# 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

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/pls/topic/lookup?ctx=acc&id=docacc.

### Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit
http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit
http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs 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:



## 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:



### 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:



#### 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.

## 1.5.3 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 to Oracle Database 11.2.0.1. For more information, contact Oracle Support.

## 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:

`https://myoraclesupport.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.<br>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:<br>`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:



**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 topics:



### 2.1.1 Clarification About Path for OPMN

OPMN provides the `opmnctl` command. The executable file is located in the following directories:

- *ORACLE_HOME*/opmn/bin/opmnctl: The opmnctl command from this location should be used only to create an Oracle instance or a component for an Oracle instance on the local system. Any opmnctl commands generated from this location should not be used to manage system processes or to start OPMN.

On Windows, if you start OPMN using the opmnctl start command from this location, OPMN and its processes will terminate when the Windows user has logged out.

- *ORACLE_INSTANCE*/bin/opmnctl: The opmnctl command from this location provides a per Oracle instance instantiation of opmnctl. Use opmnctl commands from this location to manage processes for this Oracle instance. You can also use this opmnctl to create components for the Oracle instance.

  On Windows, if you start OPMN using the opmnctl start command from this location, it starts OPMN as a Windows service. As a result, the OPMN parent process, and the processes which it manages, persist after the MS Windows user has logged out.

### 2.1.2 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.

### 2.1.3 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**.

### 2.1.4 Limitations in Moving from Test to Production

Note the following limitations in moving from test to production:

- If your environment includes Oracle WebLogic Server which you have upgraded from one release to another (for example from 10.3.4 to 10.3.5), the pasteConfig scripts fails with the following error:

  ```
  Oracle_common_home/bin/unpack.sh line29:
  WL_home/common/bin/unpack.sh No such file or directory
  ```

  To work around this issue, edit the following file:

  *MW_HOME*/utils/uninstall/WebLogic_Platform_10.3.5.0/WebLogic_Server_10.3.5.0_Core_Application_Server.txt file

  Add the following entries:

  ```
  /wlserver_10.3/server/lib/unix/nodemanager.sh
  /wlserver_10.3/common/quickstart/quickstart.cmd
  /wlserver_10.3/common/quickstart/quickstart.sh
  /wlserver_10.3/uninstall/uninstall.cmd
  /wlserver_10.3/uninstall/uninstall.sh
  /utils/config/10.3/setHomeDirs.cmd
  /utils/config/10.3/setHomeDirs.sh
  ```

- 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.

- The copyConfig operation fails if you are using IPv6 and the Managed Server listen address is not set.

  To work around this problem, set the Listen Address for the Managed Server in the Oracle WebLogic Server Administration Console. Navigate to the server. Then, on the Settings for server page, enter the Listen Address. Restart the Managed Servers.

- When you are moving Oracle Platform Security and you are using an LDAP store, the LDAP store on the source environment must be running and it must be acccessible from the target during the pasteConfig operation.

- If you are using GridLink data sources, the copyConfig and pasteConfig scripts will not update the GridLink data sources on the target. However, the scripts support the proper update of multi data sources when using Oracle RAC.

### 2.1.5 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 environment 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.

- If Oracle Service Bus is part of the same domain as Oracle SOA Suite, you cannot use the test-to-production procedures described in "Moving Oracle SOA Suite to a Production Environment" in the *Oracle Fusion Middleware Administrator's Guide*. you can either install Oracle Service Bus in a different domain, or manually create the production environment.

### 2.1.6 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
```

## 2.3 Documentation Errata for the *Oracle Fusion Middleware Administrator's Guide*

This section describes documentation errata for the *Oracle Fusion Middleware Administrator's Guide*.

In the section "Moving Oracle Business Intelligence to an Existing Target Environment When There Are Few Patches to Apply", the procedure is incorrect in the task "(Optional) Refresh Global Unique Identifiers (GUIDs)". Note the following:

- Step 3 includes an example of modifying the instanceconfig.xml file to instruct Presentation Services to refresh GUIDs on restart. The step should read:

  Modify the instanceconfig.xml file to instruct Presentation Services to refresh GUIDs on restart. Edit the file and find the following section:

  ```
  <Catalog>
  ```

```
   <UpgradeAndExit>false</UpgradeAndExit>
</Catalog>
```

Comment out the <UpgradeAndExit> line and add an extra line in this section as in the following example:

```
<Catalog>
   <!--UpgradeAndExit>false</UpgradeAndExit-->
   <UpdateAccountGUIDs>UpdateAndExit</UpdateAccountGUIDs>
</Catalog>
```

- Step 6 should read:

  Comment out the line added in Step 3 and remove the commenting from the original line so that it reads as shown in the following example:

```
<Catalog>

  <UpgradeAndExit>false</UpgradeAndExit>

  <!--UpdateAccountGUIDs>UpdateAndExit</UpdateAccountGUIDs-->
</Catalog>
```

# 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"

### 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.

### 3.1.13 Error Message on Deleting the Shared Folder After Scale-Out

If Oracle Essbase is configured, then the Shared Folder Path field is displayed in the Essbase Agents region on the Failover page of the Availability tab for the Business Intelligence node in Fusion Middleware Control.

You use the Shared Folder Path field when setting up a highly available Essbase deployment. The field specifies a shared location for Essbase configuration files, security files, and all applications and corresponding databases.

If you remove an existing value in the Shared Folder Path field and attempt to apply the change without specifying a replacement value, then the following error message is displayed:

OBI_SYSMAN_1261, "You must not delete the shared folder after a previous scaleout"

To continue, either specify a valid path to the shared location in the Shared Folder Path field, or discard the change.

### 3.1.14 Coreapplication Process for Oracle Business Intelligence Reported as Down in Fusion Middleware Control

In Fusion Middleware Control, the coreapplication process for Oracle Business Intelligence is erroneously displayed as not running (or "down") even when it is running (or "up"). For example, you might see an error message similar to the following one:

Restart All – Failed. Restart failed with 2 errors and 0 warnings. Problems reported by:coreapplication.

To work around this issue, wait for approximately five to ten minutes, then restart all processes in Fusion Middleware Control. The exact time to wait depends on the environment (for example, on the size of the repository and on the speed of the database connection).

## 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

### 3.2.2 Patching Section in the Fusion Middleware Control Online Help is Not Supported

The Fusion Middleware Control online help system includes the contents of the *Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*. In the Fusion Middleware Control online help, this guide includes Section 17.11, which describes patching the Oracle BI Presentation Catalog. This functionality is not supported in Release 11.1.1.5. The section is not included in the version of the guide that ships with Oracle BI EE or that is posted on the Oracle Technology Network.

# 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, "Secure Resources in Application Tier"
- Section 4.1.2, "mod_wl Not Supported for OHS Routing to Managed Server Cluster"
- Section 4.1.3, "Only Documented Procedures Supported"
- Section 4.1.4, "SOA Composer Generates Error During Failover"
- Section 4.1.5, "Accessing Web Services Policies Page in Cold Failover Environment"
- Section 4.1.6, "Considerations for Oracle Identity Federation HA in SSL Mode"
- Section 4.1.7, "Online Help Context May be Lost When Failover Occurs in High Availability Environment"
- Section 4.1.8, "ASCRS Cannot be Used to Create a Database Resource for the Oracle Database Console Service on Windows"
- Section 4.1.9, "Changes to Rulesets May Not be Persisted During an Oracle RAC Instance Failover"

### 4.1.1 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
```

### 4.1.2 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.

### 4.1.3 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*.

### 4.1.4 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.

### 4.1.5 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

### 4.1.6 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.

### 4.1.7 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.

### 4.1.8 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.

### 4.1.9 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.

### 4.1.10 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.

### 4.1.11 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.

### 4.1.12 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 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.

### 4.1.13 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.

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

In certain WebLogic cluster process crash scenarios, WS-AT recovery results 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 show 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 remain 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.

### 4.1.15 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|ecmhost2vhn1

   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.

### 4.1.16 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.

### 4.1.17 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.

### 4.1.18 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.

### 4.1.19 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.

### 4.1.20 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.

### 4.1.21 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.

### 4.1.22 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.

### 4.1.23 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.

### 4.1.24 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*.

### 4.1.25 JMS Instance Fails In a BI Publisher Cluster

On rare occasions, a JMS instance is missing from a BI Publisher Scheduler cluster.

To resolve this issue, restart the BI Publisher application from the WebLogic Server Administration Console.

To restart your BI Publisher application:

1. Log in to the Administration Console.
2. Click **Deployments** in the Domain Structure window.
3. Select **bipublisher(11.1.1)**.
4. Click **Stop**.
5. After the application stops, click **Start**.

### 4.1.26 Null Pointer Exception Error Window Opens during Approving Task When Failover Occurs

When failover occurs, a Null Pointer Exception error window may open the second time you click **Approve task** during the operational approval task. (The Null Pointer Exception error window always opens during failover.) The Null Pointer Exception window does not interrupt any processes and approval succeeds.

### 4.1.27 Undelivered Records not Recovered During RAC Failover of Singleton SOA Server

If there is a RAC failover of a singleton server in an SOA RAC environment, you cannot use the Enterprise Manager console to recover undelivered records that are recoverable.

## 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 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=example.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.example.com)(PORT=1521)))(CONNECT_DATA=(SERVICE_
NAME=example.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 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**.

### 4.2.14 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.

### 4.2.15 Managed Server goes into Suspended Status After Oracle 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.

### 4.2.16 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.

### 4.2.17 Server Start Parameters Not Getting Set After Scaling Out the Oracle Business Intelligence Managed Server

After scaling out Oracle Business Intelligence, Server Start parameters are not getting set correctly. To work around this issue, update the Server Start parameters for the scaled out BI Managed Server to include the following:

```
-Dserver.group=obi arguments
```

### 4.2.18 Ensuring the Oracle HTTP Server Lock File is on a Local Drive

If you configure an Oracle instance for Oracle HTTP Server 11*g* on shared storage, such as NAS, NFS, or SAN storage, you must ensure that the lock file is created on a local drive instead of the shared drive. If you do not do this, Oracle HTTP Server might experience performance problems. Perform these steps to point the `LockFile` directive at a local file system:

1. Stop the OHS instances on `WEBHOST1` and `WEBHOST2`.
2. Open the file *`ORACLE_INSTANCE`*`/config/OHS/`*`ohs_name`*`/httpd.conf` in a text editor.
3. Find the `LockFile` directive, configured under both the `prefork` and `worker MPM` configuration blocks in the `httpd.conf` file. It looks like this:

   `LockFile` *`ORACLE_INSTANCE`*`/diagnostics/logs/`*`COMPONENT_TYPE`*`/`*`COMPONENT_NAME`*`/http_lock`

4. Change the `LockFile` directive under the appropriate MPM configuration to point to a local file system, for example:

   `LockFile /`*`local_disk`*`/`*`path`*`/http_lock`

5. Restart Oracle HTTP Server.
6. Verify that the `http_lock` file exists in the directory specified by the `LockFile` directive.

### 4.2.19 Recreating OSSO Agents that Point to the Load Balancer URL

A high availability Classic environment typically has a load balancer in front of the Classic OHS instances. When you configure a classic instance with OAM 11g, the Configuration Wizard automatically configures an OSSO agent. The OSSO agent contains the individual Classic OHS instance URL.

In a high availability cluster consisting of two Classic instances, the Configuration Wizard automatically configures two OSSO agents. Each OSSO agent contains the URL information of one Classic Webtier instance URL.

In a high availability cluster, you must recreate an OSSO agent that points to the load balancer URL.

To recreate an OSSO agent that points to the load balancer URL:

1. From the OAM console, click **New OSSO Agent** to open the OSSO Wizard application.
2. Enter the following information:
   - **Name**: Enter any name
   - **Token Version**: Use the default setting, v3.0

- **Base URL**: Enter the load balancer URL, for example `http://haqaedg04.us.example.com:7788`
- **Admin ID**: Leave blank
- **Admin Inf**: Leave blank
- **Host Identifier**: Keep default value from the **Name** field.
- **Auto Create Policies**: Check this setting to enable it.

