

Oracle® Fusion Middleware

Release Notes

11g Release 1 (11.1.1) for HP-UX PA-RISC (64-Bit)

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Preface

This preface includes the following sections:

- [Audience](#)
- [Documentation Accessibility](#)
- [Related Documents](#)
- [Conventions](#)

Audience

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

Documentation Accessibility

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

Accessibility of Code Examples in Documentation

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

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<http://www.fcc.gov/cgb/consumerfacts/trs.html>, and a list of phone numbers is available at <http://www.fcc.gov/cgb/dro/trsphonebk.html>.

Related Documents

For more information, see these Oracle resources:

- Oracle Fusion Middleware Documentation on Oracle Fusion Middleware Disk 1
- Oracle Fusion Middleware Documentation Library 10g Release 1 (11.1.1)
- Oracle Technology Network at <http://www.oracle.com/technology/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.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
<code>monospace</code>	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:

- [Chapter 1, "Introduction"](#)
- [Chapter 2, "Installation and Configuration"](#)
- [Chapter 3, "Upgrade"](#)
- [Chapter 4, "Oracle Fusion Middleware Administration"](#)
- [Chapter 5, "Oracle Enterprise Manager Fusion Middleware Control"](#)
- [Chapter 6, "Oracle Fusion Middleware High Availability and Enterprise Deployment"](#)

Introduction

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

- [Section 1.1, "Latest Release Information"](#)
- [Section 1.2, "Purpose of this Document"](#)
- [Section 1.3, "Operating System Requirements"](#)
- [Section 1.4, "Certification Information"](#)
- [Section 1.5, "Licensing Information"](#)

1.1 Latest Release Information

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

<http://www.oracle.com/technology/documentation/>

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 Operating System Requirements

Oracle Fusion Middleware installation and configuration will not complete successfully unless users meet the hardware and software pre-requisite requirements before installation. See the Oracle Fusion Middleware Installation Planning Guide for a complete list of operating system requirements.

1.4 Certification Information

This section contains the following:

- [Section 1.4.1, "Where to Find Oracle Fusion Middleware Certification Information"](#)
- [Section 1.4.2, "Certification Exceptions"](#)

1.4.1 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/technology/software/products/ias/files/fusion_certification.html

1.4.2 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.

1.4.2.1 Restrictions on Specific Browsers

1.4.2.1.1 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 and install it manually.

1.4.2.2 Process to Install and Configure WebCenter With 32-bit JDK on Supported 64-Bit Platform

For WebCenter 11g Release 1, the following platform has been verified with 32-bit JDK:

HP Itanium and HP PA-RISC:

32-bit HP JDK 1.6.0.02+

To install and configure WebLogic Server with 32-bit JDK perform the following steps:

1. Install the supported 32-bit JDK
2. Export the 32-bit JDK environment. For example:


```
export JAVA_HOME=/scratch/aime/jdk1.6.0_11
export PATH=/scratch/aime/jdk1.6.0_11/bin:$PATH
```
3. Run the WebLogic Server generic installer to install WebLogic Server with 32-bit JDK:


```
java -jar wls1031_generic.jar
```
4. Install WebCenter with the required 64-bit JDK. Unzip the shiphome and go to Disk1, then invoke runInstaller command with -jreLoc pointing to the 64-bit JDK. For example:


```
./runInstaller -jreLoc /scratch/aime/jdk1.6.0_11/jre
```
5. Run the configuration script to create the WebCenter Domain:

`$ORACLE_HOME/common/bin/config.sh`

6. Provide the 32-bit JDK location while running the configuration script. After the domain is configured with 32-bit JDK, no further updates are required.

1.5 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/technology/products/ias/index.html>

Installation and Configuration

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

- [Section 2.1, "Installation Issues and Workarounds"](#)
- [Section 2.2, "Configuration Issues and Workarounds"](#)
- [Section 2.3, "Known Issues"](#)
- [Section 2.4, "Documentation Errata"](#)

2.1 Installation Issues and Workarounds

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

- [Section 2.1.1, "Oracle Fusion Middleware Support of 64-bit JDK"](#)
- [Section 2.1.2, "Prerequisite Warnings During Installation"](#)
- [Section 2.1.3, "Installing Oracle SOA Suite on a Dual Stack Host with IPv4"](#)
- [Section 2.1.4, "Managing the Oracle WebLogic Server Node Manager Utility for Oracle Identity Management Installations"](#)
- [Section 0.0.3, "Missing Shortcuts in the Oracle Portal, Forms, Reports and Discoverer Installation"](#)
- [Section 2.1.5, "Problems Installing in Thai and Turkish Locales"](#)
- [Section 2.1.6, "Installing Oracle UCM in Stand-Alone Mode"](#)
- [Section 2.1.7, "Ports are not Checked Across Multiple Oracle Home Directories"](#)
- [Section 2.1.9, "Setting the nls_length_semantics Parameter in your Database"](#)
- [Section 2.1.10, "Proper Deinstallation for Reinstallation in the Event of a Failed Installation"](#)
- [Section 2.1.11, "Deinstalling Oracle Instances Registered to a Domain"](#)
- [Section 2.1.12, "Misleading Error Message in the Oracle Identity Management Installation"](#)

2.1.1 Oracle Fusion Middleware Support of 64-bit JDK

If you are using a 64-bit JVM in your environment, ensure that all your Oracle Fusion Middleware components are using the 64-bit JVM. You cannot mix components using a 32-bit JVM with those using a 64-bit JVM.

Refer to the Oracle Fusion Middleware Certifications matrix for information on the platforms that support a 64-bit JDK:

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

2.1.2 Prerequisite Warnings During Installation

Vendor release updates cumulative patches and/or packages that may supersede our listed Oracle Fusion Middleware 11g Release 1 prerequisites for platforms. As long as vendor approved patches and/or packages are installed, the prerequisite warnings could be ignored and the installation completed.

Another option is to use `-ignoreSysPreReqs` command line additional argument to the `runInstaller` as:

```
$ Mount_Point/runInstaller -ignoreSysPreReqs other required install options
```

2.1.3 Installing Oracle SOA Suite on a Dual Stack Host with IPv4

If you install Oracle SOA Suite on a dual stack host and the SOA front end URL is only set to IPv4, Oracle BPM Worklist or asynchronous callbacks from IPv6-only clients may have problems resolving IPv4 callback URLs (and vice-versa).

The work around is to use either a split Domain Name System (DNS) or another forward proxy configuration. This enables the IPv6-only client to connect to a dual stack box through its IPv6 interface.

2.1.4 Managing the Oracle WebLogic Server Node Manager Utility for Oracle Identity Management Installations

For Oracle Identity Management Installations that require Oracle WebLogic Server, you must perform the following steps after installing Oracle WebLogic Server and before installing Oracle Identity Management:

1. Verify the Oracle WebLogic Server Node Manager utility is stopped. If it is running, kill the process.

Note: The *Oracle Fusion Middleware Installation Guide for Oracle Identity Management* and the *Oracle Fusion Middleware Quick Installation Guide for Oracle Identity Management* both state that the Oracle WebLogic Server's Node Manager utility must be running when you install Oracle Identity Management. *This is incorrect.* If the Oracle WebLogic Server Node Manager utility is running, you must stop it before installing Oracle Identity Management.

2. Determine if the `nodemanager.properties` file is present in the `WL_HOME/common/nodemanager/` directory.
 - If the `nodemanager.properties` file is *not* present, continue installing Oracle Identity Management.
 - If the `nodemanager.properties` file *does* exist, open it and verify that the `ListenPort` parameter is included and that it is set. If the `ListenPort` parameter is not included or set, edit the `nodemanager.properties` file so that it is similar to the following, where `NODE_MANAGER_LISTEN_PORT` represents the port the Node Manager listens on, such as 5556:

```
ListenPort=NODE_MANAGER_LISTEN_PORT
```

2.1.5 Problems Installing in Thai and Turkish Locales

Turkish and Thai users are recommended to install and run Oracle Fusion Middleware using the English locale. Oracle Fusion Middleware does support Turkish and Thai locales as clients.

2.1.6 Installing Oracle UCM in Stand-Alone Mode

The Oracle WebCenter installation gives you the option of installing Oracle Universal Content Management (UCM). If you choose not to install Oracle UCM during the Oracle WebCenter installation, you can install Oracle UCM separately in stand-alone mode. Installation instructions are available at the following location:

http://download.oracle.com/docs/cd/E10316_01/owc.htm

These installation instructions are missing some important information, which is covered below. The following topics are covered:

- [Section 2.1.6.1, "Do Not Include Folders_g in the Installation"](#)
- [Section 2.1.6.2, "Disable Trash in the Installation"](#)

2.1.6.1 Do Not Include Folders_g in the Installation

The last question is during the installation procedure is:

Select components to install.

1. ContentFolios: Collect related items in folios
2. Folders_g: Organize content into hierarchical folders
3. LinkManager8: Hypertext link management support
4. OracleTextSearch: External Oracle 11g database as search indexer support
5. ThreadedDiscussions: Threaded discussion management

Enter numbers separated by commas to toggle, 0 to unselect all, F to finish:

Make sure you DO NOT include number 2 (Folders_g) for this answer; you should not install Folders_g using the installation script. Folders_g will be installed when the `wc_contentserverconfig.sh` script is run.

2.1.6.2 Disable Trash in the Installation

Instead of installing an new Content Server to use with Oracle WebCenter, you have the option of using an existing Content Server. Any existing Content Server used with Oracle WebCenter should have the Trash disabled. Trash will only be in the Content Server if you have installed a foldering component.

To see if Trash is enabled in the Content Server:

1. Go to Administration.
2. Go to Folder Configuration.
3. Go to System Folder Configuration.

The colour of the dot next to the Trash folder indicates whether or not the Trash is enabled:

- Green = enabled
- Gray = disabled

To disable the Trash:

1. Ensure you can edit marked folders:
 - a. Open the *stellent_dir/custom/Folders_g/folders_environment.cfg* (on UNIX) or *stellent_dir\custom\Folders_g\folders_environment.cfg* (on Windows) file.
 - b. Verify that the `CollectionReadOnlyMarkedFolders` value is set to `true`:
`CollectionReadOnlyMarkedFolders=true`
2. Restart the Content Server if you changed the *folders_environment.cfg* file.
3. Log in to the Content Server Home Page as a user with Administrator privileges.
4. Go to Administration.
5. Go to Folder Configuration.
6. Go to System Folder Configuration.
7. Click on the green dot next to Trash. This will disable the Trash folder and will turn the dot grey.
8. Restore the value of `CollectionReadOnlyMarkedFolders` if you had changed it and restart the Content Server.

2.1.7 Ports are not Checked Across Multiple Oracle Home Directories

For Oracle Fusion Middleware 11g Release 1 (11.1.1), each product requires its own Oracle Home directory. Currently, there is no provision for ensuring that port conflicts do not occur across multiple Oracle Home directories.

The best way to work around this problem is to use the *staticports.ini* file, so that you will have a record of all the ports that are in use.

2.1.8 Administration Server Ports are not Checked Across Multiple Domains

If you are creating multiple domains inside a single Middleware Home, there is no provision for checking port conflicts with the Administration Server in each domain. You must manually ensure that the Administration Server in each domain uses a unique port number.

You can configure custom port numbers for your Administration Server as follows:

1. Start the Configuration Wizard from the *ORACLE_HOME/common/bin* directory.
2. Navigate to the Select Optional Configuration screen, and select **Administration Server**.
3. On the Configure Administration Server screen, specify a unique port number for this Administration Server.

2.1.9 Setting the `nls_length_semantics` Parameter in your Database

Oracle Fusion Middleware only supports schemas in a byte-mode database. The `nls_length_semantics` initialization parameter on the database where the schemas reside must be set to `BYTE`; setting this parameter to `CHAR` is not supported.

To check the values of this parameter using SQL*Plus, you can use the `show parameters` command:

```
prompt> sqlplus "sys/password as sysdba"SQL> show parameters nls_length_semantics
```

Replace *password* with the actual password for the SYS user.

Alternatively, you can check the values by querying the V\$PARAMETER view:

```
prompt> sqlplus "sys/password as sysdba"SQL> select name,value from v$parameter;
```

2.1.10 Proper Deinstallation for Reinstallation in the Event of a Failed Installation

In the event that an installation fails, and you want to deinstall the failed installation and then reinstall the software to the same location, you must do the following:

1. Make sure that all the managed servers in the failed installation are shut down. You must verify this in the Administration Console; the word "SHUTDOWN" must appear next to the managed server name.
2. Deinstall the binaries in the Oracle Home directory using the deinstaller in the `ORACLE_HOME/oui/bin` directory.
3. Delete all the managed servers from the failed installation in the `config.xml` file by using the Administration Console or WLST.
4. Delete all directories in the `DOMAIN_HOME/servers` directory:

This procedure will enable you to reinstall the software to the same location, using the same managed server names.

2.1.11 Deinstalling Oracle Instances Registered to a Domain

If you want to remove an Oracle instance which is registered with a WebLogic domain, make sure to launch the deinstaller from Oracle Home directory that is associated with the Oracle instance you are removing.

The deinstaller will list all instances associated with same WebLogic domain; make sure you choose to remove the instances that are associated with the Oracle Home from where you launched the deinstaller only.

2.1.12 Misleading Error Message in the Oracle Identity Management Installation

During the Oracle Identity Management installation, on the "Select Domain" screen, if you enter "weblogic" as the domain password, you will receive an error message telling you that you have used invalid characters in the password, and that only alphanumeric characters are allowed.

The actual problem is that the password must contain at least one number. For example, "weblogic1" would be a valid password.

2.2 Configuration Issues and Workarounds

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

- [Section 2.2.1, "Changing the Listen Address of a Managed Server"](#)
- [Section 2.2.2, "Expand Cluster Requires Changes to the emd.properties File"](#)
- [Section 2.2.3, "Schemas Are Not Visible After Upgrade of Oracle Identity Management"](#)
- [Section 2.2.4, "Error Message When Configuring Oracle Identity Federation"](#)

- [Section 2.2.5, "Ensure There Are No Missing Products When Using unpack.sh or unpack.cmd"](#)
- [Section 2.2.6, "Running unpack.sh or unpack.cmd on a Different Host"](#)
- [Section 2.2.7, "Rerouting to Original URL After SSO Authentication in Firefox Browser"](#)

2.2.1 Changing the Listen Address of a Managed Server

When you run the Configuration Wizard after installing Oracle Identity Management or Oracle Portal, Forms, Reports and Discoverer, the listen address for WebLogic managed servers is left blank by default (to listen to all network interfaces). If you change the listen address to the actual host name, the managed server stops listening from outside the machine.

It is recommended that you either leave the listen address blank, or specify the IP address of the host rather than using the host name.

2.2.2 Expand Cluster Requires Changes to the emd.properties File

After running the Oracle Fusion Middleware Configuration Wizard to expand a cluster, the `EMD_URL` parameter in the `INSTANCE_HOME/EMAGENT/EMAGENT/sysman/config/emd.properties` (on UNIX) or `INSTANCE_HOME\EMAGENT\EMAGENT\sysman\config\emd.properties` (on Windows) file contains the values shown below:

```
EMD_URL=http://localhost.localdomain:port/emd/main
```

You must edit this parameter and replace `localhost` and `localdomain` with the actual host and domain information of your environment. For example, using 5160 as the port number:

```
EMD_URL=http://myhost.mydomain.mycompany.com:5160/emd/main
```

2.2.3 Schemas Are Not Visible After Upgrade of Oracle Identity Management

After upgrading Oracle Identity Management from Release 10g (10.1.4.3) to 11g Release 1 (11.1.1), the Oracle Directory Service schemas (ODS and ODSSM) are not visible in the Repository Creation Utility (RCU).

The reason for this is because RCU is not used during the upgrade process, and RCU only recognizes schemas that are created by RCU. Refer to *Oracle Fusion Middleware Repository Creation Utility User's Guide* for more information.

2.2.4 Error Message When Configuring Oracle Identity Federation

During the configuration of Oracle Identity Federation (OIF), the following error message regarding key store and password may be seen in the configuration log file:

```
[app:OIF module:/fed path:/fed spec-version:2.5
version:11.1.1.1.0]: Failed while destroying servlet: usermanager.
java.lang.RuntimeException: The server could not initialize properly:
oracle.security.fed.sec.util.KeySourceException: Invalid/unsupported
key store or incorrect password. Please verify that the password is correct
and the store is a valid PKCS#12 PFX wallet or Java KeyStore file.
```

This error message can be safely ignored if OIF is running properly.

2.2.5 Ensure There Are No Missing Products When Using `unpack.sh` or `unpack.cmd`

Oracle SOA Suite, Oracle WebCenter, and Application Developer all contain the `pack.sh` and `unpack.sh` (on UNIX systems) or `pack.cmd` and `unpack.cmd` (on Windows systems) commands in their respective `ORACLE_HOME/common/bin` (on UNIX systems) or `ORACLE_HOME\common\bin` (on Windows systems) directories.

The `pack.sh` and `pack.cmd` scripts are used to create a template archive (`.jar`) file that contains a snapshot of either an entire domain or a subset of a domain. The `unpack.sh` and `unpack.cmd` scripts are used to create a full domain or a subset of a domain used for a Managed Server domain directory on a remote machine.

The `unpack.sh` and `unpack.cmd` commands will fail if any installed products are missing from the machine where you are running the `unpack.sh` or `unpack.cmd` command.

2.2.6 Running `unpack.sh` or `unpack.cmd` on a Different Host

If you are running the `unpack.sh` (on UNIX) or `unpack.cmd` (on Windows) command to unpack a domain on a remote host, the Oracle Home location and the Middleware Home location on the remote host should match the locations on the host where the pack was performed.

Below is a valid example:

```
Host 1:
MW_HOME = /user/home/Middleware
ORACLE_HOME = /user/home/Middleware/Oracle_SOA1

@ Host 2:
MW_HOME = /user/home/Middleware
ORACLE_HOME = /user/home/Middleware/Oracle_SOA1
```

The example below is NOT valid because the Oracle Homes do not match:

```
Host 1:
MW_HOME = /user/home/Middleware
ORACLE_HOME = /user/home/Middleware/Oracle_SOA1

@ Host 2:
MW_HOME = /user/home/Middleware
ORACLE_HOME = /user/home/Middleware/SOA_Home
```

The example below is NOT valid because the Middleware Homes do not match:

```
Host 1:
MW_HOME = /user/home/Middleware
ORACLE_HOME = /user/home/Middleware/Oracle_SOA1

@ Host 2:
MW_HOME = /user/home/MWHome
ORACLE_HOME = /user/home/Middleware/Oracle_SOA1
```

2.2.7 Rerouting to Original URL After SSO Authentication in Firefox Browser

When configuring Oracle Portal, Forms, Reports and Discoverer, when both Oracle HTTP Server and Oracle Web Cache are selected for configuration, re-routing (back to the original URL) after Single Sign-On (SSO) authentication does not work in Firefox Browser when the initial request comes from Oracle HTTP Server.

The work arounds are to either use the Internet Explorer browser, or manually modify the `INSTANCE_HOME/config/OHS/instance_name/httpd.conf` file and change the `ServerName` entry to include the port number. For example:

```
ServerName myhost.mydomain.com
```

should be changed to:

```
ServerName myhost.mydomain.com:port
```

Replace `port` with the actual port number.

2.3 Known Issues

This section describes known issues. It includes the following topics:

- [Section 2.3.1, "Deinstall Command Runs Into java.lang.UnsatisfiedLink Error"](#)
- [Section 2.3.2, "Forms and Reports Builder Not Supported"](#)

2.3.1 Deinstall Command Runs Into java.lang.UnsatisfiedLink Error

When command `runInstaller -deinstall` is run on HP-UX PA-RISC (64-Bit) with HP 64bit JVM to deinstall WebCenter or SOA shiphome, it fails to start deinstalling OUI and runs into `java.lang.UnsatisfiedLink` error. This happens as `-d64` flag is missing in `oraparam.ini` jre memory options.

Workaround

Run command `runInstaller -deinstall -J-d64` to continue the deinstallation process.

2.3.2 Forms and Reports Builder Not Supported

Forms and Reports Builder is not supported on Linux x86-64, Solaris Operating System (SPARC 64-Bit), AIX Based Systems (64-Bit), HP-UX PA-RISC (64-Bit), HP-UX Itanium, and Microsoft Windows x64 platforms. It is supported on Linux x86 and Microsoft Windows (32-Bit) platforms only.

2.4 Documentation Errata

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

- [Section 2.4.1, "Errors in the Quick Install Guides"](#)
- [Section 2.4.2, "Errors in the Oracle Fusion Middleware Installation Guide for Oracle Identity Management"](#)
- [Section 2.4.3, "Errors in the Oracle Fusion Middleware Installation Guide for Application Developer"](#)
- [Section 2.4.4, "Oracle RAC Database Not Supported for Oracle UCM Installation"](#)
- [Section 2.4.5, "Oracle Fusion Middleware Installation Planning Guide Contains Inaccurate Reference to File-Based Repository"](#)

2.4.1 Errors in the Quick Install Guides

The Oracle Fusion Middleware quick installation guides contain the following documentation errata:

- [Section 2.4.1.1, "Links to System Requirements and Certification are Truncated"](#)
- [Section 2.4.1.2, "Inaccurate Database Information Provided"](#)

2.4.1.1 Links to System Requirements and Certification are Truncated

In the PDF versions of the quick installation guides, the links to the system requirements and certification documents are hyphenated due to the limitations of the page size. This causes the links to be formed incorrectly.

The correct link to the Oracle Fusion Middleware System Requirements document is:

http://www.oracle.com/technology/software/products/ias/files/fusion_requirements.htm

The correct link to the Oracle Fusion Middleware Certification document is:

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

2.4.1.2 Inaccurate Database Information Provided

The quick installation guides in the Oracle Fusion Middleware documentation set contain the following database requirement:

Oracle Database 10g (10.2.0.4 or later for non-XE database) using the AL32UTF8 character set.

The AL32UTF8 is strongly recommended but is not a requirement. For the latest RCU database requirements, refer to the system requirements document on Oracle Technology Network (OTN):

http://www.oracle.com/technology/software/products/ias/files/fusion_requirements.htm

2.4.2 Errors in the Oracle Fusion Middleware Installation Guide for Oracle Identity Management

The *Oracle Fusion Middleware Installation Guide for Oracle Identity Management* contains the following documentation errata:

- [Section 2.4.2.1, "Correction for the inspre11.pl Script's CONNECT_STRING Option"](#)

2.4.2.1 Correction for the inspre11.pl Script's CONNECT_STRING Option

In Chapter 10, "Installing Oracle Single Sign-On and Oracle Delegated Administration Services Against Oracle Internet Directory," of the *Oracle Fusion Middleware Installation Guide for Oracle Identity Management*, the description for the `inspre11.pl` script's `CONNECT_STRING` option is incorrect. The document refers to the option as `DB_CONNECT_STRING`, however, it should be described as follows:

CONNECT_STRING: Represents the directory database connect string. If you already have a `tnsnames.ora` file configured, then this is the net service name specified in that file, which is located by default in the `ORACLE_HOME/config` (on UNIX) or `ORACLE_HOME\config` (on Windows) directory.

2.4.3 Errors in the Oracle Fusion Middleware Installation Guide for Application Developer

The *Oracle Fusion Middleware Installation Guide for Application Developer* contains the following documentation errata:

- [Section 2.4.3.1, "Schema Creation is not Required for Application Developer Installation"](#)
- [Section 2.4.3.2, "Incorrect Reference to Oracle SOA Suite"](#)
- [Section 2.4.3.3, "Extraneous Deinstall Instructions"](#)

2.4.3.1 Schema Creation is not Required for Application Developer Installation

The *Oracle Fusion Middleware Installation Guide for Application Developer* incorrectly states that schema creation is necessary for installation and configuration. Disregard all references to schema creation in this document.

2.4.3.2 Incorrect Reference to Oracle SOA Suite

In Section 1.1.3, "Install Oracle WebLogic Server and Create the Middleware Home," the following note appears:

Note: In order to be configured properly, Oracle SOA Suite requires that **Configuration Wizard and Upgrade Framework** is selected.

The reference to Oracle SOA Suite is an error; the note should read as follows:

Note: In order to be configured properly, Application Developer requires that **Configuration Wizard and Upgrade Framework** is selected.

2.4.3.3 Extraneous Deinstall Instructions

The following sections in Chapter 3, "Deinstalling Application Developer" are not applicable and should be skipped when deinstalling Application Developer:

- Section 3.1.1, "Stopping Oracle Fusion Middleware"
- Section 3.1.2, "Removing the Application Developer Schemas"

2.4.4 Oracle RAC Database Not Supported for Oracle UCM Installation

The Oracle WebCenter installation gives you the option of installing Oracle Universal Content Management (UCM). If you choose to install Oracle UCM, you will be asked to provide connection details to your Oracle database.

Section A.7, "Specify UCM Database Details Screen" in *Oracle Fusion Middleware Installation Guide for Oracle WebCenter* contains incorrect information suggesting that an Oracle Real Applications Cluster (RAC) database may be specified at the time of installation. Support for Oracle RAC databases is not available out-of-the-box. You must configure your Oracle RAC database after Oracle UCM is installed.

Refer to "Reconfiguring the Content Server to Support RAC" in *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle WebCenter* for more information.

2.4.5 Oracle Fusion Middleware Installation Planning Guide Contains Inaccurate Reference to File-Based Repository

The *Oracle Fusion Middleware Installation Planning Guide* contains the following text in Section 1.3.7, "Oracle Metadata Repository:"

Although a metadata repository can be database-based or file-based, it is recommended that database-based repositories be used in a production environment. If you initially configured your environment with a file-based repository, you can change it to a database-based repository.

This is incorrect because only database-based repositories are supported for Oracle Fusion Middleware 11g Release 1 (11.1.1).

This chapter describes issues associated with upgrading your environment and your applications to Oracle Fusion Middleware 11g. It includes the following topics:

- [Section 3.1, "General Issues and Workarounds"](#)
- [Section 3.2, "Additional Component-Specific Upgrade Release Notes"](#)
- [Section 3.3, "Documentation Errata"](#)

3.1 General Issues and Workarounds

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

- [Section 3.1.1, "Patches Required to Address Specific Upgrade and Compatibility Requirements"](#)
- [Section 3.1.2, "Additional Database Requirement for Oracle Portal Upgrade"](#)
- [Section 3.1.3, "Clarification of Oracle Portal Compatibility Issues During Upgrade"](#)
- [Section 3.1.4, "Unable to Read Composite Model Error During SOA Application Upgrade"](#)
- [Section 3.1.5, "Oracle BAM Upgrade Issues"](#)
- [Section 3.1.6, "Error When Upgrading Oracle Internet Directory Due to Invalid ODS Schema"](#)
- [Section 3.1.7, "Restore From Backup Required If Upgrade Fails During a Colocated Oracle Internet Directory and Oracle Directory Integration Platform Upgrade"](#)
- [Section 3.1.8, "Cannot Verify Oracle Forms Services Upgrade When Oracle HTTP Server is Running On a Separate Host"](#)
- [Section 3.1.9, "WebCenter Security Upgrade Release Notes"](#)
- [Section 3.1.10, "Upgrade Assistant Upgrades Only Enabled Oracle Identity Federation Resources"](#)
- [Section 3.1.11, "Service Name Is Required When Using ebMS with Oracle B2B"](#)
- [Section 3.1.12, "Converting Wallets to Keystores for Oracle B2B 11g"](#)
- [Section 3.1.13, "Migrating the Oracle HTTP Server Wallet After Upgrading a Secure Oracle HTTP Server"](#)
- [Section 3.1.14, "Additional Oracle Identity Federation Post-Upgrade Tasks"](#)

3.1.1 Patches Required to Address Specific Upgrade and Compatibility Requirements

In general, Oracle assumes that you are running the latest Oracle Application Server 10g patch sets before you begin the upgrade to Oracle Fusion Middleware 11g.

In addition, in some specific cases, you must apply an additional software patches to your Oracle Application Server 10g components before you start the upgrade process. These patches are designed to address specific interoperability issues that you might encounter while upgrading your Oracle Application Server 10g environment to Oracle Fusion Middleware 11g.

[Table 3–1](#) lists the specific patch sets required to address specific upgrade and compatibility requirements for Oracle Fusion Middleware 11g.

For more information, refer to the following sections:

- [Section 3.1.1.1, "Obtaining Patches and Support Documents From My Oracle Support \(Formerly OracleMetaLink\)"](#)

Table 3–1 Patches Required to Address Specific Upgrade and Compatibility Requirements

Patch Set Number	Description and Purpose	Additional Information
8404955	Before you can perform the Oracle B2B schema upgrade, you must apply this required patch to the Oracle Application Server Integration B2B 10g Release 2 (10.1.2) middle tier. This patch set is required in order to enable the Java command that you use to export the trading partner agreements, as described in the following step.	"Task 6b: If Necessary, Upgrade the B2B Schema" in the <i>Oracle Fusion Middleware Upgrade Guide for Oracle SOA Suite, WebCenter, and ADF</i>
5746866	If the database that hosts your Oracle Application Server 10g schemas is an Oracle Database 10g (10.1.0.x) database, then make sure that this database patch (or database patch 5126270) has been applied to the 10g (10.1.0.x) database before you upgrade the database to the required Oracle Database 10g (10.2.0.4). Note that database patch 5746866 includes patch 5126270.	"Upgrading to Oracle Database 10g Release 2 (10.2.0.4)" in the <i>Oracle Fusion Middleware Upgrade Planning Guide</i>
7685124	Apply this patch against Oracle Secure Enterprise Search (10.1.8.3.0) before you attempt to use Oracle Secure Enterprise Search with Oracle Portal 11g.	"Oracle Secure Enterprise Search" in the <i>Oracle Fusion Middleware Administrator's Guide for Oracle Portal</i> Section 34.4, "Interoperability Issues and Workarounds"

Table 3–1 (Cont.) Patches Required to Address Specific Upgrade and Compatibility Requirements

Patch Set Number	Description and Purpose	Additional Information
8372141	<p>Apply this patch on your Oracle Application Server 10g Release 3 (10.1.3.4) environment to enable interoperability between Oracle SOA Suite 10g Release 3 (10.1.3.4) and Oracle BPEL Process Manager 11g.</p> <p>This patch is also referred to as the Oracle SOA Suite 10g Release 3 (10.1.3.4) Cumulative MLR #7.</p>	<p>"Applying Patch Sets to Address Specific Upgrade Interoperability Issues" in the <i>Oracle Fusion Middleware Upgrade Planning Guide</i></p> <p>"Upgrading Oracle SOA Suite Client Applications" in the <i>Oracle Fusion Middleware Upgrade Guide for Oracle SOA Suite, WebCenter, and ADF</i></p>
6522654	<p>Apply this patch to your Oracle Database before you attempt to upgrade your Oracle BAM schema.</p> <p>If you do not apply this patch to your Oracle Database 10g (10.2.0.3), 10g (10.2.0.4), or Oracle Database 11g (11.1.0.7) before performing the schema upgrade, you will likely see the following error:</p> <pre>BAM MRUA: SCHEMA UPGRADE FAILED SQLException: ORA-39002: invalid operation</pre> <p>The description for this patch on My Oracle Support is "USING DATA PUMP THROUGH DBLINK CAUSED DATA CORRUPTION FOR CLOB VALUES".</p>	<p>"Task 6c: If Necessary, Upgrade the BAM Schema" in the <i>Oracle Fusion Middleware Upgrade Guide for Oracle SOA Suite, WebCenter, and ADF</i></p>
7675269	<p>Apply this patch to prevent the occurrence of an ORA-01591 error in an Oracle Real Application Clusters (RAC) 11g (11.1.0.7) database.</p> <p>This error can occur for rows locked by transactions which were in the middle of two-phase commit.</p> <p>The description of this patch on My Oracle Support is "ODAC 2008:RAC NODE AFFINITY: DISTRIBUTED TXN ABORTS WITH ORA-01591."</p>	<p>"Upgrading and Preparing Your Databases" in the <i>Oracle Fusion Middleware Upgrade Planning Guide</i></p>

3.1.1.1 Obtaining Patches and Support Documents From My Oracle Support (Formerly OracleMetaLink)

To obtain a patch, log in to My Oracle Support (formerly OracleMetaLink), click **Patches and Updates**, and search for the patch number:

<http://metalink.oracle.com/>

To obtain a support note or document, log in to My Oracle Support and enter the support note number in the **Quick Find** search field at the top of the My Oracle Support window and search the Knowledge Base for the note number.

3.1.2 Additional Database Requirement for Oracle Portal Upgrade

Section 3.6.4.3 of the *Oracle Fusion Middleware Upgrade Guide for Oracle Portal, Forms, Reports, and Discoverer* provides a list of database parameters you should verify before upgrading to Oracle Portal 11g.

In addition to the parameters listed in that section, you should also verify that the `Processes initialization` parameter is set to at least 500.

3.1.3 Clarification of Oracle Portal Compatibility Issues During Upgrade

As described in Section 4.3.2 of the *Oracle Fusion Middleware Upgrade Planning Guide* and in Section 3.5.1 of the *Oracle Fusion Middleware Upgrade Guide for Oracle Portal, Forms, Reports, and Discoverer*, there are some interoperability issues to consider when upgrading Oracle Portal to 11g.

