
(assign new) BigDecimal i = 1000000.1
```

20.1.9 Audit Trail for Upgraded AS11 Rules Components Shows Only Basic Information

After you upgrade AS11 Oracle Business Rules components to AS11 PS2, the audit trail for the composite instances created before upgrade shows only basic information.

The decision trace includes only the name of the Decision Function invoked and the timestamp.

Workaround:

You can view other details of the trace, such as the values of input and output facts by using the BPELProcess Audit Trail.

20.1.10 Non-English Rule Names Are Displayed as Garbled When Oracle JDeveloper is Started in Native Encoding

If Oracle JDeveloper is started in native encoding (non-UTF8 encoding), when you create a business rule in a composite using non-English names, the non-English business rule name, which are part of the namespace in the newly generated decisionService type schema under the xsd folder, appear as garbled. This is because the business rule name is generated in the schema by using the native encoding of the client, and not using UTF-8.

Workaround:

Open the `decisionService` type schema in Oracle JDeveloper, change the garbled words back to the non-English business rule name, and save. The non-English name is saved in UTF8 and business rule can work fine in both design time and run time.

20.1.11 Local LOVs in a Decision Table Throws an Error When a Name is Not Specified

In a Decision Table, local List Of Values (LOV) bucketsets throws the following error when a name is not specified:

```
Invalid name specified.
```

Workaround:

When you create local LOV bucketsets in a Decision Table, specify a name for the bucketset.

20.1.12 Issue Using Boolean Attribute in Decision Tables Conditions

Consider the following schema:

```
<xs:complexType name="RulesObjectType">
        <xs:sequence>
            <xs:element name="value" nillable="true" type="xs:int"/>
            <xs:element name="flag" nillable="true" type="xs:boolean"/>
        </xs:sequence>
    </xs:complexType>
```

When you use the `nillable` boolean attribute in Decision Table conditions, editing the attribute bucketset does not yield a valid result. This is because Rules SDK is unaware of `java.lang.Boolean`, so it does not know that it should map to the built-in bucketset.

Workaround:

Append `.booleanValue()` to the condition, for example, `RulesObject.flag.booleanValue()`.

In addition, you have to import `java.lang.Boolean`.

20.1.13 Oracle SOA Composer Provides Only a Subset of Rules Designer Functionality

Oracle SOA Composer provides only a subset of the functionality available in Rules Designer. Some of the features/tabs in Rules Designer are currently not available in Oracle SOA Composer. For example, the **Functions** tab functionality is missing and you cannot add new rulesets with Oracle SOA Composer.

20.1.14 Number Formatting Does Not Work in Specific Cases in Oracle SOA Composer

In Oracle SOA Composer, you create an `if-then` rule. In the "if" part, when you write some conditions based on numbers and leave the "then" part empty, the number formatting in "if" conditions does not work.

For example, create an `if-then` rule, write the following "if" condition based on an integer

```
process.inputint is  111,111 (constant)
```

Leave the "then" part empty.

Save the rule, log out and and log on to Oracle SOA Composer in the `fr_FR` locale.

The number formatting of the "if" condition is displayed as `111,222`.

Workaround:

Specify some action in the "then" part of the rule.

When using Oracle SOA Composer with German (`de`), Italian (`it`), or Portuguese (`pt_BR`) locales, if you add an "if" condition based on integer, then the integer number formatting in this condition does not work.

Workaround:

Create the "if" condition based on integer in other locales such as `en_US`.

20.1.15 Split and Merge Selected Cells Operations Do Not Work in Oracle SOA Composer

Using Oracle SOA Composer with a Decision Table, the split and merge selected cells operations do not work.

There is no workaround for this issue.

20.1.16 Conflicting Display of Editor Buttons in Oracle SOA Composer Decision Table Toolbar

In a Oracle SOA Composer Decision Table, when a row is selected, the Bucketset Editor, the Condition Browser, and the Action Editor buttons are displayed on the Decision Table toolbar.

However, when the rows and columns are switched, all these buttons are displayed on the column header.

There is no workaround for this issue.

20.2 Configuration Issues and Workarounds

This section describes configuration issues and their workarounds. It includes the following topics:

■   Section 20.2.1, "Too Many Open Files Message When Deploying a Business Rules Project"

20.2.1 Too Many Open Files Message When Deploying a Business Rules Project

If you see the error "Too Many Open Files" while deploying an Oracle Business Rules Decision Component, you might need to increase the file descriptor limit.

The "Too many open files" issue is due to JDK6 bugs. These bugs could occur at runtime or at compile time, depending on the number of JAR files used and a few other variations around the use of file descriptors by the JDK/JRE.

Workaround for this issue is to increase the limit of file descriptors. Per-process, per-user file descriptor limit can be preconfigured by default to the value 1024. If you increase this limit to 4096 or larger, the new value should resolve this issue.

These are the potentially relevant JDK6 bugs,

http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6533291

http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6485027

http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6400872

http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6456960

http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6206485

http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6446657

And a blog entry describes this issue at

http://coldfused.blogspot.com/2007/02/mystery-of-too-many-open-files.html

To increase per-process, per-user file descriptor limit on a Linux system, do the following:

1. Using limit (csh) or ulimit (bash) command, find out what the value of descriptors are.

2. If the descriptors value is 1024, this value may be too low. As a root user, using the sudo command, edit /etc/security/limits.conf to increase the descriptor limit.

3. After changing the configuration, restart the machine with the updated larger value. For example using the 4096 value setting.

Example 20–1 shows the limits.conf file with the increased limit for all users to 4096.

Example 20–1   Sample limits.conf file

```
#<domain>      <type>  <item>         <value>
#

#*             soft    core           0
#*             hard    rss            10000
#@student      hard    nproc          20
#@faculty      soft    nproc          20
#@faculty      hard    nproc          50
#ftp           hard    nproc          0
#@student      -       maxlogins      4