3. Copy the `osso.conf` file of the new OSSO agent from the OAM server to the Classic Web Instances config directory.

### 4.2.20 Use Lower-Case Letters for GridLink Data Source RAC Service Name

When you create a GridLink data source in the Configuration Wizard, you must verify that the service name on the database uses lowercase letters only and is a qualified domain name. For example, <*mydbservice*>`.us.example.com`. The Service Name field is in the Configure GridLink RAC Component Schema screen.

---

**Note:** The Oracle RAC Service name is defined on the database; it is not a fixed name. Oracle recommends that you register/add the RAC service name with the database domain name, for example, `us.example.com`

---

### 4.2.21 Additional Steps Needed for Oracle RTD Request Forwarding to Work Correctly

Due to an Oracle RTD issue related to request forwarding, the frontend URL must be the same as the backend URL for deployments that include Oracle RTD. To set the frontend URL for Oracle RTD, perform the steps listed in the following procedures at the point indicated in the Oracle Business Intelligence EDG task flow.

After performing the steps listed in Section 5.7, "Setting the Listen Address for bi_server1 Managed Server," set the frontend URL for the bi_server1 Managed Server, as follows:

1. Log in to the Administration Console.
2. In the Change Center, click **Lock & Edit.**
3. Expand the **Environment** node in the Domain Structure window.
4. Click **Servers**. The Summary of Servers page is displayed.
5. Select **bi_server1** in the Names column of the table. The settings page for bi_server1 is displayed.
6. Click the **Protocols** tab.
7. Click the **HTTP** tab.
8. Set the **Frontend Host** field to APPHOST1VHN1 (your bi_server1 Listen address).
9. Click **Save**, then click **Activate Changes**.

After performing the steps listed in Section 6.4.1, "Setting the Listen Address for the bi_server2 Managed Server," set the frontend URL for the bi_server2 Managed Server, as follows:

1. Log in to the Administration Console.
2. In the Change Center, click **Lock & Edit**.

3. Expand the **Environment** node in the Domain Structure window.
4. Click **Servers**. The Summary of Servers page is displayed.
5. Select **bi_server2** in the Names column of the table. The settings page for bi_server2 is displayed.
6. Click the **Protocols** tab.
7. Click the **HTTP** tab.
8. Set the **Frontend Host** field to APPHOST2VHN1 (your bi_server2 Listen address).
9. Click **Save**, then click **Activate Changes**.

### 4.2.22 Error INST-08075 Occurs When Scaling Out the BI System

When you are scaling out the BI System using the Oracle Business Intelligence Configuration Assistant, the following error occurs:

```
INST-08075: Weblogic Server 10.3.6.0 is installed but Weblogic Server
Temporary is used in the BI Domain.
```

To work around this error, perform the following steps:

1. Open *MW_HOME*/`registry.xml` for editing.
2. Locate the following line:

   ```
   <component name="WebLogic Server" version="10.3.6.0" InstallDir="ORACLE_
   BASE/fmw/wlserver_10.3">
   ```

3. Change the line to the following:

   ```
   <component name="WebLogic Server" version="Temporary" InstallDir="ORACLE_
   BASE/fmw/wlserver_10.3"
   ```

4. Save and close the file.
5. Return to the Oracle Business Intelligence Configuration Assistant and proceed past the Scale Out BI System Details screen.
6. Revert the entry in `registry.xml` back to `version="10.3.6.0"`.

### 4.2.23 First Defined RAC Instance Must Be Available On Domain Startup When Configuring with RAC Multi Data Source

When you configure the RAC data source for OPSS, Oracle recommends using an Oracle GridLink data source type. If you decide to use a RAC multi data source, you must ensure that the first RAC instance listed in the multi data source definition is available during the first domain startup. If you do not use the first RAC instance listed, configuration fails.

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

If JMS messages and transaction logs are stored on an NFS-mounted directory, Oracle strongly recommends that you verify the behavior of a server restart after abrupt machine failures. Depending on the NFS implementation, different issues can arise post failover/restart.

To verify server restart behavior, abruptly shut down the node that hosts WebLogic servers while the servers are running.

- If you configured the server for server migration, it should start automatically in failover node after the failover period.
- If you did not configure the server for server migration, you can manually restart the WebLogic Server on the same host after the node completely reboots.

If Oracle WebLogic Server does not restart after abrupt machine failure, the following error entry may appear in 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 occurs when the NFSv3 system does not release locks on the file stores. WebLogic Server maintains locks on files that store JMS data and transaction logs to prevent data corruption that can occur if you accidentally start two instances of the same managed server. Because the NFSv3 storage device doesn't track lock owners, NFS holds the lock indefinitely if a lock owner crashes. As a result, after abrupt machine failure followed by a restart, subsequent attempts by WebLogic Server to acquire locks may fail.

If it is not reasonably possible to tune locking behavior in your NFS environment, use one of the following solutions to unlock the logs and data files:

- 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. To do this, see Considerations for Using File Stores on NFS in the *Oracle Fusion Middleware High Availability Guide*.
- 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. See the following section Unlocking Logs and Data Files Manually.

### Unlocking Logs and Data Files Manually

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 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 protect against accidental data corruption if multiple instances of the same servers are accidently started. However, you must restart the servers manually after abrupt machine failures. File stores create multiple consecutively numbered.DAT files when they store large amounts of data. You may need to copy and rename all files when this occurs.

## 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* and includes the 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. For the latest informationon these topics, see 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. It also includes information on 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"

#### 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 topics:

#### 4.4.3.1 Set -DDomainRegistrationEnabled=true when Starting Node Manager

The November 2010 edition of *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle Identity Management* failed to mention that, prior to starting the Node Manager that controls the WebLogic Administration Server, you must set `-DDomainRegistrationEnabled=true`. For example:

```
export JAVA_OPTIONS=-DDomainRegistrationEnabled=true
```

#### 4.4.3.2 Ignore Empty Section in the Oracle Virtual Directory Chapter

In the November 2010 edition of *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle Identity Management*, Section 8.1.1 in Chapter 11, "Extending the Domain with Oracle Virtual Directory is an empty section." Please ignore it.

#### 4.4.3.3 Installing Identity Management Sections Are Incorrectly Organized

In *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle Identity Management* 11g Release 1 (11.1.1.5), Part Number E12035-07, Section 4.5.5, "Installing Oracle Identity Management," should be reorganized as follows:

- The content beginning with "Start the Oracle Fusion Middleware 11g Oracle Identity Management Installer" should be in a subsection, Section 4.5.5.1, entitled "Installing Oracle Identity Management 11.1.1.2."
- Section 4.5.6, "Upgrading the Oracle Homes for Oracle Identity Management from 11.1.1.2 to 11.1.1.5" should be Section 4.5.5.2.

#### 4.4.3.4 Errors in Instructions for Using the Guide

Errors exist in Section 1.6, "Using This Guide." They should be corrected as follows:

- Step 11 should be:

  If you are using Oracle Access Manager, follow the steps in Chapter 12, "Extending the Domain with Oracle Access Manager 11g."

- Steps 11 through 18 should refer to chapters, not sections.

#### 4.4.3.5 LDIF File Error in Procedure for Creating Users and Groups for Oracle WebLogic Server

The LDIF file in Step 2a of Section 11.4.4, "Creating Users and Groups for Oracle WebLogic Server," is missing some line breaks. It should appear as follows:

```
dn: cn=orclFAUserReadPrivilegeGroup,cn=Groups,dc=mycompany,dc=com
changetype: modify
add: uniquemember
uniquemember: cn=IDROUser,cn=Users,dc=mycompany,dc=com
```

#### 4.4.3.6 Run Additional emctl Commands When Extending the Domain with Oracle Internet Directory or Oracle Virtual Directory

In the chapters "Extending the Domain with Oracle Internet Directory" and "Extending the Domain with Oracle Virtual Directory," you are instructed run

```
./emctl switchOMS ReposURL
```

to enable the local emagent to communicate with the WebLogic Administration Server using the virtual IP address. After you have run that command, you must also perform the following tasks:

- Force the agent to reload its configuration by issuing the command:

  ```
  ./emctl reload
  ```

- Check that the agent is using the correct Upload URL using the command:

  ```
  ./emctl status agent
  ```

#### 4.4.3.7 Errors in Section 2.4, Shared Storage and Recommended Directory Structure

Table 2-3, Recommended Directory Structure, is missing some values in the Shared Storage column. The following table entries should have the value "Yes" in the **Shared Storage** column, indicating that these directories should be on shared storage:

- *IAM_ORACLE_HOME*
- *ASERVER_DOMAIN_HOME*
- *ASERVER_APP_HOME*

### 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"

Section 4.4.4.3, "Corrections to the Setting the Location of the Shared Oracle BI Repository Section"

Section 4.4.4.4, "Replace 10.1.1.1 with the Source IP Address of the Load Balancer"

Section 4.4.4.5, "Additional Steps Required When Configuring BI Composer"

#### 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**.

#### 4.4.4.3 Corrections to the Setting the Location of the Shared Oracle BI Repository Section

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

**Specifying the RPD Publishing Directory**

Specify a repository publishing directory for the Oracle BI repository. This location is used for propagating online repository changes in a cluster.

Perform the following steps in Oracle Enterprise Manager Fusion Middleware Control:

1. Log in to Fusion Middleware Control.
2. Expand the **Business Intelligence** node in the Farm_*domain_name* window.
3. Click **coreapplication**.
4. Click **Deployment**, then click **Repository**.
5. Click **Lock and Edit Configuration**.

6. Select **Share Repository** and specify the **RPD Publishing Directory** for the Oracle BI Repository.

   In a Windows environment, you must specify a UNC path name.

7. Click **Apply**.

8. Click **Activate Changes**.

#### 4.4.4.4 Replace 10.1.1.1 with the Source IP Address of the Load Balancer

In the example file given in Section 12.3.4.2, Updating the OAM11gRequest File, replace the IP address listed for the `ValListMember` parameter (10.1.1.1) with the load balancer source IP.

#### 4.4.4.5 Additional Steps Required When Configuring BI Composer

After completing the steps in Section 8.3.9, "Configuring Oracle BI Composer," the following additional steps are required:

1. Log in to Oracle Enterprise Manager Fusion Middleware Control.

2. Expand Application Deployments in the left-hand navigation pane.

3. Under bicomposer(11.1.1) (bi_cluster), right-click **bicomposer(11.1.1) (bi_server1)** and select **System MBean Browser**.

4. Go to the following MBean:

   **Application Defined MBeans > oracle.adf.share.connections > Server: bi_server1 > Application: bicomposer > ADFConnections > BISoapConnection > bi-default**

5. Set the **Protocol** attribute to **https**.

6. Set the **Port** attribute to the load balancer SSL port (443).

7. Click **Apply**.

8. Go to the **ADFConnections** MBean and select the Operations tab.

   Click **save**, then click **Invoke**.

9. Restart the BI Composer application using Fusion Middleware Control or the Administration Console.

### 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.wka`*n*`.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.wka`*n*`.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

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.

#### 4.4.5.5 Correction to Table 2-2, "Ports Used"

In *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle Business Intelligence*, Chapter 2, "Database and Environment Preconfiguration," Table 2-2 lists the ports used in the Oracle Business Intelligence topology. The following additional information should be included in the table above the row containing "Database Access:"

- **Type**: Database access for BI Server and BI Publisher JDBC Data Sources
- **Firewall**: FW1
- **Port and Port Range**: Listening port for client connections to the listener.
- **Protocol/Application**: SQL*Net
- **Inbound/Outbound**: Both
- **Other Considerations and Timeout Guidelines**: Timeout depends on all database content and on the type of process model used for BI.