To clarify the issues, consider the steps required to upgrade Oracle Portal:

1. Install Oracle Portal against the 10g PORTAL schema.
2. Run the Upgrade Assistant to upgrade your Oracle Portal 10g middle tier to 11g.
3. Run the Upgrade Assistant to upgrade the PORTAL schema to 11g.

After you install Oracle Portal against the 10g PORTAL schema, you must then run the Upgrade Assistant to upgrade the Oracle Portal middle tier. After performing the middle-tier upgrade, Oracle Portal is operational, although only 10g features will be available.

Later, you can use the Upgrade Assistant to upgrade the PORTAL schema to 11g. After the PORTAL schema is upgraded, then your upgraded Oracle Portal 11g instance will be fully operational with 11g features.

3.1.4 Unable to Read Composite Model Error During SOA Application Upgrade

The *Oracle Fusion Middleware Upgrade Guide for Oracle SOA Suite, WebCenter, and ADF* describes how Oracle JDeveloper 11g will automatically upgrade specific features of your Oracle SOA Suite 10g applications to 11g.

However, if you see the following error while upgrading your application in JDeveloper 11g, then you can safely ignore the error. Your application will be upgraded, but you will need to create a new SOA-SAR deployment profile after the application upgrade. And use this newly created profile for deploying SOA composite:

SEVERE: Unable to read composite model for project *project_name*

For more information, see 43.2, "Deploying a Single SOA Composite in Oracle JDeveloper," in the *Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite*.

3.1.5 Oracle BAM Upgrade Issues

The following sections provide information about specific issues related to upgrading Oracle BAM 10g to Oracle BAM 11g:

- [Section 3.1.5.1, "Datapump Export for Oracle BAM Upgrade Plug-in Fails in Oracle Database 10g \(10.2.0.3\), 10g \(10.1.2.0.4\), and Oracle Database 11g \(11.1.0.7\)"](#)
- [Section 3.1.5.2, "Dependent Alerts Do Not Upgrade Correctly"](#)
- [Section 3.1.5.3, "Upgrading Images in Oracle BAM Reports"](#)

3.1.5.1 Datapump Export for Oracle BAM Upgrade Plug-in Fails in Oracle Database 10g (10.2.0.3), 10g (10.1.2.0.4), and Oracle Database 11g (11.1.0.7)

Before you upgrade the Oracle BAM 11g schema to 11g, you must first apply patch 6522654 to your Oracle Database 10g (10.2.0.3), 10g (10.1.2.0.4), and Oracle Database 11g (11.1.0.7).

If you do not apply this patch, then you will likely experience the following error during Oracle BAM schema upgrade:

BAM MRUA: SCHEMA UPGRADE FAILED SQLException: ORA-39002: invalid operation

For more information, see [Section 3.1.1, "Patches Required to Address Specific Upgrade and Compatibility Requirements"](#).

3.1.5.2 Dependent Alerts Do Not Upgrade Correctly

When an alert in Oracle BAM 10g is dependent upon another alert, the dependent alert keeps a reference to the parent alert with a GUID reference. When such an alert is exported from 10g it will contain a GUID reference to the parent alert, and import to an Oracle BAM 11g system is not successful.

The following modification to the exported alert definition file can be used as a workaround for import to an Oracle BAM 11g system.

Edit the exported file contents of the dependent alert from the Oracle BAM 10g system, and modify the following element containing reference to parent alert.

Change this:

```
<param name="RuleID" order="0">
  //private:weblogic/Rule/624567ffe84de34c-6e6bdbaa120eb7f6ea6-8000
</param>
```

To this:

```
<param name="RuleID" order="0">
  ParentAlertName
</param>
```

In other words, the GUID reference for parent alert must be replaced by the parent alert's name.

3.1.5.3 Upgrading Images in Oracle BAM Reports

Any images you used in Oracle BAM 10g are not upgraded automatically to Oracle BAM 11g. As a result, you must manually move any of your Oracle BAM images to the Oracle BAM 11g before the images can be used in your Oracle BAM 11g reports.

- If you uploaded background images or inserted images into columnar views, you have two options to upgrade the images to Oracle BAM 11g:
 - **Option 1:** Copy all image files from the Oracle BAM 10g location to the Oracle BAM 11g location.

Oracle BAM 10g location:

```
ORACLE_HOME\BAM\images
```

Oracle BAM 11g location:

```
BAM_DOMAIN_HOME/servers/BAM_Managed_Server/
/tmp/_WL_user/oracle-bam-11.1.1/
/tmpdir/war/buildnumber/Images
```

Note that the Images directory in Oracle BAM 11g is case-sensitive and must begin with an uppercase "I".

- **Option 2:** Edit the Oracle BAM 11g reports and re-upload the image files.

For more information, see "Setting Backgrounds for Reports" in the *Oracle Fusion Middleware User's Guide for Oracle Business Activity Monitoring*.

- If you manually placed image files in the "images" directory in Oracle BAM 10g and you referenced them in your Oracle BAM 10g HTML calculations, then do the following:
 1. Copy the Oracle BAM 10g directory to the Oracle BAM 11g directory location as described in **Option 1** provided earlier in this section.
 2. Edit your Oracle BAM 11g HTML calculation expressions and change any folder reference images to Images.
- If you manually placed image files in a custom folder in Oracle BAM 10g and you referenced them in HTML calculations, then you must do the following:
 1. Create custom folder in 11g relative to:

```
BAM_DOMAIN_HOME/servers/BAM_Managed_Server/  
/tmp/_WL_user/oracle-bam-11.1.1/  
/tmpdir/war/buildnumber/Images
```
 2. Copy the 10g images to this new location.
 3. Edit your Oracle BAM 11g HTML calculation expressions and change any folder reference images to Images.

3.1.6 Error When Upgrading Oracle Internet Directory Due to Invalid ODS Schema

If you receive an error when using the Upgrade Assistant to upgrade the Oracle Internet Directory schema from 10g Release 2 (10.1.2.3) to 11g, then verify that the ODS 10g schema is valid.

To view the status of the Oracle Application Server 10g schemas in your database, use the following SQL command:

```
SELECT comp_id, version, status FROM app_registry;
```

If the output from this command shows that the ODS schema is INVALID, then use the instructions in the following My Oracle Support document to install and configure Referential Integrity:

```
730360.1, "Referential Integrity in Oracle Internet Directory Version 10.1.2.3"
```

After performing the instructions in the support document, then retry the Oracle Internet Directory schema upgrade.

3.1.7 Restore From Backup Required If Upgrade Fails During a Colocated Oracle Internet Directory and Oracle Directory Integration Platform Upgrade

If you are using the Upgrade Assistant to upgrade both Oracle Internet Directory and Oracle Directory Integration Platform, consider the following.

If the Oracle Internet Directory upgrade fails, then before you can run the Upgrade Assistant again, you must restore your Oracle Internet Directory 10g backup before you can run the Upgrade Assistant again. Otherwise, the Upgrade Assistant will not attempt to upgrade Oracle Directory Integration Platform.

3.1.8 Cannot Verify Oracle Forms Services Upgrade When Oracle HTTP Server is Running On a Separate Host

If you use the Upgrade Assistant to upgrade an Oracle Forms Services instance that does not include a local instance of Oracle HTTP Server, then the Verify feature of the

Upgrade Assistant cannot verify that the upgrade was successful. Instead of reporting that the upgrade was successful, the Verify feature will report that the server is unavailable. This verification error may not be valid if the Oracle HTTP Server is installed and configured on a different host than the Oracle Forms Services instance.

3.1.9 WebCenter Security Upgrade Release Notes

The following bugs/release notes relate to security changes for Custom WebCenter applications upgrading from 10.1.3.x:

- [Section 3.1.9.1, "RowSetPermission check fails with compatibility flag set"](#)
- [Section 3.1.9.2, "Grants not migrated properly if application contains grants without permissions"](#)

3.1.9.1 RowSetPermission check fails with compatibility flag set

In 10.1.3, the ADF framework performed rowset, attribute and method permission checks in addition to page permission checks. If a 10.1.3 application grants 'read' permission on the rowset and attribute and 'invoke' permission on the method for all users, then the application will behave as expected in 11R1 without any additional setup.

However, if the 10.1.3 application was designed to allow only certain users to view the rowset, attribute, or invoke method, then a special flag needs to be set to support this style of security. If this flag is not set, then anyone who has page access can view attributes and rowsets and invoke methods since in 11R1 the permission check is performed only on pages and taskflows. The flag must be set for each application in the `adf-config.xml` file.

```
<sec:adf-security-child
xmlns="http://xmlns.oracle.com/adf/security/config">
  <JaasSecurityContext
initialContextFactoryClass="oracle.adf.share.security.JAASInitialContextFactory"
jaasProviderClass="oracle.adf.share.security.providers.jps.JpsSecurityContext"
    authorizationEnforce="true"/>
    <contextEnv name="oracle.adf.security.metadata"
value="false"/>
    <CredentialStoreContext
credentialStoreClass="oracle.adf.share.security.providers.jps.CSFCredentialStore"
credentialStoreLocation="../../src/META-INF/jps-config.xml"/>
  </sec:adf-security-child>
```

3.1.9.2 Grants not migrated properly if application contains grants without permissions

Grants are not migrated properly if a 10.1.3 application contains grants without any permissions. Developers should inspect the `app-jazn-data.xml` file in the 10.1.3 workspace and remove any grants that have empty permission set prior to performing the migration.

3.1.10 Upgrade Assistant Upgrades Only Enabled Oracle Identity Federation Resources

If you have configured more than one data store, Authentication Engine, or SP Engine in your Oracle Identity Federation environment, note that the Upgrade Assistant will upgrade only the enabled resources to 11g. Any additional data stores, authentication engines, or SP engines that are configured, but not enabled, will not be upgraded to the new Oracle Identity Federation 11g environment.

After you upgrade, you can reconfigure the resources that were not upgraded. In addition, unlike Oracle Identity Federation 10g, you can enable more than one of these resources at a time in 11g.

3.1.11 Service Name Is Required When Using ebMS with Oracle B2B

Because the Service Name parameter is required when using the ebMS protocol in Oracle B2B 11g, you may need to provide a value for this field after importing 10g data.

With the agreement in the draft state, update the field on the **Partners > Documents** tab. When you select a document definition that uses the ebMS protocol, the **Document Type > ebMS** tab appears in the Document Details area. The Service Name field is on this tab.

3.1.12 Converting Wallets to Keystores for Oracle B2B 11g

After upgrading to Oracle B2B 11g, use the `orapki pkcs12_to_jks` option to replace the entire keystore. Convert the wallet to a keystore as follows:

1. Back up the original keystore.
2. Use the `orapki wallet pkcs12_to_jks` option to convert to the keystore.
3. Use `keytool -list` to list the aliases and verify.
4. Use `keytool -importkeystore` to import the converted keystore to the backup of the original keystore (as done in Step 1)

3.1.13 Migrating the Oracle HTTP Server Wallet After Upgrading a Secure Oracle HTTP Server

If you configured Secure Socket Layer (SSL) for the communications between Oracle HTTP Server and Oracle Web Cache, and you upgraded both Oracle HTTP Server and Oracle Web Cache to 11g, consider the following.

When you run the Oracle Fusion Middleware Upgrade Assistant, it configures Oracle Web Cache 11g to use the SSL wallet from your Oracle Web Cache 10g environment instead of the default wallet that gets installed with Oracle Web Cache 11g.

As a result, if you did not select the **Use source Oracle home ports in destination** option in the Upgrade Assistant, then you must perform one of the following actions:

- If you want to keep using the same SSL wallet that you used in your Oracle Application Server 10g environment, then export all your certificates from the wallet used by Oracle HTTP Server 10g and import those certificates into the wallet used by Oracle HTTP Server 11g.

You can use any available utility such as the WebLogic Scripting Tool (WLST) or Fusion Middleware Control for this task.

For more information, see Section 7.4.7, "Common Certificate Operations," in the *Oracle Fusion Middleware Administrator's Guide*.

- If you want to use a new SSL wallet for Oracle Fusion Middleware 11g, then change the SSL settings for Oracle Web Cache 11g connections to Oracle HTTP Server 11g to use the default 11g wallet.

For more information, see Section 5.4.3, "Task 3: Configure SSL Settings for Oracle Web Cache Connections to Origin Servers," in the *Oracle Fusion Middleware Administrator's Guide for Oracle Web Cache*.

3.1.14 Additional Oracle Identity Federation Post-Upgrade Tasks

The following additional post-upgrade tasks should be performed after upgrading to Oracle Identity Federation 11g, in addition to those described in the *Oracle Fusion Middleware Upgrade Guide for Oracle Identity Management*:

- If you are have configured Oracle Identity Federation 10g to use the SAML 1.x/WS-FED protocol, then after you upgrade to Oracle Identity Federation 11g, you must set a default single sign-on identity provider.

For more information, see "Configuring Service Providers" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Identity Federation*.

- Export the Identity Provider self-signed certificate to the service provider

The procedure you use to perform this task varies, depending on whether your service provider is a 10g or 11g service provider:

- If you are using a 10g service provider, then refer to "Exporting the IdP's self-signed certificate to the SP" in the *Oracle Identity Federation Administrator's Guide* in the Oracle Application Server 10g (10.1.4.0.1) documentation library on the Oracle Technology Network (OTN):

<http://www.oracle.com/technology/documentation/>

- If you are using an 11g service provider, then refer to "Set Up Single Sign-On for SAML 1.x and WS-Federation" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Identity Federation*.

- If you are using an 11g Identity Provider and a 10g service provider, and you are using the SAML 1.x/WS-FED protocol, then you configure the 10g service provider.

Specifically, for the 10g service provider, you must change the "Signing Certificate Subject DN" and "Signing Certificate Issuer DN" to 11g IdP format, which is of the form "CN=<host> Signing Certificate".

For more information, see "Configure This Domain as a Source/Identity Provider" in the *Oracle Identity Federation Administrator's Guide* in the Oracle Application Server 10g (10.1.4.0.1) documentation library on the Oracle Technology Network (OTN).

- Enable "Send Signed Assertion" in Oracle Identity Federation 10g, or disable "Require Signed Assertions" in Oracle Identity Federation 11g.

This task is necessary because in 10g, signed assertions are disabled by default, and in 11g, signed assertions are enabled by default.

Depending whether you perform this task in 10g or 11g, refer to one the following:

- "Configuring Service Providers" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Identity Federation*.
- Section 6.5.5, "Add Assertion Profile" in the *Oracle Identity Federation Administrator's Guide* in the Oracle Application Server 10g (10.1.4.0.1) documentation library on the Oracle Technology Network (OTN).

3.1.15 Recommendation When Upgrading Oracle JDeveloper 10g Projects

As described in the *Oracle Fusion Middleware Upgrade Guide for Oracle SOA Suite, WebCenter, and ADF*, when you open a Oracle JDeveloper 10g workspace (.jws) file in Oracle JDeveloper 11g, the Oracle JDeveloper migration utility upgrades the

application—including all the projects within the application—to the new Oracle JDeveloper 11g format.

You can also upgrade individual Oracle JDeveloper 10g project (.jpr) files. However, Oracle recommends you take the following steps when upgrading .jpr files:

1. Start Oracle JDeveloper 11g.
2. Create a new application in Oracle JDeveloper 11g.
3. Open the .jpr file from within the application so it becomes a project within the newly created application.

3.2 Additional Component-Specific Upgrade Release Notes

In addition to the upgrade-related release notes available in this chapter, refer to the component-specific chapters for upgrade-related information. For example, you can find additional upgrade-related release notes in the Oracle Identity Management chapter of these Release Notes.

3.3 Documentation Errata

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

- [Section 3.3.1, "Documentation Errata for Oracle Fusion Middleware Upgrade Guide for Oracle SOA Suite, WebCenter, and ADF"](#)
- [Section 3.3.2, "Documentation Errata for Oracle Fusion Middleware Upgrade Guide for Oracle Identity Management"](#)
- [Section 3.3.3, "Documentation Errata for Oracle Fusion Middleware Upgrade Guide for Oracle Portal, Forms, Reports, and Discoverer"](#)

3.3.1 Documentation Errata for *Oracle Fusion Middleware Upgrade Guide for Oracle SOA Suite, WebCenter, and ADF*

The following issues have been identified in the released version of the Oracle Fusion Middleware Upgrade Guide for Oracle SOA Suite, WebCenter, and ADF:

- [Section 3.3.1.1, "Incorrect Version Reference in Section 9.6.5.2"](#)
- [Section 3.3.1.2, "Additional Post-Upgrade Steps for Oracle BAM"](#)
- [Section 3.3.1.3, "Modified Procedure for Upgrading Domain Value Maps \(DVMs\) and Cross References with the Oracle SOA Suite Command-Line Upgrade Tool"](#)

3.3.1.1 Incorrect Version Reference in Section 9.6.5.2

The first sentence in Section 9.6.5.2, "Invoking Web Services from Oracle BAM Alerts" is incorrect. It should read as follows:

"In Oracle BAM 10g, you could configure alerts to invoke a Web service by invoking an external action. This method of using alerts to invoke a Web service is no longer supported in Oracle BAM 11g."

3.3.1.2 Additional Post-Upgrade Steps for Oracle BAM

See *Oracle Fusion Middleware Upgrade Guide for Oracle SOA Suite, WebCenter, and ADF* for information about upgrading an existing Oracle BAM installation. The following statements are additions to the information contained in that guide.

Users and Groups

After the Oracle BAM schema is updated, any Oracle BAM 10g users will appear in the Oracle BAM Administrator as inactive if they do not exist in the 11g security provider. However, you can use Oracle BAM Administrator to remap 10g users to new Oracle BAM 11g users.

For more information, see Section 23.3.7, "Managing Oracle BAM Object Ownership," in *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite*.

You may need to address the following for users and groups:

- Reset any Shared Folder permissions
- Reset any Data Object and Data Object folder permissions
- Reset any Distribution Lists
- Reset Security Filters
- Reset Alerts actions to users and groups

Alerts

Some Oracle BAM alert actions were removed in Oracle BAM 11g, and after upgrading, any alerts using them may become invalid.

The Run a Plan action was removed because Oracle BAM replaced Enterprise Link with Oracle Data Integrator, Which uses the Run an ODI Scenario alert action.

Enterprise Message Sources

Enterprise Message Sources definitions have changed from Oracle BAM 10g to Oracle BAM 11g, and must be recreated.

3.3.1.3 Modified Procedure for Upgrading Domain Value Maps (DVMs) and Cross References with the Oracle SOA Suite Command-Line Upgrade Tool

Section 9.3.6.7, "Upgrading Domain Value Maps (DVMs) and Cross References with the Oracle SOA Suite Command-Line Upgrade Tool" explains how to upgrade DVMs and Cross-References with the Oracle SOA Suite command-line upgrade tool.

However, due to a change in the way Metadata archive (MAR) files are deployed, Task 3 , "Import the archive file into MDS repository" in that procedure should be replaced with the following steps:

1. Start Oracle JDeveloper 11g and create a new application.
2. Import the Oracle SOA Suite archive into a new SOA project:
 - a. From the Oracle JDeveloper 11g **File** menu, select **Import**, then **SOA Archive into SOA Project**.
 - b. In the Create SOA Project from SOA Archive Dialog Box, select JAR Options in the navigation tree on the left, and then click **Browse** to locate the `sca_XrefDvmFiles10g_rev1.0.jar` file that you created previously in this procedure.
 - c. Select **File Groups > Project Output** from the navigational tree on the left, and enter `XrefDvmFiles10g` in the **Target Directory in Archive** field.
 - d. Click **OK** to create the new SOA project, which is called `XrefDvmFiles10g`.

The new project consists of an empty composite, along with the upgraded XRef and DVM files.

3. Create a metadata archive (MAR) file for the application, which includes the XRef and DVM metadata, and then deploy the MAR to the Oracle WebLogic Server domain.

For information about creating a MAR, see section 43.4, "Deploying and Using Shared Metadata Across SOA Composite Applications," in the *Oracle Fusion Middleware Fusion Developer's Guide for Oracle Application Development Framework*.

3.3.2 Documentation Errata for *Oracle Fusion Middleware Upgrade Guide for Oracle Identity Management*

The following issues have been identified in the released version of the *Oracle Fusion Middleware Upgrade Guide for Oracle Identity Management*:

- [When Upgrading Oracle Identity Federation, Configuring Oracle Single Sign-On Is No Longer Required Before Running the Upgrade Assistant](#)

3.3.2.1 When Upgrading Oracle Identity Federation, Configuring Oracle Single Sign-On Is No Longer Required Before Running the Upgrade Assistant

Section 6.3, "Task 3: Install and Configure Oracle Identity Federation 11g" in the *Oracle Fusion Middleware Upgrade Guide for Oracle Identity Management* describes how to install and configure Oracle Identity Federation in preparation for an upgrade to 11g.

In this procedure, Task 3d, "Configure Oracle Single Sign-On With Oracle HTTP Server 11g" is no longer necessary, since it is now performed automatically when you later run the Upgrade Assistant.

3.3.3 Documentation Errata for *Oracle Fusion Middleware Upgrade Guide for Oracle Portal, Forms, Reports, and Discoverer*

The following issues have been identified in the released version of the *Oracle Fusion Middleware Upgrade Guide for Oracle Portal, Forms, Reports, and Discoverer*:

- [Additional Configuration Step for Oracle Reports When Using 10g Ports During Upgrade](#)

3.3.3.1 Additional Configuration Step for Oracle Reports When Using 10g Ports During Upgrade

Section 3.6.3.2, "Important Notes When Using the Source Oracle Home Ports in the Destination Oracle Instance" in the *Oracle Fusion Middleware Upgrade Guide for Oracle Portal, Forms, Reports, and Discoverer* describe some tasks you should consider if you are same ports in 11g that you were using in 10g.

In particular, it explains that if you have problems monitoring your upgraded Oracle Reports in Fusion Middleware Control, then you should modify the Agent-Monitored Target properties for the Oracle Reports component. It explains that you must change both the **HTTP Port** property and the port identified in the **Servlet URL** property to reflect the 10g Oracle HTTP Server port.

Note that in addition, you must also update the **Server** property for the WLS_ REPORTS J2EE application. This is because, during the upgrade, the Oracle Reports 11g in-process server is renamed to use the same name as the 10g in-process server.

Oracle Fusion Middleware Administration

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

- [Section 4.1, "General Issues and Workarounds"](#)
- [Section 4.2, "Configuration Issues and Workarounds"](#)

4.1 General Issues and Workarounds

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

- [Section 4.1.1, "Supported Combinations for Extending Domains"](#)
- [Section 4.1.2, "Supported Topologies for IPv6 Network Protocols"](#)
- [Section 4.1.3, "Fusion Middleware Control May Return Error in Mixed IPv6 and IPv4 Environment"](#)
- [Section 4.1.4, "Deploying JSF Applications"](#)

4.1.1 Supported Combinations for Extending Domains

When you create an Oracle WebLogic Server domain, you create it using a particular domain template. That template supports a particular component or group of components, such as the Oracle SOA Suite. If you want to add other components, such as Oracle WebCenter, to that domain, you can extend the domain by creating additional Managed Servers in the domain, using a domain template for the component which you wish to add.

[Table 4–1](#) shows which components you can add to an existing domain and the domain templates needed.

Table 4–1 *Supported Domain Extensions*

Existing Domain Template	Components That Can Be Added
Oracle SOA Suite	Any Oracle SOA Suite component. Any Oracle WebCenter component. Extend with Oracle WebCenter domain template. Any Web Tier component. Extend with Web Tier domain template.
Oracle Identity Management	Any Identity Management component. Any Web Tier component. Extend with Web Tier domain template.

Table 4–1 (Cont.) Supported Domain Extensions

Existing Domain Template	Components That Can Be Added
Oracle Portal, Oracle Reports, Oracle Forms Services, Oracle Business Intelligence Discoverer	Any of these components. Any Web Tier component. Extend with Web Tier domain template.

4.1.2 Supported Topologies for IPv6 Network Protocols

The following topologies for IPv6 are supported (dual-stack means that the host is configured with both IPv4 and IPv6):

- Topology A:
 - Oracle Database on IPv4 protocol host
 - Oracle WebLogic Server on dual-stack host
 - Clients on IPv4 protocol host
 - Clients on IPv6 protocol host
- Topology B:
 - Oracle Database on IPv4 protocol host
 - One or more of the following components on dual-stack hosts: Oracle WebLogic Server, Oracle SOA Suite, Oracle WebCenter, Oracle Business Activity Monitoring, Fusion Middleware Control
 - Oracle HTTP Server with mod_wl_ohs on IPv6 protocol host
- Topology C:
 - Database, such as MySQL, that supports IPv6 on IPv6 protocol host
 - Oracle WebLogic Server on IPv6 protocol host
 - Clients on IPv6 protocol host
- Topology D:
 - Oracle Database on IPv4 protocol host
 - One or more of the following components on dual-stack hosts: Identity Management, Oracle SOA Suite, Oracle WebCenter, Oracle Business Activity Monitoring, Fusion Middleware Control
 - Clients on IPv4 protocol host
 - Clients on IPv6 protocol host
- Topology E:
 - Oracle Database on IPv4 protocol host
 - One or more of the following components on IPv4 protocol host: Oracle Portal, Oracle Forms Services, Oracle Reports, Oracle Business Intelligence Discoverer, and Oracle Single Sign-On Release 10.1.4.3
 - Oracle HTTP Server with mod_proxy on dual-stack host
 - Clients on IPv6 protocol host
- Topology F:
 - Oracle Access Manager Release 10.1.4.3 and applications, such as SOA composite applications on IPv4 protocol host

- Oracle HTTP Server with mod_proxy on dual-stack host
- Clients on IPv6 protocol host
- Topology G:
 - Oracle Database on IPv4 protocol host
 - One or more of the following components on IPv4 protocol host: Oracle SOA Suite, Oracle WebCenter, Oracle Business Activity Monitoring, Fusion Middleware Control on IPv4 protocol host
 - Oracle HTTP Server with mod_wl_ohs on dual-stack host
 - Clients on IPv6 protocol host

See Also: The section "Using IPv6" in the *Oracle Fusion Middleware Administrator's Guide*

4.1.3 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:

```
xxx.xx.xx.xx myserver-ipv6 myserver-ipv6.example.com
```

In the example, `xxx.xx.xx.xx` is the IPv4 address of the Administration Server host, `myserver.example.com`.

4.1.4 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**.

4.2 Configuration Issues and Workarounds

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

- [Section 4.2.1, "Configuring Fusion Middleware Control for Windows Native Authentication"](#)
- [Section 4.2.2, "Fusion Middleware Control Does Not Keep Column Preferences in Log Viewer Pages"](#)
- [Section 4.2.3, "Changing Log File Format"](#)

4.2.1 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

```

4.2.2 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.

4.2.3 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.

4.3 Documentation Errata

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

- [Additional Information About Disabling IPv6 for Oracle Web Cache](#)

4.3.1 Additional Information About Disabling IPv6 for Oracle Web Cache

The *Oracle Fusion Middleware Administrator's Guide* describes how to disable IPv6 for Oracle Web Cache, which is enabled by default. However, it does not describe how to add the IPV6 element if it does not exist in the `webcache.xml` file.

If the IPV6 element does not exist in the `webcache.xml` file, you can add the element to the file. Add it after the MULTIPORT element, as shown in the following example:

```
...
    <LISTEN IPADDR="ANY" PORT="7786" PORTTYPE="ADMINISTRATION"/>
    <LISTEN IPADDR="ANY" PORT="7788" PORTTYPE="INVALIDATION"/>
    <LISTEN IPADDR="ANY" PORT="7787" PORTTYPE="STATISTICS"/>
  </MULTIPORT>
  <IPV6 ENABLED="NO"/>
```

Oracle Enterprise Manager Fusion Middleware Control

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

- [Section 5.1, "General Issues and Workarounds"](#)

5.1 General Issues and Workarounds

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

- [Section 5.1.1, "Product Behavior After a Session Timeout"](#)
- [Section 5.1.2, "Fixing Errors Displayed When Selecting the TopLink Sessions Command in Fusion Middleware Control"](#)

5.1.1 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.

5.1.2 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:

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

5.1.3 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.

5.1.4 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.

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 6.1, "General Issues and Workarounds"](#)
- [Section 6.2, "Configuration Issues and Workarounds"](#)
- [Section 6.3, "Documentation Errata"](#)

6.1 General Issues and Workarounds

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

- [Section 6.1.1, "Discoverer Managed Server Starts in Admin Mode on Unpacked Machine"](#)
- [Section 6.1.2, "mod_wl Not Supported for OHS Routing to Managed Server Cluster"](#)
- [Section 6.1.3, "Only Documented Procedures Supported"](#)

6.1.1 Discoverer Managed Server Starts in Admin Mode on Unpacked Machine

If you use the pack and unpack commands for Managed Server for Oracle Portal, Oracle Forms, Oracle Reports, and Oracle Discoverer in a cluster, make sure to copy the applications from the first node to the second node (because these are externally staged applications). For details about using the pack and unpack commands, see *Oracle WebLogic Server Creating Templates and Domains Using the Pack and Unpack Commands*.

6.1.2 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.

6.1.3 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*.

6.2 Configuration Issues and Workarounds

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

- [Section 6.2.1, "XEngine Not Installed on Second Node in a Clustered Environment"](#)
- [Section 6.2.2, "jca.retry.count Doubled in a Clustered Environment"](#)
- [Section 6.2.3, "Cluster Time Zones Must Be the Same"](#)
- [Section 6.2.4, "WebLogic Server Restart after Abrupt Machine Failure"](#)
- [Section 6.2.5, "Port Translation with Oracle Portal Loopback"](#)
- [Section 6.2.6, "Fusion Middleware Control May Display Incorrect Status"](#)
- [Section 6.2.7, "Accumulated BPEL Instances Cause Performance Decrease"](#)
- [Section 6.2.8, "Extra Message Enqueue when One a Cluster Server is Brought Down and Back Up"](#)
- [Section 6.2.9, "Duplicate Unrecoverable Human Workflow Instance Created with Oracle RAC Failover"](#)
- [Section 6.2.10, "Configuration Files Missing after Planned Administration Server Node Shutdown or Reboot"](#)
- [Section 6.2.11, "Load Balancer Issue when Two Nodes Each have a Managed Server"](#)
- [Section 6.2.12, "No High Availability Support for SOA B2B TCP/IP"](#)

6.2.1 XEngine Not Installed on Second Node in a Clustered Environment

In a clustered environment, the XEngine does not get installed on the second node when the node is on another computer. This is because the XEngine extraction occurs only when you run the Configuration Wizard (which is not run automatically on the second node). The workaround is to perform the XEngine extraction manually in this case. After completing the XEngine extraction, you must restart the server.

6.2.2 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.

6.2.3 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.

6.2.4 WebLogic Server Restart after Abrupt Machine Failure

If Oracle WebLogic Server does not restart after abrupt machine failure when JMS messages and transaction logs are stored on NFS mounted directory, the following errors may appear in the server log files:

```
<MMM dd, yyyy hh:mm:ss a z> <Error> <Store> <BEA-280061> <The persistent
```

```

store "_WLS_server_soa1" could not be deployed:
weblogic.store.PersistentStoreException: java.io.IOException:
[Store:280021]There was an error while opening the file store file
"_WLS_SERVER_SOA1000000.DAT"
weblogic.store.PersistentStoreException: java.io.IOException:
[Store:280021]There was an error while opening the file store file
"_WLS_SERVER_SOA1000000.DAT"
    at weblogic.store.io.file.Heap.open(Heap.java:168)
    at weblogic.store.io.file.FileStoreIO.open(FileStoreIO.java:88)

```

If an abrupt machine failure occurs, WebLogic Server restart or whole server migration may fail if the transaction logs or JMS persistence store directory is mounted using NFS. WebLogic Server maintains locks on files used for storing JMS data and transaction logs to protect from potential data corruption if two instances of the same WebLogic Server are accidentally started. NFS protocol is stateless, and the storage device does not become aware of machine failure, therefore, the locks are not released by the storage device. As a result, after abrupt machine failure, followed by a restart, any subsequent attempt by WebLogic Server to acquire locks on the previously locked files may fail. Refer to your storage vendor documentation for additional information on the locking of files stored in NFS mounted directories on the storage device.

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

Solution 1

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

```

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

```

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

Solution 2

Disable WebLogic file locking by disabling the native I/O wlfio2 driver. The following sample steps move the shared object for the driver to a backup location, effectively removing it.