# End of file
```

```
svrtech    soft    memlock       500000
svrtech    hard    memlock       500000
*          soft    nofile          4096
*          hard    nofile          4096
```

21

Oracle Complex Event Processing

This chapter describes issues associated with Oracle Complex Event Processing (Oracle CEP). It includes the following topics:

- Section 21.1, "New Features in Oracle CEP 11g Release 1 Patch Set 3 (11.1.1.4.0),"
- Section 21.2, "General Issues and Workarounds,"
- Section 21.3, "Configuration Issues and Workarounds,"
- Section 21.4, "Documentation Errata,"

> **Note:** The issues and workarounds listed here are those that were known at the time of the product's initial release to the public. Additional issues and workarounds may have been discovered since the initial release. To view the latest known issues associated with Oracle SOA Suite, BPM Suite, and related SOA technologies, go to the Oracle Technology Network (OTN) at: http://www.oracle.com/technetwork/middleware/docs/ai asoarelnotes-196861.html.

21.1 New Features in Oracle CEP 11g Release 1 Patch Set 3 (11.1.1.4.0)

This version of Oracle CEP includes the following new features:

- Section 21.1.1, "Annotation-Based Programming Model,"
- Section 21.1.2, "Oracle CEP IDE for Eclipse,"
- Section 21.1.3, "Oracle Continuous Query Language (Oracle CQL),"
- Section 21.1.4, "Tracing and Injecting Events in the Event Processing Network (EPN),"
- Section 21.1.5, "OSGi Bundler Utility,"
- Section 21.1.6, "Domain Directory Structure Changes,"

21.1.1 Annotation-Based Programming Model

In this release, you can use an annotation-based programming model to extend Oracle CEP component configuration.

See "Extending Component Configuration" in the *Oracle CEP Developer's Guide for Eclipse*.

21.1.2 Oracle CEP IDE for Eclipse

In this release, Oracle CEP IDE for Eclipse provides:

- Adapter Wizard

  See "How to Create an Adapter Node" in the *Oracle CEP Developer's Guide for Eclipse*.

- Event type repository editor

  See:

  – "How to Create an Oracle CEP Event Type as a JavaBean Using the Event Type Repository Editor" in the *Oracle CEP Developer's Guide for Eclipse*

  – "How to Create an Oracle CEP Event Type as a Tuple Using the Event Type Repository Editor" in the *Oracle CEP Developer's Guide for Eclipse*

- **Ctrl-Click** hyperlink navigation: see "Hyperlinking" in the *Oracle CEP Developer's Guide for Eclipse*.

- **Ctrl-Alt-T** shortcut to open all Oracle CEP types: see "Browsing Oracle CEP Types" in the *Oracle CEP Developer's Guide for Eclipse*.

- You can delete a node from the Event Processing Network (EPN) by selecting it and clicking the **Delete** key.

21.1.3 Oracle Continuous Query Language (Oracle CQL)

Oracle Continuous Query Language (Oracle CQL) is a query language based on SQL with added constructs that support streaming data. Using Oracle CQL, you can express queries on data streams to perform complex event processing (CEP) using Oracle CEP.

In this release, Oracle CQL includes:

- JDBC data cartridges: see "Oracle JDBC Data Cartridge" in the *Oracle CEP CQL Language Reference*.

- Parameterized Queries: see "Parameterized Queries" in the *Oracle CEP CQL Language Reference*.

> **Note:** Oracle Event Processing Language (Oracle EPL) is deprecated and superseded by Oracle CQL. Oracle EPL will be removed in a future release.

21.1.4 Tracing and Injecting Events in the Event Processing Network (EPN)

The Oracle CEP Event Inspector service and stream visualizer now let you do the following in the development environment:

- Trace events on any HTTP pub-sub server channel

- Trace events on any stage in the EPN on the Event Inspector service dynamic HTTP pub-sub server channel

- Inject events to any HTTP pub-sub server channel

- Inject events into any stage in the EPN using the Event Inspector service dynamic HTTP pub-sub server channel

For more information, see "Tracing and Injecting Events in the EPN" in the *Oracle CEP Visualizer User's Guide*.

21.1.5 OSGi Bundler Utility

Oracle CEP provides a `bundler.sh` utility that lets you create an OSGi bundle wrapper around an arbitrary Java Archive. You can deploy the resultant bundle JAR to an OSGi container where the Java packages/classes found within the bundle may be imported and used by other deployed bundles.

For more information, see "Creating Application Libraries" in the *Oracle CEP Developer's Guide for Eclipse*.

21.1.6 Domain Directory Structure Changes

In this release, by default, the complete installation does not include the default `ocep_domain` domain (with default passwords) and the product samples. If you want to install the default `ocep_domain` domain and samples (recommended), choose the **Custom** option.

See:

- "Creating an Oracle CEP Standalone-Server Domain" in the *Oracle CEP Administrator's Guide*
- "Creating an Oracle CEP Multi-Server Domain" in the *Oracle CEP Administrator's Guide*

21.2 General Issues and Workarounds

This section describes general issues and workarounds. It includes the following topics:

- Section 21.2.1, "Use of ha-buffered and ha-buffered-adapter is Deprecated,"
- Section 21.2.2, "HA Adapters Do Not Support Event Recording and Playback,"
- Section 21.2.3, "Covariance Not Supported in Event Accessor Methods,"
- Section 21.2.4, "wlevsshell.jar Manifest Contains Outdated Version Library Numbers,"
- Section 21.2.5, "Eclipse IDE Erroneously Displays Compilation Error for Some Java Method Calls from Oracle CQL Code,"
- Section 21.2.6, "Incorrect Documentation URL in Start Menu,"

21.2.1 Use of ha-buffered and ha-buffered-adapter is Deprecated

When configuring a high-availability application, use welvs:adapter attribute provider value `ha-buffering` (not `ha-buffered`) and component configuration file element `ha:ha-buffering-adapter` (not `ha:ha-buffered-adapter`). The use of `ha-buffered` and `ha:ha-buffered-adapter` is deprecated.

21.2.2 HA Adapters Do Not Support Event Recording and Playback

This release does not support configuring HA adapters for event recording and playback. Ordinarily, you can configure adapters (along with other parts of your event processing network) to persist events to a data store for later playback. Due to an issue

in this release, HA adapters — which help ensure consistency in applications configured for high availability — do not support event recording and playback.

21.2.3 Covariance Not Supported in Event Accessor Methods

Implementing a property getter to narrow its return type will break event binding for the setter. The property value will not be set. For example, event binding will break if the getter is declared as returning an Object in an interface that the event implements, but the method in your event implementation class returns some other type.

More broadly, neither covariance (narrowing return types in implementation) nor variable arguments are supported in event accessor methods.

21.2.4 wlevsshell.jar Manifest Contains Outdated Version Library Numbers

The wlevsshell.jar file installed with Oracle CEP contains a manifest file that lists libraries with outdated version numbers. For example, in several cases, a JAR file name is appended with a version number such as 11.1.1.1_0, where the number should instead be 11.1.1.4_0.

> **Note:** wlevsshell.jar provides the command-line shell for the Oracle Event Processing Language (Oracle EPL), which is deprecated and superceded by the Oracle Continuous Query Language; Oracle EPL will be removed in a future release.

To work around this, you can use the following lines to replace corresponding lines in the manifest file. Note that the text following each attribute, such as "Import-Package" and "Class-Path", should be on its own line in the manifest file; the lines are broken here for readability.

```
Export-Package: com.bea.wlevs.eplshell;version="11.1.1.4_0"
Import-Package: bsh,com.bea.wlevs.ede.api;version="11.1.1.4_0",
com.bea.wlevs.cep.impl;version="11.1.1.4_0",
com.bea.wlevs.processor.impl;version="11.1.1.4_0",
org.apache.commons.logging;version="1.1.0",
org.osgi.framework
Bundle-Name: com.bea.wlevs.eplshell
Bundle-Description: WLEvS EPL Shell
Bundle-SymbolicName: com.bea.wlevs.eplshell
Class-Path: ../modules/com.bea.wlevs.ede.api_11.1.1.4_0.jar
../modules/com.bea.wlevs.spi_11.1.1.4_0.jar
../modules/com.bea.wlevs.processor_11.1.1.4_0.jar
../modules/com.bea.wlevs.cep_11.1.1.4_0.jar
../modules/com.bea.wlevs.eventtyperepo_11.1.1.4_0.jar
../modules/com.bea.wlevs.util_11.1.1.4_0.jar
../modules/cglib.cglib_2.1.3.jar
../modules/org.apache.commons-beanutils_1.8.0.jar
../../modules/com.bea.core.beanshell_6.0.0.0.jar
../../modules/com.bea.core.apache.commons.logging.api_1.1.0.jar
../../modules/com.bea.core.antlr.runtime_2.7.7.jar
../../modules/org.springframework.spring-beans_2.5.6.jar
../../modules/org.springframework.spring-osgi-core_1.2.0.jar
../../modules/org.osgi.eclipse.equinox_3.5.1.jar
```

21.2.5 Eclipse IDE Erroneously Displays Compilation Error for Some Java Method Calls from Oracle CQL Code

Due to a limitation in the Eclipse IDE, Oracle CQL calls to some Java methods might generate compilation errors in the IDE even though the calls are valid at run time.

Using the Java data cartridge included with Oracle CEP, you can write Oracle CQL queries that call methods of your Java classes. As part of this support, at run time the Oracle CQL query processor will, if necessary, automatically convert a method argument given in CQL between the argument type's Java wrapper class and its corresponding primitive type (known in Java as "boxing" or "unboxing"); however, the Eclipse IDE will display a compilation error where your code assumes this run-time conversion. For example, given a method whose signature is fooMethod(int), a CQL call of fooMethod(Integer) will generate a compilation error in the IDE, but succeed at run time.

You can work around this limitation by compiling your code using an Ant build file rather than using the IDE.

21.2.6 Incorrect Documentation URL in Start Menu

The Windows Start menu item created for Oracle Complex Event Processing includes an incorrect link to documentation. By default, if you click the **Start** menu, then **Oracle Complex Event Processing 11gR1**, then **Documentation**, you'll see an error message (the browser displays an error 404). You can work around this limitation by entering the correct URL directly into your browser's address bar. The correct URL is http://download.oracle.com/docs/cd/E17904_01/soa.htm.

21.2.7 Incorrect Copyright Date on Oracle CEP Configuration Wizard Splash Screen

When you launch the Oracle Complex Event Processing Configuration Wizard, its splash screen displays an outdated copyright date. The copyright text should read as follows:

Copyright © 1996, 2011 Oracle and/or its affiliates. All rights reserved. Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

21.3 Configuration Issues and Workarounds

This section describes configuration issues and their workarounds. It includes the following topics:

- Section 21.3.1, "Avoid Identifiers that Match Windows Reserved File Names,"
- Section 21.3.2, "Some Visualizer Fields Might Not Be Recognized in Full Screen Mode,"
- Section 21.3.3, "Garbled Dialog Text on Non-English Versions of Windows,"

21.3.1 Avoid Identifiers that Match Windows Reserved File Names

When defining or uploading Oracle CQL rules, Oracle CEP server log files, or Event Processing Network (EPN) stages, do not use identifiers that match Windows reserved file names. Doing so may prevent normal Oracle CEP operation.

For more information, see Naming Files, Paths, and Namespaces at
http://msdn.microsoft.com/en-us/library/Aa365247.

21.3.2 Some Visualizer Fields Might Not Be Recognized in Full Screen Mode

When you're creating a query with the Query Wizard in the Oracle CEP Visualizer, some fields might not be recognized in full-screen mode. This is due to a known issue with the Flash technology on which the Oracle CEP Visualizer is based. Here's an excerpt from the Abobe web site:

"Flash Player 9 does not allow keyboard input when displaying content in full-screen mode. Flash Player 10 changes this, allowing for a limited number of keys to be usable in full-screen mode. These include Tab, the Spacebar, and the (up, down, left, right) arrow keys."

For example, using Flash Player 9, imagine the following scenario: You view the **Query Wizard** tab in full screen mode (by clicking the **Maximize panel** button in the upper-right corner), then double-click the **Window** construct to display the Window editor dialog. In full screen mode, you might be unable to specify the **Time** window type without prompting an error message when you try to add the window.

21.3.3 Garbled Dialog Text on Non-English Versions of Windows

If you're using the graphical installer to install Oracle CEP on a non-English version of Windows, you might see garbled text for non-English words in the user interface. For example, **Select** and **Cancel** buttons on browse dialog boxes — such as for selecting a middleware home directory, CEP installation directory or JDK home directory — can display garbled text.

On a related note, you will also be unable to choose a directory name that contains multibyte characters for your middleware home directory (the dialog box will display an error message).

21.4 Documentation Errata

This section describes documentation errata. It includes the following topics:

- Section 21.4.1, "Use char[] Rather than [C to Specify a Character Array,"

21.4.1 Use char[] Rather than [C to Specify a Character Array

As of this version, in the EPN assembly file, you should use char[] rather than [C to indicate that an event property's type is a character array. The [C expression will prevent compilation in the Eclipse IDE. Note that examples in the documentation currently use the older, incorrect type name:

```
<wlevs:properties>
    <!-- Incorrect - will prevent compilation! -->
    <wlevs:property name="symbol" type="[C" length="16" />
    ...
</wlevs:properties>
<wlevs:properties>
    <!-- Correct. -->
    <wlevs:property name="symbol" type="char[]" length="16" />
```

```
        ...
    </wlevs:properties>
```

22

Oracle Enterprise Repository

The chapter describes the new and changed functionality in Oracle Enterprise Repository 11g Release 1 (11.1.1).

> **Note:** The issues and workarounds listed here are those that were known at the time of the product's initial release to the public. Additional issues and workarounds may have been discovered since the initial release. To view the latest known issues associated with Oracle SOA Suite, BPM Suite, and related SOA technologies, go to the Oracle Technology Network (OTN) at
>
> http://www.oracle.com/technetwork/middleware/docs/aiasoarelno tes-196861.html

This chapter contains the following sections:

- Section 22.1, "What's New in Oracle Enterprise Repository 11g Release 1 (11.1.1)"
- Section 22.2, "General Issues and Workarounds"
- Section 22.3, "Enhancements in Oracle Enterprise Repository"
- Section 22.4, "Deprecated Features"

22.1 What's New in Oracle Enterprise Repository 11g Release 1 (11.1.1)

This section describes the new features and functionalities in Oracle Enterprise Repository 11g Release 1 (11.1.1):

Support for Integration with SAP

You can now manage SAP asssets as part of your overall enterprise service portfolio. Oracle Enterprise Repository harvests services that are published to the SAP UDDI v3.0 Registry. These services can be subsequently consumed through Oracle JDeveloper, Eclipse, or VS .Net.

Support for BPMN and BPEL 2.0

Oracle Enterprise Repository has enhanced the harvesting of BPM assets. Oracle Enterprise Repository now captures the complete BPM metamodel, including BPMN and BPEL 2.0.

Publishing SOA Web Services to UDDI

Oracle Enterprise Repository is now able to govern additional services managed by Oracle Enterprise Manager (OEM) Fusion Middleware Control using the Oracle

Enterprise Repository Exchange Utility. OEM Fusion Middleware Control publishes these services to Oracle Service Registry (OSR) using the UDDI standard and the Oracle Enterprise Repository Exchange Utility is used to bring the services into Oracle Enterprise Repository.

In Oracle Enterprise Manager (OEM) Fusion Middleware Control, the Publishing SOA Web Services to UDDI feature is available in the Services tab of the Services and References page of SOAInfra target.

Harvesting Deployed Composites from Oracle JDeveloper

You can harvest a deployed service from the JDeveloper SOA connection browse tree, or the SOA Composite Navigator.

Oracle Enterprise Repository also supports Converged Application Repository (CAR) tools that are provided in other products to include enterprise application content in Oracle Enterprise Repository. This procedure includes loading Solution Packs into the repository and running the CAR harvester to obtain endpoints for your application services.

Running Harvester in Preview Mode

You can now see all of the assets that will be created in Oracle Enterprise Repository before the harvest is committed.

Upgrading to Oracle Enterprise Repository 11*g*

It is recommended to migrate from your custom service model to the Oracle provided SOA service model in 11*g* Relase 1(11.1.1). Migrating to the Oracle provided service model enables you to leverage new functionality in 11*g* such as the harvester, JDeveloper integration, and so on. Migrating to the Oracle Enterprise Repository 11*g* SOA asset model also makes it easier to migrate to future releases of the product.

> **Note:** Ensure you contact support in advance if you are planning to upgrade from Oracle Enterprise Repository 10*g* or earlier releases to Oracle Enterprise Repository 11*g*.

22.2 General Issues and Workarounds

This section describes the general issues and workarounds in Oracle Enterprise Repository 11g Release 1 (11.1.1). It includes the following topics:

- Section 22.2.1, "Oracle Enterprise Repository"
- Section 22.2.2, "Asset Editor"
- Section 22.2.3, "Harvester"
- Section 22.2.4, "Exchange Utility"

22.2.1 Oracle Enterprise Repository

This section describes the general issues and workarounds found in Oracle Enterprise Repository:

22.2.1.1 Modifiying Projects with Multiple Users Assigned

In Oracle Enterprise Repository, the projects that have more than hundreds of users assigned to them take a lot of time to save, whenever the project was modified. This is resolved in Oracle Enterprise Repository 11g Release 1 (11.1.1).

22.2.2 Asset Editor

This section describes the issues and workarounds found in Oracle Enterprise Repository Asset Editor:

22.2.2.1 Navigator Displays Incorrect Details

When you launch the Navigator from the Asset detail, a relationship to the consuming project is also displayed, even if that asset has been rejected. This is resolved in Oracle Enterprise Repository 11g Release 1 (11.1.1).

22.2.2.2 Automatic Login in Navigator

The Navigator has a separate login than the Oracle Enterprise Repository Web tool. Prior to PS3, the Navigator would take the login information from cookies for the automatic login, which occurs when it is launched. This caused issues when cookies were turned off or if the Weblogic Server had the following setting set to false:

```
enterprise.security.cookielogin.allow
```

This has been resolved by not relying on cookies to pass the user information.

22.2.3 Harvester

This section describes the issues and workarounds found in Oracle Enterprise Repository Harvester:

- Section 22.2.3.1, "Creating an Asset Type Without Harvester Solution Pack"
- Section 22.2.3.2, "Invalid Characters in the Harvester Credentials"
- Section 22.2.3.3, "Running Harvester and Exchange Utility on the Same Computer"
- Section 22.2.3.4, "Connecting to Oracle Enterprise Repository Fails"
- Section 22.2.3.5, "Harvesting from Linux Shell Fails to Harvest"
- Section 22.2.3.6, "Consuming SAP Services in Oracle JDeveloper"
- Section 22.2.3.7, "Using of Harvester - Known Issue"

22.2.3.1 Creating an Asset Type Without Harvester Solution Pack

Oracle Enterprise Repository throws an exception when you attempt to create a new Type in the Type Manager using Endpoint as the Type for Defaults. This only occurs when the Harvester Solution Pack is not installed. This is resolved in Oracle Enterprise Repository 11g Release 1 (11.1.1).

22.2.3.2 Invalid Characters in the Harvester Credentials

There was an issue in the password utility when harvesting a composite from the SOA server. If the SOA Server's credentials had a "#" sign in the password, then the harvester failed. This is resolved in Oracle Enterprise Repository 11g Release 1 (11.1.1).

22.2.3.3 Running Harvester and Exchange Utility on the Same Computer

There is a scenario in which a WSDL URL will resolve differently if harvested from one computer and published to Oracle Service Registry from a different computer. To correct this issue, run Exchange Utility and Harvester on the same computer. As an alternative, the Harvester and Exchange Utility may be run on seperate computers, but you must ensure that both resolve to the same WSDL URL.

22.2.3.4 Connecting to Oracle Enterprise Repository Fails

In the Eclipse plugin, when an Oracle Service Bus project is harvested and you attempt to launch the Oracle Enterprise Repository Access view, then the Oracle Enterprise Repository connections fails. The Oracle Enterprise Repository connection also fails if you do the reverse of it. That is, if you first launch the Oracle Enterprise Repository Access view and then browse for Oracle Enterprise Repository, then also the Oracle Service Bus harvesting fails.

The workaround for this is to restart Eclipse and then reconnect to Oracle Enterprise Repository.

22.2.3.5 Harvesting from Linux Shell Fails to Harvest

When you run Harvester from the Linux Shell prompt, the Harvest fails with a "No Match" error, as follows:

```
$ ./harvest.sh -file
./harvest.sh: No Match
$
```

This is a known issue.

> **Note:** The above command runs successfully in Windows as well as in the bash prompt.

Workaround

You must run the harvester script as follows:

```
./harvester -file "<URL>"
```

where URL represents the URL from where you run the the harvester. Also, note that the URL must be specified within the double quotes, for the harvester to run successfully.

22.2.3.6 Consuming SAP Services in Oracle JDeveloper

While consuming the SAP services in Oracle JDeveloper from Oracle Enterprise Repository, launch JDeveloper with the following option from the command line:

```
jdev .exe -J"-Dsoa.enable.wsdl.authentication=true"
```

This is to ensure that SAP WSDLs that are authentication-enabled are consumed properly into JDeveloper, else the WSDL would not be authenticated and downloadable in JDeveloper.

22.2.3.7 Using of Harvester - Known Issue

In some circumstances, the harvester prioritizes WSDL-harvested information over the user-supplied metadata. This is specific to the Description and Service Type fields when harvesting assets of the Service Type provided with Oracle Enterprise Repository. You can avoid this by moving the user-supplied metadata to the other fields on Service assets prior to harvesting.

> **Note:** To address this known issue in harvester, contact Oracle support for a patch.

22.2.4 Exchange Utility

This section describes the issues and workarounds that are found in Oracle Enterprise Repository Exchange Utility(XU):

22.2.4.1 Exchange Utility Truncates the Asset Name

When a wsdl is harvested with the namespace that is too long, Exchange Utility truncates the full asset name and the asset will not be published properly. This is resolved in Oracle Enterprise Repository 11g Release 1 (11.1.1).

22.3 Enhancements in Oracle Enterprise Repository

This section describes the enhancements in Oracle Enterprise Repository 11g Release 1 (11.1.1):

Harvester

Harvester includes the following enhnacements for 11g Release 1 (11.1.1):

- Preview Mode feature
- BPMN/BPEL 2.0 Introspection
- Harvester core supports passing in keywords.

Exchange Utility

Exchange Utility includes the following enhnacements for 11g Release 1 (11.1.1):

- Including policy information when receiving services
- Support for integration with SAP

22.4 Deprecated Features

This section describes the deprecated features in Oracle Enterprise Repository 11g Release 1 (11.1.1):

Deprecation of System Settings

Several system settings are deprecated and should have no impact if changed. However, it is recommended not to change these in a production environment. For example, Database Connection Name, Company Name, and so on.

Deprecation of REX APIs

The APIs in Repository Extensibility Framework (REX) are deprecated, and will be replaced in a major future release, however, you can still continue to use REX APIs in 11g Release 1 (11.1.1) and in other minor releases of Oracle Enterprise Repository 11*g*.

The next major release of Oracle Enterprise Repository, which is 12*g*, is planned to include significant modifications to the current APIs in REX in order to align with standards, and improve ease of use and integration.

23

Oracle Human Workflow

This chapter describes issues associated with human workflow. It includes the following topic:

- Section 23.1, "General Issues and Workarounds"

> **Note:** The issues and workarounds listed here are those that were known at the time of the product's initial release to the public. Additional issues and workarounds may have been discovered since the initial release. To view the latest known issues associated with Oracle SOA Suite, BPM Suite, and related SOA technologies, go to the Oracle Technology Network (OTN) at:
>
> http://www.oracle.com/technetwork/middleware/docs/aiasoar
> elnotes-196861.html

23.1 General Issues and Workarounds

This section describes general issue and workarounds. It includes the following topics:

- Section 23.1.1, "Demo Certificate Entry Required for Oracle BPM Worklist Logins"
- Section 23.1.2, "Protecting Oracle BPM Worklist Using Oracle Virtual Directory"
- Section 23.1.3, "Committing Changes to Rules in Oracle SOA Composer and Oracle BPM Worklist"
- Section 23.1.4, "Compilation Error When Selecting the Apply and OK Buttons on the Human Task Dialog"
- Section 23.1.5, "Schema Elements Not Displaying in Expression Builder for Old Projects"
- Section 23.1.6, "Task Attachments are Automatically Saved"
- Section 23.1.7, "Push Back Action Not Supported If Including the Task History of Another Task"
- Section 23.1.8, "Specifying Date From and Date To Values on Notification Management Page"
- Section 23.1.9, "Some Fields Do Not Appear After Updating and Saving a ToDo Task in a Portlet"
- Section 23.1.10, "Customized Outcomes Are Not Displayed at Runtime"
- Section 23.1.11, "Error Appears When Loading Task Details in Oracle BPM Worklist"

23.1.1 Demo Certificate Entry Required for Oracle BPM Worklist Logins

Oracle BPM Worklist requires the demo certificate to be configured for a user to log in successfully, even if the server is not SSL-enabled. Therefore, do not remove the demo certificate entry from `setDomainEnv.sh` under `$ORACLE_HOME/user_projects/domain/WLS_SOAWC/bin` unless you replace it with a valid certificate:

```
[-Djavax.net.ssl.trustStore=${WL_HOME}/server/lib/DemoTrust.jks]
```

23.1.2 Protecting Oracle BPM Worklist Using Oracle Virtual Directory

Section "Configuring the Identity Service" of *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite and Oracle BPM Suite* describes how to configure Oracle WebLogic Server (and therefore, components such as Oracle BPM Worklist) to use an authentication provider. If you want to protect Oracle BPM Worklist using Oracle Virtual Directory (OVD), perform the following tests to confirm that OVD is properly configured:

- Confirm that the human workflow layer can see the users and groups from the OVD and Oracle Internet Directory (OID) providers. Even if you set the OVD and OID provider as the first provider in the list of authentication providers on the Oracle WebLogic Server Administration Console (with the `SUFFICIENT` control flag) and restart Oracle WebLogic Server, there may be other issues.

  To ensure that human workflow can see the users and groups from the first authentication provider, invoke the necessary User and Role APIs such as `getUser`, `getUsers`, `getRoles`, and so on using the following URL:

  `http://`*your_hostname*`:`*your_port*`/integration/services/IdentityService/identity`

  If you can see the users and groups using the APIs from the above link (use your host name and port to test), then users can access Oracle BPM Worklist.

- Incorrect user or group settings in the provider configuration page can cause even a valid user to be denied access. For example, you may have incorrect group settings or may not have set up users with any groups. Even then, a valid user may be denied service. This is because human workflow checks groups and roles to see that they have access to a service. If the configuration is incorrect, then the authorization service displays an error causing the validated user to be denied service. If group settings are not required, completely remove them. This way, the authorization service is successful in *not* getting group and role entitlements for the user as set in the OVD/ OID providers, and is given access to the service.

For information about Oracle Virtual Directory, see *Oracle Fusion Middleware Administrator's Guide for Oracle Virtual Directory*.

23.1.3 Committing Changes to Rules in Oracle SOA Composer and Oracle BPM Worklist

If you save, but do not commit, changes to a rule in Oracle SOA Composer, go to Oracle BPM Worklist and make other changes to the same rule, save and commit those changes, then return to Oracle SOA Composer to commit your original changes, you receive an error.

For example, perform the following steps:

1. Deploy a human task-based composite with at least one rule-based participant.

2. Log in to Oracle SOA Composer and make changes to the custom dictionary rule.

3. Save your changes, but log out without committing them.

4. Log in to Oracle BPM Worklist and go to **Task Configurations** > **Data Driven**.

5. Perform other changes to the same rule, then save and commit your changes.

6. Log out of Oracle BPM Worklist.

7. Log in again to Oracle SOA Composer and notice that the rule you originally edited is still in edit mode, and awaiting a commit action.

8. Click **Save**, then click **Commit**.

   You receive the following error:

   ```
   EJB Exception: ; nested exception is: oracle.fabric.common.FabricException: :
   MDS-01805: Sandbox
   weblogic_72deployed-composites72default72RulesVRsConsNSerial70rev1.072Humantas
   k1.task missing in BufferedMetadataStore:DBMetadataStore : MDS Repository
   connection = (JNDI Location = jdbc/mds/MDS_LocalTxDataSource).; nested
   exception is: oracle.fabric.common.FabricException: : MDS-01805: Sandbox
   weblogic_72deployed-composites72default72RulesVRsConsNSerial70rev1.072Humantas
   k1.task missing in BufferedMetadataStore:DBMetadataStore : MDS Repository
   connection = (JNDI Location = jdbc/mds/MDS_LocalTxDataSource).
   ```

23.1.4 Compilation Error When Selecting the Apply and OK Buttons on the Human Task Dialog

If you create a BPEL process that includes a human task, and select *both* the **Apply** and **OK** buttons in the Human Task dialog, you receive a compilation error when deploying the SOA composite application.As a workaround, select *only* the **OK** button in the Human Task dialog. This action enables the SOA composite application to be successfully compiled and deployed.

23.1.5 Schema Elements Not Displaying in Expression Builder for Old Projects

If you open a human task file from a release prior to 11*g* Release 1 11.1.1.3, schema elements do not display in the Expression Builder. For example, perform the following steps:

1. Open the human task file in Oracle JDeveloper.

2. In the **Assignment** section, double-click the participant type and add a participant using the Expression Builder. Note that the schema elements do not display in the **Schema** section of the Expression Builder dialog. Only the file location is shown.

For 11*g* Release 1 and Release 1 11.1.1.2 human tasks, there is a workaround:

1. Edit anything, such as adding a space in the **Task Title** field, and select **File** > **Save All**.

2. Close the human task file and reopen it. The Expression Builder correctly displays the schema elements.

Note that this workaround does not apply to 10*g* human task files.

23.1.6 Task Attachments are Automatically Saved

When you add an attachment to a task in Oracle BPM Worklist, it is automatically saved without you having to explicitly save it.

This can cause a conflict in a scenario in which you added an attachment, forgot to delete it, assumed that it was not saved (because you never performed a save action), and then reassigned, approved, or performed a similar action on the task. As a

consequence, the task attachment was sent to the next assignee even though you did not intend to send it.

As a workaround, delete the attachment if it was added inadvertently before routing the task to others.

23.1.7 Push Back Action Not Supported If Including the Task History of Another Task

When you include the task history of another task in a SOA composite application, selecting the push back action in Oracle BPM Worklist is not supported. For example:

1. Create a SOA composite application that includes a BPEL process.

2. In Oracle BPEL Designer, drag a human task into the BPEL process.

3. In the Create Human Task dialog, select the **Add** icon to invoke the Human Task Editor.

4. Create a human task (for example, named `humantask_1`).

5. Add a payload to the task and assign the task to a user (for example, **jcooper**).

6. Save the human task and exit the Human Task Editor.

7. In Oracle BPEL Designer, drag a second human task into the BPEL process.

8. Create a second human task (for example, named `humantask_2`) and add a payload to the task.

9. Assign the second task to another user (for example, **jstein**).

10. Click the **Advanced** tab for the second human task and select the **Include task history from** checkbox.

11. From the dropdown list, select the first task, **human_task1**.

12. Select **Use existing payload**.

13. Save and deploy the SOA composite application.

14. Invoke an instance of the SOA composite application.

15. Log in to Oracle BPM Worklist as the assignee of the first task (**jcooper**), and approve the task for **human_task1**.

    The task is completed.

16. Log in to Oracle BPM Worklist as the assignee of the second task (**jstein**).

    The task for **human_task2** is displayed.

17. From the dropdown box, select **Push back**.

    Although a push back is completed successfully, the task is still assigned to **jstein**.

23.1.8 Specifying Date From and Date To Values on Notification Management Page

You must specify values for *both* the **Date From** and **Date To** fields in the **Search** sections on the Notification Management page in Oracle Enterprise Manager Fusion Middleware Control Console to receive the correct search results. These fields do not work independently. Specifying values for only one of these fields does not display the correct search results. To access these fields:

1. Right-click **soa-infra** in the navigation tree, and select **Service Engines** > **Human Workflow** > **Notification Management**.

2. Expand the **Search** icon in the **Outgoing Notifications** section or **Incoming Notifications** section to display the **Date From** and **Date To** fields.

23.1.9 Some Fields Do Not Appear After Updating and Saving a ToDo Task in a Portlet

After you update and save a ToDo task or a ToDo subtask for a business task in a Worklist Portlet, the following fields should appear, but do not: **Assignee**, **Status**, and **Search** options.

23.1.10 Customized Outcomes Are Not Displayed at Runtime

This issue can occur under all of the following conditions combined:

- You have created a SOA project with a human task, which includes task outcomes to use.

- You have also created a task display form project associated with that SOA project.

- You have deployed the project.

- You have then added new outcomes, deleted existing outcomes, or made other changes to the task in the SOA project by using the Human Task Editor.

After redeploying both projects, you see that the human task-based ADF task flow does not get updated with your recent changes.

To resolve this issue so that new outcomes are displayed in the Task Details page, you must regenerate the task form.

23.1.11 Error Appears When Loading Task Details in Oracle BPM Worklist

When loading task details in Oracle BPM Worklist, the following error message appears:

```
Content was blocked because it was not signed by a valid security certificate
```

This is the expected behavior under the following conditions:

- You are logged in to Oracle BPM Worklist using Microsoft Internet Explorer version 7 or version 8.

- The main page is not using SSL.

- The IFrame for the task detail is using SSL, but the SSL certificate is not signed by a valid certificate authority.

If you are using Internet Explorer, and Oracle BPM Worklist is over HTTP and the task detail IFrame is over HTTPS, then a valid certificate must be used.

24

Oracle Mediator

This chapter describes issues associated with Oracle Mediator. It includes the following topics:

- Section 24.1, "General Issues and Workarounds"
- Section 24.2, "Configuration Issues and Workarounds"
- Section 24.3, "Documentation Errata"

> **Note:** The issues and workarounds listed here are those that were known at the time of the product's initial release to the public. Additional issues and workarounds may have been discovered since the initial release. To view the latest known issues associated with Oracle SOA Suite, BPM Suite, and related SOA technologies, go to the Oracle Technology Network (OTN) at:
>
> http://www.oracle.com/technetwork/middleware/docs/aiasoar
> elnotes-196861.html

24.1 General Issues and Workarounds

This section describes general issue and workarounds. It includes the following topics:

- Section 24.1.1, "Multi-lingual Support Depends on Database Character Set"
- Section 24.1.2, "Oracle Mediator - BPEL Process Manager Callback Processing"
- Section 24.1.3, "Mediator Components May Cause SOA Suite Server to Run Out of Memory"
- Section 24.1.4, "Mediator Advanced Functions Do Not Work in Design Time"
- Section 24.1.5, "Recoverable Case Instances for the Resequencer Are Tracked Incorrectly"
- Section 24.1.6, "Limits on Streaming Attachments"
- Section 24.1.7, "Oracle Mediator Locks all Groups on Restart"

24.1.1 Multi-lingual Support Depends on Database Character Set

If you want to use multi-language support feature for some functions in Oracle Mediator, then, to avoid any unexpected results, you must ensure that these characters are supported by Database character set. For example, for Unit Test function, if the initial message payload in Unit Test includes characters that are not supported by Database character set, then you will see that the characters fail to display correctly in

Unit Test part of the Oracle Enterprise Manager Fusion Middleware Control Console. This issue does not occur for a Database that supports Unicode characters.

24.1.2 Oracle Mediator - BPEL Process Manager Callback Processing

If Oracle Mediator calls a BPEL Process with callback processing and timeout, it is a best practice to explicitly handle the Callback exceptions returned from Oracle Mediator, in BPEL process. This is to ensure that the global transaction associated with Callback processing gets committed and is not rolled back. This way, the timeout handler configured in Oracle Mediator will not kick in even if the Callback handling in Oracle Mediator fails.

24.1.3 Mediator Components May Cause SOA Suite Server to Run Out of Memory

Mediator applications may run out of memory sometimes. For example, if the rate of incoming messages to Mediator is faster than the rate of callback messages, then memory accumulation occurs in the Mediator cache.

Workaround

To fix this issue, change the cache size through the Oracle Enterprise Manager Fusion Middleware Control Console by adding the following property in the `Parameters` attribute of the Mediator configuration properties:

```
mediator.runtime_cache.limit=<value>
```

For example, if you set the value of the `mediator.runtime_cache.limit` property to 100, then the size of the cache will be limited to 100. The cache size refers to the number of objects that can be stored in the cache. You can switch off caching completely by setting this property to zero.

24.1.4 Mediator Advanced Functions Do Not Work in Design Time

Mediator advanced functions such as `mhdr:getCompositeName()`, `mhdr:getHeader` require a runtime context to execute. If these functions are run using the Mapper Test functionality during design time, the target XML file is not generated and the following error is thrown:

```
XML-22044: (Error) Extension function error: Error invoking 'getComponentName':'
java.lang.IndexOutOfBoundsException: Index: 0, Size: 0'
```

These functions work fine in runtime environment.

24.1.5 Recoverable Case Instances for the Resequencer Are Tracked Incorrectly

In the Enterprise Manager, the number of recoverable case instances shown for the Mediator resequencer equals the number of retries made to that instance rather than the number of actual recoverable instances. This information is for tracking purposes only, and does not result in duplicate messages being sent out.

24.1.6 Limits on Streaming Attachments

You can pass attachments as a stream using Oracle Mediator, but currently only point-to-point with pass-through is supported. Inbound stream attachments can be routed to only one reference, and no assign or transformation rules can be applied.

24.1.7 Oracle Mediator Locks all Groups on Restart

If there are a large number of groups waiting to be processed in the resequencer tables and all the containers are restarted, the first container to restart locks all the groups for processing. Even if the other containers are started, the first container has already locked all the groups, and those groups are processed on the first node only. Note that each time a container restarts, it is assigned a new container ID, and so loses its association with the groups that were previously assigned to it.

As an example, if there are five containers, each associated with ten groups, and the containers are restarted, all 50 groups are associated with the first container to restart. The 50 groups continue to be processed by the first container even after the remaining containers start up. If all five containers restart simultaneously, the groups are still likely to be associated with only one or just a few containers.

24.2 Configuration Issues and Workarounds

This section describes configuration issue and workarounds. It includes the following topic:

- Section 24.2.1, "A Null Pointer Exception Occurs When There Are No Routing Rules"

24.2.1 A Null Pointer Exception Occurs When There Are No Routing Rules

In order to be a valid Mediator configuration, each Mediator component must include routing rules. If a component has no routing rules, Mediator does nothing at run-time and a null pointer exception occurs at mediator.dispatch.CaseExecutionPlan.getEffectiveExecutableCases.

24.3 Documentation Errata

There are no documentation errata for Oracle Mediator.

25

Oracle Service Bus

This chapter describes issues associated with Oracle Service Bus. It includes the following topics:

- Section 25.1, "What's New in Oracle Service Bus 11.1.1.4.0"

  Section 25.2, "General Issues and Workarounds"

- Section 25.3, "Configuration Issues and Workarounds"

- Section 25.4, "Documentation Errata"

> **Note:** The issues and workarounds listed here are those that were known at the time of the product's initial release to the public. Additional issues and workarounds may have been discovered since the initial release. To view the latest known issues associated with Oracle SOA Suite, BPM Suite, and related SOA technologies, go to the Oracle Technology Network (OTN) at:
> http://www.oracle.com/technetwork/middleware/docs/ai asoarelnotes-196861.html.

25.1 What's New in Oracle Service Bus 11.1.1.4.0

This section describes new features and enhancements in Oracle Service Bus 11*g* Release 1 Patch Set 3 (11.1.1.4.0).

25.1.1 Security Enhancements

This section describes security enhancements provided in this release.

25.1.1.1 Oracle Web Services Manager Policy Advertisement

For services protected with OWSM policies, Oracle Service Bus lets you specify the version of WS-Policy and WS-Security Policy to use for security policies in advertised WSDLs.

For more information, see "Advertising WSDLs to Support WS Standards" in the *Oracle Fusion Middleware Developer's Guide for Oracle Service Bus*.

25.1.1.2 Finding Compatible Oracle Web Services Manager Policies

In business services, you can find and attach compatible client OWSM policies for standard security policies embedded in the WSDL that the business service is based on.

On the business service policy configuration page, when you select the "From OWSM Policy Store" option and click **Add Compatible**, Oracle Service Bus attempts to locate and return compatible OWSM policies to replace unsupported WSDL-embedded WS-Policies.

For more information on this feature, and for information on using Oracle Web Services Manager with Oracle Service Bus, see "Securing Oracle Service Bus with Oracle Web Services Manager" in the *Oracle Fusion Middleware Developer's Guide for Oracle Service Bus*.

25.1.1.3 Change in the Default Value for the "Process WS-Security Header" Option

For proxy services, the default value for the "Process WS-Security Header" option has changed to "Yes." The new default setting applies when the WSDL contains a supported WLS 9 security policy, an OWSM security policy, or a custom policy configured for the proxy service. This change makes the proxy service an active security intermediary by default.

25.1.1.4 Oracle Web Services Manager Authorization Policy Support

Oracle Service Bus now provides support for Oracle Web Services Manager authorization policies.

"Securing Oracle Service Bus with Oracle Web Services Manager" in the *Oracle Fusion Middleware Developer's Guide for Oracle Service Bus* lists assertions and seed policies that are unsupported. Any assertions and seed policies *not* listed are supported.

25.1.2 JCA Adapter Support

Oracle Service Bus provides support for the Oracle JCA Adapter for Files/FTP.

For more information, see "JCA Transport" in the *Oracle Fusion Middleware Developer's Guide for Oracle Service Bus*.

25.1.3 JMS Inbound High Availability

The JMS transport has been enhanced to provide high availability and failover for inbound JMS messages received on a topic. When a JMS proxy service listening on a topic is deployed to a cluster, you can configure the proxy to use the "One Copy Per Application" option on the "Topic Messages Distribution" property. This option ensures that an incoming JMS message is processed on one available managed server in the cluster.

For more information, see "Transport Configuration" in the *Oracle Fusion Middleware Developer's Guide for Oracle Service Bus*.

25.1.4 HTTP Transport Query String Handling

The Oracle Service Bus HTTP transport has been enhanced to provide access to individual query parameters in the query string. In turn, this allows Oracle Service Bus to propagate query strings with encoded characters (such as & and #) correctly between proxy services and business services.

For more information on the "parameters" metadata element that was added to the HTTP transport schema to enable this enhancement, see "HTTP Transport" in the *Oracle Fusion Middleware Developer's Guide for Oracle Service Bus*.

25.1.5 Result Caching with Out-of-Process Coherence Node

Result caching in Oracle Service Bus can now be used with a stand-alone Coherence-only server.

For more information, see "Using an Out-of-Process Coherence Cache Server" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Service Bus*.

25.2 General Issues and Workarounds

This section describes general issue and workarounds. It includes the following topics:

- Section 25.2.1, "Starting Managed Server with IPv6 Host and Port Throws BEA-000000 Error"
- Section 25.2.2, "Session Activation Error Message in Firefox"
- Section 25.2.3, "Password Field Not Editable in Domain Template on Linux"
- Section 25.2.4, "JAVA_HOME Incorrect in setDomainEnv After Domain Upgrade on 64-Bit Install"

25.2.1 Starting Managed Server with IPv6 Host and Port Throws BEA-000000 Error

In the development environment, when starting a managed server by passing the managed server's IPv6 address and port, Oracle Service Bus throws a BEA-000000 "Cannot contact Admin server" error.

To work around this issue, create a new key-pair, then reconfigure SSL on the Admin server so that the key-pair in the server-side SSL certificate uses the host name of your IPv6 managed server. Then restart your managed server.

For more information on SSL, see "Configuring SSL" in *Oracle Fusion Middleware Securing Oracle WebLogic Server*.

25.2.2 Session Activation Error Message in Firefox

When activating an Oracle Service Bus session in Firefox, session activation takes longer than three minutes and you see an error message stating, "Another session operation is in progress. Please retry later."

The error message is harmless, and you can ignore it. The server is still processing the session activation, and you can wait for activation to finish.

The error message occurs when the Firefox network connection is set to "Manual proxy configuration" and the "HTTP Proxy" value is used for all listed protocols. The message is triggered by Firefox's auto-refresh occurring in conjunction with the proxy settings.

If you want to ensure the error message does not appear rather than ignoring it, change the Firefox proxy settings to another option, such as "Auto-detect proxy settings for this network" or "Automatic proxy configuration URL." To access these options in Firefox, choose **Tools** > **Options** > **Advanced** > **Network** > **Settings**.

25.2.3 Password Field Not Editable in Domain Template on Linux

On Linux, when creating a new domain using a developer template in the Oracle Fusion Middleware Configuration Wizard, the password and confirm password fields are not editable, and you cannot enter a password to create a domain.

To work around this issue, do one of the following:

- **To work around the issue each time it occurs**: Click the close window "x" button in the upper right corner of the Configuration Wizard. In the confirmation dialog that appears, click "No" to return to the Configuration Wizard. Now you can enter the password and confirmation password.

  or

- **To fix the issue permanently**:

  1. Kill a scim processes. For example, kill "pgrep scim"

  2. Modify (or create) the file ~/.scim/config to include the following line:

     `/FrontEnd/X11/Dynamic = true` (follow case sensitivity)

  3. If you are running VNC, restart the VNC server.

  4. Run the Configuration Wizard again.

25.2.4 JAVA_HOME Incorrect in setDomainEnv After Domain Upgrade on 64-Bit Install

On 64-bit installations of Oracle Service Bus, after upgrading a domain from 11*g* Release 1 Patch Set 2 (11.1.1.3.0) to 11*g* Release 1 Patch Set 3 (11.1.1.4.0), the JAVA_HOME value in the upgraded domain's setDomainEnv.cmd/sh file is incorrect.

The reason JAVA_HOME is not set correctly on 64-bit installations is because the 64-bit installer does not include a JDK.

To work around this issue, edit the setDomainEnv.cmd/sh in the upgraded domain with the correct JAVA_HOME for the JDK you are using.

25.3 Configuration Issues and Workarounds

This section describes configuration issues and their workarounds. It includes the following topics:

- Section 25.3.1, "Inbound Adapters Throw Error on Payload Size Limit"
- Section 25.3.2, "MQ Transport in Binding Mode Throws Error on Linux"
- Section 25.3.3, "Publishing Services to IPv6 Server Fails"
- Section 25.3.4, "Resources Disappear When Server Encoding Changes"

25.3.1 Inbound Adapters Throw Error on Payload Size Limit

When using the Oracle JCA adapters with Oracle Service Bus, Oracle Service Bus throws an error when the inbound payload size (DOM size) exceeds what is allowed by the payloadSizeThreshold adapter endpoint property.

To work around this issue, increase the size of the payloadSizeThreshold property on the JCA adapter endpoint configuration.

25.3.2 MQ Transport in Binding Mode Throws Error on Linux

When Oracle Service Bus and IBM WebSphere MQ are installed on the same Linux system, configuring the Oracle Service Bus MQ transport to run in binding mode causes an error.

To work around this issue, perform the following steps:

1. Make sure Oracle Service Bus and IBM WebSphere MQ are installed using the same user credentials.

2. Add the MQ Java library path to the Oracle Service Bus *DOMAIN_
   HOME*/bin/setDomainEnv.sh file. For example:

   ```
   -Djava.library.path=/opt/mqm/java/lib
   ```

3. **Oracle JRockit**: When using Oracle JRockit on Linux, add the LD_PRELOAD
   property to setDomainEnv.sh as well. For example:

   ```
   LD_PRELOAD=${JAVA_HOME}/jre/lib/i386/libjsig.so
   ```

25.3.3 Publishing Services to IPv6 Server Fails

Publishing services from the development environment to a domain that uses IPv6
addressing results in a MalformedURLException error.

To work around this issue, when specifying the host name in the "Define New Server"
window in the Servers view of the IDE, use either the server host name or specify the
IPv6 server address in square brackets. For example: [2001:0db8:ffff:ffff:ffff:ffff:ffff:ffff].

25.3.4 Resources Disappear When Server Encoding Changes

After creating resources in the Oracle Service Bus Console, then changing the server
encoding and restarting the server with the different encoding, only English language
resources (if any) appear in the Oracle Service Bus Console. Non-English resources do
not appear.

For example, if you start the server using ja_JP.utf8 encoding and create resources in
the Oracle Service Bus Console with Japanese, Korean, and English names, then restart
the server using a different encoding such as ko_KR.euckr, only the English-name
resources appear in the Oracle Service Bus Console.

In this situation, the missing resources still exist but are not displayed because of the
encoding change.

To work around this issue, switch back to the original server encoding and restart the
server. Oracle Service Bus does not support server encoding changes.

25.4 Documentation Errata

This section describes documentation errata. It includes the following topics:

- Section 25.4.1, "About Errors When Using Plug-in Security Providers"
- Section 25.4.2, "Adding WSDLs"
- Section 25.4.3, "Oracle Service Bus Product Download Location"

25.4.1 About Errors When Using Plug-in Security Providers

> **Note:** This section will be added to the Oracle Service Bus security
> topics in a future release.

If you are using a plug-in security provider with Oracle WebLogic Server to store
policies for use with Oracle Service Bus, you may encounter an error that says Oracle
Service Bus cannot determine whether or not required policies are available; for
example, error BEA-387896, as described in the *Oracle Fusion Middleware Messages for
Oracle Service Bus*.

An error message like that does not necessarily mean the policies do not exist, or that you have a connection or configuration problem with the security provider. Oracle Service Bus uses an Oracle WebLogic Server SSPI to read policies that security providers can implement. However, the SSPI read functionality is optional. It is possible that a security provider does not allow read access by not implementing this SSPI. In such a case, Oracle Service Bus cannot reliably determine whether or not the security provider contains the required policies, even when the required policies could very well exist in the security provider.

To determine whether or not such a warning indicates a real problem, try creating or modifying resources in the Oracle Service Bus Console. Also, try securing a proxy service with an access control policy and test it. See "Editing Message-Level Access Policies" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Service Bus* for more details on how to configure an access control policy on a proxy service. If you can successfully create or manipulate resources as well as test a secured proxy service while using the security provider, then the security provider is configured correctly and you can safely ignore the error message.

25.4.2 Adding WSDLs

> **Note:** Following is a modified version of the existing "Adding WSDLs" section of the *Oracle Fusion Middleware Administrator's Guide for Oracle Service Bus*. The updated content is the "Before You Begin" paragraph.

Before You Begin: If the WSDL resource you want to create contains URL references to external schemas that do not currently exist in Oracle Service Bus, such as http://www.w3.org/2001/XMLSchema.xsd, you must import those URL-referenced schemas—and any dependent schemas—into Oracle Service Bus by creating XML Schema resources. WSDL resources in Oracle Service Bus can only reference locally available schemas. For more information, see "Adding XML Schemas" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Service Bus*.

To add a WSDL:

1. If you have not already done so, click **Create** to create a new session or click **Edit** to enter an existing session.

2. Select **Project Explorer**, then select a project or folder in which to add the WSDL. The Project/Folder View page is displayed.

3. From the **Create Resource** list, select **WSDL** from under Interface to display the Create a New WSDL Resource page.

4. In the **Resource Name** field, enter a unique name for this WSDL. This is a required field.

5. In the **Resource Description** field, enter a description for the WSDL.

6. In the **WSDL** field, do one of the following:

   - Enter text for the new WSDL.

   - Click **Browse** to locate and import an existing WSDL.

   - Copy and paste text from an existing WSDL into this field.

   This is a required field.

7. Click **Save**. The new WSDL is saved in the current session.

   When you click **Save**, if there any unresolved references for the new WSDL, the system displays them.

8. To end the session and deploy the configuration to the run time, click **Activate** under Change Center.

25.4.3 Oracle Service Bus Product Download Location

Following is the direct link to the Oracle Service Bus product download page. The *Oracle Fusion Middleware Installation Guide for Oracle Service Bus* will be updated to include this link.

http://www.oracle.com/technetwork/middleware/service-bus/downloads/index.html

26

Web Services Security and Administration

This chapter describes issues associated with Web services security and administration, including Oracle Web Services Manager. It includes the following topics:

- Section 26.19, "Compatible Policies Not Returned When Using JDeveloper Wizard to Attach Oracle WSM Policies to Web Service Client"

- Section 26.20, "No Documentation for wss_saml_or_username_token_service_ policy Policy"

- Section 26.21, "Doc Errata in "Schema Reference for Predefined Assertions" Appendix"

- Section 26.22, "SAML Bearer Token Policies Now Signed by Default"

> **Note:** See also Section 9.35, "Web Services and XML Issues and Workarounds."

26.1 Using Multibyte User Credentials with wss_http_token_* Policy

In this release, multibyte user credentials are not supported for the wss_http_token_* policies. If multibyte user credentials are required, use a different policy, such as wss_ username_token_* policy. For more information about the available policies, see Appendix B "Predefined Policies" in the *Oracle Fusion Middleware Security and Administrator's Guide for Web Services*.

26.2 Importing Custom Policies Before Attaching and Deploying to a Service Application

It is recommended that you import custom policies before attaching and deploying them to a service application.

If you deploy an application with policies that do not exist in the Metadata Store (MDS), and subsequently import the policies, you need to restart the server for the policy attachment count to be updated.

26.3 Performing a Bulk Upload of Policies

When performing a bulk import of policies to the MDS repository, if the operation does not succeed initially, retry the operation until the bulk import succeeds.

For the most part, this can occur for an Oracle RAC database when the database is switched during the metadata upload. If there are *n* databases in the Oracle RAC database, then you may need to retry this operation *n* times.

For more information about bulk import of policies, see "Migrating Policies" in the *Oracle Fusion Middleware Security and Administrator's Guide for Web Services*.

26.4 Reviewing Policy Configuration Override Values After Detaching a Client Policy

If you attach a policy to a client, override policy configuration values, and subsequently detach the policy, the policy configuration override values are not deleted. When attaching new policies to this client, ensure that you review the policy configuration override values and update them appropriately.

26.5 Removing Post-deployment Customizations

When the connections.xml file is changed after deployment using the AdfConnection MBean, the complete connection is saved as a customization. This means that changes to the connection in a redeployed application are overwritten by the customization.

When you use Fusion Middleware Control to make changes to an application's connections.xml file after deployment, a new connections.xml file is created as a customization and stored in the MDS repository. This customization persists for the life of the application. Therefore, if you redeploy the application, the customized connections.xml file continues to be applied as a customization on the application.

To allow the redeployed application's connections.xml file to be applied without the prior customization (from Fusion Middleware Control), you must explicitly remove the `connections.xml` customizations from the MDS repository.

For example, if you deploy an application with a Web services data control, then use Fusion Middleware Control to attach the 'username token client policy', and subsequently detach the policy. Then, you return to JDeveloper to edit the application and attach the 'http token client policy', and redeploy the application. When you view the application using Fusion Middleware Control, you see that it is not using the 'http token client policy' that you attached. That is because it is using the customized connections.xml file that you previously created using Fusion Middleware Control.

If you remove the connections.xml customizations from the MDS repository, the application will use the its own connections.xml file.

26.6 Reviewing Localization Limitations

The following information is supported in **English only** in this release of Oracle Enterprise Manager:

- All fields in the policy and assertion template except the `orawsp:displayName` field.

- If using the `?orawsdl` browser address, the `orawsp:description` field.

- In the System MBean browser, the **Description** field in the `oracle.wsm.upgrade` Mbean.

26.7 When Using WLST to Import a Security Policy, the Same Policy May Be Repeatedly Imported

When WLST is used to import a security policy, be aware that the same policy may be repeatedly imported.

26.8 Identity in WSDLs Is Not Used for Enforcement with ADF DC Applications

For ADF DC applications, the identity extension in a WSDL (for example, the certificate published in the WSDL), cannot be used as a recipient certificate for message protection policies. Instead, either the recipient key alias (declarative configuration override) or the default recipient key alias specified in the policy are used.

26.9 JVM limitation for Kerberos Token Policy with Message Protection Policy

Within a JVM, the Kerberos acquire key works fine when there is only a single Web service principal. If there are additional Web service principals within the same JVM, the acquire key returns null. When a Web service and client exist in different JVMs, this is no longer an issue.

26.10 Fusion Middleware Control Does Not List Policies When Two Servers Are SSL Enabled (Two-way SSL)

When a Managed Server is Two-way enabled SSL (for example, a SOA server hosting Oracle WSM Policy Manager over Two-way SSL) and the Administration Server hosting Fusion Middleware Control is correctly configured to access the Two-way SSL-enabled Managed Server, Fusion Middleware Control still does not list the Oracle WSM policies.

26.11 Web Service Test Page Cannot Test Input Arguments Bound to SOAP Headers

For Web services that have any input arguments bound to SOAP headers, the Test Web Service page in the Fusion Middleware Control console cannot show the message. Therefore, such operations cannot be tested with the **Test Web Service** page.

For example, if the input for a multi-part WSDL is viewed through Fusion Middleware Control, and one input argument is bound to a SOAP header, the composite instance fails with the following exception because the other part of the message was missing in the input:

```
ORAMED-01203:[No Part]No part exist with name "request1" in source message
```

To resolve such an issue, select XML View for Input Arguments and edit the payload to pass input for both parts of the WSDL.

26.12 Possible Build Label Version and Date Discrepancy On the Policy Validation Page

The build label and date information on the Policy Manager Validation page represent the repository information and the version of the Policy Manager. The build label represents the Policy Manager build that populated the repository and the date is the date that the repository was last refreshed. If the repository is not refreshed during a sparse installation of Oracle Fusion Middleware 11gR1 PS2, the information will not change. Note that a typical installation of Oracle Fusion Middleware 11gR1 PS2 does not refresh the repository either.

26.13 When Adding SAML Issuer From Fusion Middleware Control the jps-config.xml File Is Incorrectly Updated

In release 11*g* R1 (11.1.1.1.0), when you try to add or edit a trusted issuer from the Fusion Middleware Control console, then the `jps-config.xml` file is incorrectly updated. As a workaround for this issue, Oracle recommends upgrading to 11*g* R1 Patch Set 2 (11.1.1.3.0).

26.14 Patching of Patch Set 1 WebLogic Server Web Services Attached to Custom Polices With Patch Set 3 Oracle WSM Policy Manager

Due to a new feature in 11*g* R1 Patch Set 2 (11.1.1.3.0), the "Shared policy store for Oracle Infrastructure Web services and WebLogic Server Web services", WebLogic Server Web services now utilize the Policy Manager by default to retrieve policies from the MDS repository. In Patch Set 1, WebLogic Server Web services used classpath mode by default.

After patching your Oracle Fusion Middleware 11*g* R1 software installation to Patch Set 2, if you have attached a *custom* Oracle WSM policy to a WebLogic Server Web service, you need to make sure your custom policy is stored in the MDS repository. Note that only custom policies in use need to be migrated. All seed policies will be available in the MDS repository out-of-the-box.

To migrate policies to the Metadata Services (MDS) repository, see "Maintaining the MDS Repository" in the *Security and Administrator's Guide for Web Services*.

26.15 Custom Policy Fails When an Empty Subject Is Passed

If an empty subject is passed to a custom policy, it fails with a generic error. To work around this issue, you can create and set an `anonymousSubject` inside the execute method of the custom step. For example:

```
javax.security.auth.Subject subject =
oracle.security.jps.util.SubjectUtil.getAnonymousSubject();
context.setProperty(oracle.wsm.common.sdk.IMessageContext.SECURITY_
SUBJECT,subject)
```

Note that in this example the context is of Type `oracle.wsm.common.sdk.IContext`

26.16 Best Practice For UDDI Publication

If your Web services are already in Oracle Enterprise Repository (OER), then you should use the OER Exchange Utility to publish those Web services to the Oracle Service Registry.

26.17 Possible Limitation When Using Custom Exactly-one Policies

In some cases, there can be a limitation when using custom Exactly-one policies. For a set of assertions within the exactly-one policy, if a request message satisfies the first assertion, then the first assertion gets executed and a response is sent accordingly. However, this may not be the desired behavior in some cases because the request may be intended for the subsequent assertions.

For example, you may have a client policy that has `Timestamp=ON` and a service exactly-one policy that has a `wss11 username token` with message protection assertions: the first has `Timestamp=OFF`; the second has `Timestamp=ON`. Therefore, the first assertion in the service exactly-one policy is not expecting the Timestamp in the request, yet the second assertion does expect it. In this case, the first assertion gets executed and the response is sent with no Timestamp. However, the client-side processing then fails because it expects the Timestamp that was sent in the request.

This limitation can exist with any cases where a client policy expects a greater number of elements to be signed and a service policy does not.

26.18 Ignore "Services Compatibility" Error for Security Policies Used Between Oracle WSM and WebLogic Server

Fusion Middleware Control may display a false error message when verifying compatibility between Oracle WSM security polices and WebLogic Server security polices. This happens because some WebLogic Server security policies use the 2007 version of WSSP 1.2, while other policies use the 2005 version (early draft). The false incapability message occurs when using the Enterprise Manager to attach an Oracle WSM security client policy. Upon clicking the **Check Services Compatibility** button, a message states that the services are incompatible. However, this service interoperability use case works for both versions of WSSP 1.2.

26.19 Compatible Policies Not Returned When Using JDeveloper Wizard to Attach Oracle WSM Policies to Web Service Client

During design time, the JDeveloper Wizard's option for **Attaching Oracle WSM Policies to Web Service Clients** might not return any compatible policies. This can occur due to one of the following reasons:

- There are no compatible client policies corresponding to the service policies published in the WSDL.

- In some cases, when you are trying to determine the compatible client policies in version 11.1.1.4 of JDeveloper running with Fusion Middleware Control Enterprise Manager that correspond to the service policies published in the WSDL of the Web service in version 11.1.1.2 or earlier.

Workaround:

Disable the **Show only the compatible client policies for selection** option in the JDeveloper Wizard. This will list all the client policies.

If Oracle WSM policies *are attached* to the Webs service, use the corresponding client policy. For example, if the service has the policy wss11_saml_or_username_token_with_message_protection_service_policy, it is safe to assume that wss11_saml_token_with_message_protection_client_policy or wss11_username_token_with_message_protection_client_policy will work at the client side.

If WSM policies are *not attached* to the Web service, refer to the *Interoperability Guide for Oracle Web Services Manager* for instructions on determinant the corresponding client policy and attaching it.

26.20 No Documentation for wss_saml_or_username_token_service_policy Policy

The following policy is new for this release, but is not documented: wss_saml_or_username_token_service_policy

This policy enforces one of the following authentication policies, based on whether the client uses a SAML or username token, respectively:

- SAML token within WS-Security SOAP header using the sender-vouches confirmation type.

- WS-Security UsernameToken SOAP header to authenticate users against the Oracle Platform Security Services configured identity store.

The policy contains the following assertions, as an OR group, meaning either type of policy can be enforced by a client:

- oracle/wss10_saml_token_service_template

- oracle/wss_username_token_service_template

For information about configuring the policy, see the configuration descriptions for oracle/wss10_saml_token_service_policy and oracle/wss_username_token_service_policy in Appendix B "Predefined Policies" section of the *Oracle Fusion Middleware Security and Administrator's Guide for Web Services*.

26.21 Doc Errata in "Schema Reference for Predefined Assertions" Appendix

In this release of the *Oracle Fusion Middleware Security and Administrator's Guide for Web Services*, Appendix D "Schema Reference for Predefined Assertions" has not been updated to reflect the STS policies. This appendix will be updated in the next release.

26.22 SAML Bearer Token Policies Now Signed by Default

A new property, `saml.enveloped.signature.required`, is available when configuring wss_saml_token_bearer_over_ssl policies (both client and service). In previous releases, the SAML bearer token was unsigned by default. In the current release, the SAML bearer token is signed because the default value for the `saml.enveloped.signature.required` property is `true`.

To retain the behavior of the previous release, set the `saml.enveloped.signature.required` property to `false` in both the client and service policies. The SAML bearer token is signed using the domain sign key, but it can be overridden using the `keystore.sig.csf.key` property set in the bearer client policy.

The affected policies are:

- wss_saml20_token_bearer_over_ssl_client_policy

- wss_saml_token_bearer_over_ssl_client_policy

- wss_saml20_token_bearer_over_ssl_service_policy

- wss_saml_token_bearer_over_ssl_service_policy