> **Note:** This issue was fixed in the E15722-03 revision of Oracle Fusion Middleware Enterprise Deployment Guide for Oracle Business Intelligence.

#### 4.4.5.6 Note Missing from Configure Cluster Screens Step in Extend Domain for SOA Chapter

The following note is missing from Step 13 of the section titled "Extending the Domain for SOA Components using the Configuration Wizard."

> **Note:** For asynch request/response interactions over direct binding, the SOA composites must provide their jndi provider URL for the invoked service to look up the beans for callback.
>
> If soa-infra config properties are not specified, but the WebLogic Server Cluster address is specified, the cluster address from the JNDI provider URL is used. This cluster address can be a single DNS name which maps to the clustered servers' IP addresses or a comma separated list of server ip:port. Alternatively, the soa-infra config property `JndiProviderURL/SecureJndiProviderURL` can be used for the same purpose if explicitly set by users.

This note also applies to Section 11.3, "Running the Configuration Wizard on SOAHOST1 to Extend a SOA Domain to Include Oracle Service Bus" in the *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle SOA Suite*.

#### 4.4.5.7 WebCenter Content or Inbound Refinery Managed Servers Cannot Use a Shared Domain Directory

In the "Recommended Locations for the Different Directories" section of the "Preparing the File System for an Enterprise Deployment" chapter, the *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle WebCenter Content* implies that you can use a shared domain directory for Oracle WebCenter Content Server. A shared domain directory for a managed server with Content Server does not work because certain files within the domain, such as `intradoc.cfg`, are specific to each node.

To prevent issues with node-specific files, use a local (per node) domain directory for each Oracle WebCenter Content and Oracle WebCenter Content: Inbound Refinery managed server.

This note also applies to the *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle WebCenter Portal*.

# Part II

## Oracle Development Tools

Part II contains the following chapters:

- Chapter 5, "Oracle JDeveloper and Oracle Application Development Framework (ADF)"
- Chapter 6, "Oracle TopLink"

# 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, "Cannot set EclipseLink log level in WLS System MBean Browser"
- Section 6.1.1.2, "Incorrect outer join SQL on SQLServer2005"
- Section 6.1.1.3, "UnitOfWork.release() not Supported with External Transaction Control"
- Section 6.1.1.4, "Returning Policy for UPDATE with Optimistic Locking"
- Section 6.1.1.5, "JDBC Drivers returning Timestamps as Strings"
- Section 6.1.1.6, "Unit of Work does not add Deleted Objects to Change Set"

#### 6.1.1.1 Cannot set EclipseLink log level in WLS System MBean Browser

Use Oracle Enterprise Manager to set the EclipseLink log level; do not use the WLS System MBean Browser to complete this action.

#### 6.1.1.2 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.

#### 6.1.1.3 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();
    }
}
```

#### 6.1.1.4 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.

#### 6.1.1.5 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
        );
    }
}
```

#### 6.1.1.6 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, "User Interface Issue"
- Section 6.1.2.2, "Accessibility"
- Section 6.1.2.3, "Running the TopLink Workbench on Windows OS"

#### 6.1.2.1 User Interface Issue

When running TopLink Mapping Workbench using JDK 1.7, dialogs with a group box containing check boxes or radio buttons may display duplicated or truncated group box titles. There is no loss of functionality, and you should proceed as usual.

#### 6.1.2.2 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.

#### 6.1.2.3 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 |
| **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

## Oracle WebLogic Server

Part III contains the following chapters:

- Chapter 7, "Oracle WebLogic Server"

# 7

# Oracle WebLogic Server

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

**Note:** For a list of bugs that are fixed in WebLogic Server 11*g* Release 1 (10.3.6), enter the following document ID in the Search Knowledge Base field. You must enter the entire document ID.

1302753.1

## 7.1 General Issues and Workarounds

This section describes the following issues and workarounds:



### 7.1.1 Multi-Byte Characters Display Incorrectly in Filenames When Using Safari

When using the Safari browser to download content, if a filename contains multi-byte characters, the characters are displayed as '------' in the filename.

#### Workaround

Set `UseHeaderEncoding` to `true` on the Managed Server. Use the following WLST commands to do so:

```
connect("admin_name", "admin_password", "t3://localhost:port")
edit()
```

```
startEdit()
cd("Servers/server_name/WebServer/server_name")
set("UseHeaderEncoding", "true")
save()
activate()
exit()
```

### 7.1.2 Oracle WebLogic Server Version Number

Oracle Fusion Middleware 11*g* contains Oracle WebLogic Server 11*g*. The version number of Oracle WebLogic Server is 10.3.6.

### 7.1.3 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`.

### 7.1.4 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.

### 7.1.5 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.

### 7.1.6 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

Increase the number of file descriptors within the shell and restart the WLS Administration Server within that shell. The command to increase the number of file descriptors (nofiles) differs across Operating Systems and shells but it's usually done with the ulimit command on UNIX platforms so consult the man pages for `ulimit`.

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
   ```

### 7.1.7 Availability of Sun JDK 6 U24-B50 for 10.3.5.0 Oracle WLS Generic Installation

Sun JDK 1.6.0.24-b50 version is required for Oracle WebLogic Server 10.3.5.0 (PS4) generic installation on Linux x86-64, Microsoft Windows x64 (64-Bit), and Oracle Solaris platforms.

The mentioned version of JDK is not available for download from the Oracle Web site:

`http://www.oracle.com/technetwork/indexes/downloads/index.html`

Complete the following steps to download the required JDK version:

1. Go to My Oracle Support:

   `https://support.oracle.com`

2. Click the **Patches & Updates** tab.
3. Enter patch 12346791 in the **Patch Name or Number** field, under Patch Search.
4. Click **Search**.
5. Select and download the patch for the required platform by following the instructions in the `README` file included with the patch.

### 7.1.8 NoClassDefFoundError Occurs When JACC-enabled Oracle WebLogic Server Instance Runs with IBM JDK

Oracle WebLogic Server, Release 11.1.1.6 Java Authorization Contract for Containers (JACC) uses PrincipalComparator, which is not supported with IBM JDK. Therefore, when you run JACC-enabled Oracle WebLogic Server instance using IBM JDK, a `NoClassDefFoundError` occurs.

#### Workaround

Download and install patch13495664 from the My Oracle Support Web site.

## 7.2 Administration Console Issues and Workarounds

This section describes the following issues and workarounds:



### 7.2.1 Cached JDBC Information is not Displayed

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

### 7.2.2 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.

### 7.2.3 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.

### 7.2.4 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.

### 7.2.5 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.

### 7.2.6 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.

### 7.2.7 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.

### 7.2.8 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.

## 7.3 Apache Beehive Support Issues and Workarounds

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

## 7.4 Clustering Issues and Workarounds

This section describes the following issue and workaround:

- Section 7.4.1, "Threads Are Blocked on Cluster Messaging in Unicast Mode"

### 7.4.1 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
```

## 7.5 Configuration Issues and Workarounds

This section describes the following issues and workarounds:

- Section 7.5.1, "ASProvWorkflowException Occurs When Creating a WebLogic Domain"
- Section 7.5.2, "Directory For a Non-Existent Server Name Is Created"
- Section 7.5.3, "Abnormal Behavior in Terminal Window After Entering WebLogic Password"
- Section 7.5.4, "Creating and Updating Domains Takes Too Long"
- Section 7.5.5, "Password Field Is Not Editable When Configuring a New Domain"

### 7.5.1 ASProvWorkflowException Occurs When Creating a WebLogic Domain

In rare cases, if your installation environment contains existing JAVA_OPTIONS prior to starting a Fusion Middlware product installation, these may cause an `ASProvWorkflowException`, preventing the domain from being created.

#### Workaround

Prior to starting the Fusion Middleware product installation, clear the existing JAVA_OPTIONS. If you have an applicagtion in the environment that use these JAVA_OPTIONS, the applications may not work after clearing the options. In this case, save the existing JAVA_OPTIONS to a text file and investigate alternatives for running your other application.

### 7.5.2 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.

### 7.5.3 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.

### 7.5.4 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
```

### 7.5.5 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.

## 7.6 Connector (Resource Adapter) Issues and Workarounds

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

## 7.7 Console Extensions Issues and Workarounds

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

## 7.8 Core Server and Core Work Manager Issues and Workarounds

This section describes the following issues and workarounds:



### 7.8.1 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.

### 7.8.2 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
```

### 7.8.3 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.

### 7.8.4 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.

### 7.8.5 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>
```

### 7.8.6 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.

### 7.8.7 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.

### 7.8.8 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.

## 7.9 Deployment Issues and Workarounds

This section describes the following issues and workarounds:



### 7.9.1 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.

### 7.9.2 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.

### 7.9.3 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.

### 7.9.4 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();
```

### 7.9.5 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.

### 7.9.6 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 9.2 MP2, 9.2 MP3,10.0 MP1, 10.0 M2, 10.3, 10.3.1, 10.3.2, 10.3.3, or 10.3.4 this flag is not needed.

### 7.9.7 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.

### 7.9.8 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.

## 7.10 EJB Issues and Workarounds

This section describes the following issues and workarounds:



### 7.10.1 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.

### 7.10.2 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.

### 7.10.3 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.

### 7.10.4 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.

### 7.10.5 Lookup Method Injection Not Supported by Spring

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

### 7.10.6 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.

### 7.10.7 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.

## 7.10.8 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.

## 7.10.9 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.

## 7.10.10 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.

## 7.10.11 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();
}
```

### 7.10.12 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.

## 7.11 Examples Issues and Workarounds

This section describes the following issues and workarounds:

- Section 7.11.1, "Security Configuration in medrec.wls.config"
- Section 7.11.2, "HTML File not Created for StreamParser.java File"
- Section 7.11.3, "Warning Message Appears When Starting Medrec or Samples Domain"

### 7.11.1 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.

### 7.11.2 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.

### 7.11.3 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.

## 7.12 HTTP Publish/Subscribe Server Issues and Workarounds

This section describes the following issues and workarounds:

- Section 7.12.1, "Authentication and Authorization of the Local Client is not Supported"
- Section 7.12.2, "Event Messages Published by Local Clients Cannot Be Received"
- Section 7.12.3, "Event Messages Published By Local Clients Do Not Go Through Filters"

### 7.12.1 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.

### 7.12.2 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.

### 7.12.3 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.

## 7.13 Installation Issues and Workarounds

This section describes the following issues and workarounds:

- Section 7.13.1, "Sybase JDBC Drivers Not Downloaded with Upgrade Installation"
- Section 7.13.2, "Improper Rollback to Previous Installation May Occur After Exiting an Upgrade Installation Prematurely"
- Section 7.13.3, "WebLogic Server Installer Fails With Insufficient Disk Space Error"
- Section 7.13.4, "Installation Fails with Fatal Error"
- Section 7.13.5, "Patch for NoClassDefFoundError While Using JACC in AIX and zLinux"
- Section 7.13.6, "Patch for Incompatibility of IBM JDK Transformer Factory With Security SAML in AIX and zLinux"

### 7.13.1 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.

### 7.13.2 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.

### 7.13.3 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
```

### 7.13.4 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.

### 7.13.5 Patch for NoClassDefFoundError While Using JACC in AIX and zLinux

In 11.1.1.5.0 Release, when JACC (Java Authorization Contract for Containers) enabled Oracle WebLogic Server 10.3.5 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: `V5GA` Passcode: `NPC1WPQ5`

For more information about Oracle Smart Update tool, refer to the "Smart Update Tool":

`http://download.oracle.com/docs/cd/E14759_01/index.htm`

### 7.13.6 Patch for Incompatibility of IBM JDK Transformer Factory With Security SAML in AIX and zLinux

In 11.1.1.5.0 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: `V5GA` Passcode: `NPC1WPQ5`

For more information about Oracle Smart Update tool, refer to the "Smart Update Tool":

`http://download.oracle.com/docs/cd/E14759_01/index.htm`

## 7.14 Java EE Issues and Workarounds

This section describes the following issues and workarounds:

- Section 7.14.1, "FastSwap May Relax the Access Modifiers of Fields and Methods"
- Section 7.14.2, "FastSwap Does Not Support Redefinition of the Entity Bean and ejbClass"
- Section 7.14.3, "Classpath Order Is Not Guaranteed When There Are Multiple JARs in an EAR File"

### 7.14.1 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.

### 7.14.2 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.

### 7.14.3 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.

## 7.15 JDBC Issues and Workarounds

This section describes the following issues and workarounds:

- Section 7.15.1, "Call To setTransactionIsolation() May Fail When Using the JDBC Driver for MS SQLServer"
- Section 7.15.2, "An Attempt to Access a Remote 10.3.2 or Later WLS Data Source Fails"
- Section 7.15.3, "ORA-01591 Errors Occur on SOA Servers Configured to Use Multiple Oracle RAC Nodes"

### 7.15.1 Call To setTransactionIsolation() May Fail When Using the JDBC Driver for MS SQLServer

When using the JDBC driver for MS SQLServer, a call to `setTransactionIsolation()` may fail in a transactional context if `getTransactionIsolation()` is called first.