```

cd WL_HOME/server/native/platform/cpu_arch
mv libwlfio2.so /shared/backup

```

With this solution, since the WebLogic locking is disabled, automated server restarts and failovers succeed. In addition, this may result in performance degradations. Be very cautious when using this solution. Always configure the database based leasing

option, which enforces additional locking mechanism using database tables, and prevents automated restart of more than one instance of same WebLogic Server. Additional procedural precautions must be implemented to avoid any human error and ensure that one and only one instance of a server is manually started at any given point of time. Similarly, extra precautions must be taken to ensure that no two domains have a store with the same name that references the same directory.

6.2.5 Port Translation with Oracle Portal Loopback

In a high availability Portal implementation, it is often required to configure the Parallel Page Engine to loopback requests through a load balancer. When configuring the load balancer for Portal Loopback ensure that it is not configured with Port Translation. For example:

The correct configuration: Load Balancer Listens for Requests on Port 7777 and Passes them onto Web Cache Port 7777.

The incorrect configuration: Load Balancer Listens for Requests on Port 8888 and Passes them onto Web Cache Port 7777.

6.2.6 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.

6.2.7 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 PBEL instances from the database.

6.2.8 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.

6.2.9 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.

6.2.10 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.

6.2.11 Load Balancer Issue when Two Nodes Each have a Managed Server

If the cluster configuration is made up of the following:

- Unicast messaging for cluster communication
- Clustered Servers running on different physical machines
- No ListenAddress specified for the servers in the cluster

Be sure to do the following:

- Define a custom network channel for cluster-broadcast protocol on each of the clustered servers. The channel must have the same name on each server.
- Set its ListenAddress/port to one of the IP/Port of the machine where the server is running.
- Set the Unicast Broadcast Channel name for the cluster to be the newly defined custom channel. This channel should be outbound-enabled.

6.2.12 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.

6.2.13 404 Errors while Accessing a Composite's end point that uses OHS as Front End

The routing of requests from Oracle HTTP Server to composites' end points exposed in the WLS_SOA servers begins as soon as the WLS_SOA servers change to status "running." The soa-infra application may be unavailable regardless of whether the WLS_SOA server is running. Additionally, composite deployment and syncing across a cluster can take some time after the start of the WLS_SOA server. This may lead to Oracle HTTP Server starting to route to soa-infra context URL while the required composites are not yet available in a server that is being started (after a failover, server

migration or simple restart in the node). Oracle recommends including the appropriate retry code in the clients when invoking the end points to overcome the possible 404 HTTP error codes. After the full composite syncing completes, the errors should stop.

6.3 Documentation Errata

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

- [Section 6.3.1, "Documentation Errata for the Fusion Middleware High Availability Guide"](#)
- [Section 6.3.2, "Documentation Errata for the Fusion Middleware Enterprise Deployment Guides"](#)

6.3.1 Documentation Errata for the Fusion Middleware High Availability Guide

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

6.3.1.1 Latest Requirements and Certification Information

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

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

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

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

- Oracle Fusion Middleware Certification information at:

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

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

6.3.1.2 Synchronizing System Clocks in a Cluster Required

Section 5.11.1.5, "Synchronizing System Clocks," of the *Oracle Fusion Middleware High Availability Guide*, states that "Oracle recommends synchronizing system clocks on each of the cluster nodes for high availability SOA deployments."

Synchronizing system clocks in a cluster is not a recommendation; it is a mandatory requirement.

6.3.1.3 Incorrect References to NIP and NAP Protocols

Oracle Access Manager components use proprietary protocols called Oracle Access Protocol (OAP) and Oracle Identity Protocol (OIP) to communicate with each other.

Oracle Access Protocol (OAP) enables communication between Access System components (for example, Policy Manager, Access Manager, and WebGate) during

user authentication and authorization. This protocol was formerly known as NetPoint Access Protocol (NAP) or COREid Access Protocol.

Oracle Identity Protocol (OIP) governs communications between Identity System components (for example, Identity Server, WebPass) and a Web server. This protocol was formerly known as NetPoint Identity Protocol (NIP) or COREid Identity Protocol.

In the *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle Identity Management*, Section 1.4.2 "Understanding the Application Tier" includes a reference to the NAP (Network Access Protocol) port, which should be a reference to the Oracle Access Protocol (OAP) port. This section also includes a reference to the NIP (Network Identity Protocol) port, which should be a reference to the Oracle Identity Protocol (OIP) port.

In the *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle Identity Management*, Section 1.4.3 "Understanding the Web Tier" includes a reference to the Network Access Protocol (NAP), which should be a reference to the Oracle Access Protocol (OAP).

In the *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle Identity Management*, Table 2-2 "Ports Used in the Oracle Identity Management Enterprise Deployment Topology" includes two references to the NAP protocol, which should be references to the OAP protocol. This table also includes two references to the NIP protocol, which should be references to the OIP protocol.

6.3.1.4 Procedure Missing from High Availability Guide Oracle Reports Configuration Section

In the *Oracle Fusion Middleware High Availability Guide*, before section "12.6.5.6.4 Restart WLS_REPORTS and WLS_REPORTS1," the following procedure for creating an Oracle Reports server cluster is missing:

By creating a Reports cluster with a database reports queue it is possible to link all of the Reports servers to the same queue. The benefit of this procedure is that when a server has spare capacity, it can take and execute the next report in the queue, thereby distributing the load. It also ensures that if a cluster member becomes unavailable, another Reports server can detect this and run any reports on which the failed server was working.

Create a Reports cluster by adding a cluster entry to the `rwsvlet.properties` file on both APPHOST1 and APPHOST2.

Cluster APPHOST1

Edit the `rwsvlet.properties` file located in the `DOMAIN_HOME/user_projects/domains/ReportsDomain/servers/WLS_REPORTS/stage/reports/reports/configuration` directory.

Add the following line:

```
<cluster clusternode="cluster_reports" clusternodes="rep_wls_reports1_APPHOST2_reports2"/>
```

Note: The value of `clusternodes` is the value which appears in the `<server>` tag in the `rwsvlet.properties` file located on APPHOST2.

Note: The `clusternodes` parameter should list all of the Reports servers in the cluster (comma separated) EXCEPT the local Reports server.

Cluster APPHOST2

Edit the `rwsvlet.properties` file located in the `DOMAIN_HOME/user_projects/domains/ReportsDomain/servers/WLS_REPORTS1/stage/reports/reports/configuration` directory.

Add the following line:

```
<cluster clustername="cluster_reports" clusternodes="rep_wls_reports_APPHOST1_reports1"/>
```

Note: The value of `clusternodes` is the value which appears in the `<server>` tag in the `rwsvlet.properties` file located on APPHOST1.

Note: The `clusternodes` parameter should list all of the Reports servers in the cluster (comma separated) EXCEPT the local Reports server.

6.3.2 Documentation Errata for the Fusion Middleware Enterprise Deployment Guides

This section contains Documentation Errata for Oracle Fusion Middleware Enterprise Deployment Guides.

- [Section 6.3.2.1, "Quartz Requires Synchronizing System Clocks in a Cluster"](#)
- [Section 6.3.2.2, "Changes Required in for Deploying FOD in and EDG SOA Topology"](#)
- [Section 6.3.2.3, "Configuration Changes Propagation Information Missing from SOA EDG"](#)
- [Section 6.3.2.4, "Converting Discussions Forum from Multicast to Unicast"](#)

6.3.2.1 Quartz Requires Synchronizing System Clocks in a Cluster

In Chapter 2, "Database and Environment Preconfiguration," of the *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle SOA Suite*, the following information is missing:

- Quartz

Oracle SOA Suite uses Quartz to maintain its jobs and schedules in the database. For the Quartz jobs to be run on different Oracle SOA nodes in a cluster, it is required that the system clocks on the cluster nodes be synchronized.

6.3.2.2 Changes Required in for Deploying FOD in and EDG SOA Topology

The following information is missing from section 10.2, "Deploying Composites and Artifacts in SOA Enterprise Deployment Topology" of the *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle SOA Suite*:

When deploying SOA Fusion Order Demo, the following additional steps are required in addition to the deployment steps provided in the FOD's README file).

1. Change the nostage property to **false** in the `build.xml` file of the Web applications so that ear files are copied to each node. Edit the `CreditCardAuthorization` and `OrderApprovalHumanTask` `build.xml` files, located at `FOD_dir\CreditCardAuthorization\bin` and `FOD_dir\OrderApprovalHumanTask\bin` directories, and change the following field:

```
<target name="deploy-application">
    <wldploy action="deploy" name="${war.name}"
        source="${deploy.ear.source}" library="false"
        nostage="false"
        user="${wls.user}" password="${wls.password}"
        verbose="false" adminurl="${wls.url}"
        remote="true" upload="true"
        targets="${server.targets}" />
</target>
```

To:

```
<target name="deploy-application">
    <wldploy action="deploy" name="${war.name}"
        source="${deploy.ear.source}" library="false"
        nostage="true"
        user="${wls.user}" password="${wls.password}"
        verbose="false" adminurl="${wls.url}"
        remote="true" upload="true"
        targets="${server.targets}" />
</target>
```

2. Change the target for the Web applications so that deployments are targeted to the SOA Cluster and not to an individual server. Edit the `build.properties` file for FOD, located in the `FOD_Dir/bin` directory, and change the following field:

```
# wls target server (for shiphome set to server_soa, for ADRS use AdminServer)
server.targets=SOA_Cluster (the SOA cluster name in your SOA EDG)
```

3. Change the JMS seed templates so that instead of regular Destinations, Uniform Distributed Destinations are used and the JMS artifacts are targeted to the EDG JMS Modules. Edit the `createJMSResources.seed` file, located in the `FOD_DIR\bin\templates` directory, and change:

```
# lookup the SOAJMSModule - it's a system resource
jmsSOASystemResource = lookup("SOAJMSModule","JMSSystemResource")

jmsResource = jmsSOASystemResource.getJMSResource()

cfbean = jmsResource.lookupConnectionFactory('DemoSupplierTopicCF')
if cfbean is None:
    print "Creating DemoSupplierTopicCF connection factory"
    demoConnectionFactory =
jmsResource.createConnectionFactory('DemoSupplierTopicCF')
    demoConnectionFactory.setJNDIName('jms/DemoSupplierTopicCF')
    demoConnectionFactory.setSubDeploymentName('SOASubDeployment')
.

topicbean = jmsResource.lookupTopic('DemoSupplierTopic')
if topicbean is None:
    print "Creating DemoSupplierTopic jms topic"
    demoJMSTopic = jmsResource.createTopic("DemoSupplierTopic")
```

```
demoJMSTopic.setJNDIName('jms/DemoSupplierTopic')
demoJMSTopic.setSubDeploymentName('SOAJMSDeployment')
```

To:

```
# lookup the SOAJMSModule - it's a system resource
jmsSOASystemResource = lookup("SOAJMSModuleUDDs", "JMSSystemResource")

jmsResource = jmsSOASystemResource.getJMSResource()

cfbean = jmsResource.lookupConnectionFactory('DemoSupplierTopicCF')
if cfbean is None:
    print "Creating DemoSupplierTopicCF connection factory"
    demoConnectionFactory =
jmsResource.createConnectionFactory('DemoSupplierTopicCF')
    demoConnectionFactory.setJNDIName('jms/DemoSupplierTopicCF')
    demoConnectionFactory.setSubDeploymentName('SOAJMSSubDM')
.

topicbean = jmsResource.lookupTopic('DemoSupplierTopic')
if topicbean is None:
    print "Creating DemoSupplierTopic jms topic"
    demoJMSTopic =
jmsResource.createDistributedTopic("DemoSupplierTopic")
    demoJMSTopic.setJNDIName('jms/DemoSupplierTopic')
    demoJMSTopic.setSubDeploymentName('SOAJMSSubDM')
```

6.3.2.3 Configuration Changes Propagation Information Missing from SOA EDG

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

Configuration Changes being applied to the SOA and BAM components in an EDG Topology:

If you are using Oracle SOA Suite in a clustered environment, any configuration property changes you make in Oracle Enterprise Manager on one node must be made on all nodes. Configuration properties are set in Oracle Enterprise Manager through the following options of the SOA Infrastructure men:

Administration > System MBean Browser SOA Administration > any property selections Services and References > Properties tab.

In addition, consider the following when making configuration changes to BAM Server in a BAM EDG Topology:

Since server migration is used, the BAM Server is moved to a different node's domain directory. It is necessary to pre-create the BAM Server configuration in the failover node. The BAM Server configuration files are located in the following directory:

```
ORACLE_BASE/admin/<domain_name>/mserver/<domain_name>
/servers/<servername>/tmp/_WL_user/oracle-bam_11.1.1
/*/APP-INF/classes/config/
```

Where '*' represents a directory name randomly generated by Oracle WebLogic Server during deployment, for example, 3682yq.

In order to create the files in preparation for possible failovers, you can force a server migration and copy the files from the source node. For example, for BAM:

1. Configure the driver for WLS_BAM1 in BAMHOST1.

2. Force a failover of WLS_BAM1 to BAMHOST2. Verify the directory structure for the BAM Server in the failover node:

```
cd ORACLE_BASE/admin/<domain_name>/msserver/
<domain_name>/servers/<servername>/tmp/_WL_user/oracle-bam_11.1.1
/*/APP-INF/classes/config/
```

Where '*' represents a directory name randomly generated by Oracle WebLogic Server during deployment, for example, 3682yq.

3. Do a remote copy of the BAM Server configuration file from BAMHOST1 to BAMHOST2:

```
BAMHOST1> scp
ORACLE_BASE/admin/<domain_name>/msserver/<domain_name>
/servers/<servername>/tmp
/_WL_user/oracle-bam_11.1.1/*/APP-INF/classes/config/* oracle@BAMHOST2:
ORACLE_BASE/admin/<domain_name>/msserver/<domain_name>/servers/<servername>/tmp
/_WL_user/oracle-bam_11.1.1/*/APP-INF/classes/config/
```

6.3.2.4 Converting Discussions Forum from Multicast to Unicast

The procedure for converting Discussions Forum from multicast to unicast is missing from Chapter 6, Configuring High Availability for Oracle ADF and WebCenter Applications, in the the *Oracle Fusion Middleware High Availability Guide*.

To convert Discussions Forum from multicast to unicast:

Step 1: Enable system properties in the Oracle Coherence configuration files

To override the default Oracle Coherence settings, set the relevant system properties in the coherence .xml files. For Discussions Forum, edit the tangosol-coherence-override.xml file. This file is part of the coherence.jar deployed with Discussions Forum. Make the following changes to this file:

1. Extract the tangosol-coherence-override.xml file from coherence.jar in the WLS_Services deployment directory (jar xvf coherence.jar).
2. Add the following lines to the file within the cluster-config element:

```
<unicast-listener>
  <well-known-addresses>
    <socket-address id="1">
      <address system-property="tangosol.coherence.wka1"></address>
      <port system-property="tangosol.coherence.wka1.port">8088</port>
    </socket-address>
    <socket-address id="2">
      <address system-property="tangosol.coherence.wka2"></address>
      <port system-property="tangosol.coherence.wka2.port">8088</port>
    </socket-address>
    ...etc....
    <socket-address id="9">
      <address system-property="tangosol.coherence.wka9"></address>
      <port system-property="tangosol.coherence.wka9.port">8088</port>
    </socket-address>
  </well-known-addresses>
</unicast-listener>
```

3. Jar up the file and restart the server (jar cvf coherence.jar *).

Step 2: Add the startup parameters

To add the relevant startup parameters:

1. In the Oracle WebLogic Server Administration Console, select **Servers, WLS_Services1, Configuration**, and then **Server Start**.
2. In the **Arguments** box, add the following:

```
-Dtangosol.coherence.wka1=Host1 -Dtangosol.coherence.wka2=Host2  
-Dtangosol.coherence.localhost=Host1 -Dtangosol.coherence.wka1.port=8088  
-Dtangosol.coherence.wka2.port=8088
```

Where **Host1** is where WLS_Services1 is running.
3. Repeat steps 1 and 2 for WLS_Services2, swapping Host1 for Host2 and Host2 for Host1.
4. Restart the WLS_Services servers.

Step 3: Validate the changes

To validate the changes:

1. Log on to the Discussions Forum Administration panel.
2. Select **Cache Settings** in the left pane.
3. At the bottom of the screen, ensure that **Clustering** is set to **enabled**.
4. Repeat steps 1 through 3 for all members of the cluster.

As servers join the cluster they appear at the top of the screen.

Part II

Oracle Development Tools

Part II contains the following chapters:

- [Chapter 7, "Oracle JDeveloper and Oracle Application Development Framework \(ADF\)"](#)
- [Chapter 8, "Oracle TopLink"](#)

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/technology/products/jdev/htdocs/11/knownissues.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/technology/products/jdev/index.html>.

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

- [Section 8.1, "General Issues and Workarounds"](#)

8.1 General Issues and Workarounds

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

- [Section 8.1.1, "TopLink Object-Relational Issues"](#)
- [Section 8.1.2, "TopLink Workbench Issues"](#)
- [Section 8.1.3, "TopLink Grid \(Coherence Integration\)"](#)
- [Section 8.1.4, "Oracle Database Extensions with TopLink"](#)

8.1.1 TopLink Object-Relational Issues

This section contains information on the following issues:

- [Section 8.1.1.1, "Incorrect outer join SQL on SQLServer2005"](#)
- [Section 8.1.1.2, "UnitOfWork.release\(\) not Supported with External Transaction Control"](#)
- [Section 8.1.1.3, "Returning Policy for UPDATE with Optimistic Locking"](#)
- [Section 8.1.1.4, "JDBC Drivers returning Timestamps as Strings"](#)
- [Section 8.1.1.5, "Proxy Authentication with Oracle Containers for Java EE \(OC4J\) Managed Data Sources"](#)
- [Section 8.1.1.6, "Unit of Work does not add Deleted Objects to Change Set"](#)

8.1.1.1 Incorrect outer join SQL on SQLServer2005

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

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

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

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

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

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

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

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

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

8.1.1.3 Returning Policy for UPDATE with Optimistic Locking

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

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

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

8.1.1.4 JDBC Drivers returning Timestamps as Strings

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

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

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

```
ValueReadQuery vrq = new ValueReadQuery(
    "SELECT to_char(sysdate, 'YYYY-MM-DD HH:MM:SS.SSSSS') FROM DUAL"
);
vrq.setRedirector(new TSQueryRedirector());
```

```

...
class TSQueryRedirector implements QueryRedirector
{
    public Object invokeQuery(DatabaseQuery query, Record arguments, Session session)
    {
        String value = (String)session.executeQuery(query);
        return ConversionManager.getDefaultManager().convertObject(
            value, java.sql.Timestamp.class
        );
    }
}

```

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

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

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

For example, replace this code:

```

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

```

with the following:

```

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

```

8.1.1.6 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.

8.1.2 TopLink Workbench Issues

This section contains information on the following issues:

- [Section 8.1.2.1, "Accessibility"](#)

8.1.2.1 Accessibility

Due to an issue with HP-UX JDK 1.6, if `NullPointerException` error dialog is generated when saving a file, the error dialog window is not in focus.

8.1.3 TopLink Grid (Coherence Integration)

This section contains information on the following issue:

- [Section 8.1.3.1, "Lazy Collections"](#)
- [Section 8.1.3.2, "Read/Write Configuration"](#)

8.1.3.1 Lazy Collections

When using an attribute-level change tracking woven entity, changes made to *lazy* collections may not be reflected within the Coherence Cache – only the modification event is recorded. This issue is only present when attribute-level change tracking is enabled, and will not occur if the persistence unit property `eclipselink.weaving.changetracking` is set to **false**.

The recommended workaround is to ensure that the lazy collection is retrieved with `size()` before modifying the collection.

8.1.3.2 Read/Write Configuration

When using a Coherence Read/Write configuration, relationships using *lazy* loading are written to the Coherence Cache correctly, but may not be updated in the database.

The recommended work around is to configure the relationship as *eager*. Alternatively, you can use the Coherence Read configuration instead of Read/Write.

8.1.4 Oracle Database Extensions with TopLink

This section contains information on the following issue:

- [Section 8.1.4.1, "Template JAR for Spatial and XDB Support in Oracle WebLogic Server"](#)

8.1.4.1 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. Copy the following files:

File	From... ¹	To... ²
To support Oracle Spatial:		
<code>sdoapi.jar</code>	<code><ORACLE_DATABASE_HOME>/md/jlib</code>	<code><WEBLOGIC_HOME>/server/lib</code>
To support Oracle XDB:		
<code>xdb.jar</code>	<code><ORACLE_DATABASE_HOME>/rdbms/jlib</code>	<code><WEBLOGIC_HOME>/server/lib</code>
<code>xml.jar</code>	<code><ORACLE_DATABASE_HOME>/lib</code>	<code><WEBLOGIC_HOME>/server/lib</code>

File	From... ¹	To... ²
xmlparserv2.jar	<ORACLE_DATABASE_HOME>/lib	<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.

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.

Part III

Web Tier

Part III contains the following chapters:

- [Chapter 9, "Oracle HTTP Server"](#)
- [Chapter 10, "Oracle Web Cache"](#)

Oracle HTTP Server

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

- [Section 9.1, "Documentation Errata"](#)
- [Section 9.2, "Configuration Issues and Workarounds"](#)

9.1 Documentation Errata

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

- [Section 9.1.1, "Incorrect Location Provided For the opmnctl Command-line Tool"](#)
- [Section 9.1.2, "The mod_security Module and Reference Manual Are Not Shipped With Oracle HTTP Server"](#)

9.1.1 Incorrect Location Provided For the opmnctl Command-line Tool

The "Management Tools for Oracle HTTP Server" chapter of the *Oracle Fusion Middleware Administrator's Guide for Oracle HTTP Server* contains incorrect information about the location of the `opmnctl` command-line tool within an `ORACLE_HOME`. The correct location for `opmnctl` is in the `ORACLE_HOME/opmn/bin` directory.

9.1.2 The mod_security Module and Reference Manual Are Not Shipped With Oracle HTTP Server

The "Understanding Oracle HTTP Server Modules" chapter of the *Oracle Fusion Middleware Administrator's Guide for Oracle HTTP Server* contains Section 3.10, "mod_security", which discusses the `mod_security` module and references the *ModSecurity Reference Manual* PDF (`modsecurity2_reference.pdf`). The `mod_security` module and the (`modsecurity2_reference.pdf` file will not be shipped in this release.

9.2 Configuration Issues and Workarounds

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

- [Section 9.2.1, "Empty Command Window Displays When Oracle HTTP Server Starts If Using Apache's Log Rotation Option"](#)

9.2.1 Empty Command Window Displays When Oracle HTTP Server Starts If Using Apache's Log Rotation Option

On Microsoft Windows platforms, a native Apache 2.x issue causes an empty command window to display when Oracle HTTP Server is started with the Apache `rotatelogs` feature enabled for rotating access logs or error logs. The empty command window displays only when using Apache as the log mode, and not when using Oracle HTTP Server's default log mode of ODL-Text or ODL-XML (`odl_rotatelogs`).

For more information about configuring error and access logs, see Section 7.2, "Configuring Oracle HTTP Server Logs" in the *Oracle Fusion Middleware Administrator's Guide for Oracle HTTP Server*.

Oracle Web Cache

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

- [Section 10.1, "Configuration Issues and Workarounds"](#)

10.1 Configuration Issues and Workarounds

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

- [Section 10.1.1, "Reset the Random Password Generated in the Oracle Portal, Forms, Reports and Discoverer Install Types"](#)
- [Section 10.1.2, "Running Oracle Web Cache Processes as a Different User Is Not Supported"](#)
- [Section 10.1.3, "Certificate Revocation Lists \(CRLs\)"](#)
- [Section 10.1.4, "Defining Duplicate Origin Servers Causes Startup Failure"](#)
- [Section 10.1.5, "Mixed Protocols in Site-to-Server Mappings Causes Startup Failures"](#)

10.1.1 Reset the Random Password Generated in the Oracle Portal, Forms, Reports and Discoverer Install Types

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

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

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

No matter the installation type, before you begin configuration, change the passwords for these accounts to a secure password. If you are configuring a cache cluster, all members of the cluster must use the same password for the administrator account.

To change the password, use the Passwords page of Fusion Middleware Control, as described in Section 5.2, "Configuring Password Security," of the *Oracle Fusion Middleware Administrator's Guide for Oracle Web Cache*.

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

Running Oracle Web Cache as a user other than the installed user through the use of the `webcache_setuser.sh setidentity` command is not supported for this release. Specifically, you cannot change the user ID with the following sequence:

1. Change the process identity of the Oracle Web Cache processes in the Process Identity page using Oracle Web Cache Manager (**Properties** > **Process Identity**).
2. Use the `webcache_setuser.sh` script as follows to change file and directory ownership:

```
webcache_setuser.sh setidentity <user_ID>
```

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

3. Restart Oracle Web Cache using `opmnctl`.

Oracle Web Cache will start and then immediately shut down.

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

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

For further information about the `webcache_setuser.sh` script, see Section 5.9, "Running webcached with Root Privilege," of the *Oracle Fusion Middleware Administrator's Guide for Oracle Web Cache*.

10.1.3 Certificate Revocation Lists (CRLs)

Fusion Middleware Control or Oracle Web Cache Manager do not provide support for client certificate validation with Certificate Revocation Lists (CRLs). You can configure this support by manually editing the `webcache.xml` file.

Client certificate revocation status is checked against CRLs that are located in a file system directory. Typically, CRL definitions are valid for a few days, and must be updated on a regular basis. Whenever the CRL definitions are modified, you must restart Oracle Web Cache.

When CRL validation is enabled and available, Oracle Web Cache performs certificate revocation status checking for client certificates. The SSL connection is rejected if a

certificate is revoked. SSL connections are accepted if no CRL is found, or if the certificate has not been revoked.

To configure certificate validation with CRL

1. Enable client certificate for the HTTPS listen port. See Section 5.5.2, "Requiring Client-Side Certificates," of the *Oracle Fusion Middleware Administrator's Guide for Oracle Web Cache*.

2. Use a text editor to open `webcache.xml`, located in:

```
(UNIX) ORACLE_INSTANCE/<instance_name>/config/WebCache/<webcache_name>
(Windows) ORACLE_INSTANCE\<instance_name>\config\WebCache\<webcache_name>
```

3. Locate the HTTPS listen port in `webcache.xml` for which CRL checking needs to be enabled, and add the `SSLCRLENABLE="YES"` parameter to the `LISTEN` directive. For example:

```
...
<LISTEN IPADDR="ANY" PORT="443" PORTTYPE="NORM" SSLENABLED="SSLV3_V2H" CLIENT_
CERT="YES" SSLCRLENABLE="YES" STRONG_CRYPTO_ONLY="NO" Key="IPADDR PORT">
...
```

4. Configure CRL file or location by adding the `SSLCRLPATH` and `SSLCRLFILE` parameters to the HTTPS `LISTEN` directive.

- `SSLCRLPATH`: Enter the path to the directory where CRLs are stored. Ensure that the path is correct; otherwise CRL checking will not work. This parameter has no default value.
- `SSLCRLFILE`: Enter the path to a comprehensive CRL file where PEM-encoded (BASE64 CRLs are concatenated in order of preference in one file. If this parameter is set, then the file must be present at the specified location. Otherwise CRL checking will not work.

For example:

```
...
<LISTEN IPADDR="ANY" PORT="443" PORTTYPE="NORM" SSLENABLED="SSLV3_V2H" CLIENT_
CERT="YES" SSLCRLENABLE="YES" SSLCRLFILE="/ORACLE_HOME/webcache/crls/sample_
crl" SSLCRLPATH="/ORACLE_HOME/webcache/crls/" STRONG_CRYPTO_ONLY="NO"
Key="IPADDR PORT">
...
```

Use the command line utility `orapki` to rename CRLs in your file system. See the section titled "Certificate Revocation List Management" in the *Oracle Database Advanced Security Administrator's Guide* from the Oracle Database documentation library for information about using `orapki`.

5. Save `webcache.xml`.
6. Restart Oracle Web Cache with the following command:

```
opmnctl restartproc ias-component=component_name
```

This executable is found in the following directory:

```
(UNIX) ORACLE_INSTANCE/bin
(Windows) ORACLE_INSTANCE\bin
```

In a cluster configuration, when configuration changes are made directly to a cluster member's `webcache.xml` file, use Fusion Middleware Control or Oracle Web Cache Manager to propagate the change to other cluster members. See

Section 3.6, "Configuring a Cache Cluster for Caches Using the Same Oracle WebLogic Server," or Section 3.7, "Configuring a Cache Cluster for Unassociated Caches or Caches Using Different Oracle WebLogic Servers," of the *Oracle Fusion Middleware Administrator's Guide for Oracle Web Cache*.

10.1.4 Defining Duplicate Origin Servers Causes Startup Failure

Fusion Middleware Control enables you to configure multiple origin servers using the same host name and port number. Configure origin servers with duplicate host and port settings, both the cache server and admin server processes fail to start.

To resolve this issue:

1. Use a text editor to open `webcache.xml`, located in:

```
(UNIX) ORACLE_INSTANCE/<instance_name>/config/WebCache/<webcache_name>
(Windows) ORACLE_INSTANCE\<instance_name>\config\WebCache\<webcache_name>
```

2. Find the two or more `HOST` elements with the same `NAME` and `PORT` values as mentioned in the startup error message in the event log. Edit the port number of one of the `HOST` elements so that it is a unique value between 1 and 65535.

For example, suppose the error message in the event log is as follows:

```
Duplicate origin server hosts specified for host my.company.com port 8888.
```

Also, the `HOST` elements in `webcache.xml` are as follows:

```
<HOST OSSTATE="ON" LOADLIMIT="100" PORT="8888" NAME="my.company.com" ID="h1"
/>
<HOST OSSTATE="ON" LOADLIMIT="100" PORT="8888" NAME="my.company.com" ID="h2"
/>
```

You would modify the `PORT` value for one. For example:

```
<HOST OSSTATE="ON" LOADLIMIT="100" PORT="8888" NAME="my.company.com" ID="h1"
/>
<HOST OSSTATE="ON" LOADLIMIT="100" PORT="9999" NAME="my.company.com" ID="h2"
/>
```

You can now restart the admin and cache server processes. You can then use Fusion Middleware Control or Web Cache Manager to make further configuration changes.

For further information about the configuring site-to-server mapping, see Section 2.11.2, "Specify Origin Server Settings" of the *Oracle Fusion Middleware Administrator's Guide for Oracle Web Cache*.

10.1.5 Mixed Protocols in Site-to-Server Mappings Causes Startup Failures

When you map sites to origin servers you cannot create a mapping that has a mix of HTTP and HTTPS origin sever. Select origin servers using HTTP or HTTPS, but not both protocols. If you select of origin server using a mix of HTTP and HTTP, both the cache server and admin server processes fail to start.

To resolve this issue:

1. Use a text editor to open `webcache.xml`, located in:

```
(UNIX) ORACLE_INSTANCE/<instance_name>/config/WebCache/<webcache_name>
(Windows) ORACLE_INSTANCE\<instance_name>\config\WebCache\<webcache_name>
```

2. And the `VIRTUALHOSTMAP` element:

```
<VIRTUALHOSTMAP PORT="80" NAME="my.company.com">
  <HOSTREF HOSTID="h1" />
  <HOSTREF HOSTID="h2" />
</VIRTUALHOSTMAP>
```

3. Remove one of the HOSTREF child elements. For example:

```
<VIRTUALHOSTMAP PORT="80" NAME="my.company.com">
  <HOSTREF HOSTID="h1" />
</VIRTUALHOSTMAP>
```

You can now restart the admin and cache server processes. You can also use Fusion Middleware Control or Oracle Web Cache Manager to make further configuration changes.

For further information about the configuring site-to-server mapping, see Section 2.11.4, "Map Site Definitions to Origin Servers," of the *Oracle Fusion Middleware Administrator's Guide for Oracle Web Cache*.

Part IV

Oracle WebLogic Server

Part IV contains the following chapters:

- [Chapter 11, "Oracle WebLogic Server Installation and Configuration"](#)
- [Chapter 12, "Oracle WebLogic Server"](#)

Oracle WebLogic Server Installation and Configuration

This chapter describes issues associated with Oracle WebLogic Server installation and configuration. It includes the following topic:

- [Section 11.1, "Installation Issues and Workarounds"](#)
- [Section 11.3, "Documentation Errata: Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server"](#)

11.1 Installation Issues and Workarounds

This section describes the issues with WebLogic Server installation and workarounds. It includes the following topic:

- [Section 11.1.1, "Issue with Oracle WebLogic Server Upgrade Installation"](#)

11.1.1 Issue with Oracle WebLogic Server Upgrade Installation

The Oracle WebLogic Server 11gR1 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 ClassNotFoundException.

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

11.2 Configuration Issues and Workarounds

This section describes the WebLogic Server configuration issues and workarounds.

11.2.1 Configuration Wizard Password Does Not Allow Special Characters

Depending on your country local, special characters may not be recognized when trying to input and confirm the password when using the Configuration Wizard.

Workaround

Copy the problematic characters into the clipboard and paste them into the password fields. For security reasons, do not copy the entire password into the clipboard.

11.3 Documentation Errata: Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server

The Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server contains the following documentation errata:

- [Section 11.3.1, "Missing Information about Oracle Configuration Manager in the Sample silent.xml File"](#)
- [Section 11.3.2, "Correction for a Data-Value Name in the silent.xml File Description"](#)

11.3.1 Missing Information about Oracle Configuration Manager in the Sample silent.xml File

The sample silent.xml file provided in *Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server* does not include information about the properties that are used to enable support for Oracle Configuration Manager. [Table 11–1](#) lists the properties specific to Oracle Configuration Manager, that you should define in the silent.xml file.

Table 11–1 Oracle Configuration Manager Properties in the silent.xml File

Data-Value Name in silent.xml	Description
OCM_PROXY_HOST	The host name of the HTTP proxy server if your computer connects to internet through a proxy server.
OCM_PROXY_PORT	The port number of the HTTP proxy server.
OCM_PROXY_USER	The user name to access your HTTP proxy server if the server requires authentication.
OCM_PROXY_PASSWORD	The password to access your HTTP proxy server.
OCM_SUPPORT_EMAIL	The e-mail address if you want to receive the latest product information and security updates that are specific to your installation. If you have a My Oracle account and wish to receive updates via My Oracle Support, specify your My Oracle Support e-mail address as the value for this property.
OCM_SUPPORT_PASSWORD	The password for your My Oracle Support account.

If you do not want to receive security updates from Oracle, you need not specify values for OCM_SUPPORT_PASSWORD and OCM_SUPPORT_EMAIL.

11.3.2 Correction for a Data-Value Name in the silent.xml File Description

In Chapter 5, "Running the Installation Program in Silent Mode" of *Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server*, the data-value name for the home directory in Table 5-1 is documented as MW_HOME, which is incorrect. The correct data-value name is BEAHOME.

Oracle WebLogic Server

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

- [Section 12.1, "General Issues and Workarounds"](#)
- [Section 12.2, "Administration Console Issues and Workarounds"](#)
- [Section 12.3, "Apache Beehive Support Issues and Workarounds"](#)
- [Section 12.4, "Clustering Issues and Workarounds"](#)
- [Section 12.5, "Configuration Issues and Workarounds"](#)
- [Section 12.6, "Connector \(Resource Adapter\) Issues and Workarounds"](#)
- [Section 12.7, "Console Extensions Issues and Workarounds"](#)
- [Section 12.8, "Core Server and Core Work Manager Issues and Workarounds"](#)
- [Section 12.9, "Deployment Issues and Workarounds"](#)
- [Section 12.10, "EJB Issues and Workarounds Issues and Workarounds"](#)
- [Section 12.11, "Examples Issues and Workarounds"](#)
- [Section 12.12, "HTTP Publish/Subscribe Server Issues and Workarounds"](#)
- [Section 12.13, "Installation Issues and Workarounds"](#)
- [Section 12.14, "Java EE Issues and Workarounds"](#)
- [Section 12.15, "JDBC Issues and Workarounds"](#)
- [Section 12.16, "JDK Issues and Workarounds"](#)
- [Section 12.17, "JMS Issues and Workarounds"](#)
- [Section 12.18, "JNDI Issues and Workarounds"](#)
- [Section 12.19, "JSP and Servlet Issues and Workarounds"](#)
- [Section 12.20, "JTA Issues and Workarounds"](#)
- [Section 12.21, "Java Virtual Machine \(JVM\) Issues and Workarounds"](#)
- [Section 12.22, "Monitoring Issues and Workarounds"](#)
- [Section 12.23, "Node Manager Issues and Workarounds"](#)
- [Section 12.24, "Operations, Administration, and Management Issues and Workarounds"](#)
- [Section 12.25, "Protocols Issues and Workarounds"](#)
- [Section 12.26, "RMI-IIOP Issues and Workarounds"](#)

- [Section 12.27, "Security Issues and Workarounds"](#)
- [Section 12.28, "Spring Framework on WebLogic Server Issues and Workarounds"](#)
- [Section 12.29, "Upgrade Issues and Workarounds"](#)
- [Section 12.30, "Web Applications Issues and Workarounds"](#)
- [Section 12.31, "WebLogic Server Scripting Tool \(WLST\) Issues and Workarounds"](#)
- [Section 12.32, "Web Server Plug-Ins Issues and Workarounds"](#)
- [Section 12.33, "Web Services and XML Issues and Workarounds"](#)
- [Section 12.34, "WebLogic Tuxedo Connector Issues and Workarounds"](#)
- [Section 12.35, "Documentation Errata"](#)

12.1 General Issues and Workarounds

This section describes the following issues and workarounds:

- [Section 12.1.1, "Oracle WebLogic Server Version Number"](#)
- [Section 12.1.2, "Oracle ojdbc14.jar File Has Been Changed to ojdbc6.jar"](#)
- [Section 12.1.3, "Strong Password Enforcement May Cause Issues With WLST Offline Scripts"](#)
- [Section 12.1.4, "In Turkish Locale MDS Initialization Fails"](#)
- [Section 12.1.5, "adf-config.xml Property Names Translated"](#)
- [Section 12.1.6, "Administration Server Reports a 'Too Many Open Files' Message on the Enterprise Manager Console"](#)
- [Section 12.1.7, "Increase MaxPermSize"](#)

12.1.1 Oracle WebLogic Server Version Number

Oracle Fusion Middleware 11g contains Oracle WebLogic Server 11g. The version number of Oracle WebLogic Server is 10.3.1.

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

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

12.1.3 Strong Password Enforcement May Cause Issues With WLST Offline Scripts

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

Workaround

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

- Set the `BACKWARD_COMPAT_PW_CHECK` environment variable to true.
- Include the `-Dbackward.compat.pw.check=true` option when invoking WLST.

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

12.1.4 In Turkish Locale MDS Initialization Fails

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

Workaround

Start the server in English locale.

12.1.5 adf-config.xml Property Names Translated

When using the German, Spanish, or Portuguese(Brazil) language settings, the property names `jndi-datasource` and `partition-name` are translated in the `adf-config.xml` file in the `wsm-pm` application causing the following error:
WSM-04509: cannot initialize the connection to the data store.

Workaround

Use one of the following workarounds to replace the translated the property names to english names which allows the schema to verify the `adf-config.xml` file:

Workaround 1: Replace `<property name="JNDI-Datenquelle" value="jdbc/mds/owsm"/>` with `<property name="jndi-datasource" value="jdbc/mds/owsm"/>` and replace `<property name="Partitionsname" value="owsm"/>` with `<property name="partition-name" value="owsm"/>` in the `adf-config.xml` file directly in the deployed environment. Restart the SOA server.

Workaround 2: Replace `<property name="JNDI-Datenquelle" value="jdbc/mds/owsm"/>` with `<property name="jndi-datasource" value="jdbc/mds/owsm"/>` and replace `<property name="Partitionsname" value="owsm"/>` with `<property name="partition-name" value="owsm"/>` in the `adf-config.xml` file inside of `wsm-pm.ear`, then redeploy it using the Administration console. This does not require a server restart.

Workaround 3: Before running the Configuration Wizard CIE, you can replace `mds.partition.name=Partitionsname` with `mds.partition.name=partition-name` and replace `mds.jndi.ds=JNDI-Datenquelle` with `mds.jndi.ds=partition-name` in the `config_de.properties` file in `com.bea.cie.config.de_6.0.0.0.jar`, `com.bea.cie.config.pt.BR_6.0.0.0.jar`, and `com.bea.cie.config.es_6.0.0.0.jar` files.

12.1.6 Administration Server Reports a 'Too Many Open Files' Message on the Enterprise Manager Console

The WLS Administration Server reports a Too Many Open Files message on the Enterprise Manager 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`.

For example:

```
$ ulimit -n 65535
```

12.1.7 Increase MaxPermSize

You may need to increase the `MaxPermSize` parameter based on application requirements.

12.2 Administration Console Issues and Workarounds

This section describes the following issues and workarounds:

- [Section 12.2.1, "Cached JDBC Information is not Displayed"](#)
- [Section 12.2.2, "Pressing Browser Back Button Discards Context"](#)
- [Section 12.2.3, "Administration Console not Updating the Request URL"](#)
- [Section 12.2.4, "Unsupported Work Manager Configurations Can Be Created"](#)
- [Section 12.2.5, "Server Status Table Reflects Inconsistent Information"](#)
- [Section 12.2.6, "Exceptions When Defining a Security Policy for an EJB"](#)
- [Section 12.2.7, "Administration Console Does Not Always Reflect External Changes Made in a Deployment Plan"](#)
- [Section 12.2.8, "Screen Reader Configuration Must Be Changed in Order to Read Link Title Attributes"](#)
- [Section 12.2.9, "Oracle OCI Driver Support"](#)

12.2.1 Cached JDBC Information is not Displayed

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

12.2.2 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.

12.2.3 Administration Console not Updating the Request URL

Under some circumstances, the Administration Console does not automatically update the request URL to follow administration port configuration changes.

If you have the **Automatically Acquire Lock and Activate Changes** Console option enabled (which is the default for development mode) and change the Console's address (for example, turn on the domain wide administration port, create an administration channel, or change to the SSL listen port), the Console will not automatically redirect to its new address. Instead, the browser will display an error.

Workaround

Enter the URL address and protocol in the browser where the administration server is now listening for requests (for example, switch from `http://localhost:7001/console` to `https://localhost:9002/console`).

12.2.4 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.

12.2.5 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.

12.2.6 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 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.

12.2.7 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.

12.2.8 Screen Reader Configuration Must Be Changed in Order to Read Link Title Attributes

To improve its level of accessibility to blind users, in certain situations, the Administration Console provides title attributes for links whose purpose or target needs a better explanation than the link text alone provides. The primary case is when links are part of a 'simulated tab' group, and of which 'tab' is currently selected. However, screen reader users need to make a configuration change for these link title attributes to be read instead of the visible link text.

The following instructions are provided for the leading screen reader, JAWS (by Freedom Scientific):

To configure JAWS to read link titles:

1. With WebLogic Server as the active browser window, activate JAWS' Personalized Settings dialog by pressing Insert+Shift+V.
2. For JAWS versions 6.x, 7.x, and 8.x:

Navigate to the **Links With Text Only** setting, then select the **Title** option (toggle through the values by pressing the spacebar).

For JAWS version 9.x:

Expand the **Links Options** node, navigate to the **Text Links** option, then select the **Show Using Title** option (toggle through the values by pressing the spacebar).

3. Select **Close** to save the configuration change.

12.2.9 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.

12.3 Apache Beehive Support Issues and Workarounds

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

12.4 Clustering Issues and Workarounds

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

12.5 Configuration Issues and Workarounds

This section describes the following issues and workarounds:

- [Section 12.5.1, "ConfigToScript Fails to Create a Domain"](#)
- [Section 12.5.2, "Directory For a Non-Existent Server Name Is Created"](#)
- [Section 12.5.3, "Abnormal Behavior in Terminal Window After Entering WebLogic Password"](#)

12.5.1 ConfigToScript Fails to Create a Domain

If there is no server running when you run a `config.py` file that was generated by `ConfigToScript`, it fails to create a domain with the following error:

```
com.bea.plateng.domain.script.ScriptException: The password must be at least
8 alphanumeric characters with at least one number or special character.
```

Workaround

Start the server manually, then run the `config.py` file that was generated by `ConfigToScript`. Use the following steps:

1. After `config.py` fails with the `ScriptException`, `cd` to the empty domain directory:

```
cd <domain_name>
```

the default for `<domain_name>` is `WLSTConfigToScriptDomain` when you run `config.py` without starting the server.

2. Start a server and create the initial empty domain:

```
java -Xmx512m -XX:MaxPermSize=128m -Dweblogic.Name=AdminServer
-Dweblogic.Domain=<domain_name> weblogic.Server
```

Substitute `<domain_name>` with the appropriate name of your domain. Enter the desired username and password when prompted.

3. Modify the generated `config.py` to prompt for a username and password by changing the connect command in the `config.py` from:

```
connect(userName, passWord, URL)
```

to

```
connect()
```

4. Run `config.py` again.

```
java weblogic.WLST config.py
```

It will prompt you for the username and password you specified in Step 2.

12.5.2 Directory For a Non-Existent Server Name Is Created

If you attempt to connect to the admin 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.

12.5.3 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.

This is a development mode issue, and does not occur in production.

Workaround

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

12.6 Connector (Resource Adapter) Issues and Workarounds

This section describes the following issue and workaround:

- [Section 12.6.1, "New Connection Instances in a Resource Adapter Do Not Take Effect"](#)

12.6.1 New Connection Instances in a Resource Adapter Do Not Take Effect

After creating a new outbound connection instance in a Resource Adapter, the Administration Console displays the message "All changes have been activated. No restarts are necessary." The new connection, however, will not take effect until you restart the server.

Workaround

Restart the server after creating a new connection instance.

12.7 Console Extensions Issues and Workarounds

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

12.8 Core Server and Core Work Manager Issues and Workarounds

This section describes the following issues and workarounds:

- [Section 12.8.1, "Threads Become Stuck While Waiting to Get a Connection"](#)
- [Section 12.8.2, "Using IPv6-Formatted Addresses"](#)
- [Section 12.8.3, "Change in Ipv6 Support"](#)
- [Section 12.8.4, "Server Cannot Be Started After a Whole Server Migration"](#)
- [Section 12.8.5, "Object State is not Retained After Renaming Field"](#)

- [Section 12.8.6, "Administration Server or Node Manager Cannot Track the Status of a Managed Server in MSI mode"](#)
- [Section 12.8.7, "Multicast Traffic Observed to be Unreliable During or After a Network Partition"](#)

12.8.1 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.

12.8.2 Using IPv6-Formatted Addresses

When using an IPv6-formatted address for WLS, 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
```

12.8.3 Change in Ipv6 Support

Prior to HP SDK 1.6.0.03, the default protocol stack was IPv4. Starting with HP SDK 1.6.0.03, the default protocol stack is now IPv6. See http://docs.hp.com/en/JDKJRE60RN/jdk_rnotes_6.0.03.html#ipv6.

Workaround

To switch to IPv6, use the following command:

```
-Djava.net.preferIPv4Stack="false"
```

12.8.4 Server Cannot Be Started After a Whole Server Migration

If the 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.

12.8.5 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.

12.8.6 Administration Server or Node Manager Cannot Track the Status of a Managed Server in MSI mode

If you start a managed server by providing an incorrect 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.

12.8.7 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.

12.9 Deployment Issues and Workarounds

This section describes the following issues and workarounds:

- [Section 12.9.1, "security-permission Element is not Available in weblogic-application.xml"](#)
- [Section 12.9.2, "Extraneous String Values Interpreted as File Specification"](#)
- [Section 12.9.3, "java.lang.NoClassDefFoundError is Displayed"](#)
- [Section 12.9.4, "Deployment Task Is Left in Initializing State"](#)

- [Section 12.9.5, "The restore Method Does Not Update the DConfig Bean With Plan Overrides"](#)
- [Section 12.9.6, ""config-root <directory> not found" Warning Is Displayed When Applying a Deployment Plan"](#)
- [Section 12.9.7, "Application State Is Not Updated If the Server Starts in MSI Mode"](#)

12.9.1 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.

12.9.2 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.

12.9.3 java.lang.NoClassDefFoundError is Displayed

While using the WebLogic 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 Administration Server in addition to any Managed Servers or clusters.

12.9.4 Deployment Task Is Left in Initializing State

If you start an edit session, install an application, and then undo the changes, a deployment task is not cleaned up appropriately. This task is left in the initializing state and causes issues with future Activate Changes.

12.9.5 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();
```

12.9.6 "config-root <directory> not found" Warning Is Displayed When Applying a Deployment 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 <WebLogicDescriptorWL> <BEA-2156000><"config-root" C:\deployments\plan  
was not found>.
```

Workaround

Create the plan directory manually.

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

A managed server will start in MSI mode if the 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.

12.10 EJB Issues and Workarounds Issues and Workarounds

This section describes the following issues and workarounds:

- [Section 12.10.1, "Primary Key in Oracle Table is CHAR"](#)
- [Section 12.10.2, "No Available Annotation That Enables Creation of a Clusterable Timer"](#)
- [Section 12.10.3, "Kodo's MappingTool Cannot Generate Schemas"](#)
- [Section 12.10.4, "Extensions to the JPA Metadata Model Can Only Be Specified Via Annotations"](#)
- [Section 12.10.5, "Lookup Method Injection Not Supported by Spring"](#)

- [Section 12.10.6, "Deserializing a JDO PersistenceManagerFactory in a Managed Environment May Fail"](#)
- [Section 12.10.7, "Application Deployment Fails With IllegalArgumentException"](#)
- [Section 12.10.8, "Indexes Not Always Created During Schema Creation"](#)
- [Section 12.10.9, "OpenJPA throws an exception when @Id fields are also annotated as @Unique"](#)
- [Section 12.10.10, "Inserting a Record in the Database Fails When Using WebLogic-Supplied Sybase Driver"](#)
- [Section 12.10.11, "Cache Hit and Miss Counts May Rise Unexpectedly"](#)
- [Section 12.10.12, "Empty Byte Array Field Values Stored as NULL"](#)
- [Section 12.10.13, "Open JPA Tries to Create a Table Even if the Table Exists"](#)
- [Section 12.10.14, "EJB Applications Fail During Serialization"](#)
- [Section 12.10.15, "Unable to Serialize a Business Object in the EJB3 Specification"](#)
- [Section 12.10.16, "Maintaining Ready Bean Instances Can Adversely Affect Performance"](#)
- [Section 12.10.17, "Using Generics in EJB Can Cause Problems"](#)

12.10.1 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.

12.10.2 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.

12.10.3 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.

12.10.4 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.

12.10.5 Lookup Method Injection Not Supported by Spring

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

12.10.6 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.

12.10.7 Application Deployment Fails With IllegalArgumentException

When filtering out just the `org.apache.openjpa.*` packages (but not the `com.solarmetric.*` and `kodo.*` packages), deployment of the application will fail with an exception message similar to this:

```
java.lang.IllegalArgumentException: interface
org.apache.openjpa.event.CallbackModes is not visible from class
loader
```

Note that the particular class or interface cited in the exception message may vary.

Workaround

When deploying an application-provided version of OpenJPA, all three Kodo-related packages must be filtered using the `prefer-application-libraries` directive:

```
<weblogic-application>
  <prefer-application-packages>
    <package-name>org.apache.openjpa.*
  </package-name>
    <package-name>kodo.*</package-name>
    <package-name>com.solarmetric.*
  </package-name>
  </prefer-application-packages>
</weblogic-application>
```

The Kodo and `com.solarmetric` packages must be filtered even if you want to disable all Kodo features (that is, only use OpenJPA).

Additionally, if you want to provide your own version of `openjpa.jar`, but use the WebLogic-provided Kodo jar, the application must still exclude `kodo.*` and `com.solarmetric.*`, and the application must bundle the Kodo jar from the WebLogic distribution.

Applications may also need to exclude `serp.*` and bundle their own version of it at some point in the future if new APIs or bug fixes are introduced in that codebase. However, there are no interdependencies with `serp` as there are between the `org.apache.openjpa.*`, `kodo.*`, and `com.solarmetric.*` packages.

12.10.8 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.

12.10.9 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.

12.10.10 Inserting a Record in the Database Fails When Using WebLogic-Supplied Sybase Driver

When using the Weblogic-supplied Sybase driver instead of the Sybase-supplied JDBC driver, attempting to insert a record in the database for an entity whose ID is auto-incremented can fail, as the default query to fetch the next available identity value always returns zero.

Note: As of WLS 10.3.1, the Sybase JDBC driver is no longer supplied with WebLogic Server, and you must download the driver from Sybase. Therefore, this issue does not apply to *new* WLS installations.

Workaround

Override the lastGeneratedKeyQuery property in the kodo.properties file as shown here:

```
openjpa.jdbc.DBDictionary: lastGeneratedKeyQuery='SELECT MAX({0}) FROM {1}'
```

12.10.11 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.

12.10.12 Empty Byte Array Field Values Stored as NULL

When trying to persist an empty byte array field within an entity to a Sybase database, the value gets stored as a NULL rather than as bytes. Therefore, the value is retrieved as NULL.

This is a limitation of the Sybase drivers, which convert the empty byte array to a NULL while storing it in the database. This happens with both Weblogic JDBC drivers as well as the proprietary Sybase drivers.

12.10.13 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.

12.10.14 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();
}
```

12.10.15 Unable to Serialize a Business Object in the EJB3 Specification

Currently, there is no way to serialize a business object in the EJB3 specification, which is different than a traditional component object.

Workaround

When you need to serialize a business object, first invoke `BusinessObject._WL_getBusinessObjectHandle()` to get the business handle object, then serialize the business handle object. To recover from this serialization, just deserialize to get the business handle object, then invoke its `getBusinessObject()`.

12.10.16 Maintaining Ready Bean Instances Can Adversely Affect Performance

For entity beans with a high cache miss ratio, maintaining ready bean instances can adversely affect performance.

Workaround

By setting the flag `<disable-ready-instances>` in the `<entity-cache>` element of an `<entity-descriptor>`, the container will not maintain the ready instances in cache. If the feature is enabled in the deployment descriptor, the cache will only keep

the active instances. Once the involved transaction is committed or rolled back, the bean instance is moved from active cache to the pool immediately.

12.10.17 Using Generics in EJB Can Cause Problems

Using generics in EJB will cause a problem in the following cases:

1. When the business interface extends `java.rmi.Remote`, and extends some generic methods from a super class, the deployment will fail.
2. When the business interface doesn't extend `java.rmi.Remote`, the invocation on the generic business methods will fail.

Workaround

The first case is a limitation in WLS 10.3 or greater.

The second case can be resolved by downloading the needed classes from the server side. If network downloading is disabled, however, the invocation will fail still. If network downloading isn't permitted in the user's environment, it is recommended that you run `appc` first, then add the generated classes to the classpath of the client side.

12.11 Examples Issues and Workarounds

This section describes the following issues and workarounds:

- [Section 12.11.1, "Security Configuration in `medrec.wls.config`"](#)
- [Section 12.11.2, "HTML File not Created for `StreamParser.java` File"](#)
- [Section 12.11.3, "Warning Message Appears When Starting Medrec or Samples Domain"](#)

12.11.1 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.

12.11.2 HTML File not Created for `StreamParser.java` File

The `../xml/stax` example contains two files with the same root but different extension: `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.

12.11.3 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.

12.12 HTTP Publish/Subscribe Server Issues and Workarounds

This section describes the following issues and workarounds:

- [Section 12.12.1, "Authentication and Authorization of the Local Client is not Supported"](#)
- [Section 12.12.2, "Event Messages Published by Local Clients Cannot Be Received by Subscribed Clients Connected to Other Servers"](#)
- [Section 12.12.3, "Event Messages Published By Local Clients Do Not Go Through Message Filters"](#)

12.12.1 Authentication and Authorization of the Local Client is not Supported

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

12.12.2 Event Messages Published by Local Clients Cannot Be Received by Subscribed Clients Connected to Other Servers

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.

12.12.3 Event Messages Published By Local Clients Do Not Go Through Message Filters

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

12.13 Installation Issues and Workarounds

This section describes the following issues and workarounds:

- [Section 12.13.1, "The pack and unpack Commands Fail When WebLogic Server Is Not Installed in the Default Location"](#)

- [Section 12.13.2, "Installation Fails with Fatal Error"](#)

12.13.1 The pack and unpack Commands Fail When WebLogic Server Is Not Installed in the Default Location

When the WebLogic Server product is installed in a location other than the default, the pack and unpack commands can fail with a `java.lang.ClassNotFoundException`.

Workaround

Edit the `$WL_HOME/.product.properties` file, where `$WL_HOME` is the directory in which WebLogic Server is installed. Add the following two properties:

```
weblogic.server.modules.featurejar=MWHOME/modules/features/weblogic.server.  
modules_10.3.1.0.jar
```

```
WLS_PRODUCT_VERSION=10.3.1.0
```

Substitute the absolute path to the Fusion Middleware Home directory for *MWHOME*, using the appropriate file separator. For example, on Microsoft Windows platforms:

```
weblogic.server.modules.featurejar=D:\myMWhome\modules\features\weblogic.  
server.modules_10.3.1.0.jar
```

12.13.2 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:

```
$JAVA_HOME/bin/java -jar wls1031_generic.jar -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.

12.14 Java EE Issues and Workarounds

This section describes the following issues and workarounds:

- [Section 12.14.1, "FastSwap May Relax the Access Modifiers of Fields and Methods"](#)
- [Section 12.14.2, "FastSwap Does Not Support Redefinition of the Entity Bean and ejbClass \(Session/MDB\)"](#)
- [Section 12.14.3, "Classpath Order Is Not Guaranteed When There Are Multiple Jars in the Same EAR File"](#)

12.14.1 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.

12.14.2 FastSwap Does Not Support Redefinition of the Entity Bean and ejbClass (Session/MDB)

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.

12.14.3 Classpath Order Is Not Guaranteed When There Are Multiple Jars in the Same 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.

12.15 JDBC Issues and Workarounds

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

12.16 JDK Issues and Workarounds

This section describes the following issues and workarounds:

- [Section 12.16.1, "stopWebLogic.sh Command Exposes Password"](#)

12.16.1 stopWebLogic.sh Command Exposes Password

The WebLogic Server system password may appear in clear text while prompted for userid and password when using the `stopWebLogic.sh` command.

Workaround

Do one of the following:

- Include `$JAVA_VM` in the java command of the `stopWeblogic.sh` script.
- Include `-d64` in the java command of the `stopWeblogic.sh` script if you are using a 64-bit HP JDK.

12.17 JMS Issues and Workarounds

This section describes the following issues and workarounds:

- [Section 12.17.1, "Deployment Descriptor Validation Fails"](#)

- [Section 12.17.2, "Exception When Multiple JMS Producers Use the Same JMS Client SAF Instance"](#)
- [Section 12.17.3, "Multi-byte Characters are not Supported in WLS Store File and Directory Names"](#)
- [Section 12.17.4, "Memory Leak Due to Special Characters in Connection IDs or Subscriber IDs"](#)
- [Section 12.17.5, "C Programs That Use the JMS C Client Library May Experience a JVM Failure"](#)

12.17.1 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.

12.17.2 Exception When Multiple JMS Producers Use the Same JMS 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.

12.17.3 Multi-byte Characters are not Supported in WLS 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 the WebLogic Server will not boot.

Workaround

Create WebLogic Servers without multi-byte characters in the path name and use that path name rather than the default store. Do not use multi-byte characters in the Weblogic Server name.

12.17.4 Memory Leak Due to Special Characters in Connection IDs or Subscriber IDs

Certain JMS applications could cause a memory leak on a WebLogic server if periods (that is, dots) or slashes are present inside Connection IDs or Subscriber IDs. This issue typically occurs only for applications that both (a) continuously create and destroy durable subscriptions on topic destinations, and (b) specify a unique string prior to the last '.' or '/' in the Connection ID or Subscriber ID for each new durable subscription, instead of reusing strings from past destroyed subscriptions.

Workaround

Use caution when specifying a period '.' or slash '/' in a Connection ID and Subscriber ID.

12.17.5 C Programs That Use the JMS C Client Library May Experience a JVM Failure

A C program that uses the JMS C client library may crash with a JVM failure. This could be related to a known intermittent race-condition that is only known to occur with certain JVM products, where the likelihood of failure can change based on the JVM version and patch level, operating system, and hardware. Specifically, the JMS C-Client library implicitly attaches C-threads to the JVM, but fails to detach them when it is done with them.

Workaround

The workarounds are:

1. Add code in the client to detach the JVM from any C thread that exits and that has previously called into the JMS C-API.
2. Do not allow any C thread that has previously called into the JMS C-API to exit before the entire process exits.

Sun 1.5 and later can specifically handle this problem, although it is still recommended to call detach even with the Sun JVM. For more information, see:

http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6219874

3. Upgrade to a newer JVM.

12.18 JNDI Issues and Workarounds

This section describes the following issue and workaround:

- [Section 12.18.1, "JMS Message Consumers Will Not Always Reconnect After a Service Migration"](#)

12.18.1 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`.

12.19 JSP and Servlet Issues and Workarounds

This section describes the following issues and workarounds:

- [Section 12.19.1, "Deployment Plans Cannot Be Used To Override Two Descriptors"](#)
- [Section 12.19.2, "Spring Dependency Injection Not Supported on JSP Tag Handlers"](#)
- [Section 12.19.3, "503 Error When Accessing an Application With a Valid sessionid"](#)

12.19.1 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.

12.19.2 Spring Dependency Injection Not Supported on JSP Tag Handlers

With the Spring extension model enabled, WLS 10.3 or greater does not support Spring Dependency Injection (DI) on JSP tag handlers for performance reasons.

Currently, WLS 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.

12.19.3 503 Error When Accessing an Application With a Valid sessionid

When a session is persistent and an old 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.

12.20 JTA Issues and Workarounds

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

12.21 Java Virtual Machine (JVM) Issues and Workarounds

This section describes the following issues and workarounds:

- [Section 12.21.1, "1.4 Thin Client Applet Cannot Contact WebLogic Server"](#)
- [Section 12.21.2, "Using AWT libraries May Cause a JVM Crash"](#)

12.21.1 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.

Workaround

None. This issue must be resolved by Sun Microsystems.

12.21.2 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
```

12.22 Monitoring Issues and Workarounds

This section describes the following issues and workarounds:

- [Section 12.22.1, "MBean Attributes not Explicitly Marked as @unharvestable Appear as Harvestable in the WLS Administration Console"](#)
- [Section 12.22.2, "WatchData Field in an Outgoing Notification is Empty"](#)
- [Section 12.22.3, "-C prop-file Option of the SnmpTrapLogger Command Does Not Work"](#)
- [Section 12.22.4, "NullPointerException Occurs When Configuring the First WLDF Watch"](#)
- [Section 12.22.5, "NullPointerException When Using MethodInvocationStatisticsAction After It Was Added Using a Deployment Plan"](#)
- [Section 12.22.6, "Complex and Array Type Attributes Have Been Removed From the SNMP MIB"](#)
-

12.22.1 MBean Attributes not Explicitly Marked as @unharvestable Appear as Harvestable in the WLS Administration Console

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.

12.22.2 WatchData Field in an Outgoing Notification is Empty

When a Harvester watch rule variable resolves to multiple metric data points triggers, the WatchData field in the outgoing notification would be empty; normally this is supposed to contain a list of the MBean instances and the actual values of the attributes used to evaluate the rule.

12.22.3 -C prop-file Option of the SnmpTrapLogger Command Does Not Work

The -C *prop-file* option of the SnmpTrapLogger sub-command of the SNMP command line tool, `weblogic.diagnostics.snmp.cmdline.Manager`, does not

work. As a result, you cannot specify a log config properties file with the `SnmpTrapLogger` sub-command of the SNMP command line tool.

Workaround

Currently, there is no workaround for this issue.

12.22.4 NullPointerException Occurs When Configuring the First WLDF Watch

When configuring the WLDF Harvester for the first time after a server reboot, if you attempt to configure the first WLDF Watch in a WLDF module on an MBean Metric in the `DomainRuntime` namespace, a `NullPointerException` occurs. The error occurs because the console is attempting to query the Harvester for the set of MBeans that are available on the server's `DomainRuntime` MBeanServer before the Harvester has finished initializing. This occurs only if both (a) the Harvester is not yet initialized and (b) the first Watch created in a WLDF module is being configured for an MBean in the `DomainRuntime` namespace.

This is not a serious error.

Workaround

Cancel the Watch creation attempt and retry. The `NullPointerException` error should not occur again.

12.22.5 NullPointerException When Using MethodInvocationStatisticsAction After It Was Added Using a Deployment Plan

If you use a deployment plan to add a new diagnostic monitor to the instrumentation of a deployed application, and the `MethodInvocationStatisticsAction` action is attached to the newly added monitor, a `NullPointerException` is thrown while executing the `MethodInvocationStatisticsAction` action under the following conditions:

1. The application is already deployed.
2. You added a new 'around' diagnostic monitor to the application's instrumentation configuration using the deployment plan.
3. The `MethodInvocationStatisticsAction` is attached to the newly newly added diagnostic monitor using the deployment plan.
4. The application is exercised so that the `MethodInvocationStatisticsAction` gets invoked.

This issue happens only when `MethodInvocationStatisticsAction` is attached to a newly added diagnostic monitor using a deployment plan after the application has been deployed. The issue does not happen if the application is redeployed after you have updated the instrumentation configuration.

Workaround

When `MethodInvocationStatisticsAction` is to be added to the application's instrumentation configuration, redeploy the application with the plan rather than only updating the application with the plan.

12.22.6 Complex and Array Type Attributes Have Been Removed From the SNMP MIB

Entries for MBean attributes that are either complex types or arrays of complex types have been removed from the SNMP MIB in WebLogic Server 10.3.1, as SNMP does not

support these types natively. Previous versions of WebLogic Server returned `Object.toString()` for complex type objects, which is not meaningful for any monitoring purpose.

12.22.7 The BEA Prefix in Message IDs Will Be Changed in a Future Release

In an upcoming release of WebLogic Server, the current default prefix for catalog and non-catalog Message IDs will be changed from the current BEA prefix to WL.

Workaround

You should be prepared for this future change. In the interim, here are some guidelines to consider:

- Avoid depending on BEA for Message ID prefixes in scripts, filter expressions, etc.
- For log messages such as the following:

```
<Jan 30, 2009 12:51:49 AM CST> <Notice> <WebLogicServer> <BEA-000365>  
<Server state changed to STARTING>
```

it is better for you to filter on '000365' and not on the BEA prefix itself.

- Your log parsing scripts should be updated to look for both BEA and WL, instead of filtering only on BEA.

12.23 Node Manager Issues and Workarounds

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

12.24 Operations, Administration, and Management Issues and Workarounds

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

12.25 Protocols Issues and Workarounds

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

12.26 RMI-IIOP Issues and Workarounds

This section describes the following issue and workaround:

- [Section 12.26.1, "Ant 1.7 rmic Task Incompatibility"](#)

12.26.1 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 Oracle WebLogic Server's `rmic`.

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}"
```

12.27 Security Issues and Workarounds

This section describes the following issues and workarounds:

- [Section 12.27.1, "StoreBootIdentity Option Works Only if the Appropriate Server Security Directory Exists"](#)
- [Section 12.27.2, "Connections Requiring a NULL Cipher Will Fail Unless AllowUnencryptedNull Cipher is Set to True"](#)
- [Section 12.27.3, "WLS Server Instance Experiences Boot Time Failure with SecurityServiceException"](#)
- [Section 12.27.4, "Authentication Failure After Upgrading a Domain From WLS 6.1"](#)
- [Section 12.27.5, "InvalidParameterException Message Generated and Displayed in the Administration Console"](#)
- [Section 12.27.6, "Default Web Permissions in weblogic.policy Do Not Work if There Is No weblogic.xml File"](#)
- [Section 12.27.7, "Random Number Generator May Be Slow on Machines With Inadequate Entropy"](#)
- [Section 12.27.8, "Circular Group Membership Can Cause OracleInternetAuthenticator to Open Many LDAP Connections"](#)

12.27.1 StoreBootIdentity Option 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.

12.27.2 Connections Requiring a NULL Cipher Will Fail Unless AllowUnencryptedNull Cipher is Set to True

WLS allows for a NULL cipher to be used with an SSL connection, which results in data not being encrypted.