### 7.15.2 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.

### 7.15.3 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

Download and apply Oracle RAC database patch 7675269 for Linux x86, Oracle Release 11.1.0.7.0. You can download this patch from My Oracle Support. Alternatively, you can download and apply patch set 9007079 for Linux x86, Oracle Release 11.1.0.7.0, which includes the patch 7675269.

## 7.16 JMS Issues and Workarounds

This section describes the following issues and workarounds:

## 7.16.1 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.

## 7.16.2 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.

## 7.16.3 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.

## 7.16.4 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.

### 7.16.5 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."

### 7.16.6 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`.

### 7.16.7 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 7.8.5, "Forcing Unicast Messages To Be Processed in Order."

## 7.17 JNDI Issues and Workarounds

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

## 7.18 JSP and Servlet Issues and Workarounds

This section describes the following issues and workarounds:

- Section 7.18.1, "Deployment Plans Cannot Be Used To Override Two Descriptors"
- Section 7.18.2, "Spring Dependency Injection Not Supported on JSP Tag Handlers"
- Section 7.18.3, "503 Error When Accessing an Application With a Valid sessionid"

### 7.18.1 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.

### 7.18.2 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.

### 7.18.3 503 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.

## 7.19 JTA Issues and Workarounds

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

## 7.20 Java Virtual Machine (JVM) Issues and Workarounds

This section describes the following issues and workarounds:

- Section 7.20.1, "1.4 Thin Client Applet Cannot Contact WebLogic Server"
- Section 7.20.2, "Applications Running on Some Processors May Experience Intermittent Time Issues"
- Section 7.20.3, "JRockit JVM Appears to Freeze When Doing Long Array Copies"
- Section 7.20.4, "Serial Version UID Mismatch"
- Section 7.20.5, "JVM Stack Overflow"
- Section 7.20.6, "Using AWT libraries May Cause a JVM Crash"
- Section 7.20.7, "XML Schema Validation Error"

### 7.20.1 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.

### 7.20.2 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

### 7.20.3 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
```

### 7.20.4 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 IBM_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.

### 7.20.5 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.

### 7.20.6 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
```

### 7.20.7 XML Schema Validation Error

An xml schema factory validation error is encountered when IBM JDK fails to return the platform default schema factory because of a preconfigured property file format.

#### Workaround

Modify the *BEA_HOME*`/wlserver_10.0/common/bin/commEnv.sh` file to include the following command:

```
JAVA_OPTIONS="$JAVA_OPTIONS
-Djavax.xml.validation.SchemaFactory:http://www.w3.org/2001/XMLSchema=org.apache.xerces.jaxp.validation.XMLSchemaFactory"
```

## 7.21 Monitoring Issues and Workarounds

This section describes the following issue and workaround:

- Section 7.21.1, "MBean Attributes Not Explicitly Marked as @unharvestable Appear as Harvestable"
- Section 7.21.2, "Events Generated By the JVM Level Are Not Generated at Low Volume"
- Section 7.21.3, "WLDF Performance Issues Can Occur When JVM Events Are Enabled"

### 7.21.1 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`.

### 7.21.2 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).

### 7.21.3 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).

## 7.22 Node Manager Issues and Workarounds

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

## 7.23 Operations, Administration, and Management Issues and Workarounds

There are no known Operations, Administration, and Management issues in this release of WebLogic Server.

## 7.24 Oracle Kodo Issues and Workarounds

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

## 7.25 Protocols Issues and Workarounds

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

## 7.26 RMI-IIOP Issues and Workarounds

This section describes the following issue and workaround:

- Section 7.26.1, "Ant 1.7 rmic Task Incompatibility"

### 7.26.1 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}"
```

## 7.27 Security Issues and Workarounds

This section describes the following issues and workarounds:

- Section 7.27.1, "StoreBootIdentity Works Only if the Appropriate Server Security Directory Exists"
- Section 7.27.2, "Boot Time Failure Occurs With SecurityServiceException"
- Section 7.27.3, "Authentication Failure After Upgrading a Domain From WLS 6.1"
- Section 7.27.4, "InvalidParameterException Message Generated and Displayed"
- Section 7.27.5, "Enabling Both the Authentication and Passive Attributes In SML 2.0 Service Provider Services Is an Invalid Configuration"
- Section 7.27.6, "Running the WebLogic Full Client in a Non-Forked VM"

### 7.27.1 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.

### 7.27.2 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.

### 7.27.3 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.

### 7.27.4 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.

### 7.27.5 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.

### 7.27.6 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`

## 7.28 SNMP Issues and Workarounds

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

## 7.29 Spring Framework on WebLogic Server Issues and Workarounds

This section describes the following issues and workarounds:

- Section 7.29.1, "OpenJPA ClassFileTranformer Does Not Work When Running on JRockit"
- Section 7.29.2, "petclinic.ear Does Not Deploy on WebLogic Server"

### 7.29.1 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`.

### 7.29.2 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.

## 7.30 System Component Architecture (SCA) Issues and Workarounds

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

# 7.31 Upgrade Issues and Workarounds

This section describes the following issue:

- Section 7.31.1, "Domains Created on WebLogic Server 10.3.1 Cannot Be Run on WebLogic Server 10.3"

## 7.31.1 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.

# 7.32 Web Applications Issues and Workarounds

This section describes the following issues and workarounds:

- Section 7.32.1, "Administration Console Fails to Implement session-timeout Changes"
- Section 7.32.2, "Connection Pool Connection Reserve Timeout Seconds Value is Overridden"
- Section 7.32.3, "Database Connections Become Unstable When a PoolLimitSQLException Occurs"
- Section 7.32.4, "Web Page Fails to Open When Accessing It Using the SSL Port"

## 7.32.1 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.

## 7.32.2 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.

## 7.32.3 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.

### 7.32.4 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.

## 7.33 WebLogic Server Scripting Tool (WLST) Issues and Workarounds

This section describes the following issues and workarounds:

- Section 7.33.1, "Property Names Containing '.' Characters Are Not Supported by loadProperties"
- Section 7.33.2, "Invalid cachedir Created by Jython Causes WLST to Error Out"
- Section 7.33.3, "WLST returnType='a' Option Returns Child Management Objects"

### 7.33.1 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

### 7.33.2 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`.

### 7.33.3 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.

## 7.34 Web Server Plug-Ins Issues and Workarounds

This section describes the following issue:

- Section 7.34.1, "MOD_WLS_OHS Does Not Fail Over"

### 7.34.1 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.

## 7.35 Web Services and XML Issues and Workarounds

This section describes the following issues and workarounds:

- Section 7.35.1, "weblogic.wsee.jaxws.mdb.DispatchPolicy WorkManager Cannot Be Found"
- Section 7.35.2, "Multiple Resize Buffer Calls Occur"
- Section 7.35.3, "Troubleshooting Problems When Applying the WebLogic Advanced Web Services for JAX-WS Extension Template"
- Section 7.35.4, "Sparse Arrays and Partially Transmitted Arrays Are Not Supported"
- Section 7.35.5, "WSDL Compiler Does Not Generate Serializable Data Types"
- Section 7.35.6, "Use of Custom Exception on a Callback"
- Section 7.35.7, "Cannot Use JMS Transport in an Environment That Also Uses a Proxy Server"
- Section 7.35.8, "clientgen Fails When Processing a WSDL"
- Section 7.35.9, "JAX RPC Handlers in Callback Web Services Are Not Supported"
- Section 7.35.10, "Message-level Security in Callback Web Services Is Not Supported"

### 7.35.1 weblogic.wsee.jaxws.mdb.DispatchPolicy WorkManager Cannot Be Found

In some situations, warning messages are logged indicating that the weblogic.wsee.jaxws.mdb.DispatchPolicy WorkManager cannot be found, although this WorkManager is targeted to one or more of the Managed Servers in the domain.

#### Workaround

Use one of the following workarounds to resolve this issue.

- To prevent these warning messages, start the WebLogic Server instance with the `-Dweblogic.wsee.skip.async.response=true` flag. See *Programming Advanced Features of JAX-RPC Web Services for Oracle WebLogic Server* for more information on this flag.
- Manually target the `weblogic.wsee.jaxws.mdb.DispatchPolicy` WorkManager to the Administration Server.

### 7.35.2 Multiple Resize Buffer Calls Occur

When executing Web services client calls where Message Transmission Optimization Mechanism (MTOM) attachments are processed for send, multiple resize buffer calls occur..

#### Workaround

There is a patch available to resolve this issue. This patch can be applied only to WebLogic Server 10.3.4. It provides the system property `jaxws.transport.streaming`, which enables or disables streaming at the transport layer for a Web services client. Set this property to `true` for CPU-intensive applications that are running on a WebLogic Server instance that is participating in Web services interactions as a client, and is sending out large messages.

To obtain the patch, do one of the following:

- Contact My Oracle Support and request the patch for bug 9956275, or
- Download the patch from My Oracle Support and install it using Smart Update per the instructions in the following My Oracle Support document:

  `1302053.1`

  Search for Oracle patch number 9956275 or Smart Update patch 7Z5H.

### 7.35.3 Troubleshooting Problems When Applying the WebLogic Advanced Web Services for JAX-WS Extension Template

After upgrading from WebLogic Server 10.3.4 to 10.3.5, when creating or extending a domain using the WebLogic Advanced Web Services for JAX-WS Extension template (`wls_webservices_jaxws.jar`), you may encounter an exception during the execution of the final.py script. For complete details and a workaround, see "Troubleshooting Problems When Applying the WebLogic Advanced Services for JAX-WS Extension Template" in *Getting Started With JAX-WS Web Services for Oracle WebLogic Server*.

### 7.35.4 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.

### 7.35.5 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.

### 7.35.6 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.

### 7.35.7 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.

### 7.35.8 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.

### 7.35.9 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.

### 7.35.10 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.

### 7.35.11 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.

### 7.35.12 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.

### 7.35.13 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`.

### 7.35.14 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 {
  ...
}
```

### 7.35.15 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/>`.

## 7.35.16 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.

## 7.35.17 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.

## 7.35.18 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.

## 7.35.19 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.

### 7.35.20 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.

### 7.35.21 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*.

## 7.35.22 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 `http://jax-ws.java.net/2.2.6/docs/ch03.html`.

## 7.35.23 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.

### 7.35.24 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.

## 7.36 WebLogic Tuxedo Connector Issues and Workarounds

This section describes the following issue and workaround:

- Section 7.36.1, "View Classes are not Set on a Per Connection Basis"

### 7.36.1 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.

## 7.37 Documentation Errata

This section describes documentation errata:

- Section 7.37.1, "Japanese Text Displays in Some Search Results Topics Avitek Medical Records"
- Section 7.37.2, "HTML Pages For Downloaded Libraries Do Not Display Properly"
- Section 7.37.3, "Evaluation Database Component Is Not Listed For silent.xml"
- Section 7.37.4, "Instructions for Reliable SOAP Messaging Code Example Are Incorrect"

### 7.37.1 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.

### 7.37.2 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.

### 7.37.3 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`.

### 7.37.4 Instructions for Reliable SOAP Messaging Code Example Are Incorrect

The instructions for the "Configuring Secure and Reliable SOAP Messaging for JAXWS Web Services" example are a copy of the instructions for the "Using Make Connection and Reliable Messaging for JAX-WS Web Service" example.