In WLS 10.3 or greater, the use of the NULL cipher is now disabled by default. In order for a client to enable the NULL cipher, set the

`weblogic.ssl.AllowUnencryptedNullCipher` system property to true. For example:

```
-Dweblogic.ssl.AllowUnencryptedNullCipher=true
```

In WLS 10.3 or greater, client SSL connections requiring a NULL cipher will fail unless this system property explicitly enables the use of the NULL cipher. For NULL cipher to be used, you need to enable NULL cipher on both the server side and client side. If not enabled on both sides, the SSL handshake will fail.

12.27.3 WLS Server Instance Experiences Boot Time Failure with `SecurityServiceException`

A WLS 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 WLS-supplied DB2 driver.

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 WLS-supplied DB2 driver.

12.27.4 Authentication Failure After Upgrading a Domain From WLS 6.1

After upgrading a domain from WLS 6.1, the WLS 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 WLS Server instance to boot properly.

12.27.5 `InvalidParameterException` Message Generated and Displayed in the Administration Console

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.

12.27.6 Default Web Permissions in `weblogic.policy` Do Not Work if There Is No `weblogic.xml` File

If you define your default web application permissions in `weblogic.policy`, but your web application does not have a `weblogic.xml` descriptor file, the default web permissions will not take effect, and you may see an `AccessControlException`.

Workaround

Add a `weblogic.xml` descriptor file to your application.

12.27.7 Random Number Generator May Be Slow on Machines With Inadequate Entropy

In order to generate random numbers that are not predictable, SSL security code relies upon "entropy" on a machine. Entropy is activity such as mouse movement, disk IO, or network traffic. If entropy is minimal or non-existent, then the random number generator will be slow, and security operations may time out. This may disrupt activities such as booting a managed server into a domain using a secure admin channel. This issue generally occurs for a period after startup. Once sufficient entropy has been achieved on a JVM, the random number generator should be satisfied for the lifetime of the machine.

For further information, see Sun bugs 6202721 and 6521844 at:

http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6202721

http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6521844

Workaround

On low-entropy systems, you can use a non-blocking random number generator, providing your site can tolerate lessened security. To do this, add the `-Djava.security.egd=file:///dev/urandom` switch or `file:/dev/. /urandom` to the command that starts the Java process. Note that this workaround should not be used in production environments because it uses pseudo-random numbers instead of genuine random numbers.

12.27.8 Circular Group Membership Can Cause OracleInternetAuthenticator to Open Many LDAP Connections

If the schema in an OID server has a static group, and the static group contains a `uniquemember` entry that points back to the static group itself, this creates a circular group membership. Such a circular reference can cause the WebLogic Server `OracleInternetAuthenticator` to open many LDAP connections to the LDAP server, eventually using up all connection resources.

Workaround

Do not include a static group with a reference back to itself in the LDAP schema.

12.28 Spring Framework on WebLogic Server Issues and Workarounds

This section describes the following issues and workarounds:

- [Section 12.28.1, "petclinic.ear Does Not Deploy on WebLogic Server"](#)

12.28.1 petclinic.ear Does Not Deploy on WebLogic Server

For the SpringSource 'petclinic' sample, the `petclinic.war` deploys without any problem. The `petclinic.ear` will not deploy on WLS because it is not packaged correctly. A request has been sent to SpringSource to fix the `petclinic.ear` packaging.

12.29 Upgrade Issues and Workarounds

This section describes the following issue:

- [Section 12.29.1, "Domains Created Using WebLogic Server 10.3.1 Cannot Be Run on WebLogic Server 10.3"](#)

12.29.1 Domains Created Using 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.

12.30 Web Applications Issues and Workarounds

This section describes the following issue and workaround:

- [Section 12.30.1, "Original Application Version Is Not Retired When Using the Production Redeploy Feature to Deploy a New Version"](#)
- [Section 12.30.2, "Administration Console Fails to Implement session-timeout Changes"](#)

12.30.1 Original Application Version Is Not Retired When Using the Production Redeploy Feature to Deploy a New Version

When using the production redeploy feature to deploy a new version of an application, it is typical to initiate a graceful shutdown of the original application so that all existing sessions continue to be handled by the original version of the application. If, however, you are using jdbc or async-jdbc session persistence, the original version of the application is not retired.

Workaround

You have two options as a workaround:

- If there are no incompatibility issues in the session objects between the two versions of the application, select the production redeployment with no graceful shutdown (Force stop now). This ensures that the only one application version is active and taking requests.
- If there are incompatibility issues between the two versions of the application, perform a graceful retirement for the old version. Monitor your applications and session table to find the appropriate time to force the retirement of the old version. The session table shows all sessions. When all of the sessions in the table have been reduced (due to timeout or invalidation) to only those from the new version of the application, you can safely retire the old version of the application by forcing a shutdown.

12.30.2 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.

12.31 WebLogic Server Scripting Tool (WLST) Issues and Workarounds

This section describes the following issues and workarounds:

- [Section 12.31.1, "Property Names Containing '.' Characters Are Not Supported by loadProperties Command"](#)
- [Section 12.31.2, "Invalid cachedir Created by Jython Causes WLST to Error Out"](#)
- [Section 12.31.3, "WLST returnType='a' Option Returns Child Management Objects"](#)

12.31.1 Property Names Containing '.' Characters Are Not Supported by loadProperties Command

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>

12.31.2 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`.

12.31.3 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.

12.32 Web Server Plug-Ins Issues and Workarounds

This section describes the following issue:

- [Section 12.32.1, "MOD_WLS_OHS DOES NOT FAILOVER"](#)

12.32.1 MOD_WLS_OHS DOES NOT FAILOVER

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.

12.33 Web Services and XML Issues and Workarounds

This section describes the following issues and workarounds:

- [Section 12.33.1, "Sparse Arrays and Partially Transmitted Arrays Are Not Supported"](#)
- [Section 12.33.2, "WSDL Compiler Does Not Generate Serializable Data Types"](#)
- [Section 12.33.3, "Use of Custom Exception on a Callback"](#)
- [Section 12.33.4, "Cannot Use JMS Transport in an Environment That Also Uses a Proxy Server"](#)
- [Section 12.33.5, "Clientgen Fails When Processing a WSDL"](#)
- [Section 12.33.6, "JAX RPC Handlers in Callback Web Services Are Not Supported"](#)
- [Section 12.33.7, "Message-level Security in Callback Web Services Is Not Supported"](#)
- [Section 12.33.8, "Handling of Java Method Arguments or Return Parameters That Are JAX-RPC-style JavaBeans"](#)
- [Section 12.33.9, "IllegalArgumentException When Using a Two-Dimensional XML Object in a JWS Callback"](#)
- [Section 12.33.10, "Using SoapElement\[\] Results in Empty Array"](#)
- [Section 12.33.11, "FileNotFoundException When a Web Service Invokes Another Web Service"](#)
- [Section 12.33.12, "Client Side Fails to Validate the Signature on the Server Response Message"](#)
- [Section 12.33.13, "INFO Messages in Server Log for Domains Created Without Web Services-Specific Resources"](#)
- [Section 12.33.14, "Sending async Responses and acks Using a Client Certificate Is Not Supported by Reliable Messaging"](#)
- [Section 12.33.15, "xmlcatalog Element Entity Cannot Be a Remote File or a File in an Archive"](#)
- [Section 12.33.16, "Catalog File's public Element Is Not Supported When Using XML Catalogs"](#)
- [Section 12.33.17, "Local xmlcatalog Element Does Not Work Well"](#)
- [Section 12.33.18, "JAXRPC Client Does Not Encode the HTTP SOAPAction Header With Multi-byte Characters"](#)
- [Section 12.33.19, "External Catalog File Cannot Be Used in the xmlcatalog Element of a clientgen Task"](#)
- [Section 12.33.20, "Exceptions When Running Web Services Reliable Messaging Under Heavy Load"](#)

- [Section 12.33.21, "jwsc Has Been Modified, Resulting in Methods With No @WebMethod Annotation to Be Included in the Service Endpoint Interface"](#)

12.33.1 Sparse Arrays and Partially Transmitted Arrays Are Not Supported

WebLogic Server does not support Sparse Arrays and Partially Transmitted Arrays as required by the JAX-RPC 1.1 Spec.

12.33.2 WSDL Compiler Does Not Generate Serializable Data Types

The Web Service Description Language (WSDL) compiler does not generate serializable data types, so data cannot be passed to remote EJBs or stored in a JMS destination.

12.33.3 Use of Custom Exception on a Callback

WebLogic Server does not support using a custom exception on a callback that has a package that does not match the target namespace of the parent Web Service.

Workaround

Make sure that any custom exceptions that are used in callbacks are in a package that matches the target namespace of the parent web service.

12.33.4 Cannot Use JMS Transport in an Environment That Also Uses a Proxy Server

You cannot use JMS transport in an environment that also uses a proxy server. This is because, in the case of JMS transport, the Web Service client always uses the t3 protocol to connect to the Web Service, and proxy servers accept only HTTP/HTTPS.

12.33.5 Clientgen Fails When Processing a WSDL

Clientgen fails when processing a WSDL that uses the complex type `http://www.w3.org/2001/XMLSchema{schema}` as a Web Service parameter.

12.33.6 JAX RPC Handlers in Callback Web Services Are Not Supported

WebLogic Server 9.2 and later does not support JAX RPC handlers in callback Web Services.

Workaround

If JAX RPC handlers were used with Web Services created with WebLogic Workshop 8.1, then such applications must be redesigned so that they do not use callback handler functionality.

12.33.7 Message-level Security in Callback Web Services Is Not Supported

WebLogic Server 9.2 and later does not support message-level security in callback Web Services.

Workaround

Web Services created with WebLogic Workshop 8.1 that used WS-Security must be redesigned to not use message-level security in callbacks.

12.33.8 Handling of Java Method Arguments or Return Parameters That Are JAX-RPC-style JavaBeans

WebLogic Server does not support handling of Java method arguments or return parameters that are JAX-RPC-style JavaBeans that contain an XmlBean property. For example, applications cannot have a method with a signature like this:

```
void myMethod(myJavaBean bean);
```

where myJavaBean class is like:

```
public class MyJavaBean {
    private String stringProperty;
    private XmlObject xmlObjectProperty;

    public MyJavaBean() {}
    String getStringProperty() {
        return stringProperty;
    }
    void setStringProperty(String s) {
        stringProperty = s;
    }
    XmlObject getXmlObjectProperty() {
        return xmlObjectProperty;
    }
    void setXmlObjectProperty(XmlObject x) {
        xmlObjectProperty = x;
    }
}
```

Workaround

Currently there is no known workaround for this issue.

12.33.9 IllegalArgumentException When Using a Two-Dimensional XML Object in a JWS Callback

Using a two dimensional XmlObject parameter (XmlObject[][]) in a JWS callback produces an IllegalArgumentException.

Workaround

Currently there is no known workaround for this issue.

12.33.10 Using SoapElement[] Results in Empty Array

Using SoapElement[] as a Web Service parameter with @WildcardBinding(className="javax.xml.soap.SOAPElement[]", binding=WildcardParticle.ANYTYPE) will always result in an empty array on the client.

Workaround

Do not use the @WildcardBinding annotation to change the default binding of SOAPElement[] to WildcardParticle.ANYTYPE. The SOAPElement[] default binding is set to WildcardParticle.ANY.

12.33.11 FileNotFound Exception When a Web Service Invokes Another Web Service

When Web Service A wants to invoke Web Service B, Web Service A should use the `@ServiceClient` annotation to do this. If Web Service B needs a custom policy file that is not attached to Web Service B's WSDL, 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 {
    ...
}
```

12.33.12 Client Side Fails to Validate the Signature on the Server Response Message

When the security policy has one of these Token Assertions, the client side may fail to validate the signature on the server response message.

```
<sp:WssX509PkiPathV1Token11/>
<sp:WssX509Pkcs7Token11/>
<sp:WssX509PkiPathV1Token10/>
<sp:WssX509Pkcs7Token10/>
```

In addition, when there are more than two certifications in the chain for X509 certification for `<sp:WssX509Pkcs7Token11/>` or `<sp:WssX509Pkcs7Token10/>` Token Assertion, the server side may fail to validate the signature on the incoming message.

A policy such as the following policy is not supported, unless the entire certificate chain remains on the client side.

```
<sp:AsymmetricBinding>
  <wsp:Policy>
    <sp:InitiatorToken>
      <wsp:Policy>
        <sp:X509Token
          sp:IncludeToken=' . . ./IncludeToken/AlwaysToRecipient'>

          <wsp:Policy>
            <sp:WssX509Pkcs7Token11/>
          </wsp:Policy>
        </sp:X509Token>
      </wsp:Policy>
    </sp:InitiatorToken>
    <sp:RecipientToken>
      <wsp:Policy>
        <sp:X509Token sp:IncludeToken=' . . ./IncludeToken/Never'>
          <wsp:Policy>
            <sp:WssX509Pkcs7Token11/>
          </wsp:Policy>
        </sp:X509Token>
      </wsp:Policy>
    </sp:RecipientToken>
    . . .
  </wsp:Policy>
</sp:AsymmetricBinding>
```


Workaround

Use either of the following two solutions:

1. Configure the response with the `<sp:WssX509V3Token10/>` Token Assertion, instead of `WssX509PkiPathV1Token11/>`. The policy will look like this:

```
<sp:AsymmetricBinding>
  <wsp:Policy>
    <sp:InitiatorToken>
      <wsp:Policy>
        <sp:X509Token sp:IncludeToken='. . ./IncludeToken/AlwaysToRecipient'>
          <wsp:Policy>
            WssX509PkiPathV1Token11/>
          </wsp:Policy>
        </sp:X509Token>
      </wsp:Policy>
    </sp:InitiatorToken>
    <sp:RecipientToken>
      <wsp:Policy> sp:IncludeToken='. . ./IncludeToken/Never'>
        <sp:X509Token>
          <wsp:Policy>
            <sp:WssX509V3Token10/>
          </wsp:Policy>
        </sp:X509Token>
      </wsp:Policy>
    </sp:RecipientToken>
    . . .
  </wsp:Policy>
</sp:AsymmetricBinding>
```

2. Configure the response with the `WssX509PkiPathV1Token11/>` token assertion, but include it in the message. The policy will look like this:

```
<sp:AsymmetricBinding>
  <wsp:Policy>
    <sp:InitiatorToken>
      <wsp:Policy>
        <sp:X509Token sp:IncludeToken='. . ./IncludeToken/AlwaysToRecipient'>
          <wsp:Policy>
            WssX509PkiPathV1Token11/>
          </wsp:Policy>
        </sp:X509Token>
      </wsp:Policy>
    </sp:InitiatorToken>
    <sp:RecipientToken>
      <wsp:Policy>
        <sp:X509Token sp:IncludeToken='. . ./IncludeToken/AlwaysToInitiator'>
          <wsp:Policy>
            WssX509PkiPathV1Token11/>
          </wsp:Policy>
        </sp:X509Token>
      </wsp:Policy>
    </sp:RecipientToken>
    . . .
  </wsp:Policy>
</sp:AsymmetricBinding>
```

When there are multiple certifications in the X509 Certificate chain, `WssX509PkiPathV1Token11/>` or `<sp:WssX509PkiPathV1Token10/>` should be used, instead of `<sp:WssX509Pkcs7Token11/>` or `<sp:WssX509Pkcs7Token10/>`.

12.33.13 INFO Messages in Server Log for Domains Created Without Web Services-Specific Resources

WebLogic Web Services expects that each WebLogic Server domain will contain specific resources needed to support web services. Some domains, however, are not created with these resources.

For example, creating a default WebLogic Server domain in the configuration wizard (without applying any other templates) will not create the needed Web Services resources.

A domain that doesn't contain Web Services resources will still boot and operate correctly for non-webservice scenarios, and any Web Service scenario that doesn't involve asynchronous request/response. You will, however, see INFO messages in the server log indicating that async resources have not been configured and that the async response service for web services has not been completely deployed.

Workaround

Web Services that use async request/response will not function properly in a domain that doesn't have Web Services resources configured in it. To configure these resources, there are two approaches:

- Use the configuration wizard and apply the `wls_webservice.jar` template to your domain.
- Manually configure these resources according to the rules given in the online documentation under domain configuration for web services.

Note: The configuration wizard approach mentioned above is not advised for domains that already have JMS servers configured and that enable JMS resource 'default targeting' on JMS resources such as destinations. The wizard automatically creates additional JMS servers, and the default targeted resources can automatically appear on the newly created JMS servers, yielding, for example, distributed destinations that suddenly span many more JMS servers than intended.

12.33.14 Sending async Responses and acks Using a Client Certificate Is Not Supported by Reliable Messaging

Reliable Messaging cannot support sending async responses and acks using a client certificate.

Web Services using async or Reliable Messaging will automatically use the server's SSL certificate when establishing a new connection (back from the receiving service to the sending service) for the purposes of sending async responses, acknowledgments, etc.

12.33.15 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.

12.33.16 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. WLS only supports defining the `system` element in a catalog file.

12.33.17 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.

12.33.18 JAXRPC Client Does Not Encode the HTTP SOAPAction Header With Multi-byte Characters

The WLS Web Service JAXRPC client doesn't encode the HTTP SOAPAction header with multi-byte characters, but WLS server only supports ASCII for HTTP headers.

Workaround

Change the SOAP action to ASCII in the `wsdl`.

12.33.19 External Catalog File Cannot Be Used in the `xmlcatalog` Element of a `clientgen` Task

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 `<dttd>` and `<entity>` elements may be specified inline. These correspond to the OASIS catalog entry types PUBLIC and URI respectively.

12.33.20 Exceptions When Running Web Services 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 `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
```

With either of these workarounds, you may also want to set the block-size for the file store using the following Java system property:

```
-Dweblogic.store.BlockSize=block-size
```

Changing file store settings may lead to some performance degradation, but is necessary for correct operation of Web services reliable messaging under load.

For important information about these settings and additional options, see "Tuning File Stores" in *Oracle Fusion Middleware Performance and Tuning for Oracle WebLogic Server*.

12.33.21 jwsc Has Been Modified, Resulting in Methods With No @WebMethod Annotation to Be Included in the Service Endpoint Interface

Prior to 11g Release 1 (WebLogic Server version 10.3.1), a JAX-WS JWS that allowed its service endpoint interface to be inferred from the implementation (that is, no explicit service endpoint interface class was declared) would have the implicit service endpoint interface include only those methods that included an `@WebMethod` annotation (and that annotation did not specify `exclude=true`). This behavior is incorrect according to the JAX-WS 2.1 specification. JAX-WS 2.1 specifies that the service endpoint interface inferred from the JWS should *include* all public non-static

methods on the JWS, as long as those methods do not have `@WebMethod(exclude=true)` attached to them.

In WLS 10.3.1, `jwsc` (and the web services runtime) have been modified to properly generate the implicit service endpoint interface (and resulting WSDL for the service) according to the JAX-WS 2.1 specification. As a result, the implicitly derived service endpoint interface will include all non-excluded public non-static methods on the JWS. In some cases, you may have written JWS implementations that relied on the prior `jwsc` behavior, assuming that methods with no `@WebMethod` annotation would not be included in the service endpoint interface and resulting WSDL for the service. With the new `jwsc` behavior, such methods *will* be included in the service endpoint interface and resulting WSDL for the service.

Workaround

After installing WLS 10.3.1, Oracle recommends that you evaluate your existing services for the following possible errors:

1. Public non-static methods that are not legal web method declarations (these can cause `jwsc` to fail when building a service).
2. Public non-static methods that are legal web methods, but were never intended to be exposed publicly on the service.

The two cases are described in detail here:

Case 1: It is possible that some JWS classes will fail to compile in `jwsc` if a previously excluded method is an invalid web method. The new implicit inclusion of such methods will cause the `jwsc` task to fail. There are many possible reasons for `jwsc` to fail compiling of a newly included web method. The most common reason is if a method includes parameter types that are incompatible with JAXB (for example, an interface instead of a concrete class with a default no-arg constructor).

Case 2: Any public non-static methods that are not explicitly excluded will now be represented in the service endpoint interface. These methods may be perfectly legal web method declarations (for example, they compile correctly in `jwsc`), but may never have been intended as public operations on the service.

Oracle recommends that you inspect any implicitly defined service endpoint interface (and dynamically generated WSDL) for their existing services, and ensure that only the intended methods are exposed.

In either of these cases, simply add the following annotation to the method that you want to exclude from the service's endpoint interface and WSDL:

```
@WebMethod(exclude=true)
```

12.34 WebLogic Tuxedo Connector Issues and Workarounds

This section describes the following issue and workaround:

- [Section 12.34.1, "View Classes are not Set on a Per Connection Basis"](#)

12.34.1 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.

12.35 Documentation Errata

This section describes documentation errata:

- [Section 12.35.1, "Issues With Search Function in the Samples Viewer"](#)
- [Section 12.35.2, "Japanese Text Displays in Some Avitek Medical Records Topics"](#)
- [Section 12.35.3, "Some Interfaces to SAML2 Are Not Documented in the MBean Reference"](#)
- [Section 12.35.4, "WebLogic Express Is No Longer Available"](#)

12.35.1 Issues With Search Function in the Samples Viewer

The **Search** function in the Samples viewer does not work when accessing the Examples documentation by selecting **Oracle Weblogic > Weblogic Server > Examples > Documentation** from the Windows **Start** menu, or by clicking the **Documentation** link at the top of the Examples page.

Workaround

To search the Sample Applications and Code Examples, you must start the Examples server and navigate to `http://localhost:7001/examplesWebApp/docs/core/index.html`. Click **Instructions** and then **Search**.

12.35.2 Japanese Text Displays in Some Avitek Medical Records Topics

The samples viewer displays the Japanese and English versions of some Avitek Medical Records topics simultaneously.

12.35.3 Some Interfaces to SAML2 Are Not Documented in the MBean Reference

The WebLogic Server 10.3.1 MBean Reference does not document the interfaces to the SAML 2.0 Identity Asserter and SAML 2.0 Credential Mapping provider. Instead, Javadoc for these MBean interfaces is provided in the WebLogic Server 10.3.1 MBean API Reference Guide.

12.35.4 WebLogic Express Is No Longer Available

WebLogic Express is no longer available from Oracle, therefore its description has been removed from the WebLogic Server documentation. All WebLogic Express functionality is available and supported in other Oracle WebLogic Server products. You can upgrade your 10.0 and earlier WebLogic Express applications to WebLogic Server 10.3.x.

Part V

Oracle WebCenter

Part V contains the following chapter:

- [Chapter 13, "Oracle WebCenter"](#)

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

- [Section 13.1, "General Issues and Workarounds"](#)
- [Section 13.2, "Configuration Issues and Workarounds"](#)
- [Section 13.3, "Documentation Errata"](#)

13.1 General Issues and Workarounds

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

- [Section 13.1.1, "Uploading Documents in JDev Applications"](#)
- [Section 13.1.2, "Including Both Data Controls and Oracle Composer Components on a Page"](#)
- [Section 13.1.3, "Including Both ADF Data Visualization Components and Oracle Composer Components on a Page"](#)
- [Section 13.1.4, "Performing Actions in a Personal Space"](#)
- [Section 13.1.5, "Importing Group Spaces with Security"](#)
- [Section 13.1.6, "Renaming Group Spaces After Import"](#)
- [Section 13.1.7, "Oracle WebCenter Wiki and Blog Limitations"](#)
- [Section 13.1.8, "Using the Rich Text Portlet"](#)
- [Section 13.1.9, "Displaying Web Content in a Web Clipping Portlet"](#)
- [Section 13.1.10, "Opening Announcements in the Sidebar View"](#)
- [Section 13.1.11, "Accessing Wikis, Blogs, or Discussions from WebCenter Spaces with SAML SSO Configuration"](#)
- [Section 13.1.12, "Editing Wiki Pages in WebCenter Spaces Screen Reader Mode with JAWS"](#)
- [Section 13.1.13, "Specifying a Group Space Name Parameter for IMP Service Task Flow"](#)
- [Section 13.1.14, "Editing the Include External Buddies Parameter for the Buddies Task Flow"](#)
- [Section 13.1.15, "Refreshing Buddy Presence Status in Internet Explorer 7"](#)
- [Section 13.1.16, "Moving the Active Cursor When Launching a New Page \(Accessibility Issue\)"](#)

- [Section 13.1.17, "Moving Favorites Into an Existing Folder \(Accessibility Issue\)"](#)
- [Section 13.1.18, "Logging in to an External Application"](#)
- [Section 13.1.19, "Migrating WSRP Producer Metadata to a New URL Endpoint"](#)
- [Section 13.1.20, "Viewing and Participating in Discussions and Announcements"](#)
- [Section 13.1.21, "Defining User Names in Discussions and Announcements"](#)
- [Section 13.1.22, "Adding RSS Feeds at Runtime"](#)
- [Section 13.1.23, "Viewing HTML Reports, Tables, and Fonts in Mail"](#)
- [Section 13.1.24, "Viewing Images in Mail"](#)
- [Section 13.1.25, "Purging the Metadata Services \(MDS\) Repository in WebCenter Spaces"](#)
- [Section 13.1.26, "Web Services Limitation in Oracle WebCenter Discussions"](#)
- [Section 13.1.27, "Running a Custom WebCenter Application Page"](#)
- [Section 13.1.28, "Installing the WebCenter Extension Bundle"](#)

13.1.1 Uploading Documents in JDev Applications

An attempt to upload a document in a Documents task flow displays an error in JDev applications that are based on one of the following templates:

- Generic Application
- Java Desktop Application
- Java Desktop Application (ADF)
- Java EE Web Application
- Portlet Producer Application

After you add a Documents task flow onto a JSPX page in an application based on one of these templates, an attempt to upload a document from the task flow, the Upload Document page displays the message "Error: A value is required".

This issue does not occur in applications created based on the following templates:

- WebCenter Application
- Fusion Web Application

To work around this issue and successfully upload a document from a Documents task flow, add the attribute `usesUpload="true"` to the `af:form` component on the JSPX page.

13.1.2 Including Both Data Controls and Oracle Composer Components on a Page

If your custom WebCenter application page contains a data control and Oracle Composer components, then you may encounter an exception while using Oracle Composer at runtime. To work around this issue, include the data control inside a task flow and consume that task flow in your page.

13.1.3 Including Both ADF Data Visualization Components and Oracle Composer Components on a Page

If your custom WebCenter application page contains both ADF Data Visualization components and Oracle Composer components, then you may encounter an exception while wiring events in the Component Properties dialog in Oracle Composer.

To work around this issue, you must register the `DvtElementObjectFactory` class with the Oracle ADF `FactoryManager` object. To do this, add the following code to the application class that gets loaded the earliest:

```
...
import oracle.adfdt.model.dvt.objects.DvtElementObjectFactory;
import oracle.adfdt.model.managers.FactoryManager;
...
static
{
    FactoryManager.getInstance().registerFactory(new DvtElementObjectFactory());
}
```

13.1.4 Performing Actions in a Personal Space

When a personal space is disabled, the end user of the personal space cannot perform the following actions:

- Compose a new mail
- Perform an advanced search
- Create a link and browse the linked object

These actions fail with an "unauthorized" error. To allow these actions, the personal space must be enabled.

13.1.5 Importing Group Spaces with Security

When you import a group space (with security), security policy updates do not apply immediately. Users who are already logged in to WebCenter Spaces need to log out and log back in to adopt the new group space security policy.

13.1.6 Renaming Group Spaces After Import

When you rename a group space that was imported from another Oracle WebCenter application, you cannot reimport that group space because the group space names on the source and target applications no longer match. You must first rename the source group space or the target group space to share the same name before attempting to reimport the group space.

13.1.7 Oracle WebCenter Wiki and Blog Limitations

In 11g Release 1 (11.1.1), the Oracle WebCenter Wiki and Blog server has following limitations:

- Wiki pages on the Oracle WebCenter Wiki and Blog server do not support global preference settings and bi-directional languages.
- All Web Services methods for the Oracle WebCenter Wiki and Blog server are protected to prevent unauthorized access. However, the passcode is stored as cleartext in the `web.xml` file of the server. It is important to properly secure `web.xml` and to change the default passcode upon installation of the wiki and

blog server. It is also recommended that all remote Web Services calls be made over Secure Socket Layer (SSL).

13.1.8 Using the Rich Text Portlet

With 11g Release 1 (11.1.1), the Rich Text Portlet is no longer registered directly with WebCenter Spaces. To use the Rich Text Portlet in your applications, you must register it explicitly.

13.1.9 Displaying Web Content in a Web Clipping Portlet

When web content is displayed in a Web Clipping portlet, any invalid HTML or JavaScript in the Web Clipping may cause a parser error message of the following format to be written to the log file:

```
WARNING: Error Message : Encountered "x" at line n, column n. Was expecting one of: "x", "y" ..
```

This is a site-specific issue, not a Web Clipping error. If this occurs, contact the site's administrator for assistance.

13.1.10 Opening Announcements in the Sidebar View

With custom WebCenter applications, the Announcement Manager task flow opened from the Sidebar view opens for global announcements, even though it should open for a particular forum in the backend discussions server.

With WebCenter Spaces, the Announcement Manager task flow opened from the Sidebar view opens in a specific group space, even though it should open per the `parentId` parameter given in Sidebar task flow.

13.1.11 Accessing Wikis, Blogs, or Discussions from WebCenter Spaces with SAML SSO Configuration

If you set up single sign-on (SSO) by using Security Assertion Markup Language (SAML) SSO with WebCenter Spaces as the source application and Oracle WebCenter Wiki and Blog Server as the destination application, then when you access a wiki or a blog either from your WebCenter Spaces application or directly through the wiki URL for the first time in your session, the home page of the wiki and blog server is displayed instead of the requested wiki or blog. Once the session has been established, for subsequent access, the requested wiki or blog is displayed. This is due to a limitation with SAML POST profile implementation provided by Oracle WebLogic Server.

If you set up SSO by using SAML SSO with WebCenter Spaces as the source application and Oracle WebCenter Discussions as the destination application, then you can access administration pages of the Discussions application from WebCenter Spaces's Manage Group Space Services screen or Configure WebCenter Services screen. However, the administration pages of Oracle WebCenter Discussions do not participate in SSO. Therefore, if you access administration pages directly, then you are required to log in to Oracle WebCenter Discussions again.

13.1.12 Editing Wiki Pages in WebCenter Spaces Screen Reader Mode with JAWS

In WebCenter Spaces in screen reader mode, after launching JAWS, editing a wiki page that has a Type of HTML with the rich text editor is not possible. It is possible edit wiki pages with the Type wiki markup. Therefore, to work around this limitation,

use the Type `wiki` markup (instead of HTML) when creating wiki pages to allow them to be subsequently edited in screen reader mode while using JAWS.

Additionally, the WebCenter Spaces administrator can disable the rich text editor on the **Administration>Settings** page (clear **Support WYSIWYG Editing**). Note that this will disable the rich text editor for all users.

13.1.13 Specifying a Group Space Name Parameter for IMP Service Task Flow

The Group Space Name parameter, which specifies the group space for which members should be listed, applies only to the Members task flow. If you provide a value for the Buddies task flow, it is ignored.

13.1.14 Editing the Include External Buddies Parameter for the Buddies Task Flow

Changes to the Buddies task flow affect all instances of the Buddies task flow on a page. If there is more than one instance of the Buddies task flow, editing the Include External Buddies parameter for one instance affects all other instances of the task flow on the page. Changing the value of the Include External Buddies parameter for the Buddies task flow has no effect on the list of buddies in the Sidebar. The Sidebar always lists all buddies.

13.1.15 Refreshing Buddy Presence Status in Internet Explorer 7

When users refresh a task flow that contains presence tags, the presence information changes to indicate all displayed users as offline. Other task flows on the page show the correct status. This problem is intermittent and specific to Internet Explorer 7. Either of the following options will correct the issue:

- Refresh the page to see the correct presence status.
- View the application from another browser. Presence information renders as expected in Internet Explorer 8, Firefox, and Safari browsers.

13.1.16 Moving the Active Cursor When Launching a New Page (Accessibility Issue)

Upon selecting a link in a WebCenter Spaces application, the active cursor does not automatically move to the content area in new non-popup/popover pages that are launched. To work around this issue, you can manually tab over to the new content area.