The correct instructions for the "Configuring Secure and Reliable SOAP Messaging for JAXWS Web Services" example are provided here.

#### 7.37.4.1 About the Example

This example shows how to configure secure, reliable messaging for JAX-WS Web services. The example includes the following WebLogic Web services:

- Web service whose operations can be invoked using reliable and secure SOAP messaging (*destination endpoint*).
- Client Web service that invokes an operation of the first Web service in a reliable and secure way (*source endpoint*).

##### Overview of Secure and Reliable SOAP Messaging

Web service reliable messaging is a framework that enables an application running on one application server to reliably invoke a Web service running on another application server, assuming that both servers implement the WS-RelicableMessaging specification. Reliable is defined as the ability to guarantee message delivery between the two endpoints (Web service and client) in the presence of software component, system, or network failures.

WebLogic Web services conform to the WS-ReliableMessaging 1.2 specification (February 2009) and support version 1.1. This specification describes how two endpoints (Web service and client) on different application servers can communicate reliably. In particular, the specification describes an interoperable protocol in which a message sent from a *source endpoint* (or client Web service) to a *destination endpoint* (or Web service whose operations can be invoked reliably) is guaranteed either to be delivered, according to one or more delivery assurances, or to raise an error.

WebLogic Web services use WS-Policy files to enable a destination Web service to describe and advertise its reliable SOAP messaging capabilities and requirements. WS-Policy files are XML files that describe features such as the version of the WS-ReliableMessaging specification that is supported, the source Web service retransmission interval, the destination Web service acknowledgment interval, and so on.

##### Overview of the Example

This example uses JWS annotations to specify the shape and behavior of the Web services. It describes additional JWS annotations to enable reliable and secure SOAP messaging in the destination Web service and to reliably invoke an operation from the source Web service in a secure way.

The destination `ReliableEchoService` Web service has two operations that can be invoked reliably and in a secure way: `echo` and `echoOneway`. The JWS file that implements this Web service uses the `@Policies` and `@Policy` JWS annotations to specify the WS-Policy file, which contains the reliable and secure SOAP messaging assertions.

The source `ClientService` Web service has one operation for invoking the echo operations of the `ReliableEchoService` Web service reliably and in a secure way within one conversation: `runTestEchoWithRes`. The JWS file that implements the ClientService Web service uses the `@WebServiceRef` JWS annotation to specify the service name of the reliable Web service being invoked.

To generate the Web services, use the `jwsc` WebLogic Web service Ant task, as shown in the build.xml file. The `jwsc` target generates the reliable and secure Web service and the `jwsc-client-app` target creates the source Web service that invoke the echo operations of the `ReliableEchoService` Web service. The `jwsc` Ant task compiles the JWS files, and generates the additional files needed to implement a standard J2EE Enterprise Web service, including the Web service deployment descriptors, the WSDL file, data binding components, and so on. The Ant task automatically generates all the

components into an Enterprise Application directory structure that you can then deploy to WebLogic Server. This example uses the wldeploy WebLogic Ant task to deploy the Web service.

The `jwsc-client-app` target also shows how you must first execute the `clientgen` Ant task to generate the JAX-WS stubs for the destination `ReliableEchoService` Web service, compile the generated Java source files, and then use the `classpath` attribute of `jwsc` to specify the directory that contains these classes so that the `ClientServiceImpl.java` class can find them.

The `WsrmJaxwsExampleRequest.java` class is a standalone Java application that invokes the `echo` operation of the source Web service. The client target of the `build.xml` file shows how to run `clientgen`, and compile all the generated Java files and the `WsrmJaxwsExampleRequest.java` application.

### 7.37.4.2 Files Used in This Example

**Directory Location:** *MW_HOME*/wlserver_10.3/samples/server/examples/src/examples/webservices/wsrm_jaxws/wsrm_jaxws_security

*MW_HOME* represents the Oracle Fusion Middleware home directory.

| File | Description |
|---|---|
| ClientServiceImpl.java | JWS file that implements the source Web service that reliably invokes the echo operation of the `ReliableEchoService` Web service in a secure way. |
| ReliableEchoServiceImpl.java | JWS file that implements the reliable destination Web service. This JWS file uses the `@Policies` and `@Policy` annotation to specify a WS-Policy file that contains reliable and secure SOAP messaging assertions. |
| client/WsrmJaxwsExampleRequest.java | Standalone Java client application that invokes the source WebLogic Web service, that in turn invokes an operation of the `ReliableEchoervice` Web service in a reliable and secure way. |
| ws_rm_configuration.py | WLST script that configures the components required for reliable SOAP messaging. Execute this script for the WebLogic Server instance that hosts the reliable destination Web service. The out-of-the-box Examples server has already been configured with the resources required for the source Web service that invokes an operation reliably. |
| configWss.py | WLST script that configures the components required for secure SOAP messaging. Execute this script for the WebLogic Server instance that hosts the source Web service. Remember to restart the source WebLogic Server after executing this script. |
| configWss_Service.py | WLST script that configures the components required for secure SOAP messaging. Execute this script for the WebLogic Server instance that hosts the destination Web service. Remember to restart the destination WebLogic Server after executing this script. |
| certs/serverKeyStore.jks | Server-side key store used to create the server-side `BinarySecurityToken` credential provider. |

| File | Description |
|---|---|
| certs/clientKeyStore.jks | Client-side key store used to create the client-side `BinarySecurityToken` credential provider. |
| jaxws-binding.xml | XML file that describes the package name of the generated code and indicate the client side code needs to contain asynchronous invocation interface. |
| build.xml | Ant build file that contains targets for building and running the example. |

### 7.37.4.3 Prepare the Example

This section describes how to prepare the example.

#### Prerequisites

Before working with this example:

1. Install Oracle WebLogic Server, including the examples.
2. Start the Examples Server.
3. Set up your environment.

#### Configure the Destination WebLogic Server Instance (Optional)

The default configuration for this example deploys both the source and destination Web services to the Examples server. You can use this default configuration to see how the example works, but it does not reflect a real life example of using reliable and secure SOAP messaging in which the source Web service is deployed to a WebLogic Server that is *different* from the one that hosts the destination Web service. This section describes how to set up the real life example.

The example includes WebLogic Server Scripting Language (WLST) scripts that are used to configure:

- Store-and-forward (SAF) service agent
- File store
- JMS server
- JMS module
- JMS subdeployment
- JMS queues
- Logical store
- Credential provider for Security Context Token
- Credential provider for Derived Key
- Credential provider for x.509
- KeyStores for Confidentiality and Integrity
- PKI CreditMapper

Follow these steps if you want to deploy the secure and reliable destination Web service to a different WebLogic Server instance:

1. If the managed WebLogic Server to which you want to deploy the reliable JAX-WS Web service does not exist, create it.

2. Change to the *SAMPLES_HOME*\server\examples\src\examples\webservices\wsrm_jaxws\wsrm_jaxws_security directory, where *SAMPLES_HOME* refers to the main WebLogic Server examples directory, such as c:\Oracle\Middleware\wlserver_10.3\samples.
3. Edit the build.xml file and update the following property definitions to ensure that the reliable JAX-WS Web service is deployed to the destination WebLogic Server:

```
<property name="wls.service.server" value="destinationServerName" />
<property name="wls.service.hostname" value="destinationHost" />
<property name="wls.service.port" value="destinationPort" />
<property name="wls.service.username" value="destinationUser" />
<property name="wls.service.password" value="destinationPassword" />
```

   Substitute the italicized terms in the preceding properties with the actual values for your destination WebLogic Server. The default out-of-the-box build.xml sets these properties to the Examples server.

### Build and Deploy the Example

To build and deploy the example:

1. Change to the *SAMPLES_HOME*\server\examples\src\examples\webservices\wsrm_jaxws\wsrm_jaxws_security directory, where *SAMPLES_HOME* refers to the main WebLogic Server examples directory, such as c:\Oracle\Middleware\wlserver_10.3\samples.
2. Run the WLST script that configures the destination WebLogic Server by executing the config.ws.reliable.service target of the build.xml file from the shell where you set your environment:

   ```
   prompt> ant config.ws.reliable.service
   ```

3. Execute the following command to configure JAX-WS Web service Security from the shell where you set your environment:

   ```
   prompt> ant config.wss
   ```

4. If you have configured a different destination WebLogic Server (that is, the destination server is not the Examples server), copy the certs\serverKeyStore.jks file to the domain directory of your destination server.
5. Restart both your client and destination WebLogic Server to activate the MBean changes.
6. Execute the following command from the shell where you set your environment:

   ```
   prompt> ant build
   ```

   This command compiles and stages the example. Specifically, it compiles both the source and destination Web services. It also compiles the standalone `WsrmJaxwsExampleRequest` application that invokes the source Web service, which in turn invokes the reliable destination Web service.
7. Execute the following command from the shell where you set your environment:

   ```
   prompt> ant deploy
   ```

   This command deploys, by default, both the source and destination Web services to the wl_server domain of your WebLogic Server installation. If you have configured a different destination WebLogic Server and updated the build.xml file

accordingly, then the reliable JAX-WS Web service is deployed to the configured destination server.

#### 7.37.4.4 Run the Example

To run the example, follow these steps:

1. Complete the steps in the Prepare the Example section.
2. In your development shell, run the `WsrmJaxwsExampleRequest` Java application using the following command from the main example directory (*SAMPLES_HOME*\server\examples\src\examples\webservices\wsrm_jaxws\wsrm_jaxws_security):

   ```
   prompt> ant run
   ```

   This command runs the standalone `WsrmJaxwsExampleRequest` application that invokes the source Web service, which in turn invokes the reliable destination JAX-WS Web service.
3. To test the reliability of the Web service, stop the destination WebLogic Server, and then rerun the `WsrmJaxwsExampleRequest` application. When you restart the destination WebLogic Server and the reliable Web service is deployed, you should see that the operation is also automatically invoked.