13.1.17 Moving Favorites Into an Existing Folder (Accessibility Issue)

When using only the keyboard in WebCenter Spaces, you cannot move a favorite into an existing folder. To work around this issue, create a new, duplicate favorite within the existing folder, then delete the original favorite that exists outside the folder.

13.1.18 Logging in to an External Application

When logging in to an external application, if you clear the **Remember My Login Information** checkbox, then the credentials provisioned for that user session are lost in the event of a failover in a high availability (HA) environment. You are prompted to specify the credentials again if you try to access the external application content in the same user session.

13.1.19 Migrating WSRP Producer Metadata to a New URL Endpoint

If you need to move a producer to a new URL endpoint, you can use the `exportProducerMetadata`, `setWSRPProducer`, and `importProducerMetadata` WLST commands to migrate the existing producer metadata to the new location. Before importing the producer metadata, you must deregister the existing producer and then re-register the producer with the new URL endpoint. If you do not re-register the producer, "Portlet Unavailable" messages display in your WebCenter application.

Follow these steps:

1. Export the producer metadata, using the WLST command `exportProducerMetadata`. For details, see "exportProducerMetadata" in *Oracle Fusion Middleware WebLogic Scripting Tool Command Reference*.
2. Change the producer's URL endpoint , using the WLST command `setWSRPProducer`. For details, see "setWSRPProducer" in *Oracle Fusion Middleware WebLogic Scripting Tool Command Reference*.
3. Use Fusion Middleware Control or the WLST command `deregisterWSRPProducer` to remove the existing producer connection, as well as the producer's metadata from the WebCenter application. For details, see "Deregistering Producers" in *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.
4. Use Fusion Middleware Control or the WLST command `registerWSRPProducer` to reregister the WSRP portlet producer with the same name but the new URL endpoint. For details, see "Registering WSRP Producers" in *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.
5. Import the producer metadata, using the WLST Command `importProducerMetadata`. For details, see "importProducerMetadata" in *Oracle Fusion Middleware WebLogic Scripting Tool Command Reference*.

13.1.20 Viewing and Participating in Discussions and Announcements

After being added to a discussions server through the Oracle Discussions Administration Application, group space members whose group space role is initially given view-only permission, then given edit permission (on the group space **Settings>Role** page) for discussions or announcements, will not be able to participate in discussions or announcements, despite being given edit permission. If edit permission on the group space role is revoked, the group space members granted that role are unexpectedly deleted in the Oracle Discussions Administration Application.

To give edit permission to group space members whose group space role in initially given view-only permission on discussions and announcements:

1. On the **Settings>Roles** page, clear the **View** permission checkbox for the appropriate group space role.
2. Click **Apply**.
3. Select the **Edit** permission checkbox for the appropriate group space role.
4. Click **Apply**.

This workaround allows group space members to be upgraded from view-only to edit permission for discussions and announcements.

13.1.21 Defining User Names in Discussions and Announcements

To allow support for non-ASCII user names in the Discussions and Announcements services, the server on which Oracle WebCenter is deployed must have the environment variable `LC_ALL` set to `utf-8`.

13.1.22 Adding RSS Feeds at Runtime

When end users click the RSS icon in a WebCenter Spaces application, the user name entered in the login dialog must contain only ASCII characters.

The RSS service does not support non-ASCII user names if the character encoding of the browser-based basic authentication is different from the character encoding of the system on which Oracle WebCenter is deployed.

13.1.23 Viewing HTML Reports, Tables, and Fonts in Mail

HTML reports, tables, and fonts viewed in a mail message may not render correctly. The Mail service requires HTML data to be well-formed to display as expected in a mail message.

13.1.24 Viewing Images in Mail

In some cases, images viewed in a mail message do not render. The Mail service requires that images use an absolute path or URL to display as expected in a mail message.

13.1.25 Purging the Metadata Services (MDS) Repository in WebCenter Spaces

In 11g Release 1 (11.1.1), the MDS Repository is not automatically purged. To manually purge metadata in the MDS repository, perform the following steps:

1. Create a jython script named `mds_purge_metadata.py` that contains the following code:

```
# mds_purge_metadata.py #
#

l = len(sys.argv)
if l < 7:
    print "Usage: $OH/common/bin/wlst.sh mds_purge_metadata.py
<weblogic_user> <weblogic_passwd> <weblogic url> <application name> <managed
server name> < time in secs> [<application version>] "
    print " Example: $OH/common/bin/wlst.sh mds_purge_metadata.py
weblogic weblogic1 t3://localhost:8888 mdsapp AdminServer 30"
    exit()

i = len(sys.argv)
while len > 0:
    if sys.argv[1] == 'None':
        sys.argv[1] = None
    l -- 1

# Assign arguments to the variables

weblogic_user=sys.argv[1]
weblogic_pwd=sys.argv[2]
weblogic_url=sys.argv[3]
applicationName=sys.argv[4]
```

```
mserverName=sys.argv[5]
olderThan=sys.argv[6]
if i == 8:
    applicationVersion=sys.argv[7]
else:
    applicationVersion=None

connect(weblogic_user, weblogic_pwd, weblogic_url)
longVal=Long(olderThan)
value = purgeMetadata(applicationName, mserverName, longVal,
applicationVersion)

dateVal = System.currentTimeMillis();
date = java.util.Date(dateVal)
print date
print "Metadata Purge Executed"
print value

exit()

# End of script ####
```

Usage:

```
$OH/common/bin/wlst.sh mds_purge_metadata.py weblogic_user weblogic_passwd
weblogic url application_name managed_server_name time_in_secs [application_
version]
```

Example:

```
/scratch/AS11_11.1.1/Oracle_WC/common/bin/wlst.sh ./mds_purge_metadata.py
weblogic weblogic t3://localhost:8888 webcenter WLS_Spaces 0
```

-
2. In the shell, type `crontab -e cmd` to open a text file in vi.
3. Enter the following code in the text file:

Note: All paths must be absolute.

```
0, interval_in_mins * * * * $OH/common/bin/wlst.sh script_path/mds_purge_
metadata.py weblogic_user weblogic_passwd weblogic_url application_name
managed_server_name time_in_secs >> output_log_file_path
```

Example:(to execute every 30 minutes):

```
0,30 * * * * /scratch/AS11_11.1.1/Oracle_WC/common/bin/wlst.sh
/scratch/tmp/mds_purge_metadata.py weblogic welcome1 t3://myserver.foo.com:7001
webcenter WLS_Spaces 0 >> /scratch/tmp/wc_auto_purge.log
```

-
-
-
4. Save and quit the file.

The log file contains the logs generated every 30 min, as shown in the following example:

```
Fri Jun 19 05:04:15 UTC 2009
Metadata Purge Executed
Total number of versions: 64.
Number of versions purged: 15.
```


13.1.26 Web Services Limitation in Oracle WebCenter Discussions

In 11g Release 1 (11.1.1), the Oracle WebCenter Discussions server-specific Web Services messages sent by WebCenter applications to Oracle WebCenter Discussions are not encrypted. If message confidentiality is a requirement, then the Oracle WebCenter Discussions URL must be accessed over a Secure Sockets Layer (SSL) connection.

13.1.27 Running a Custom WebCenter Application Page

If your system runs out of memory after running a custom WebCenter application page a couple of times, it is probably because some components on the page added a `MaxPermSize` value of 256M to the project's run/debug setting, which causes a memory allocation conflict on the server. To work around this issue, install WebCenter Framework and Services Design Time version 11.1.1.1.0.090820.0735 from Oracle JDeveloper's update center. This version overwrites the currently installed WebCenter extension version of 11.1.1.1.0.090618.1120.

The new WebCenter extension bundle does not add the `MaxPermSize` memory setting while creating new applications. When you migrate existing applications to the latest version using the new extension bundle, the `MaxPermSize` memory setting is removed.

13.1.28 Installing the WebCenter Extension Bundle

After you install the latest version (11.1.1.1.0.090820.0735), the WebCenter Framework and Services Design Time option disappears from Oracle JDeveloper's update center, until there are newer versions in the future. To work around this issue, install WebCenter Framework and Services Design Time version 11.1.1.1.0.090820.0735 from Oracle JDeveloper's update center. This version overwrites the currently installed WebCenter extension version of 11.1.1.1.0.090618.1120.

13.2 Configuration Issues and Workarounds

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

- [Section 13.2.1, "Using Oracle WebLogic Communications Server"](#)
- [Section 13.2.2, "Initiating a Phone Conference with Group Space Members"](#)
- [Section 13.2.3, "Viewing Group Space Output Information When Language Character Set is Unsupported"](#)
- [Section 13.2.4, "Opening a Group Space with a Name Containing "I" in the Turkish Language"](#)
- [Section 13.2.5, "Exporting and Importing Group Spaces in Multibyte Languages"](#)
- [Section 13.2.6, "Troubleshooting WebCenter Spaces Workflows"](#)
- [Section 13.2.7, "Troubleshooting Issues with WebCenter Spaces APIs"](#)

13.2.1 Using Oracle WebLogic Communications Server

Oracle WebLogic Communications Server (OWLCS) is provided as a sample for development only. It should not be used for production deployments.

13.2.2 Initiating a Phone Conference with Group Space Members

If you encounter an error when attempting to initiate a phone conference with Oracle WebCenter users, ensure that usernames are lowercase. If they are not, an error may occur.

13.2.3 Viewing Group Space Output Information When Language Character Set is Unsupported

If the server on which WebCenter Spaces is running does not support the character set of the language preference set in WebCenter Spaces, the output information related to group spaces will become garbled or display as question marks. To work around this issue, end users can change the session language or the Language preference to English. This will create new log file information. The log file is typically located at `$WC_DOMAIN/servers/WLS_Spaces/logs`.

For more information, see "Setting a Session Display Language" in *Oracle Fusion Middleware User's Guide for Oracle WebCenter*.

13.2.4 Opening a Group Space with a Name Containing "I" in the Turkish Language

When browser settings control the display language, if the browser language is Turkish, WebCenter Spaces end users can not open a group space with the letter "I" in the group space name. To work around this issue, change the default language to Turkish[tr] in the Preferences dialog in WebCenter Spaces, then open the group space.

For more information, see "Setting a Default Display Language" in *Oracle Fusion Middleware User's Guide for Oracle WebCenter*.

13.2.5 Exporting and Importing Group Spaces in Multibyte Languages

If end users of a WebCenter application are allowed to create group spaces in multibyte languages, with the ability to export and import these group spaces, then a group space name is restricted to alphanumeric and space characters ("a" through "z", "A" through "Z", "0" through "9", and the single-byte space character, which WebCenter replaces with "_" (underscore)). Other characters used in the group space name will cause the export or import to fail. To enforce the naming restriction, the server on which Oracle WebCenter is deployed must have the environment variable `LC_ALL` set to `utf-8`.

13.2.6 Troubleshooting WebCenter Spaces Workflows

If you experience issues with WebCenter Spaces workflows, review the following sections:

- [Validating the WebCenter Workflow Configuration](#)
- [Troubleshooting Issues with WebCenter Spaces Workflows](#)

13.2.6.1 Validating the WebCenter Workflow Configuration

The *Oracle Fusion Middleware Installation Guide for Oracle WebCenter* describes how to install and configure WebCenter Spaces workflows. For details, see "Back-End Requirements for WebCenter Spaces Workflows". You can validate the workflow configuration as follows:

1. Log in to WebCenter Spaces.

2. Create a group space and then navigate to the Members tab (group space settings).
3. Invite a new member with any role (say User2).
4. Log out, and then log in to WebCenter Spaces as User2.
5. Expand Worklist in the sidebar.
6. Open the invite notification and click the Accept button.
7. Open My Group Spaces.

If the WebCenter Spaces workflows are working properly, the newly created group space appears in My Group Spaces for User2. If the group space is not listed, there is some issue with the configuration.

13.2.6.2 Troubleshooting Issues with WebCenter Spaces Workflows

If WebCenter Spaces workflows are not working properly, follow these steps to help troubleshoot the issue:

1. Check that WebCenter Spaces workflows are deployed on the Oracle SOA server:
 - a. Log in to Fusion Middleware Control.
 - b. Check that **WebCenterWorklistDetailApp.ear** is deployed.
 - c. Verify that **sca_CommunityWorkflows_rev1.0.jar** is deployed.

See also, "Oracle SOA Server - Workflow Deployment" in *Oracle Fusion Middleware Installation Guide for Oracle WebCenter*.

2. Ensure the Web Service connection between the Oracle SOA server and WebCenter Spaces is secure:

- a. Check the alias in the keystore file on the Oracle SOA server.

For example, use the following command to list the content of the keystore file on the Oracle SOA server:

```
keytool -list -v -keystore bpel.jks -storepass <password>
```

There should be an entry with:

```
Alias name: webcenter_spaces_ws
```

See also, "Oracle SOA and Oracle WebCenter - WS-Security Configuration" in *Oracle Fusion Middleware Installation Guide for Oracle WebCenter*.

- b. Verify that the credential stores for both WebCenter Spaces and Oracle SOA server are configured correctly.

See also, "Updating the Credential Stores" in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.

- c. Check that keystores exist at both ends of the connection, for example:

- webcenter.jks (copied to WebCenter Spaces end)

- bpel.jks (copied to Oracle SOA server end)

For example, the following commands generate webcenter.jks and bpel.jks:

```
keytool -genkeypair -keyalg RSA -dname
"cn=webcenter,dc=us,dc=oracle,dc=com" -alias webcenter -keypass mypassword
-keystore webcenter.jks -storepass mypassword -validity 360
keytool -exportcert -v -alias webcenter -keystore webcenter.jks -storepass
```

```
mypassword -rfc -file webcenter.cer
keytool -importcert -alias webcenter_spaces_ws -file webcenter.cer
-keystore bpel.jks -storepass mypassword
keytool -genkeypair -keyalg RSA -dname "cn=bpel,dc=us,dc=oracle,dc=com"
-alias bpel -keypass mypassword -keystore bpel.jks -storepass mypassword
-validity 360
keytool -exportcert -v -alias bpel -keystore bpel.jks -storepass mypassword
-rfc -file bpel.cer
keytool -importcert -alias bpel -file bpel.cer -keystore webcenter.jks
-storepass mypassword
```

See also, "Generating the Keystores" in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.

- d. Configure role members for the BPMWorkflowAdmin application role in Oracle SOA server (soa-infra).

When associating the domain with an identity store that does not contain the user "weblogic", you must assign some other valid user to the application role BPMWorkflowAdmin. Use WLST commands to do this from the SOA Oracle home, for example, to assign a user named "monty" that exists in LDAP:

```
cd $ORACLE_HOME/common/bin/
wlst.sh

connect('<admin username>', '<admin password>',
'mysoahost.us.oracle.com:7001')
revokeAppRole(appStripe="soa-infra", appRoleName="BPMWorkflowAdmin",
principalClass="oracle.security.jps.service.policystore.ApplicationRole",
principalName="SOAAdmin")
grantAppRole(appStripe="soa-infra", appRoleName="BPMWorkflowAdmin",
principalClass="weblogic.security.principal.WLSUserImpl",
principalName="monty")
```

See also, "Security Commands" in the *Oracle Fusion Middleware WebLogic Scripting Tool Command Reference*.

13.2.7 Troubleshooting Issues with WebCenter Spaces APIs

If you experience issues with WebCenter Spaces APIs, check the following:

1. Verify that the credential stores for both WebCenter Spaces and the client custom WebCenter application are configured correctly.

See also, "Updating the Credential Stores" in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.

2. Ensure the group space client context is set up correctly in the custom WebCenter application by checking the alias passed in the `context.setRecipientKeyAlias`. The alias should be the public key alias of the producer (WebCenter Spaces), for example:

```
GroupSpaceWSContext context = new GroupSpaceWSContext();
context.setEndPoint(endPointUrl);
context.setRecipientKeyAlias("webservice_client_api");
groupSpaceInternalWSClient = new GroupSpaceWSInternalClient(context);
```

In this example the public key alias of the producer is **webservice_client_api**. See also, "Setting Up the Group Space Client Context" in the *Developer's Guide for Oracle WebCenter*.

3. Check that keystores exist at both ends of the connection, for example:

- webcenter.jks (copied to WebCenter Spaces end)
- clientapi.jks (copied to custom WebCenter application end)

For example, the following commands generate clientapi.jks and webcenter.jks:

```
keytool -genkeypair -keyalg RSA -dname "cn=webcenter,dc=us,dc=oracle,dc=com"
-alias webcenter -keypass mypassword -keystore webcenter.jks -storepass
mypassword -validity 360
keytool -exportcert -v -alias webcenter -keystore webcenter.jks -storepass
mypassword -rfc -file webcenter.cer
keytool -importcert -alias webservice_client_api -file webcenter.cer -keystore
clientapi.jks -storepass mypassword
keytool -genkeypair -keyalg RSA -dname "cn=clientapi,dc=us,dc=oracle,dc=com"
-alias clientapi -keypass mypassword -keystore clientapi.jks -storepass
mypassword -validity 360
keytool -exportcert -v -alias clientapi -keystore clientapi.jks -storepass
mypassword -rfc -file clientapi.cer
keytool -importcert -alias clientapi -file clientapi.cer -keystore
webcenter.jks -storepass mypassword
```

See also, "Generating the Keystores" in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.

13.3 Documentation Errata

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

- [Section 13.3.1, "Removing Your Page Personalizations \(User's Guide\)"](#)
- [Section 13.3.2, "Arranging Your Display of Worklist Items \(User's Guide\)"](#)
- [Section 13.3.3, "Checking a File In \(User's Guide\)"](#)

13.3.1 Removing Your Page Personalizations (User's Guide)

In the chapter "Organizing Your WebCenter Spaces Environment" in *Oracle Fusion Middleware User's Guide for Oracle WebCenter*, the section "Removing Your Page Personalizations" begins as follows:

The **Reset Layout** command on the **Page Actions** menu removes all the personalizations you made to a page.

This sentence should be revised to read as follows:

If you have Personalize privilege on the current page, the **Reset Layout** command on the **Page Actions** menu removes all the personalizations you made to a page.

13.3.2 Arranging Your Display of Worklist Items (User's Guide)

In the chapter "Working with the Worklist Service" in *Oracle Fusion Middleware User's Guide for Oracle WebCenter*, the last paragraph in the section "Arranging Your Display of Worklist Items" reads:

"The Worklist displays up to 25 items per Worklist server connection, with the closest due date or the most overdue retrieved first. If no due date was specified, the oldest items are retrieved first. For items exceeding the 25-item limit, follow the link to the BPEL Worklist Application, where you can view and act on a larger volume of Worklist items."

This paragraph should read as follows:

"The Worklist displays **the newest created 25 items** per Worklist server connection. For Worklists exceeding the 25-item limit, follow the link to the BPEL Worklist Application, where you can view and act on a larger volume of Worklist items."

13.3.3 Checking a File In (User's Guide)

In the chapter "Working with the Documents Service" in *Oracle Fusion Middleware User's Guide for Oracle WebCenter*, the note in the section "Checking a File In" reads:

The default maximum size for an uploaded file is 20 MB.

This is incorrect. It should read:

The default maximum size for an uploaded file is 2 GB.

Part VI

Oracle SOA Suite

Part VI contains the following chapters:

- [Chapter 14, "Human Workflow"](#)
- [Chapter 15, "Oracle B2B"](#)
- [Chapter 16, "Oracle BPEL Process Manager"](#)
- [Chapter 17, "Oracle Business Activity Monitoring"](#)
- [Chapter 18, "Oracle Business Rules"](#)
- [Chapter 19, "Oracle Mediator"](#)
- [Chapter 20, "Oracle SOA Suite Common Functionality"](#)
- [Chapter 21, "Oracle Technology Adapters"](#)
- [Chapter 22, "Oracle WebLogic Communication Services"](#)
- [Chapter 23, "Web Services Security and Administration"](#)

Human Workflow

This chapter describes issues associated with human workflow. It includes the following topics:

- [Section 14.1, "General Issues and Workarounds"](#)
- [Section 14.2, "Configuration Issues and Workarounds"](#)
- [Section 14.3, "Documentation Errata"](#)

14.1 General Issues and Workarounds

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

- [Section 14.1.1, "No Access Visibility Rule Does Not Work for the History and Flexfield Task Contents"](#)
- [Section 14.1.2, "Pushback Action Overrides All Other Actions"](#)
- [Section 14.1.3, "Tasks Can Be Pushed Back to an Owner or Creator Who Was Not in the Past Approvers List"](#)
- [Section 14.1.4, "Limitation on Using Microsoft Excel Workbook in an SSL environment"](#)
- [Section 14.1.5, "Adhoc Routing Does Not Work When Selected at the Serial Participant Type Level"](#)
- [Section 14.1.6, "Adhoc Routing is Not Supported for Parallel Assignees at the Participant Level"](#)
- [Section 14.1.7, "Attachments in Tasks with Parallel Assignees and Collaboration Enabled are Lost"](#)
- [Section 14.1.8, "Application Roles Do Not Work when Used in a Participant Level Rule"](#)
- [Section 14.1.9, "Task Flow Created with Notification Drop Handler Displays a Code Line in Oracle BPM Worklist"](#)
- [Section 14.1.10, "Worklist Application Does Not Refresh User Permissions Until a Subsequent Login"](#)
- [Section 14.1.11, "Specifying Values for Both the Date From and Date To Fields on the Notification Management Page"](#)
- [Section 14.1.12, "Oracle BPM Worklist Does Not Support a JNDI Connection Pool"](#)
- [Section 14.1.13, "Some Runtime Languages Are Not Displayed in the Worklist"](#)
- [Section 14.1.14, "Business Tasks Can be Deleted After They Are Withdrawn"](#)

- [Section 14.1.15, "Displaying Details for Stale Tasks on the Evidence Search Tab"](#)
- [Section 14.1.16, "Undeploying a Task Flow Does Not Remove the Database Entry for the URL"](#)
- [Section 14.1.17, "Changing the Task Display URL to Use the Correct Protocol and Port Number"](#)
- [Section 14.1.18, "Creating Custom Identity Store Providers"](#)
- [Section 14.1.19, "Some Fields Do Not Appear After Updating and Saving a ToDo Task in a Worklist Portlet"](#)
- [Section 14.1.20, "Inconsistent Display Languages in Worklist and Embedded User's Notification Preference Interface"](#)

14.1.1 No Access Visibility Rule Does Not Work for the History and Flexfield Task Contents

The no access visibility rule does not work for the history and flexfield task contents. For example, perform the following steps:

1. In the **Advanced Settings** section of the Human Task Editor, click **Configure Visibility**.
2. Click the **Task Content** tab.
3. In the **Task Content** column, select history and click the **Edit** icon.
4. Move all entries to the **No Access** section, and click **OK**.
5. Repeat steps 3 through 4 for flexfields.
6. Deploy the SOA composite and taskflow applications.
7. Initiate an instance and log in to Oracle BPM Worklist.
8. Click the task and note that history and flexfields still display in the task details.

14.1.2 Pushback Action Overrides All Other Actions

The pushback action overrides all other actions. For example, if a task is pushed back and then reassigned, after the reassignee approves it, the task goes to the user who performed the pushback. This is the expected behavior.

14.1.3 Tasks Can Be Pushed Back to an Owner or Creator Who Was Not in the Past Approvers List

A task owner or creator who was not a previous task approver displays in the list of approvers to whom the task can be pushed back. For example, perform the following tasks:

1. Create the Vacation Request SOA composite application in which you set the **Owner** field of the Human Task Editor with an XPath expression.
2. Set the creator from the payload as the owner of the task.
3. Deploy and create an instance with the creator as `jcooper`.
4. Log in as `jstein` to Oracle BPM Worklist.
5. Select **Actions > Request Information**.

6. In the Request More Information dialog in Oracle BPM Worklist, the task owner jcooper is shown as a past approver in the **Past Approvers** dropdown list. Since jcooper is not in the original list of approvers, if you select this user, a validation error similar to the following is correctly displayed:

```
Invalid action on workflow task or user does not have privilege to
perform this action. Action PUSH_BACK on task
89f227cd-7ea2-4fcf-83ff-845082e01416 cannot be performed by jstein. Make
sure that the action is valid with respect to the current state of the task or
ensure that the user has privilege to perform this action on the workflow
task.
```

14.1.4 Limitation on Using Microsoft Excel Workbook in an SSL environment

Microsoft Excel Workbook does not work in an SSL environment using the HTTPS web context URL. After you log in, the protected dummy login dialog does not go away.

As a workaround, use non-SSL mode (even with SSL enabled).

14.1.5 Adhoc Routing Does Not Work When Selected at the Serial Participant Type Level

If you select the **Allow this participant to invite other participants** check box in the **Advanced** section of the serial participant type to set adhoc routing at the participant level, this selection does not work at runtime.

As a workaround, select **Allow all participants to invite other participants** in the Configure Assignment dialog. This enables adhoc routing to work at runtime at the global level.

14.1.6 Adhoc Routing is Not Supported for Parallel Assignees at the Participant Level

Do not select the **Allow this participant to invite other participants** check box in the **Advanced** section of the parallel participant type. Adhoc routing is not supported for parallel assignees at the participant level. If selected, adhoc routing does not display in the **Actions** dropdown list during runtime in Oracle BPM Worklist.

As a workaround, select **Allow all participants to invite other participants** in the Configure Assignment dialog. This enables adhoc routing to work at runtime at the global level.

14.1.7 Attachments in Tasks with Parallel Assignees and Collaboration Enabled are Lost

Assume you create a task with parallel assignees and select **Share attachments and comments**, which enables collaboration. At run time, if you add a file attachment in Oracle BPM Worklist, and immediately save it by selecting **Save** from the **Actions** dropdown list, the file attachment is lost.

As a workaround, do not immediately save the attachment. The save command is not required for file attachments; it is only required for URL attachments. Instead, refresh the task details immediately after adding the file attachment by clicking the task title to ensure that the file attachment is preserved. You can then perform actions such as save. This ensures that the file is attached and can be shared by other parallel assignees.

14.1.8 Application Roles Do Not Work when Used in a Participant Level Rule

Application roles do not work when used within the context of the following participant level rules.

- Selecting **Rule-based** from the **Build a list of participant using list**
- Selecting **Names and Expressions** or selecting **Management Chain** from the **Build a list of participant using list**, and then selecting **Rule-based**

For example, assume you perform the following steps for a human task:

1. In the **Parameters** section of the Human Task Editor, add a parameter (for example, `payload1` of type `double`).
2. Create a single participant type.
3. From the **Build a list of participants using list**, select **Names and expressions**.
4. Select the **Rule-based** radio button.
5. In the **List Ruleset** field, enter a name (for example, `Ruleset1`), and click **OK**.

The Oracle Business Rules Designer appears.

6. Create rules with application roles. For example:

- Rule 1

```
IF Task.payload.payload1 (double type) < 500
THEN
call CreateResourceList (users:null, groups:null, approles:"QATeam",
reponseType: reponseType.REQUIRED, ruleName:"rule_1", lists:Lists)
```

- Rule 2

```
IF Task.payload.payload1 (double type) >= 500
THEN
call CreateResourceList (users:jstein, groups:null, approles:null,
reponseType: reponseType.REQUIRED, ruleName:"rule_2", lists:Lists)
```

7. Save and deploy the SOA composite application.
8. Invoke an instance from Oracle Enterprise Manager Fusion Middleware Control Console with the following values:
 - Enter 700 as the payload, and note that the application works correctly. User `jstein` is assigned the task.
 - Enter 200 as the payload. Note that exception errors appear in the server log.

As a workaround, use application roles and participant level rules separately.

14.1.9 Task Flow Created with Notification Drop Handler Displays a Code Line in Oracle BPM Worklist

When you create the task flow for a human workflow task by dragging the **Task** object from the Application Navigator and selecting **Human Task > Task details for email** from the menu, then after task flow deployment, the following code line precedes the task details in Oracle BPM Worklist.

```
font {font-family: Tahoma, Verdana, Helvetica, sans-serif} H1 { font-size:
14px; color:#000000; margin-left: 5px} td {font-size: 11px;color:#000000}
label {font-size:11px;color:#704A00;margin-right:10px}
```

This does not effect any functionality. In Oracle BPM Worklist and in the email notification, task details display correctly.

14.1.10 Worklist Application Does Not Refresh User Permissions Until a Subsequent Login

If you change a user's privileges in Oracle Enterprise Manager Fusion Middleware Control Console while the user is logged in to Oracle BPM Worklist, the changes will take effect only after a subsequent login by the user. This is true for situations in which there are two active worklist sessions, one in which the user is already logged in before the privileges are changed, and one in which the same user logs in after the privileges are changed. In the first case, the changes to the user's privileges do not take effect while the user is logged in. In the second case, when the user logs in to the second instance of the Worklist Application, the changes to the user's privileges do take effect.

14.1.11 Specifying Values for Both the Date From and Date To Fields on the Notification Management Page

You must specify values for *both* the **Date From** and **Date To** fields in the **Search** sections on the Notification Management page in Oracle Enterprise Manager Fusion Middleware Control Console to receive the correct search results. These fields do not work independently. Specifying values for only one of these fields does not display the correct search results. To access these fields:

1. Right-click **soa-infra** in the navigation tree, and select **Service Engines > Human Workflow > Notification Management**.
2. Expand the **Search** icon in the **Outgoing Notifications** section or **Incoming Notifications** section to display the **Date From** or **Date To** fields.

14.1.12 Oracle BPM Worklist Does Not Support a JNDI Connection Pool

The worklist engine uses a user/role connection pool. It does not support a JNDI connection pool.

14.1.13 Some Runtime Languages Are Not Displayed in the Worklist

Oracle BPM Worklist supports nine administration languages. However, the user's notification preference interface, as a standalone application, supports 21 runtime languages. If a user's preferred language is set to a language that is not supported by the worklist, but which is supported by the user's notification preference interface, then the worklist displays the language set by the server (or English if the server language is also not supported by the worklist), while the embedded user's notification preference interface displays in the user's preferred language. In this case, two languages are seen when you navigate to the Preferences settings in the **Notification** tab in the worklist.

For example, assume that the language of the SOA server is French and that someone tries to access the worklist in a browser with the language set to Arabic. The worklist interface displays the server language, French, while the embedded user's notification preference interface displays in Arabic when navigating to the **Preferences > Notification** tab.

14.1.14 Business Tasks Can be Deleted After They Are Withdrawn

You can delete withdrawn business tasks (that is, non-ToDo tasks) in Oracle BPM Worklist.

14.1.15 Displaying Details for Stale Tasks on the Evidence Search Tab

Many of the task details for a stale task are not displayed, because stale tasks are typically purged. For this reason, content on the page is not aligned correctly and clicking a stale task results in an error message.

14.1.16 Undeploying a Task Flow Does Not Remove the Database Entry for the URL

When a task flow Web application is deployed, the task flow URL is registered in the database. This URL is displayed in Oracle BPM Worklist when a task is clicked and the task details are displayed. If the task flow Web application is later undeployed or stopped, the task flow URL in the database is not removed as part of the undeployment. Consequently, when you click the task in the worklist to see the task details, a "404 Not Found" error is displayed rather than the message "Details not available for task." To avoid the "404 Not Found" error, use Oracle Enterprise Manager Fusion Middleware Control Console to undeploy the task flow application from the application home page.

14.1.17 Changing the Task Display URL to Use the Correct Protocol and Port Number

If the SOA Server is SSL enabled or disabled, then you must manually enable or disable SSL for any already deployed workflow task detail applications. Use Oracle Enterprise Manager Fusion Middleware Control Console to change the workflow task display URL to use the correct protocol and port number. To enable the use of the SSL (HTTPS) URL, ensure that the HTTP port setting is left blank. See *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite* for more information.

14.1.18 Creating Custom Identity Store Providers

Oracle Fusion Middleware supports providers that enable the User and Role API to interact with custom identity stores. For more information, visit the following URL:

http://www.oracle.com/technology/products/id_mgmt/opss/index.html

14.1.19 Some Fields Do Not Appear After Updating and Saving a ToDo Task in a Worklist Portlet

After you update and save a ToDo task or a ToDo subtask for a business task in a Worklist Portlet, the following fields should appear, but do not: **Assignee**, **Status**, and **Search** options.

14.1.20 Inconsistent Display Languages in Worklist and Embedded User's Notification Preference Interface

Oracle BPM Worklist can be configured to set the language from the browser or from the identity store. There are two levels to this setting, the application level and the user level. If the user preference is set, it takes precedence in determining the worklist display language. However, the embedded user's notification preference interface always respects the application preference. Therefore, if the user's preference indicates that the language from the browser is to be used, while the application preference is

set to use the language from the identity store, or vice versa, you may see different display languages in the worklist and in the user's notification preference interface.

14.2 Configuration Issues and Workarounds

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

- [Section 14.2.1, "Seeding Users, Groups, and Application Roles using LDAP Tools"](#)
- [Section 14.2.2, "Reusing the Task Flow Application with Multiple Human Tasks"](#)
- [Section 14.2.3, "Specify the Complete Host Name of the Task Display Form URL"](#)

14.2.1 Seeding Users, Groups, and Application Roles using LDAP Tools

This section provides an overview of the procedures required for seeding users, groups, and application roles with LDAP tools.