**Check the Output**

If your example runs successfully, the following messages display in the command shell from which you ran the `WsrmJaxwsExampleRequest` application:

```
Trying to override old definition of task clientgen

run:
     [java]
     [java]
     [java] ########################################
     [java]     In testEcho_AsyncOnServerClient_ServiceBuffered...
     [java]     On-Server / Async / Buffered case
     [java]     2011/06/160 03:30:29.938
     [java] ########################################
     [java]
     [java]
     [java] Client addr:http://localhost:9001/wsrm_jaxws_sc_example_client/Clien
tService
     [java] ---[HTTP request - http://localhost:9001/wsrm_jaxws_sc_example_clien
t/ClientService]---
     [java] Content-type: text/xml;charset=utf-8
     [java] Soapaction: ""
     [java] Accept: text/xml, multipart/related, text/html, image/gif, image/jpe
g, *; q=.2, */*; q=.2
     [java] <?xml version='1.0' encoding='UTF-8'?><S:Envelope xmlns:S="http://sc
hemas.xmlsoap.org/soap/envelope/"><S:Body><ns2:runTestEchoWithRes xmlns:ns2="htt
p://example.wsrm_jaxws/"><arg0>Foo bar</arg0><arg1>localhost</arg1>
<arg2>8001</arg2><arg3>C:\Oracle\Middleware\wlserver_10.3\samples\server\
examples\src\examples\webservices\wsrm_jaxws_security/certs</arg3>
</ns2:runTestEchoWithRes></S:Body></S:Envelope>--------------------
     [java]
     [java] ---[HTTP response - http://localhost:9001/wsrm_jaxws_sc_example_clie
nt/ClientService - 200]---
     [java] Transfer-encoding: chunked
     [java] null: HTTP/1.1 200 OK
     [java] Content-type: text/xml;charset=utf-8
```

```
     [java] X-powered-by: Servlet/2.5 JSP/2.1
     [java] Date: Thu, 09 Jun 2011 07:30:33 GMT
     [java] <?xml version='1.0' encoding='UTF-8'?><S:Envelope xmlns:S="http://sc
hemas.xmlsoap.org/soap/envelope/"><S:Body><ns2:runTestEchoWithResResponse xmlns:
ns2="http://example.wsrm_jaxws/"><return>[2011/06/160 03:30:33.953] ## Making Ec
ho Requests (ASYNC/BUFFERED) ##
     [java] [2011/06/160 03:30:42.703] *** On first good invoke ***
     [java] [2011/06/160 03:30:42.703] echo returned: Foo bar expected: Foo bar
     [java] [2011/06/160 03:30:42.922] echo returned: foo bar 2 expected: foo ba
r 2
     [java] [2011/06/160 03:30:43.031] echo returned: foo bar 3 expected: foo ba
r 3
     [java] [2011/06/160 03:30:43.031] ## Done Making Echo Requests (ASYNC/BUFFE
RED) ##
     [java] </return></ns2:runTestEchoWithResResponse></S:Body>
</S:Envelope>--------------------
     [java]
     [java] [2011/06/160 03:30:33.953] ## Making Echo Requests (ASYNC/BUFFERED)
##
     [java] [2011/06/160 03:30:42.703] *** On first good invoke ***
     [java] [2011/06/160 03:30:42.703] echo returned: Foo bar expected: Foo bar
     [java] [2011/06/160 03:30:42.922] echo returned: foo bar 2 expected: foo ba
r 2
     [java] [2011/06/160 03:30:43.031] echo returned: foo bar 3 expected: foo ba
r 3
     [java] [2011/06/160 03:30:43.031] ## Done Making Echo Requests (ASYNC/BUFFE
RED) ##
     [java]

BUILD SUCCESSFUL
Total time: 2 minutes 33 seconds
```

The following messages display in the command window from which you started as the client WebLogic Server (that hosts the reliable source Web service):

```
Service addr:http://localhost:7001/wsrm_jaxws_sc_example/ReliableEchoService
    [2011/06/180 01:33:40.906] ## Making Echo Requests (ASYNC/BUFFERED) ##

    [2011/06/180 01:33:40.906] In invokeEchoAsync, invoking echo with request: Foo
bar

    [2011/06/180 01:33:40.906] In invokeEchoAsync, waiting for response to
request: Foo bar ...

    SignInfo mismatch  Algo mismatch http://www.w3.org/2000/09/xmldsig#rsa-sha1
VS.
    http://www.w3.org/2000/09/xmldsig#hmac-sha1 Refs: Msg size =1#Signature_
prfr5thF
    y2vRPbpC, Policy size =3 #unt_w7HSTtcGcebXFWEr, #Timestamp_XIXttwj9Yq2XO7Tj,
#Bo
    dy_81D2x3V7iTNyy1I5,
    STR type mismatch Actual
KeyInfo:{http://docs.oasis-open.org/wss/2004/01/oasis-2

00401-wss-wssecurity-secext-1.0.xsd}KeyIdentifier|http://docs.oasis-open.org/wss
    /oasis-wss-soap-message-security-1.1#ThumbprintSHA1,  StrTypes size=1
:{http://d

ocs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd}Refere
    nce||http://docs.oasis-open.org/ws-sx/ws-secureconversation/200512/dk,
    Security Token mismatch, token type
```

```
=http://docs.oasis-open.org/ws-sx/ws-securec
    onversation/200512/dk and actual
ishttp://docs.oasis-open.org/wss/2004/01/oasis-
    200401-wss-x509-token-profile-1.0#X509v3
    <WSEE:15>There is no information on the incoming SOAP message.
    <SmartPolicySelect or.getSmartPolicyBlueprint:501>
    testing...................


    [2011/06/180 01:33:41.718] In ClientServiceImpl.onEchoResponse(request:
    examplesServer: 4b1c0f3e575dfa8c:7291c50f:130d9cbaace:-7fb8)

    [2011/06/180 01:33:41.718] Done with ClientServiceImpl.onEchoResponse(request:
    examplesServer: 4b1c0f3e575dfa8c:7291c50f:130d9cbaace:-7fb8): Foo bar

    [2011/06/180 01:33:41.718] *** On first good invoke ***

    [2011/06/180 01:33:41.734] echo returned: Foo bar expected: Foo bar

    [2011/06/180 01:33:41.734] In invokeEchoAsync, invoking echo with request: foo
bar 2

    [2011/06/180 01:33:41.750] In invokeEchoAsync, waiting for response to
request: foo bar 2 ...

    <WSEE:15>There is no information on the incoming SOAP message.
    <SmartPolicySelect or.getSmartPolicyBlueprint:501>
    testing...................


    [2011/06/180 01:33:41.984] In ClientServiceImpl.onEchoResponse(request:
    examplesServer: 4b1c0f3e575dfa8c:7291c50f:130d9cbaace:-7fae)

    [2011/06/180 01:33:41.984] Done with ClientServiceImpl.onEchoResponse(request:
    examplesServer: 4b1c0f3e575dfa8c:7291c50f:130d9cbaace:-7fae): foo bar 2

    [2011/06/180 01:33:41.984] echo returned: foo bar 2 expected: foo bar 2

    [2011/06/180 01:33:42.000] In invokeEchoAsync, invoking echo with request: foo
bar 3

    [2011/06/180 01:33:42.015] In invokeEchoAsync, waiting for response to
request: foo bar 3 ...

    <WSEE:31>There is no information on the incoming SOAP message.
    <SmartPolicySelect or.getSmartPolicyBlueprint:501>
    testing...................

    [2011/06/180 01:33:42.187] In ClientServiceImpl.onEchoResponse(request:
    examplesServer:4b1c0f3e575dfa8c:7291c50f:130d9cbaace:-7fab)

    [2011/06/180 01:33:42.328] Done with ClientServiceImpl.onEchoResponse(request:
    examplesServer:4b1c0f3e575dfa8c:7291c50f:130d9cbaace:-7fab): foo bar 3

    [2011/06/180 01:33:42.328] echo returned: foo bar 3 expected: foo bar 3

    [2011/06/180 01:33:42.328] ## Done Making Echo Requests (ASYNC/BUFFERED) ##

    <WSEE:46>There is no information on the incoming SOAP message.
    <SmartPolicySelect or.getSmartPolicyBlueprint:501>
```

The following messages display in the command window from which you started the destination WebLogic Server (that hosts the reliable destination Web service):

```
%% Echoing: Foo bar %%
%% Echoing: foo bar 2 %%
%% Echoing: foo bar 3 %%
```

If you deploy both the source and destination Web services to the same Server, the following messages display in the command window from which you started your client and destination WebLogic Server:

```
    Service addr:http://localhost:7001/wsrm_jaxws_sc_example/ReliableEchoService
    [2011/06/180 01:33:40.906] ## Making Echo Requests (ASYNC/BUFFERED) ##

    [2011/06/180 01:33:40.906] In invokeEchoAsync, invoking echo with request: Foo
bar

    [2011/06/180 01:33:40.906] In invokeEchoAsync, waiting for response to
request: Foo bar ...

    SignInfo mismatch  Algo mismatch http://www.w3.org/2000/09/xmldsig#rsa-sha1
VS.
    http://www.w3.org/2000/09/xmldsig#hmac-sha1 Refs: Msg size =1#Signature_
prfr5thF
    y2vRPbpC, Policy size =3 #unt_w7HSTtcGcebXFWEr, #Timestamp_XIXttwj9Yq2XO7Tj,
#Bo
    dy_81D2x3V7iTNyy1I5,
    STR type mismatch Actual
KeyInfo:{http://docs.oasis-open.org/wss/2004/01/oasis-2

00401-wss-wssecurity-secext-1.0.xsd}KeyIdentifier|http://docs.oasis-open.org/wss
    /oasis-wss-soap-message-security-1.1#ThumbprintSHA1,  StrTypes size=1
:{http://d

ocs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd}Refere
    nce||http://docs.oasis-open.org/ws-sx/ws-secureconversation/200512/dk,
    Security Token mismatch, token type
=http://docs.oasis-open.org/ws-sx/ws-securec
    onversation/200512/dk and actual
ishttp://docs.oasis-open.org/wss/2004/01/oasis-
    200401-wss-x509-token-profile-1.0#X509v3
    %% Echoing: Foo bar %%
    <WSEE:15>There is no information on the incoming SOAP message.
    <SmartPolicySelect or.getSmartPolicyBlueprint:501>
    testing...................


    [2011/06/180 01:33:41.718] In ClientServiceImpl.onEchoResponse(request:
    examplesServer: 4b1c0f3e575dfa8c:7291c50f:130d9cbaace:-7fb8)

    [2011/06/180 01:33:41.718] Done with ClientServiceImpl.onEchoResponse(request:
    examplesServer: 4b1c0f3e575dfa8c:7291c50f:130d9cbaace:-7fb8): Foo bar

    [2011/06/180 01:33:41.718] *** On first good invoke ***

    [2011/06/180 01:33:41.734] echo returned: Foo bar expected: Foo bar

    [2011/06/180 01:33:41.734] In invokeEchoAsync, invoking echo with request: foo
bar 2
```

```
    [2011/06/180 01:33:41.750] In invokeEchoAsync, waiting for response to
request: foo bar 2 ...

    %% Echoing: foo bar 2 %%
    <WSEE:15>There is no information on the incoming SOAP message.
    <SmartPolicySelect or.getSmartPolicyBlueprint:501>
    testing...................


    [2011/06/180 01:33:41.984] In ClientServiceImpl.onEchoResponse(request:
    examplesServer: 4b1c0f3e575dfa8c:7291c50f:130d9cbaace:-7fae)

    [2011/06/180 01:33:41.984] Done with ClientServiceImpl.onEchoResponse(request:
    examplesServer: 4b1c0f3e575dfa8c:7291c50f:130d9cbaace:-7fae): foo bar 2

    [2011/06/180 01:33:41.984] echo returned: foo bar 2 expected: foo bar 2

    [2011/06/180 01:33:42.000] In invokeEchoAsync, invoking echo with request: foo
bar 3

    [2011/06/180 01:33:42.015] In invokeEchoAsync, waiting for response to
request: foo bar 3 ...

    %% Echoing: foo bar 3 %%
    <WSEE:31>There is no information on the incoming SOAP message.
    <SmartPolicySelect or.getSmartPolicyBlueprint:501>
    testing...................

    [2011/06/180 01:33:42.187] In ClientServiceImpl.onEchoResponse(request:
    examplesServer:4b1c0f3e575dfa8c:7291c50f:130d9cbaace:-7fab)

    [2011/06/180 01:33:42.328] Done with ClientServiceImpl.onEchoResponse(request:
    examplesServer:4b1c0f3e575dfa8c:7291c50f:130d9cbaace:-7fab): foo bar 3

    [2011/06/180 01:33:42.328] echo returned: foo bar 3 expected: foo bar 3

    [2011/06/180 01:33:42.328] ## Done Making Echo Requests (ASYNC/BUFFERED) ##

    <WSEE:46>There is no information on the incoming SOAP message.
    <SmartPolicySelect or.getSmartPolicyBlueprint:501>
```

# Part IV

## Oracle WebCenter Portal

Part IV contains the following chapter:

- Chapter 8, "Oracle WebCenter Portal"

# 8

# Oracle WebCenter Portal

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



## 8.1 General Issues and Workarounds

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

### 8.1.1 Support for Discussions Server from Jive Software

Oracle supports the embedded discussions server from Jive Software. The interfaces to call the discussions server directly from an application should be done by leveraging the supplied task flows that come with WebCenter Portal. Any custom development against APIs in the Jive Web Service layer are subject to review by Oracle and may not be supported.

There are a limited set of beta features that Jive Software delivers as part of the discussions server that Oracle does not recommend and cannot yet support.

Documentation for Jive Forums is included for reference only. Jive software installations and upgrades outside of the WebCenter Portal product installation are not supported.

### 8.1.2 Oracle WebCenter Portal's Pagelet Producer Failover Support

Oracle WebCenter Portal's 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.

### 8.1.3 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 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 "Content Server Connection Parameters" in *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.

### 8.1.4 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.

### 8.1.5 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.

### 8.1.6 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.

### 8.1.7 Configuring the REST Server Post-Installation

For certain features of the WebCenter Portal REST server to work correctly when using a REST client like the Oracle WebCenter Portal iPhone application, the flag `WLForwardUriUnparsed` must be set to `ON` for the Oracle Weblogic Server Plugin that you are using.

- If you are running Apache in front of Weblogic Server, add this flag to `weblogic.conf`.
- If you are running Oracle HTTP Server (OHS) in front of Weblogic Server, add this flag to `mod_wl_ohs.conf`.

The examples below illustrate the possible configurations for both of these cases.

For more information about how to configure Weblogic Server Plugins, see *Oracle Fusion Middleware Using Web Server 1.1 Plug-Ins with Oracle WebLogic Server*.

**Example 1**: Using `<location /rest>` to apply the flag only for `/rest` URIs (recommended)

```
<Location /rest>
  # the flag below MUST BE set to "On"
  WLForwardUriUnparsed    On

  # other settings, example: WebLogicCluster or WebLogicHost & WebLogicPort

  # set the handler to be weblogic
  SetHandler weblogic-handler
</Location>
```

**Example 2**: Applying the flag to all URIs served by Oracle Weblogic Server

```
<IfModule mod_weblogic.c>
   # the flag below MUST BE set to "On"
  WLForwardUriUnparsed    On

  # other settings, example: WebLogicCluster or WebLogicHost & WebLogicPort
  WebLogicCluster johndoe02:8005,johndoe:8006
  Debug ON
  WLLogFile             c:/tmp/global_proxy.log
  WLTempDir             "c:/myTemp"
  DebugConfigInfo       On
  KeepAliveEnabled ON
  KeepAliveSecs  15
</IfModule>
```

### 8.1.8 Resources in Framework Application Disappear after Redeployment of Application

If a Framework application has been customized at runtime to add new resources through the Resource Manager, those new resources are lost after a new deployment or a redeployment of the same application.

Any new pages created at runtime that use the lost resources are still available even though the resources themselves are no longer available in the Resource Manager.

This issue happens when the application version or the redeployment version is changed during the redeployment of the application, either using Fusion Middleware Control or WLST. It can also happen on redeployment when the `generic-site-resources.xml` file has been changed at design time (for example, by creating new resources).

This issue occurs because the `generic-site-resources.xml` file is overwritten on redeployment.

To work around this issue, you must manually add the `mds-transfer-config.xml` file to the application.

> **Note:** Any resources created at design time must be manually added to the runtime application before redeploying the application.

1. Download the `mds-transfer-config.xml` file from the following location:

   https://support.oracle.com/oip/faces/secure/km/DownloadAttachment.jspx?attachid=1343209.1:mdstransferconfig

2. Extract the MAR file (for example `AutoGeneratedMar.mar`) from the EAR file.
3. In the extracted MAR file directory, create a new directory, called `META-INF`, and copy the `mds-transfer-config.xml` file to the new directory.
4. Update the MAR file with `META-INF\mds-transfer-config.xml`, for example:

   ```
   jar -uvf AutoGeneratedMar.mar META-INF\mds-transfer-config.xml
   ```

5. Update the EAR file with the updated MAR file:

   ```
   jar -uvf YourApp.ear AutoGeneratedMar.mar
   ```

6. Redeploy *YourApp*`.mar`.

### 8.1.9 Style Sheets Not Loaded Correctly for Sample WSRP Producer Test Pages through Oracle HTTP Server

If Oracle HTTP Server is used as a front end for the Sample WSRP Portlets producer, the style sheets for the WSRP Producer Test Pages of the WSRP Tools and Rich Text Editor portlet producers are not loaded properly in Mozilla Firefox or Google Chrome. However, the style sheets do load properly in Internet Explorer. Functionality of the portlets is not affected.

### 8.1.10 Cannot Customize or Personalize a JSF Portlet

When clicking **OK** after customizing or personalizing a JSF portlet (that is, a portlet created using the Oracle JSF Portlet Bridge), the portlet does not respond and displays a timeout message. This caused by performing an edit action and changing the portlet mode in a single operation.

End users can work around this issue by clicking **Apply** (instead of **OK**) to perform the edit action first and then clicking **Return** to change the portlet mode back to View mode.

Portlet developers can avoid the issue occurring by editing the code for the generated Edit Defaults mode (in the `edit_defaults.jspx` file) and Edit mode (in the `edit.jspx` file) and removing the code for the **OK** button so that end users are forced to use the **Apply** button instead.

### 8.1.11 Fallback Support for Custom Translations

There is no fallback support for custom translations. For example, if you create a custom translations file named `scope-resource-bundle_fr.xlf` and the space language setting is country-specific (fr-FR), the custom translation file is not used because Spaces is looking for `scope-resource-bundle_fr-FR.xlf`.

As a workaround, copy `_fr xlf` and include the country specification in the names of the custom translation files (for example, `scope-resource-bundle_fr-FR.xlf`).

### 8.1.12 Spaces Do Not Display Correct Language When the Spaces Application is Accessed Using OAM

When users access the Spaces application through OAM, spaces do not display the language selected on the OAM login page. The Spaces application does not use the same `xlf` file name standard as OAM.

### 8.1.13 Announcement Publication Format can be Incorrect in Thai

When the display language is set to Thai, the announcement publication format can be incorrect. This happens when announcements are opened to edit and are then saved, even if nothing in the announcement itself is updated.

### 8.1.14 Favorite Based on Seeded Page Lost When Language Preference Changed from en-US

If you add a seeded page, such as the Activities page, to your list of Favorites, and then change your preferred application language from en-US using Preferences, the favorite seeded page cannot be found.

### 8.1.15 Document Permissions Not Honored in Spaces

In some circumstances, permissions on a folder in Content Server that stores the documents for a space may not reflect the permissions set in the Spaces application. In such cases, one or more users may not be able to perform actions on documents in that space, even though they have been assigned appropriate permissions in Spaces.

To resolve this situation when it affects only one user, the space moderator (or a space member assigned Manage Membership permission) can do either of the following:

- Revoke the user's membership to the space, then add them back to the space: in the space administration settings, on the **Members** page, click **Remove Members**

to revoke membership, then **Add People** to add them back as members of the space.

- Change the user's role to a different role, then change it back to the required role:in the space administration settings, on the **Members** page, select the user, then click **Change Role**.

To resolve this situation when it affects more than one user, the space moderator (or a space member assigned Manage Membership permission) can perform the following steps:

1. Identify the membership role that the affected users have, then edit that role: in the space administration settings, on the **Roles** page, select the role, then click **Edit Permissions**.
2. Clear all permissions for the role, and click **Save**.
3. Edit the role again, select all permissions for the role, and click **Save**.

### 8.1.16 The Run as Servlet Link on Producer Test Page Does Not Work for JSF Portlet

You can create a JSF portlet (that is, a portlet that uses the Oracle JSF Portlet Bridge) using the Create JSR 286 Java Portlet Wizard by selecting the **Generate ADF-Faces JSPX** implementation method on the third step of the wizard.

If you create a JSF portlet in this way, you may find that clicking the **Run as Servlet** link on the portlet's Producer Test Page produces an error. The portlet itself, however, runs correctly.

To avoid this issue, add the ADF Page Flow scope to the project that contains the portlet.

### 8.1.17 Documents Service Unavailable

After configuring WebCenter Portal: Spaces to have a active connection to a Content Repository connection (Oracle WebCenter Content: Content Server) and bouncing WebCenter Portal: Spaces, the Documents Service does not appear to be available in Spaces. For example, in the Home space or a space there are no documents available. The cause of the issue is likely to be in the Content Repository connection settings or that the WebCenter Portal data was not successfully seeded into the Content Server.

To resolve this problem:

1. Check that the Content Server is up and running. Ensure the server has the Server Port (`intradoc`) configured and the Server IP Filter allows connection from WebCenter Portal: Spaces:
   a. Log in to the Content Server.
   b. Click Administration.
   c. Click Configuration for *instance name*
   d. Click the Server Configurations link under System Configuration.
   e. Ensure that Server Port is listed and that Server IP Filter allows access from WebCenter Portal: Spaces.
2. Check the Content Repository Connection settings are correct for the Content Server being used for the Document store:
   a. Using either WLST or Fusion Middleware Control display the Content Repository Connection settings.

b. Ensure that the connection for the Content Server is marked as the Active Connection or Primary Connection.

c. Ensure that the settings for the Content Server are correct.

d. Ensure that the Content Administrator, Root Folder and Application Name have been specified:

   – The Content Administrator must have administration rights in the Content Server. This user will be used to create and maintain folders for spaces content, security groups and roles, and manage content access rights.

   – The Root Folder and Application Name must be unique and not used by any other WebCenter Portal: Spaces application using the same Content Server. If you change these values, ensure that both values are changed and not just one of them.

   – It is recommended the Application Name is less than 14 characters as it is used as a prefix for items created in Content Server, such as workflows, which have a limit on the length of the item name.

3. Check the log at the time of the WebCenter Portal: Spaces start-up for any errors connecting to the Content Server or seeding the data in the Content Server:

   a. When WebCenter Portal: Spaces has an active or primary Content Repository connection and the Content Administrator, Root Folder and Application Name have been specified, then when the WebCenter Portal: Spaces server starts up, data is seeded in the Content Server for that application (if it does not already exist).

   b. If both Step 1 and 2 are correct, check the WebCenter Portal: Spaces log for any errors when WebCenter Portal: Spaces is started up. There may be errors when seeding the data in the Content Server.

   c. If the log does not show any useful log information, turn up the logging for the Documents server and bounce WebCenter Portal: Spaces to see the log messages regarding seeding the WebCenter Portal: Spaces seed data:

      a. Either use the Fusion Middleware Control or edit the `logging.xml` file to increase the logging for `oracle.webcenter.doclib.internal.model` and `oracle.webcenter.doclib.internal.spaces`.

      b. Restart WebCenter Portal: Spaces.

      c. View the log for any messages regarding the seeding of the WebCenter Portal: Spaces data.

      d. If the data is seeded correctly there should be a message logged at TRACE level similar to the following:

         ```
         Content Server already contains the Space container, therefore no need
         to seed any data
         ```

      e. If the seed data does not already exist, there should be a message logged at TRACE level similar to the following:

         ```
         Creating WebCenter Seeded Data
         ```

## 8.1.18 Granting Permissions Errors in Documents When Creating a Space

On creating a space based on a template with the Documents service, the space creation fails with an error such as the following:

```
Granting permissions for Documents failed
```

To resolve this issue, view the WebCenter Portal: Spaces log to see if there are any log messages indicating the source of the error.

If it is not clear what the cause of the error is, try resetting all the Document permissions for all the roles to see if the role mapping completes successfully. Any failures should be logged in the WebCenter Portal: Spaces log.