14.2.1.1 Changing the Default Password in the Embedded LDAP Server

The password credential is accessible from the Oracle WebLogic Server Administration Console by selecting **Security > Embedded LDAP** for your domain.

For instructions on changing the default password credential, see Chapter 9, "Managing the Embedded LDAP Server" of *Oracle Fusion Middleware Securing Oracle WebLogic Server*.

14.2.1.2 Seeding Users or Groups through LDAP Browser

1. Start an LDAP browser (for example, openLdap browser, ldapbrowser, jXplorer, and so on). See the documentation for your browser for instructions.
2. Connect to the LDAP server by providing the hostname, port number on which the server is running, and the administration user credentials with which to log in.
 - For Embedded LDAP:
 - a. The default managed server port number is 7001.
 - b. The administration credential username is cn=admin.
 - c. The administration credential password is what you set in [Section 14.2.1.1, "Changing the Default Password in the Embedded LDAP Server."](#)
 - For OIDm:
 - a. The default port number is 3060.
 - b. The administration username is cn=orcladmin.
 - c. The administration password is the password for the LDAP server.
3. Seed a user or group through the browser by performing the following steps:
 - a. Select a parent under which to add a user or group.
 - b. Select the **Edit** menu and choose an appropriate option to add a new entry.
 - c. Enter all required attribute values for the entry.
4. Seed users or groups through the LDIF file by performing the following steps:
 - a. Select the domain under which to seed the users or groups.
 - b. Select the **LDIF** menu and choose to import an LDIF file.

- c. In the Import LDIF File dialog, browse for and select the LDIF file and click **Import**.

Similarly, the users or groups seeded on the LDAP server can be exported to an LDIF file by selecting the **Export** option from the **LDIF** menu.

5. Add attributes to the users or groups by performing the following steps:
 - a. Select an entry for which to add a new attribute.
 - b. Right-click and choose the option to add a new attribute.
 - c. In the Add Attribute dialog, provide the name and value of the attribute.

You can only add attributes that are defined in the LDAP server schema.
6. Delete attributes for users or groups by performing the following steps:
 - a. Select an entry for which to delete a new attribute.
 - b. Select an attribute from the list of attributes and delete it.

14.2.1.3 Seeding Application Roles using WLST Scripts

For instructions on using the WebLogic Scripting Tool (WLST) to seed application roles, see Chapter 4, "Infrastructure Security Custom WLST Commands" of *Oracle Fusion Middleware WebLogic Scripting Tool Command Reference*.

14.2.1.4 Seeding Application Roles in Oracle Enterprise Manager Fusion Middleware Control Console

1. In the navigator, select the appropriate Oracle WebLogic Server under **WebLogic Domain** > *Farm_Domain_name*.
2. In the right pane, select **WebLogic Domain** -> **Security** -> **Application Roles**.
3. Create an application role by performing the following steps:
 - a. Select the **Create** option in the Application Roles page.

The Create Application Role page appears.
 - b. In the **Application** list, select the application name (*server_name/soa_infra*) under which to create a new role.
 - c. Enter the role name, display name, and description for the application role.
 - d. Add members by selecting **Add Role** in the **Roles** section and **Add User** in the **Users** section.
 - e. Click **OK** to create the application role.
4. Edit application roles by performing the following steps:
 - a. In the **Application** list of the **Search** section of the Application Roles page, select an appropriate application.

This action lists all the application roles created for that application.
 - b. To the right of the **Role Name** list, click the **Search** icon.
 - c. Select the application role to edit.
 - d. Click **Edit**.
 - e. Add or delete roles in the **Roles** section and **Users** section of the Edit Application Role page.

- f. Click **OK**.
5. Delete application roles by performing the following steps:
 - a. In the **Application** list of the **Search** section of the Application Roles page, select an appropriate application.
This action lists all the application roles created for that application.
 - b. Select the application role to delete.
 - c. Click the **Delete** button to delete the application role.
 - d. Click **Yes** in the Confirmation dialog.

14.2.2 Reusing the Task Flow Application with Multiple Human Tasks

You can reuse a single task flow application with multiple human tasks. To use this feature, all human tasks must have identical payload elements.

1. Open the `TASKFLOW_PROJ_DIR\adfmsrc\hwtaskflow.xml` file.
2. For each additional human task, add the following element inside the file (at the bottom just before `</hwTaskFlows>`):

```
<hwTaskFlow>
  <WorkflowName>$TASK_NAME</WorkflowName>
  <TaskDefinitionNamespace>$TASK_NAMESPACE</TaskDefinitionNamespace>
  <TaskFlowId>$TASK_FLOW_NAME</TaskFlowId>
  <TaskFlowFileName>$TASK_FLOW_FILENAME</TaskFlowFileName>
</hwTaskFlow>
```

where:

- `$TASK_NAME` is replaced with the name of the human task inside the `.task` file (value of the `<name>` element).
- `$TASK_NAMESPACE` is replaced with the namespace of the human task inside the `.task` file (value of the attribute `targetNamespace` of element `<taskDefinition>`).
- `$TASK_FLOW_NAME` is copied from the existing `<hwTaskFlow>/<TaskFlowId>` element.
- `$TASK_FLOW_FILENAME` is copied from the existing `<hwTaskFlow>/<TaskFlowFileName>` element.

14.2.3 Specify the Complete Host Name of the Task Display Form URL

For the task display form to work correctly, always specify the URL using the complete name for the host on which the task flow is deployed. If the server information is included in the `hwtaskflow.xml` file (as shown in Example 26-1 of the *Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite*), specify it as follows:

```
<TaskFlowServer>
  <hostName>dev123.us.oracle.com</hostName>
  <httpPort>8888</httpPort>
  <httpsPort/>
</TaskFlowServer>
```

The same is true if the task display form URL is explicitly registered in the Oracle Enterprise Manager Fusion Middleware Control Console, as shown in Section "20.3

Managing the URI of the Human Task Service Component Task Details Application" of *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite*.

14.2.4 Digitally Signing a Task Outcome in Oracle BPM Worklist

To sign the task outcome or, once signed, get the certificate validated, ensure that you perform the following tasks:

- After you obtain a valid certificate from a certificate authority (CA), enter the name and URL of the CA of each certificate in the trust chain through the System MBean Browser in Oracle Enterprise Manager Fusion Middleware Control Console. See Chapter 29, "Introduction to Human Workflow Services" of *Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite* for instructions.
- When signing a task outcome using your certificate, you must upload the entire chain of certificates through Oracle BPM Worklist as a .P7B (PKCS7 format) file, not just the one certificate issued to you by the certificate issuer. The entire chain can be exported through Internet Explorer. Mozilla Firefox does not let you export the chain as a .P7B file. Therefore, you can perform the following steps:
 1. Export the chain from Mozilla Firefox as a .P12 file (PKCS12 format that also contains your private key).
 2. Import the .P12 file in Internet Explorer.
 3. Export it again from Internet Explorer as a .P7B file.
 4. Upload it through Oracle BPM Worklist.

14.3 Documentation Errata

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

- [Section 14.3.1, "Using Resource Bundles"](#)
- [Section 14.3.2, "Configuring Notification Preferences for SSL Communication"](#)
- [Section 14.3.3, "Accessing Messaging Preferences from Oracle BPM Worklist"](#)
- [Section 14.3.4, "Configuring the User's Preferred Language and Time Zone for Worklist in LDAP"](#)
- [Section 14.3.5, "Corrections to Oracle BPM Worklist Documentation"](#)

14.3.1 Using Resource Bundles

Section "25.3.10.4 Specifying Multilingual Settings" of Chapter 25, "Designing Human Tasks" of the *Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite* describes how to specify resource bundles for displaying task details in different languages in Oracle BPM Worklist. A bulleted list of resource bundles supported for the task details is provided. The following bullet point from that list is not supported in 11g Release 1.

Displaying the XML element and attributes names in the payload display of Oracle BPM Worklist. The key name in the resource bundle must be the same as the name of the XML element and attributes for internationalization of XML element names in Oracle BPM Worklist.

Section "29.5.4 Task Detail ADF Task Flow Resource Bundles of Chapter 29" of *Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite* describes how to use the `oracle.bpel.services.workflow.worklist.resource.worklist` resource bundle to store resource strings. You can localize the XML element name displayed in

the task flow form through this resource bundle. You can add keys, and use them in the task flow form contents section. The input text label looks like `{resources.mykeyword}`.

14.3.2 Configuring Notification Preferences for SSL Communication

Section "6.3.1 Configuring Oracle HTTP Server for SSL Communication" of Chapter 6 of the *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite* describes how to configure SSL communication between Oracle SOA Suite and Oracle HTTP Server in the `mod_ssl.conf` file. In addition to protecting the `/integration/worklistapp/*` URL, also protect the `/sdpmessaging/userprefs-ui/*` URL. This is essential for accessing notification preferences.

```
<Location /sdpmessaging/userprefs-ui/>
    WebLogicPort 8002
    SetHandler weblogic-handler
    ErrorPage http://host.domain.com:port/error.html
</Location>
```

14.3.3 Accessing Messaging Preferences from Oracle BPM Worklist

Table 16-1 of Section "16.2 Introduction to Notification Channel Setup" of Chapter 16, "Using the Notification Service" of the *Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite* provides an overview of notification channel setup. The fourth row in this table describes how to register the devices used to access messages by specifying user preferences. Under the User Interface column for this row of the table, the way to navigate to the messaging preferences is by selecting **Preferences > Notification** in Oracle BPM Worklist.

14.3.4 Configuring the User's Preferred Language and Time Zone for Worklist in LDAP

The following information clarifies the discussion of worklist languages and time zones in Section 27.12, "Accessing Oracle BPM Worklist in Local Languages" of *Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite*.

The worklist language is configured from the identity store or the browser. See the following sections of *Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite* for how to select **Browser** or **Identity Provider** in the worklist interface:

- Section 27.8.2, "How To Set the Worklist Display (Application Preferences)," for how to select **Browser** or **Identity Provider** from the Application Preferences page
- Section 27.3, "Customizing the Task List Page," and Figure 27-13, "Customizing Fields in a Worklist View"

However, the time zone is configured from the identity store.

If no preference information is available, then the user's preferred language and time zone are determined by the system defaults. System defaults are based on the server settings for language and time zone.

If an LDAP-based provider such as OID is used, then language settings are changed in the OID community. Steps 1 - 2 in [Section 14.2.1.2, "Seeding Users or Groups through LDAP Browser"](#) describe how to connect to the embedded LDAP server, where you can change language settings in the OID community. To change a user's preferred language, navigate to the user entry, and add/set the `preferredLanguage` attribute. See Table 27-11, "Languages Supported in Oracle BPM Worklist" in *Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite* for a list of supported languages. To

change the time zone setting, add/set the `orclTimeZone` attribute. The format of the time zone string is Continent/Region. You can find the time zone values in the `$JAVA_HOME/jre/lib/zi` directory. The directories specify the continent names, for example, Africa, Asia, America, and so on, while the files within the directories specify the regions. Note that some regions include subregions, for example America/Indiana/Indianapolis.

When a user logs in, the worklist pages are rendered in the user's preferred language and time zone.

14.3.5 Corrections to Oracle BPM Worklist Documentation

The following incorrect images in the Help are updated in Chapter 27, "Using Oracle BPM Worklist" of *Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite*.

- Task Details Page (Figure 27-18 in the guide)
- Reassigning a Task (Figure 27-23 in the guide)
- Requesting Information from a User or Group (Figure 27-26 in the guide)
- Routing a Task (Figure 27-29 in the guide)
- Adding a Worklist Attachment (Figure 27-32 in the guide)
- Uploading a Certificate (Figure 27-35 in the guide)

The following incorrect image in the Help and in the guide will be updated in the next release.

- The Evidence Store

The Evidence Store is accessed from the **Evidence Search** tab of the Administration link. Administrator privilege is required.

The image in the section "To specify application preferences" in the Help and the guide should not contain the Approval Groups and Task Configuration tabs.

The description of Tabs in Table 27-2 and the description of the Administration page in Table 27-3 in the Help and in the guide should not include references to approval groups. Approval groups are not a feature of this release.

This chapter describes issues associated with Oracle B2B. It includes the following topics:

- [Section 15.1, "General Issues and Workarounds"](#)
- [Section 15.2, "Configuration Issues and Workarounds"](#)
- [Section 15.3, "Documentation Errata"](#)

15.1 General Issues and Workarounds

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

- [Section 15.1.1, "Installing the Latest XEngine for EDI and HL7"](#)
- [Section 15.1.2, "XEngine Uses Default GMT Time Setting Regardless of XERegistry.xml Setting"](#)
- [Section 15.1.3, "Non-administrator Users Can Perform Certain Administrative Tasks"](#)
- [Section 15.1.4, "replyToAppMessageId Incorrectly Set in Ack Notifications"](#)
- [Section 15.1.5, "Batched EDI Message State Changes for FA Do Not Consider Individual Messages"](#)
- [Section 15.1.6, "Batch Messages and Batch Schedules"](#)
- [Section 15.1.7, "Notification Is Not Available for an Ack Received for an EDI FA"](#)
- [Section 15.1.8, "Oracle Enterprise Manager Displays Truncated Active Document Type Information"](#)
- [Section 15.1.9, "FileNotFoundException Message After Saving an EDI Document Definition"](#)
- [Section 15.1.10, "Incorrect User Information for Receipt Notification \(AS2 MDN\) to AQ"](#)
- [Section 15.1.11, "Application Message Report Displays Incorrect Document Type"](#)
- [Section 15.1.12, "Generated MDN Incorrectly Uses Name Identifier in Inbound Agreement"](#)
- [Section 15.1.13, "Oracle B2B Signs MDN Using the Algorithm Set in the Agreement Delivery Channel"](#)
- [Section 15.1.14, "Batch Scheduler Does Not Work Properly When Initiated Between 11:50 PM and Midnight"](#)

- [Section 15.1.15, "Displayed Data Does Not Automatically Refresh in Multiple Running Instances of the Oracle B2B Interface"](#)
- [Section 15.1.16, "Sending an Unknown AS2 From Header Is Not Recognized as an Error"](#)
- [Section 15.1.17, "Incorrect URL in the Wire Message for a Received Sync MDN"](#)
- [Section 15.1.18, "Invalid EDI Interchange ID Qualifier or Function Group Identifier Is Not Recognized as an Error"](#)
- [Section 15.1.19, "Oracle Enterprise Manager Shows Incorrect Error Count Following Successful Resubmit"](#)
- [Section 15.1.20, "System Validates Saved Data"](#)
- [Section 15.1.21, "XEngine Not Installed on Second Node in a Clustered Environment"](#)
- [Section 15.1.22, "Changes to Identification Fields Do Not Take Effect Until All Referring Agreements Are Purged"](#)
- [Section 15.1.23, "Messages Remain in MSG_WAIT_ACK State After Receiving Acknowledgement"](#)
- [Section 15.1.24, "EDI Batching Results in Incorrect Average Message Size on Metrics Page"](#)
- [Section 15.1.25, "Setting a Property Back to Null on the Configuration Page Generates an Error"](#)
- [Section 15.1.26, "User Deleted Using Oracle WebLogic Console Continues to Appear in Oracle B2B Interface for Several Minutes"](#)
- [Section 15.1.27, "Updating a Schedule May Result in Batched Messages Not Being Picked Up"](#)
- [Section 15.1.28, "Do Not Purge Instance Metadata When Messages Are Being Processed"](#)
- [Section 15.1.29, "Test Page for B2BMetadataWSPort Is Not Found"](#)
- [Section 15.1.30, "The Property checkduplicateisacontrolnumber Is Not Available"](#)
- [Section 15.1.31, "Use the Oracle B2B Interface Instead of Command Line Utilities in a Clustered Environment"](#)
- [Section 15.1.32, "ebMS Negative Acknowledgments for Decryption and Signature Failures"](#)
- [Section 15.1.33, "Issues When Resubmitting Messages Using the AS2 Exchange"](#)
- [Section 15.1.34, "EDI X12 Version 5020 Is Not Supported"](#)
- [Section 15.1.35, "Instance Data Access Java API Is Not Available"](#)
- [Section 15.1.36, "XSLTCallout Is Not Available"](#)
- [Section 15.1.37, "Using Oracle B2B Online Help"](#)
- [Section 15.1.38, "JTA Settings Based on Loads"](#)
- [Section 15.1.39, "Settings for Large Payloads When Using Enqueue Scripts"](#)
- [Section 15.1.40, "With Use JMS Queue Enabled, B2B Sends Error Notifications to IP_IN_QUEUE Instead of B2B_IN_QUEUE"](#)
- [Section 15.1.41, "Enabling JMS Queues Requires a Restart"](#)

- Section 15.1.42, "Exception Signal Message Is Not Sent for a RosettaNet Message with an Error During Processing"
- Section 15.1.43, "Batch with One Error in the Outbound CONTRL Message"
- Section 15.1.44, "FTPS Connection Times Out with Implicit SSL Encryption"
- Section 15.1.45, "%ACTIONNAME% Filename Format Is Not Recognized"
- Section 15.1.46, "RosettaNet Message Encoded in UTF-16 Fails at the Receiver's End"
- Section 15.1.47, "RosettaNet Delivery Channel Settings on Inbound Side"
- Section 15.1.48, "Save Autogenerated Agreements Before Deployment"
- Section 15.1.49, "Permanent MLLP Delivery Channels Can Become Transient After Activation"
- Section 15.1.50, "Upgrading from Oracle Integration B2B 10g to Oracle B2B 11g"
- Section 15.1.51, "Cannot Use ecs Files Created in the Document Editor for Positional Flat File Document Types"
- Section 15.1.52, "Some Listening Channel Details Are Not Relevant for the Selected Protocol"
- Section 15.1.53, "B2B Configuration Wizard in JDeveloper Hangs When Switching Between Application Servers"
- Section 15.1.54, "FTP Listening Channel Does Not Have Proxy Support"
- Section 15.1.55, "b2bpurge Command Line Utility May Not Terminate Listening Threads for Inactive Channels"
- Section 15.1.56, "Recompiling B2B Interface JSP Files May Be Necessary"
- Section 15.1.57, "SSL Is Not Supported for an Application Server Connection to B2B"
- Section 15.1.58, "Exporting Multiple Agreements That Include Agreement Names That Use a Multibyte Character Language"
- Section 15.1.59, "ebMS Delivery Channel Is Required for ebMS Inbound Agreements with Async Ack Mode"
- Section 15.1.60, "Even with the Log Level Set to Default, Details Are Written to the Log File"
- Section 15.1.61, "B2B Interface Does Not Show the Custom Trading Partner Icon"
- Section 15.1.62, "Enabling Multibyte Support for EDIFACT and HL7 Documents"
- Section 15.1.63, "Use UNICODE in the Payload Header for an HL7 Document with Multibyte Characters"
- Section 15.1.64, "Using Document Definition Names with Multibyte Characters in JDeveloper"

15.1.1 Installing the Latest XEngine for EDI and HL7

Install the latest XEngine patch if you are using Oracle B2B with EDI and HL7. You can find the latest patch on My Oracle Support (formerly Oracle*Metalink*), number 8604074.

15.1.2 XEngine Uses Default GMT Time Setting Regardless of XERegistry.xml Setting

The XEngine sets Interchange and Group header fields for the date and time using GMT instead of the date and time on the local server. This is so even in cases when you have local time configured in the XERegistry.xml configuration file.

The default setting for the XEngine Time attribute is GMT, as shown in the following segment of the XERegistry.xml file:

```
<Product Name="XEngine">
  <Category Name="Settings">
    <Item Name="Time">GMT</Item>
    <Item Name="LimitEvents">Rejecting</Item> <!-- Rejecting |
      @ NonRejecting | All -->
    <Item Name="InputBufferSize">4096</Item>
    <Item Name="EnvCrtSeq">DSA</Item>
    <Item Name="UECLSupport">true</Item>
```

Specifying Local instead of GMT for the Time attribute has no effect.

Install the latest XEngine patch. After applying the patch, the default changes to Local. Installing the latest XEngine patch is also recommended if you are using Oracle B2B with EDI and HL7 (the latest patch addresses this issue). You can find the latest patch on My Oracle Support (formerly OracleMetalink), number 8604074.

15.1.3 Non-administrator Users Can Perform Certain Administrative Tasks

Although the Save button is not displayed on the Agreement screen for remote partner administrators, these users can update and save agreements by editing the agreement name on non-deployed agreements, and then updating and saving the agreements. Oracle B2B does not check the user authorization in this case.

15.1.4 replyToAppMessageId Incorrectly Set in Ack Notifications

Oracle B2B offers a notification of an Ack (AS2-MDN or EDI-FA) that is sent back to a composite or AQ (IP_IN_QUEUE) if configured using the Oracle B2B interface (Administration > Configuration page). The received Ack notification appears similar to the following:

```
<Acknowledgment xmlns="http://integration.oracle.com/B2B/Acknowledgment"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <replyToB2BMessageId>0AB1FE0211FE933570200000120666E0</replyToB2BMessageId>
  <replyToAppMessageId>0AB1FE0211FE933570200000120666E0</replyToAppMessageId>
  <ackB2BMessageId>0AB1FE0211FE9338CB80000012066930-1</ackB2BMessageId>
</Acknowledgment>
```

Note, however, that the replyToAppMessageId is always incorrectly set to be the same as the replyToB2BMessageId.

15.1.5 Batched EDI Message State Changes for FA Do Not Consider Individual Messages

In a batched message, if multiple documents batched as part of a single message have different settings for the FA in the agreement, Oracle B2B uses the FA setting for the first document and applies the setting to all other documents in the batch.

In the outbound case, documents that do not require functional acknowledgement wait on the FA with a status of MSG_WAIT_FA. In the inbound case, documents for

which the FA need not be produced are generated and this can cause FA documents to transition to the MSG_ERROR state if there are no deployed agreements for the FA.

15.1.6 Batch Messages and Batch Schedules

Note the following:

- If an exception occurs during an outbound batch, the batch is not cleared from the repository. This is true even if a trigger has been fired. In this case, you must manually delete the scheduled batch entry using the Administration page in the Oracle B2B interface.
- If you disable a single time invocation batch schedule, any messages set in WAIT_BATCH mode remain in this mode if the schedule is not re-enabled before the expiry time. Furthermore, a new batch schedule created for the same document will not process these messages. The workaround is to resend the message using the resubmit application message option.

15.1.7 Notification Is Not Available for an Ack Received for an EDI FA

Receipt notification does not occur for an Ack (AS2-MDN) received back for an EDI FA document that was sent.

15.1.8 Oracle Enterprise Manager Displays Truncated Active Document Type Information

In the Oracle Enterprise Manager B2B Infrastructure (SOA Binding) page, the Top 5 Active Document Types section displays inbound messages received using the AS2 exchange showing only the `DocumentTypeName` instead of `DocumentProtocolName DocumentProtocolVersion DocumentTypeName`.

For example, 850 may display instead of EDI_X12 4010 850.

15.1.9 FileNotFoundException Message After Saving an EDI Document Definition

After creating an EDI document definition, accessing and saving the document definition (when no updates have been made to the ecs file) can cause a `FileNotFoundException` message to be generated.

15.1.10 Incorrect User Information for Receipt Notification (AS2 MDN) to AQ

When delivering a receipt notification (AS2 MDN) to AQ, Oracle B2B incorrectly sets the user information to the document routing ID (if the outbound document has a document routing ID set) instead of `b2backuser`.

15.1.11 Application Message Report Displays Incorrect Document Type

The Application Message report in the Oracle B2B interface incorrectly displays document types. Specifically, the Application Message report displays the following:

- For receipt messages, the displayed document type is of the outbound message. This can be an issue if you need to collect metric data on the number of inbound application messages for a specific document type. In this case, the issue can cause queries to report incorrect data.
- For FA messages, the displayed document type is the same as the FA message type.

15.1.12 Generated MDN Incorrectly Uses Name Identifier in Inbound Agreement

In Sync AS2 mode, the generated MDN uses the AS2 Identifier set in the inbound agreement. If no AS2 Identifier is defined in the agreement, the generated MDN incorrectly uses the name identifier.

The workaround is to set the expected AS2 Identifier in the inbound agreement.

15.1.13 Oracle B2B Signs MDN Using the Algorithm Set in the Agreement Delivery Channel

In AS2, a request for a signed MDN from the recipient can specify the algorithm to use for signing. Oracle B2B, however, incorrectly signs the MDN with the algorithm set in the agreement delivery channel. This algorithm may be different from the requested algorithm.

15.1.14 Batch Scheduler Does Not Work Properly When Initiated Between 11:50 PM and Midnight

In the Oracle B2B interface, the default time to initiate an event in the Administration > Configuration > Schedule Batch screen is 10 minutes ahead of the current server time. However, if you launch the scheduler between 11:50 PM and midnight, then this default time setting does not work properly.

15.1.15 Displayed Data Does Not Automatically Refresh in Multiple Running Instances of the Oracle B2B Interface

In cases when you have the Oracle B2B interface running in two Web browsers or Web browser windows (on the same or different computers), actions performed in one instance of the Oracle B2B interface may not be automatically reflected in the other running instance. For example, importing metadata in one instance of the Oracle B2B interface is not reflected in the other instance, even after performing a browser refresh.

Clicking on another tab in the Oracle B2B interface and then returning to the previous screen causes the information to refresh correctly.

15.1.16 Sending an Unknown AS2 From Header Is Not Recognized as an Error

When receiving an EDI document over an AS2 exchange, if Oracle B2B fails to identify the trading partner using the AS2 From Identifier, Oracle B2B tries to identify the partner using the EDI Interchange and Group ID. The failure to identify the partner by the AS2 Identifier is ignored.

15.1.17 Incorrect URL in the Wire Message for a Received Sync MDN

The Sync MDN received by the host server in response to an AS2 message sent over SSL shows an incorrect URL in the wire message. Specifically, the URL indicates the HTTPS protocol while the port information is for the HTTP listen port.

15.1.18 Invalid EDI Interchange ID Qualifier or Function Group Identifier Is Not Recognized as an Error

Setting an invalid EDI Interchange ID Qualifier or an invalid Function Group Identifier (not part of the default ecs Qualifier Standard Code List_105 or Function Identifier Code Standard Code List_479 respectively) is not signalled as a MSG_

ERROR in the outbound case. Oracle B2B instead delivers the message to the configured endpoint without error.

15.1.19 Oracle Enterprise Manager Shows Incorrect Error Count Following Successful Resubmit

When a B2B channel is configured to retry following an error (such as a transport channel being unavailable) and the message is subsequently successfully delivered, Oracle Enterprise Manager fails to adjust the corresponding error count.

15.1.20 System Validates Saved Data

When validating an agreement, Oracle B2B validates the saved data. Oracle B2B does not validate any unsaved changes you make to an agreement.

15.1.21 XEngine Not Installed on Second Node in a Clustered Environment

In a clustered environment, the XEngine does not get installed on the second node when the node is on another computer. This is because the XEngine extraction occurs only when you run the Configuration Wizard (which is not run automatically on the second node). The workaround is to perform the XEngine extraction manually in this case. After completing the XEngine extraction, you must restart the server.

15.1.22 Changes to Identification Fields Do Not Take Effect Until All Referring Agreements Are Purged

When you change the identification fields of a custom document (such as the XPath expression, value, start-position, or end-position, among others), you must retire and purge all agreements referring to the document definition before redeploying the agreements to have the changes take effect. Note that redeploying the agreements without purging does not ensure an update of the identification fields in-memory.

15.1.23 Messages Remain in MSG_WAIT_ACK State After Receiving Acknowledgement

When sending EDI messages batched over the Applicability Statement 2 (AS2) exchange protocol, only one message transitions to the MSG_COMPLETE state after receiving an acknowledgment (MDN) back. All other messages remain in the MSG_WAIT_ACK state.

15.1.24 EDI Batching Results in Incorrect Average Message Size on Metrics Page

When Oracle B2B batches multiple messages into a single message, the system records the native message size for each business message as the size of all messages in the batch. This results in Oracle B2B reporting an incorrect average message size on the Metrics pages of the Oracle B2B interface.

15.1.25 Setting a Property Back to Null on the Configuration Page Generates an Error

When using the Administration > Configuration page in the Oracle B2B interface, after you enter a value for a property and save it, you cannot change the property value to null. Doing so causes the Oracle B2B interface to generate the following error:

```
The value must be of the following type: Type Name: non-empty-string Base Type:
string Primitive Type: string With the following constraints: minimum length: 1
Value '' does not satisfy '' facet : minLength
```

Furthermore, after receiving this error, you will not be able to update any other values on the Administration > Configuration page. The workaround is to navigate to another page, return to the Administration > Configuration page, and update the values, as appropriate.

15.1.26 User Deleted Using Oracle WebLogic Console Continues to Appear in Oracle B2B Interface for Several Minutes

After deleting a user using Oracle WebLogic Administration Console, the user continues to appear in the Oracle B2B interface for approximately five minutes. This is because the user information remains cached in the managed server (Oracle B2B) for a user-configurable period of time. Performing certain operations, such as provisioning this user, can generate an error.

The workaround is to wait for longer than five minutes after deleting a user using Oracle WebLogic Administration Console.

Alternatively, you can specify the following system property in the setDomain.sh file to disable the cache:

```
-Dweblogic.security.identityAssertionTTL=-1
```

15.1.27 Updating a Schedule May Result in Batched Messages Not Being Picked Up

In some cases, Oracle B2B may not pick up the batched messages when you update the batching schedule. If you see that batched messages are not being picked up, delete the batch and create a new batch schedule with the same name as the previous batch. The same name must be used so that Oracle B2B picks up the previous messages in WAIT_BATCH status.

15.1.28 Do Not Purge Instance Metadata When Messages Are Being Processed

Do not purge instance metadata (using the Purge Instance Metadata button on the Administration > Purge tab) when messages are being processed. Doing so can result in messages in progress being lost. Instead, use the b2bpurge command line utility, which accepts a date range and message state as arguments. When using the b2bpurge command, remove messages in the Completed state only (unless you have a specific reason for doing otherwise).

15.1.29 Test Page for B2BMetadataWSPort Is Not Found

The test page for B2BMetadataWSPort results in a "404 Not Found" error. The workaround is to change the port number in the URL for the link from the managed server port to the admin server port (7001) and try again.

15.1.30 The Property checkduplicateisacontrolnumber Is Not Available

The property checkduplicateisacontrolnumber is not available in this release.

15.1.31 Use the Oracle B2B Interface Instead of Command Line Utilities in a Clustered Environment

In a clustered environment, do not use the B2B command line utilities for purging data, importing data, exporting data, deploying agreements, and validating B2B metadata. Use the Oracle B2B interface for these functions.

15.1.32 ebMS Negative Acknowledgments for Decryption and Signature Failures

For ebMS documents, negative acknowledgments for decryption and signature failures are sent as security severity errors. For all other negative ebMS acknowledgments, the error is set as `UnknownError`.

15.1.33 Issues When Resubmitting Messages Using the AS2 Exchange

Under certain circumstances, resubmitting an asynchronous AS2 inbound wire message does not work as expected. For example, change the state of an inbound agreement to inactive. On receiving a message, a negative acknowledgment is generated and sent back. The sender sees the message state as `MSG_ERROR` on receipt of the negative acknowledgment. Resolve the issue on the inbound side by changing the agreement state from inactive to active. Now two scenarios for resubmitting the asynchronous message exist:

Scenario A: Resubmit the wire message at the sender's side. Because the message was already processed at the receiver's end, this results in a duplicate error message.

Scenario B: Resubmit the wire message at the receiver's end. This passes at the receiver's end and pushes back a positive acknowledgment message. However, the state of the message on the sender's side is not changed. Although scenario A can be expected, scenario B should have worked. However, because the state of the message is `MSG_ERROR`, the incoming positive acknowledgment is ignored. This results in inconsistency in reporting at the two ends. The inbound side passes the message to the back-end successfully, whereas the outbound side has the message in the `MSG_ERROR` state.

15.1.34 EDI X12 Version 5020 Is Not Supported

EDI X12 version 5020 is not supported in this release.

15.1.35 Instance Data Access Java API Is Not Available

The Oracle B2B Instance Data Access Java API is not available in this release. The API will be available in a future release.

15.1.36 XSLTCallout Is Not Available

The predefined callout, `XSLTCallout`, is not available in this release.

15.1.37 Using Oracle B2B Online Help

Note the following:

- Allow pop-ups (disable the browser pop-up blocker) to use the Oracle B2B online help.
- Oracle B2B online help is available in English only for this release.
- Some links in the Contents and Index panes do not consistently display the correct section in the topic pane. The workaround is to click one of the top-level headings in Contents and use the internal links at the beginning of each topic to navigate within the topic. Use the search function to find an index term if the link does not work.

15.1.38 JTA Settings Based on Loads

Based on the database load and the application server load, tune the transaction timeout setting in the Oracle Weblogic Administration Console. Select JTA from the home page and increase the default setting of 30 to a higher value.

15.1.39 Settings for Large Payloads When Using Enqueue Scripts

Set the following properties in the `enqueue.properties` file when enqueueing large payloads:

```
payload=payload_filename_with_absolute_path
eventName=LARGE_PAYLOAD=true
```

Because the full directory path must be provided, use the local computer for this operation.