### 8.1.19 Using OpenSocial Pagelets to Post Activities to User's Activity Stream

Pagelets based on OpenSocial gadgets are not able to post activities to a user's activity stream. To implement a temporary solution, grant User Profile 'edit' permission to Oracle WebCenter Portal's Pagelet Producer using the following WLST/WSAdmin command:

```
grantPermission(appStripe="pagelet-producer",
principalClass="oracle.security.jps.internal.core.principals.JpsAuthenticatedRoleI
mpl", principalName="authenticated-role",
permClass="oracle.webcenter.peopleconnections.profile.security.ProfilePermission",
permTarget="/oracle/webcenter/peopleconnections/profile/s8bba98ff_4cbb_40b8_beee_
296c916a23ed/.*", permActions="view,edit")
```

After running the command, restart the Pagelet Producer server.

### 8.1.20 Accessing Owners' Profile Information Using the OpenSocial API

To access owners' Profile/Activities/Friends information using the OpenSocial API with Oracle WebCenter Portal's Pagelet Producer, you must target the `WebCenterDS` data source to the `WC_Portlet` managed Server as described in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*. After saving this configuration, Activities and Friends information can be fetched, but Profile information is not returned. To access Profile information, restart the `WC_Portlet` managed server.

### 8.1.21 Granting View Document Permissions to Public and Authenticated Users for a Hierarchical Space

When you grant the `View Document` permission to the `Public-User` and `Authenticated-User` roles on a hierarchical space, equivalent "Read" permissions are not set correctly in Content Server. If you want public users and authenticated users to have `View Document` permissions on a space, you do not need to grant the permission to both the roles separately. When you grant the `View Document` permission to public users, authenticated users inherit the `View Document` permission automatically.

If you want to revoke `View Document` permissions from public users but grant `View Document` permissions to authenticated users, then revoke the permission from the `Public-User` role and add it for `Authenticated-User` role.

### 8.1.22 Issues when Using the Russian or Swedish Language

In the Spaces application when the language is set to Russian, you cannot manage user membership in spaces, including the following: adding a new user to a space, inviting a registered user to a space, and modifying or revoking a user's role assignment.

If the language is set to Swedish, the Roles page under Spaces Administration is not accessible.

### 8.1.23 Conditions for Deleting Messages from the Activity Stream

Users can delete only messages from the Activity Stream that were entered from the Publisher task flow and include a link. (In other words, messages in the Activity Stream that were not entered via the Publisher and do not include a link cannot be deleted.)

Users can delete only messages with a link from the Activity Stream. Other activity stream entries, such as notifications of page creations, cannot be deleted.

### 8.1.24 Configuring Web Services Security for Discussions Server

In Release 11.1.1.6.0, discussions server is shipped with no message protection for Web Service interaction between discussions server and Spaces; this allows you to use discussions server without any further configuration. However, after patching your Oracle WebCenter 11.1.1.4.0 or earlier version, if you encounter WS-Security-related errors, you must reconfigure the discussions server security settings. For information, see the "Configuring Web Services Security for Discussions" section in *Oracle Fusion Middleware Patching Guide*.

## 8.2 Documentation Errata

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

- Section 8.2.1, "Lists Service Activities Tracked by Activity Stream"
- Section 8.2.2, "synchronizeUserInformation WLST Command Not Available"

### 8.2.1 Lists Service Activities Tracked by Activity Stream

In *Oracle Fusion Middleware WebCenter Portal User's Guide*, in "Table 32-1 Activities Tracked by Activity Stream", the Lists row incorrectly states that the following activities are tracked by Activity Stream:

- Create a list
- Add a row to a list
- Edit a list row

Activity Stream does not track addition of a row to a list or editing of a list row.

### 8.2.2 synchronizeUserInformation WLST Command Not Available

The *Oracle Fusion Middleware WebLogic Scripting Tool Command Reference* lists `synchronizeUserInformation` as a WebCenter Portal WLST command. This command is not available or valid for release 11.1.1.6.0.

# Part V

# Oracle SOA Suite and Business Process Management Suite

Part V contains the following chapters:

- Chapter 9, "Oracle SOA Suite, Oracle BPM Suite, and Common Functionality"
- Chapter 10, "Web Services Development, Security, and Administration"

# 9

# Oracle SOA Suite, Oracle BPM Suite, and Common Functionality

To view the latest known issues associated with Oracle SOA Suite, BPM Suite, and related SOA technologies, go to Oracle Technology Network (OTN) at http://www.oracle.com/technetwork/middleware/docs/soa-aiafp-knownissuesindex-364630.html. These known issues documents include the following products:

- Oracle Adapter for Oracle Applications (Oracle E-Business Suite Adapter)
- Oracle AIA Foundation Pack
- Oracle Application Adapters for Oracle WebLogic Server
- Oracle Application Server Legacy Adapters
- Oracle B2B
- Oracle BPEL Process Manager
- Oracle Business Activity Monitoring
- Oracle Business Process Management
- Oracle Business Rules
- Oracle Complex Event Processing
- Oracle Enterprise Repository
- Oracle Human Workflow
- Oracle Mediator
- Oracle Service Bus
- Oracle SOA Suite and Oracle BPM Suite Common Functionality
- Oracle Technology Adapters

# 10

# Web Services Development, Security, and Administration

This chapter describes issues associated with Web services development, security, and administration, including Oracle Web Services Manager.

It includes the following topics:

**Note:** For WebLogic Web Services, see Section 7.35, "Web Services and XML Issues and Workarounds."

## 10.1 WSLDFactoryImpl Class Reflects Incorrect Unit for WSDL_READ_TIMEOUT

Within the Java API Reference for Oracle Infrastructure Web Services Javadoc, the `WSDLFactoryImpl` class incorrectly states that the `WSDL_READ_TIMEOUT` value is specified in seconds. This value should be specified in milliseconds.

## 10.2 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*.

## 10.3 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*.

## 10.4 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.

## 10.5 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.

## 10.6 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.

## 10.7 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.

## 10.8 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.

## 10.9 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.

## 10.10 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.

## 10.11 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.

## 10.12 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).

## 10.13 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*.

## 10.14 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`

## 10.15 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.

## 10.16 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 of service policies. This incompatibility message is shown when using Enterprise Manager to attach an Oracle WSM Security client policy. Upon clicking the **Check Services Compatibility**, a message states that policies are incompatible despite the fact that these might be compatible.

**Workaround**:

If WSM policies are attached at the Web service endpoint, use the corresponding client policy. For example, if the service has wss11_saml_or_username_token_with_message_protection_service_policy, wss11_saml_token_with_message_protection_client_policy or wss11_username_token_with_message_protection_client_policy will work at the client side. If non-WSM policies are attached to the Web Service, see the *Interoperability Guide for Oracle Web Services Manager* for information about the corresponding client policy and attach it.

## 10.17 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 11.1.1.3 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 Web 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.

## 10.18 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 releases prior to 11.1.1.4, the SAML bearer token was unsigned by default. In the 11.1.1.4 release and later, 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 releases prior to 11.1.1.4, 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

## 10.19 Security Policies Do Not Work on Subscriber Mediator Component

Component Authorization denyall policy does not work at subscriber mediator component. Authorization policy works for other normal mediator component cases.

## 10.20 Policy Table Might Not Show Attached Policies for Some Locales

Select the Web service application in Fusion Middleware Control and navigate to the Web service endpoint. Attach a policy to the endpoint in the Attach/Detach page. Sometimes the Directly Attached Polices table might not display the attached policies for the following locales: zh-cn, zh-tw, ja, pt-br, es, fr, ko.

As a workaround, enlarge the columns.

## 10.21 Manual Step Required to Uptake Changes in Predefined Policy

The oracle/wss11_saml_or_username_token_with_message_protection_service_policy now includes five assertions as described in "Configuring a Policy With an OR Group" in *Oracle Fusion Middleware Security and Administrator's Guide for Web Services*:

- wss_saml_token_bearer_over_ssl (new)
- wss_username_token_over_ssl (new)
- wss_http_token_over_ssl (new)
- wss11_saml_token_with_message_protection (existing)
- wss11_username_token_with_message_protection (existing)

To take advantage of these additional assertions, you need to upgrade the Oracle WSM policies in the repository using the `resetWSMPolicyRepository(false)` WLST command. Note that executing this command will upgrade all of the predefined policies to the latest version provided in 11.1.1.6. For additional information, see "Upgrading the Oracle WSM Policies in the Repository" in *Oracle Fusion Middleware Security and Administrator's Guide for Web Services*.

## 10.22 Usage Tracking Not Enabled for WebLogic Web Service Client

In this release, usage tracking and analysis is not provided for WebLogic Java EE Web service clients.

## 10.23 Invalid Authorization Combination Validates Successfully

Although you can attach multiple authorization policies to the same Web service, you should not attach both a permitall and denyall policy. If you do so, however, the combination validates successfully in this release.

**Workaround**:

Do not attach a permitall and denyall policy to the same Web service. For more information about authorization policies, see "Authorization Policies and Configuration Steps" in Oracle Fusion Middleware Security and Administrator's Guide for Web Services.

## 10.24 Additional Quotes in Fusion Middleware Control for Run-time Constraint Input from WLST

When you specify a run-time constraint using WLST, as described in "Specifying Run-time Constraints in Policy Sets" in *Oracle Fusion Middleware Security and Administrator's Guide for Web Services*, you must specify the constraint using quotes, for example `setPolicySetConstraint('HTTPHeader("VIRTUAL_HOST_TYPE", "external")')`. If you then use Fusion Middleware Control to view and edit the

policy set constraint, the constraint is shown with the quotes in the Constraint Name and Constraint Value fields. You need to remove the quotes in these fields.

## 10.25 Scoped Configuration Override Persists for Subsequent References to the Same Policy

When using a scoped configuration override for the server side identity/encryption key (keystore.enc.csf.key) with a message protection policy, the override value is stored in the policy. Because the policy is cached, any subsequent references

to this policy by other services will contain the override value. Therefore, the results will not be as expected.

Two examples of this scenario are as follows:

- An Oracle Infrastructure Web service has an attached message protection service policy. Both the service identity (service public encryption key, keystore.enc.csf.key) and the service message protection policy are advertised in the service WSDL. If the service encryption key is overwritten, using the global `setPolicySetOverride` command for example, then the scoped overwritten value for the keystore.enc.csf.key property that was intended for the specific attachment/reference of the initial service may affect other services attachments/references to the same policy.
- A SOA service composite has an attached message protection service policy and both the service identity (server public encryption key `keystore.enc.csf.key`) and the service message protection policy are advertised in the service WSDL. If the service encryption key is overwritten, for example, using JDeveloper to override `keystore.enc.csf.key` while building the service composite, then the scoped overwritten value for the `keystore.enc.csf.key` property that was intended for the specific attachment/reference of the initial service may affect other services attachments/references to the same policy.

**Workaround**

The recommended workaround is to perform a cache refresh when possible. For example, if a policy attachment/reference has a scoped override for the property `keystore.enc.csf.key` and it has been enforced or advertised once, the cached policy contains the override, however the original policy in the repository is not affected. To clear the override you can refresh the cache using methods such as restarting the server, redeploying the application, modifying the policy using Fusion Middleware Control, and so on.

In some scenarios, however, a cache refresh is not feasible. For example, if a service with a policy attachment/reference has a scoped override for the property `keystore.enc.csf.key` and it is enforced before other services that reference the same policy in a flow of execution that does not allow time for a manual cache refresh, then the policy in the cache referenced by the subsequent services contains the configuration override. For example, in an asynchronous service where the same policy is attached to both the asynchronous request and the asynchronous callback client, and only the asynchronous request attachment/reference has the override (the asynchronous callback does not), the asynchronous callback policy enforcement happens after the asynchronous request. In this case, the callback client accesses the policy in the cache that contains the configuration override. Since there is no opportunity to refresh the cache, there is no workaround available.