15.1.40 With Use JMS Queue Enabled, B2B Sends Error Notifications to IP_IN_QUEUE Instead of B2B_IN_QUEUE

If the Use JMS Queue flag is enabled, B2B starts to send all inbound messages to the JMS queue, B2B_IN_QUEUE. However, error notifications for runtime message failures continue to be sent to IP_IN_QUEUE, even with the Use JMS Queue flag enabled.

15.1.41 Enabling JMS Queues Requires a Restart

If you enable B2B to use the JMS queues by setting the flag Use JMS Queue to true on the Administration > Configuration tab of the Oracle B2B interface, then you must restart the SOA Server.

15.1.42 Exception Signal Message Is Not Sent for a RosettaNet Message with an Error During Processing

When the processing of an incoming RosettaNet message fails, as per the standards, an Exception signal should be sent back to the partner, but is not.

15.1.43 Batch with One Error in the Outbound CONTRL Message

If a CONTRL message contains multiple document types and one document is in error, then one ORDERS message remains in the MSG_WAIT_FA state.

Consider the following example:

A batch containing the following is sent from Acme to GlobalChips:

ORDERS

ORDRSP

ORDERS (duplicate GUID)

ORDERS (new GUID)

The outbound message is sent with one ORDERS message in the MSG_ERROR state, as expected. The other messages are in the MSG_WAIT_FA state. The inbound FA (CONTRL) updates only the status of one ORDERS and one ORDRSP message. The result is that one ORDERS message remains in MSG_WAIT_FA.

15.1.44 FTPS Connection Times Out with Implicit SSL Encryption

Implicit SSL encryption is not supported in the transport layer.

15.1.45 %ACTIONNAME% Filename Format Is Not Recognized

The %ACTIONNAME% filename format is not recognized when used with the File, FTP, and SFTP transport protocols.

15.1.46 RosettaNet Message Encoded in UTF-16 Fails at the Receiver's End

Oracle B2B is unable to process an inbound RosettaNet message encoded as UTF-16. It gives a document protocol identification error.

15.1.47 RosettaNet Delivery Channel Settings on Inbound Side

The RosettaNet delivery channel security settings for an inbound agreement must be set as follows:

- When sending back an unsigned receipt acknowledgment message, set both Message Signed and Ack Signed to false (do not select the boxes).
- When sending back a signed receipt acknowledgment message, set both Message Signed and Ack Signed to true (select the boxes). Select the signature algorithm and certificate alias as required.

15.1.48 Save Autogenerated Agreements Before Deployment

Save autogenerated agreements at least once before the agreements are deployed. The agreement parameter settings for translation/validation and FA are generated in the agreement only when you save an agreement and not when it is autogenerated. Although the interface may show the default values, they are not captured in the agreement metadata and are ignored at runtime; that is, the inbound EDI message may not be translated.

15.1.49 Permanent MLLP Delivery Channels Can Become Transient After Activation

When creating a Minimum Lower Layer Protocol (MLLP) client delivery channel specified using a host name and a permanent connection, the permanent delivery channel can become transient when the in-flight message establishes the connection to the server. The workaround is to use an IP address instead of the host name when creating the client MLLP delivery channel. However, if the connection is pre-established (by enabling the client channel to establish the connection), then the connection works as a permanent connection.

15.1.50 Upgrading from Oracle Integration B2B 10g to Oracle B2B 11g

See [Section 3.1.1, "Patches Required to Address Specific Upgrade and Compatibility Requirements,"](#) for required patches.

15.1.51 Cannot Use ecs Files Created in the Document Editor for Positional Flat File Document Types

An ecs file created in Oracle B2B Document Editor cannot be used for translation with the positional flat file document type. Therefore, the positional flat file document type is not available for this release. It will be available in the next release.

15.1.52 Some Listening Channel Details Are Not Relevant for the Selected Protocol

On the Listening Channel tab, some parameter fields that are displayed in the Channel Details area based on your protocol selection are not relevant to that protocol. Entering a value for these parameters has no effect. [Table 15–1](#) lists the parameter fields that are *not* relevant.

Table 15–1 Fields That Display but Are Not Relevant for the Selected Protocol

If you select this protocol...	Then you can ignore these parameter fields...
AS1-1.0	Subject, Send as attachment, Ack Mode, Response Mode, Retry Count, Retry Interval, all fields on the Security tab
Generic File-1.0	Retry Count, Retry Interval
Generic AQ-1.0	Retry Count, Retry Interval
Generic FTP-1.0	Use Proxy, Retry Count, Retry Interval
Generic SFTP-1.0	Retry Count, Retry Interval
Generic JMS-1.0	Retry Count, Retry Interval
Generic Email-1.0	Subject, Send as attachment, Retry Count, Retry Interval

See [Section 15.3.6, "Some Parameters Should Not Be Documented for Listening Channels"](#) for related information.

15.1.53 B2B Configuration Wizard in JDeveloper Hangs When Switching Between Application Servers

Oracle JDeveloper hangs when you switch application server connections in the B2B Configuration Wizard. The workaround is to restart JDeveloper.

15.1.54 FTP Listening Channel Does Not Have Proxy Support

The Generic FTP-1.0 protocol for a listening channel does not have proxy support.

15.1.55 b2bpurge Command Line Utility May Not Terminate Listening Threads for Inactive Channels

When using the `b2bpurge` command line utility, if inactive channels exist, then those listening threads are not terminated. The workaround is to repeat the `b2bpurge` call two or three times until the listening threads for the inactive channels are terminated.

15.1.56 Recompiling B2B Interface JSP Files May Be Necessary

If you encounter a "Method Not Found" error in the B2B interface (due to incorrect JSP compilation), use the following workaround to recompile the interface JSP files:

1. Go to your Fusion Middleware home.
2. Find the `_tpagreement_jsp.class` location and remove all B2B interface JSP class files in the same directory.

For the admin server, the directory typically looks like this:

```
FMWHOME/user_projects/domains/domain_name/servers/server_name/tmp/tmp_
directory_name/b2bui/WEB-INF/classes/jsp_servlet
```

For the managed server, the directory typically looks like this:


```
FMWHOME/user_projects/domains/domain_name/servers/server_name/tmp/user_
name/b2bui/id/jsp_servlet
```

3. Restart all servers, including every server in a clustered environment.

Accessing the B2B interface may be slow at first due to JSP compilation.

15.1.57 SSL Is Not Supported for an Application Server Connection to B2B

When using the B2B Configuration Wizard in Oracle JDeveloper, the SOA HTTP Port field on the Application Server Connection page does not accept an HTTPS port.

15.1.58 Exporting Multiple Agreements That Include Agreement Names That Use a Multibyte Character Language

If you select multiple agreements to export (from Administration > Import/Export), and any of those agreement names are in a multibyte character language, then in the export ZIP file, which contains a separate ZIP file for each agreement, the ZIP file names for the agreement names with the multibyte characters are garbled. The ZIP files with the garbled names are corrupted and cannot be successfully imported. However, a single agreement name (or repository name) in a multibyte character language is exported correctly.

15.1.59 ebMS Delivery Channel Is Required for ebMS Inbound Agreements with Async Ack Mode

For an inbound agreement that uses an ebMS exchange with the Ack Mode parameter set to Async, an ebMS delivery channel is required.

15.1.60 Even with the Log Level Set to Default, Details Are Written to the Log File

Normally the default log level suppresses details in the log file. However, for RosettaNet deployments, log details are not suppressed even with the default log level setting.

15.1.61 B2B Interface Does Not Show the Custom Trading Partner Icon

If you use a custom icon for a trading partner (a PNG image file) and export the entire repository, then the icon image file is present in the exported configuration (ZIP file). However, if you import the ZIP file to another B2B server, then the custom icon for the trading partner does not appear in the B2B interface.

The workaround is to do the following:

1. Move the image file for the trading partner from the images directory to the images\tpIcons directory.

The images directory is located under the b2bui directory. For example, the directory path looks something like

```
DOMAIN_HOME\servers\soa_server1\tmp\_WL_user\b2bui\sov2md\b2bui\images
```

2. Rename the PNG image file to remove the prepended string, tpIcons.

The directory name is added to the image file name. To preserve the image file name, remove the prepended directory name. For example, if your original image file name is TP_ICON_tp_dGL-8506012758410451620_mobile.png, then after moving it, rename it from tpIconsTP_ICON_tp_

dGL-8506012758410451620_mobile.png back to the original file name, TP_ICON_tp_dGL-8506012758410451620_mobile.png.

15.1.62 Enabling Multibyte Support for EDIFACT and HL7 Documents

For documents using the XEngine, such as EDIFACT and HL7 documents, when you have a payload with multibyte characters that are not in the EDIFACT and HL7 document character set registry, you may see the error, "A data element contains characters not listed in the allowed character set."

To avoid this error, create a custom character set (CS) file in Oracle B2B Document Editor called `user.cs`:

1. In Oracle B2B Document Editor, click **Tools > Character Set Registry**.
2. In the Character Set Registry window, select the character set you want to override.

For example, you may want to override EDIFACT UNOB CS or HL7 CS.

3. Click the **Duplicate** icon.
4. In the Duplicate Character Set Properties window, accept the defaults and add the specific multibyte characters at the end of the Charset blank; then click **OK**.
5. With the duplicated file still selected, click the **Export** icon.
6. Name the file `user.cs` and save it.
7. Copy `user.cs` to

`ORACLE_HOME/soa/thirdparty/edifecs/Common`

Now documents such as EDIFACT and HL7 will use the `user.cs` file instead of the default CS file to verify the payload file.

15.1.63 Use UNICODE in the Payload Header for an HL7 Document with Multibyte Characters

If the `a01.xml` payload for an HL7_2.3.1_ADT_A01 XML document contains multibyte characters, then, to support multibyte characters, you must change the MSH.18 element in the payload from `<MSH.18>ASCII</MSH.18>` to `<MSH.18>UNICODE</MSH.18>`. If the UNICODE value is not included, you will get the error "Sub-Component PID5-1-1 (family name) contains characters not listed in the allowed character set." You must also create `user.cs` and modify it to contain the multibyte characters. See [Section 15.1.62, "Enabling Multibyte Support for EDIFACT and HL7 Documents"](#) for more information.

15.1.64 Using Document Definition Names with Multibyte Characters in JDeveloper

When working with document definition names with multibyte characters (MBCS-named document definitions) in the B2B Configuration Wizard in JDeveloper, you may see the error "Invalid UTF8 encoding" at the step where the document definitions are loading for you to select the document definition for the service. This occurs when JDeveloper is running in a non-UTF-8 environment (for example, in Windows, using Simplified Chinese Win2k3, or in a native encoding Linux OS, using `zh_CN.gb18030`). However, in a Linux environment with UTF-8 encoding, such as `zh_CN.utf8`, MBCS-named document definitions load correctly. After loading, the MBCS-named document definition becomes the name of the document XSD folder in JDeveloper.

To ensure that MBCS-named document definitions load and display correctly in the B2B Configuration Wizard, do the following:

- When using JDeveloper in a Linux environment, first set the `LANG` and `LC_ALL` environment variables to a locale with the UTF-8 character set. This enables the operating system to process any characters in Unicode. Then start JDeveloper.
- When using JDeveloper in a Windows environment, start JDeveloper using UTF-8 encoding with `jdev -J-Dfile.encoding=utf-8`.

15.2 Configuration Issues and Workarounds

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

- [Section 15.2.1, "File/Batch Header Envelope Support Is Not Available from Seeded ecs Files for HL7 2.6"](#)
- [Section 15.2.2, "Functional Ack Internal Properties Setting Ignored for HL7"](#)
- [Section 15.2.3, "Unable To Specify Separate Parameters for Remote Trading Partner Sender and Receiver"](#)
- [Section 15.2.4, "Unable To Set Ack Requested Field for Interchange"](#)
- [Section 15.2.5, "Overriding Defaults in a Host Document Not Carried to the Remote Trading Partner"](#)
- [Section 15.2.6, ""Query Sent to an Unactivated UnitOfWork" Exception"](#)
- [Section 15.2.7, "Tablespace Configuration Recommendation for Production Environments"](#)
- [Section 15.2.8, "Changes to Ignore Validation on Envelope Elements Setting Require Server Restart"](#)
- [Section 15.2.9, "Using the Use JMS Queue and Use B2B Queue System Parameters"](#)
- [Section 15.2.10, "Enable Auto Search Feature Does Not Function"](#)
- [Section 15.2.11, "Payload Is Logged Under Trace Level"](#)
- [Section 15.2.12, "Updating B2B Metadata Repository Attributes for a High Availability Environment Is Not Supported"](#)

15.2.1 File/Batch Header Envelope Support Is Not Available from Seeded ecs Files for HL7 2.6

HL7 File/Batch Header Envelope support is not available directly from the seeded ecs files for HL7 version 2.6. However, as a workaround, you can override the File/Batch Header ecs file when creating the document protocol version. Note that while HL7 Batch and File envelopes are supported, batching is not supported in this release.

15.2.2 Functional Ack Internal Properties Setting Ignored for HL7

For HL7, setting the Functional Ack internal property (FAInternalProperty) to false using the Administration > Configuration page in the Oracle B2B interface causes Oracle B2B to nevertheless use the payload header FA internal properties instead of the design-time parameters.

When the `FAInternalProperty` is set to true and there are different payload and design-time parameter values, you may see an error in the Ack message. Therefore, it is recommended that you do not set the `FAInternalProperty` to true for HL7.

15.2.3 Unable To Specify Separate Parameters for Remote Trading Partner Sender and Receiver

Although the metadata for a remote trading partner stores separate information for the sender and the receiver for the same document definition, you cannot specify these differences using the Oracle B2B interface.

The workaround is to create a new document definition and use the two definitions to specify the parameters for the sender and receiver separately.

15.2.4 Unable To Set Ack Requested Field for Interchange

The Oracle B2B interface does not offer the ability to set the Ack Requested field for Interchange.

15.2.5 Overriding Defaults in a Host Document Not Carried to the Remote Trading Partner

When creating a host document, including specifying the version, type, and definition, Oracle B2B assigns default values to certain fields that can be overridden by the user. If you override one or more nonmandatory fields by making them blank and then add the definition to the remote trading partner, the default values that you intentionally left blank re-appear for the remote trading partner.

To resolve this issue, manually make the nonmandatory fields blank again for the remote trading partner.

15.2.6 "Query Sent to an Unactivated UnitOfWork" Exception

When using any document protocol, the following exception appears in the seller's soa.log file:

```
oracle.toplink.exceptions.QueryException  
Exception Description: Query sent to an unactivated UnitOfWork.
```

The workaround is to increase the JTA timeout from 30 to a higher value using Oracle WebLogic Server Administration Console.

15.2.7 Tablespace Configuration Recommendation for Production Environments

Increase the default tablespace configuration in production environments to prevent error conditions that can occur when processing a large number of messages.

15.2.8 Changes to Ignore Validation on Envelope Elements Setting Require Server Restart

You can specify the envelope elements, separated by commas, to be ignored during look-up validation for agreements. The possible values for ignore validation on envelope elements varies based on the identifiers used in the agreement. For example, for HL7 agreements, you can specify `MessageSendingApp`, `MessageReceivingApp`, `MessageSendingFacility`, and `MessageReceivingFacility`, among others.

For EDI agreements, the possible values are InterchangeSenderID, InterchangeReceiverID, GroupReceiverID, GroupSenderID, TransactionAssociationAssignedCode, InterchangeReceiverQual, InterchangeSenderQual, and InterchangeControlVersion, among others.

Changes to the Ignore Validation on Envelope Elements setting require you to restart the Oracle B2B server for the setting to take effect.

15.2.9 Using the Use JMS Queue and Use B2B Queue System Parameters

Use these parameters as follows:

Use JMS Queue

If this option is set to true, then

- B2B starts to poll on B2B_OUT_QUEUE, and along with IP_OUT_QUEUE, for outbound messages
- Inbound messages are delivered only to B2B_IN_QUEUE and not to IP_IN_QUEUE.

If this option is set to false, then

- B2B polls only on IP_OUT_QUEUE for outbound messages
- Inbound messages are delivered to IP_IN_QUEUE

Use B2B Queue

Do not use this setting. Set Use JMS Queue to false to deliver inbound message to IP_IN_QUEUE.

15.2.10 Enable Auto Search Feature Does Not Function

In the Oracle B2B interface, the Enable Auto Search parameter (on the Administration > Configuration page) does not function in this release.

15.2.11 Payload Is Logged Under Trace Level

When the log level is set to trace for `oracle.soa.b2b.repository`, the payload received by B2B is logged in plain text into the server's `diagnostic.log` file.

15.2.12 Updating B2B Metadata Repository Attributes for a High Availability Environment Is Not Supported

In a high availability environment, B2B MDS notification occurs across nodes in a cluster when the following default values are set for these properties:

```
ExternalChangeDetection=true
ExternalChangeDetectionInterval=30
```

These default values cannot be updated in Oracle Enterprise Manager 11g Fusion Middleware Control.

15.3 Documentation Errata

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

- [Section 15.3.1, "Description of the Retry Interval Parameter Is Incorrect"](#)

- [Section 15.3.2, "Description of the JTA Setting for Slower Computers Is Incorrect"](#)
- [Section 15.3.3, "Setting the b2b.outboundOneErrorAllError Parameter"](#)
- [Section 15.3.4, "Polling Interval Parameter Is Measured in Seconds, Not Milliseconds"](#)
- [Section 15.3.5, "Setting Internal Properties for a Functional Acknowledgment"](#)
- [Section 15.3.6, "Some Parameters Should Not Be Documented for Listening Channels"](#)
- [Section 15.3.7, "Oracle B2B Runtime Does Not Support CLIENT-CERT Authentication"](#)
- [Section 15.3.8, "Exchange Identifiers for Outbound Agreements"](#)
- [Section 15.3.9, "Typographical Corrections to Oracle Fusion Middleware User's Guide for Oracle B2B"](#)
- [Section 15.3.10, "Oracle B2B Document Editor: Using the Insert Envelope Segments Option"](#)
- [Section 15.3.11, "Use eventName=LARGE_PAYLOAD=true for Enqueue Script"](#)
- [Section 15.3.12, "B2B Configuration Wizard in JDeveloper Incorrectly Refers to oc4j"](#)

15.3.1 Description of the Retry Interval Parameter Is Incorrect

The description of the Retry Interval parameter in Table 5-3 of *Oracle Fusion Middleware User's Guide for Oracle B2B* is incorrect and should read as follows:

This is the interval, specified in minutes, after which B2B will attempt to resend a message. B2B tries to resend the message if the status of the message is not Complete. For a retry interval set to 2 minutes, the first retry may not be at the 120 second (2 minute) interval. This is because the first retry is done without considering the seconds at which the message was sent. For example, if the sent timestamp is 3:42:58 (3 hours, 42 minutes and 58 seconds), then 42 minutes is incremented by 2 minutes and the first retry is done at 3:44:00. Subsequent retries, if any, will follow at 3:46:00, then 3:48:00, and so on, with exact 2 minute intervals.

15.3.2 Description of the JTA Setting for Slower Computers Is Incorrect

The description of JTA settings in Appendix A of *Oracle Fusion Middleware User's Guide for Oracle B2B* is incorrect. It should not state a setting of up to 350 seconds. The suggested setting is an increase to 90, and if required, to higher values.

15.3.3 Setting the b2b.outboundOneErrorAllError Parameter

The description of the `b2b.outboundOneErrorAllError` parameter in Appendix B of *Oracle Fusion Middleware User's Guide for Oracle B2B* requires the following changes indicated in ***bold italics***.

When using the `b2b.outboundOneErrorAllError` parameter, inbound messages behave as if `b2b.outboundOneErrorAllError` is set to false; that is, if an error occurs during an inbound message process, then only that message is flagged with the error and other messages are passed. There is no option to flag every message as failed.

For outbound messages, `b2b.outboundOneErrorAllError` can be set to true or false. The default is false. If the parameter is set to true, then for outbound messages,

even with a single message in error, all outbound batch messages are set to the error state. None of the batched messages are sent to the trading partner.

To set the OneErrorAllError parameter, use either of the following methods:

- In `b2b-config.xml`, add the following property:

```
<property>    <name>b2b.outboundOneErrorAllError</name>    <value>true</value>
<comment>error all outbound batch messages on one error</comment></property>
```

- In Oracle Enterprise Manager Fusion Middleware Control, add the property to the b2b MBean by using the System MBean Browser. For more information about how to access the System MBean Browser, see *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite*.

15.3.4 Polling Interval Parameter Is Measured in Seconds, Not Milliseconds

The description of the polling interval parameter in Table 5-3 and Table 14-3 of *Oracle Fusion Middleware User's Guide for Oracle B2B* states that the time interval is milliseconds. This is incorrect. The time interval is *seconds*. The description should read as follows:

The time interval in *seconds* during which Oracle B2B polls the server for inbound messages.

15.3.5 Setting Internal Properties for a Functional Acknowledgment

The following statement in Appendix B, "Setting Internal Properties for a Functional Acknowledgment" of *Oracle Fusion Middleware User's Guide for Oracle B2B* is incorrect:

To ensure that the ISA segment elements (1 - 4) of a 997 message generated by B2B are identical to the received 850, or any other transaction message, set the property `FAInternalProperties` to `true`.

The correct statement is as follows:

Setting `FAInternalProperties` to `true`, by default, will not map ISA segment elements (1-4). By default it will only swap the interchange and group IDs from the sender to the receiver and vice versa, in the generated FA. The test usage indicator parameter is also mapped; that is, an inbound message set as a test message will generate an FA with the flag set to test message.

15.3.6 Some Parameters Should Not Be Documented for Listening Channels

Table 14-3 in *Oracle Fusion Middleware User's Guide for Oracle B2B* incorrectly includes the parameters listed in Table 15-2. These parameters are *not* relevant to listening channels. In addition, the **Use proxy** parameter in Table 14-3 incorrectly states that this parameter is used with the Generic FTP-1.0 protocol. **Use proxy** is used with the Generic SFTP-1.0 protocol only.

Table 15-2 Parameters Not Relevant to Listening Channels

Protocol/Parameter	Description	Protocol Used With
Send as attachment	If enabled, the message (payload) is sent as an e-mail attachment instead of the typical delivery in which the payload is the message body.	AS1 (optional) Email (optional)
Subject	The subject header of the e-mail message.	AS1 (optional) Email (optional)

Table 15–2 (Cont.) Parameters Not Relevant to Listening Channels

Protocol/Parameter	Description	Protocol Used With
Ack Mode	Select Sync , Async , or None for the mode in which the trading partner receives messages. Select None for all generic exchanges.	AS1 (optional)
Response Mode	Select Sync , Async , or None ,	AS1 (required)
Retry Count	The number of times that Oracle B2B retries sending the message.	AS1 (optional) File (optional) AQ (optional) FTP (optional) SFTP (optional) JMS (optional) Email (optional)
Retry Interval	The time interval in seconds during which Oracle B2B attempts to resend the message. A time interval of 2 minutes increments the HH:MM:SS timestamp as follows: If the sent timestamp is 3:42:58, then 42 seconds is incremented by 2 minutes and the retry is sent at 3:44:00. The seconds are dropped in the retry increment. Subsequent retries are at 2 minute intervals. For protocols with acknowledgments, B2B waits for the acknowledgment (formerly called the Time to Acknowledge parameter). If it is not received, the retry interval setting causes B2B to retry	AS1 (optional) File (optional) AQ (optional) FTP (optional) SFTP (optional) JMS (optional) Email (optional)
Security Parameters	-	-
Ack Signed	Select this option to ensure that the responder acknowledges receipt of the messages; nothing needs to be provided.	AS1
Digital Signature	If Message Signed is selected, then select one of the following: SMIME 3.0 with MD5 - RSA SMIME 3.0 with SHA1 - RSA	AS1
Encryption	If Message Encrypted is selected, then select one of the following: SMIME 3.0 with DES SMIME 3.0 with 3DES SMIME 3.0 with RC2 - 40 SMIME 3.0 with RC2 - 64 SMIME 3.0 with RC2 - 128	AS1
Message Encrypted	Select this option to enable message encryption. This option requires you to select an encryption schema in the Encryption field.	AS1
Message Signed	Select this option to provide one of the digital signatures in the Digital Signature field.	AS1

See [Section 15.1.52, "Some Listening Channel Details Are Not Relevant for the Selected Protocol"](#) for related information.

15.3.7 Oracle B2B Runtime Does Not Support CLIENT-CERT Authentication

The security note in "Security Features of Oracle B2B" in *Oracle Fusion Middleware User's Guide for Oracle B2B* is incorrect.

The correct statement is as follows:

Note: Oracle B2B *runtime* does not support the CLIENT-CERT authentication method. Therefore, B2B is not able to post to OAM-SSO protected URLs.

15.3.8 Exchange Identifiers for Outbound Agreements

The following information was omitted from *Oracle Fusion Middleware User's Guide for Oracle B2B*.

In outbound agreements, the following identifier types should be used with these exchange protocols:

Exchange Protocol	Identifier Type
Generic File-1.0	Name
Generic FTP-1.0	Name
Generic SFTP-1.0	Name
Generic AQ-1.0	Name
Generic JMS-1.0	Name
AS2-1.1	Name, AS2 Identifier
AS1-1.0	Name, AS1 Identifier
ebMS-1.0, ebMS-2.0	Name, ebMS Identifier
RosettaNet-V02.00, RosettaNet-01.10	Name, DUNS
MLLP exchange	Name, MLLP ID
Generic HTTP-1.0	Name, Generic Identifier
Generic Email-1.0	Name, Generic Identifier

15.3.9 Typographical Corrections to Oracle Fusion Middleware User's Guide for Oracle B2B

Note the following corrections to *Oracle Fusion Middleware User's Guide for Oracle B2B*:

Incorrect Repetition of Text

The following error (in *italics*) appears in Chapter 5, "Configuring Trading Partners":

For information on creating a document definition—required before *you can you can* add it to the trading partner profile—see Chapter 4, "Creating Document Definitions."

The correction (in *italics*) is as follows:

For information on creating a document definition—required before *you can* add it to the trading partner profile—see Chapter 4, "Creating Document Definitions."

Change JMS to JMS* To Indicate Preview Mode

In Table 1-2, "Protocols Supported in Oracle B2B," JMS should be asterisked—JMS*—to indicate that it is in preview mode for this release.

Secure Socket Layer

In "Security Features of Oracle B2B" in Chapter 1, *secure socket layer* should be *Secure Socket Layer*.

Directory Path for Finding Port Information

In Chapter 2, "Getting Started with Oracle B2B," the following path is incorrect:

```
FMW_HOME/user_projects/domains/your_domain_name/config/config.xml
```

The correct directory path is as follows:

```
MW_HOME/user_projects/domains/your_domain_name/config/config.xml
```

15.3.10 Oracle B2B Document Editor: Using the Insert Envelope Segments Option

In "Creating Guideline Files: EDIFACT D98 Example" in Chapter 3 of *Oracle Fusion Middleware User's Guide for Oracle B2B*, step 5 inaccurately states that you can select this option if you require a variation from the standard. This is incorrect. Selecting the interchange envelope along with the transaction will cause validation errors for the inbound message. To override the default preseeded envelope information, create a separate ecs file with only the required envelope information (without the transaction details) and then upload it using the envelope override option available in the Document version.

15.3.11 Use eventName=LARGE_PAYLOAD=true for Enqueue Script

In "Notes" in Appendix A of *Oracle Fusion Middleware User's Guide for Oracle B2B*, the following information should be included:

If an enqueue script is used when working with large payloads, add

```
eventName=LARGE_PAYLOAD=true
```

15.3.12 B2B Configuration Wizard in JDeveloper Incorrectly Refers to oc4j

The descriptive text (tooltip) that pops up when you place the cursor in the **SOA HTTP Port** field of the Application Server Connection page of the B2B Configuration Wizard in Oracle JDeveloper incorrectly refers to the property `soa.oc4j.http-web-site`. The correct description for **SOA HTTP Port** is as follows:

The HTTP port number for the application server.

Oracle BPEL Process Manager

This chapter describes issues associated with Oracle BPEL Process Manager. It includes the following topics:

- [Section 16.1, "General Issues and Workarounds"](#)
- [Section 16.2, "Configuration Issues and Workarounds"](#)
- [Section 16.3, "Documentation Errata"](#)

16.1 General Issues and Workarounds

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

- [Section 16.1.1, "Callback Not Received When Two Asynchronous Methods Are Invoked Using the Same Partner Link Definition"](#)
- [Section 16.1.2, "Limitations on Using the Identity Lookup in IM and User Notification Activities"](#)
- [Section 16.1.3, "Cannot Upgrade Oracle BPEL Process Manager Client Java API Reference to 11g Release 1"](#)
- [Section 16.1.4, "Boundary on Processing of Large Numbers of Activities in a BPEL Process"](#)
- [Section 16.1.5, "Using a Single Correlation ID Across Multiple Receive Activities is Not Supported"](#)
- [Section 16.1.6, "Vertical Scroll Bar Does Not Display in the Expression Field"](#)
- [Section 16.1.7, "Bookmarks Folder is Not Deleted from the Manage Bookmarks Dialog"](#)
- [Section 16.1.8, "Parsing of MIME Attachments is Not Supported"](#)
- [Section 16.1.9, "Viewing Non-English XML Documents in the Audit Trail Page"](#)

16.1.1 Callback Not Received When Two Asynchronous Methods Are Invoked Using the Same Partner Link Definition

A BPEL process does not receive a callback when two asynchronous methods are invoked on an external stateless web service using the same partner link definition.

As a workaround, create a separate partner link for each invoke and receive pair in the BPEL process when calling this type of web service. The callback is received and the BPEL process completes successfully when you have more than one method invoked on the same partner link.

16.1.2 Limitations on Using the Identity Lookup in IM and User Notification Activities

The **Identity Lookup** icon for the **TO** field of the IM activity is disabled.

As a workaround, perform one of the following actions.

- Manually enter the instant messaging (IM) address in the **TO** field.
- Click the **XPath Expression Builder** icon for the **TO** field to get the IM address of the user (the user name can be provided in the payload).

When you select the **Identity Lookup** icon for the **TO** field of the User Notification Activity, the Identity Lockup dialog appears. After performing a search query to display your results in the **Search User** section, the **Select** button that you click to move a user to the **Selected User** section does not work. If you click the **Select** button, you can receive a popup message similar to the following:

The following user cannot be selected since fax number is not available

As a workaround, perform the following steps:

1. Obtain the user ID you want by performing a search query (for example, **jcooper**).
2. Do *not* click the **Select** button.
3. Click **OK** to return to the User Notification dialog.
4. Manually enter the user ID in the **TO** field.

16.1.3 Cannot Upgrade Oracle BPEL Process Manager Client Java API Reference to 11g Release 1

Custom applications coded with the Oracle BPEL Process Manager 10.1.3 Client Java API cannot currently be upgraded to the 11g Release 1 Client Java API. As a workaround, you can use the Infrastructure Management API that is shipped with Release 1. However, note that this API is currently being rationalized and reworked. Periodic updates to the Infrastructure Management JavaDoc are being made available on the Oracle Technology Network. Visit the following URL for details:

<http://www.oracle.com/technology/products/soa/bpel/collateral/documentation.html>

16.1.4 Boundary on Processing of Large Numbers of Activities in a BPEL Process

There is a limit to the number of activities that can be executed in a BPEL process. When you exceed this limit, system memory fills up, which can cause time outs to occur. For example, with the following parameters, two fault instances occur due to a time out:

- 100 threads
- 1 second of think time
- 1000 incoming request messages

Try to keep the number of incoming request messages at a proper level to ensure system memory stability.

16.1.5 Using a Single Correlation ID Across Multiple Receive Activities is Not Supported

If you use a single correlation ID across multiple receive activities in a BPEL process, more than one instance ID is created.

16.1.6 Vertical Scroll Bar Does Not Display in the Expression Field

The **Expression** field in the Create Copy Operation dialog of an assign activity does not display a vertical scroll bar if the content of the XPath expression is greater than the size of the field.

As a workaround, use the up and down arrow keys to scroll through the expression.

16.1.7 Bookmarks Folder is Not Deleted from the Manage Bookmarks Dialog

If you create a folder in the Manage Bookmarks dialog in Oracle BPEL Designer, then delete it, the folder continues to display in this dialog.

As a workaround, click **OK** to close the Manage Bookmarks dialog, then reopen it. The folder is deleted and no longer appears.

16.1.8 Parsing of MIME Attachments is Not Supported

A BPEL process can receive a MIME attachment along with the payload. The attachment can be in any format (for example, doc, PDF, JPEG, XML, text, and so on). If the BPEL process receives an XML attachment and must parse the XML to get an element value, you cannot do it using a single XPath function. This task must be performed in two steps:

1. Use the `ora:writeBinaryToFile` XPath function.

```
<copy>
  <from expression="ora:writeBinaryToFile('input2','bin',
    'file:///tmp/out/attachment.xml')"/>
  <to variable="input2" part="bin"/>
</copy>
```

2. Use the `doc` XPath function to read the XML element from the above file.

```
<copy>
  <from expression="ora:doc('file:///tmp/out/Input.xml')"/>
  <to variable="DecodedAttachment" query="/ns1:discountandshipping"/>
</copy>
```

16.1.9 Viewing Non-English XML Documents in the Audit Trail Page

If the payload XML has non-English characters, you receive a popup with the following error message in the Audit Trail page when you click the **View XML Document** inline link.

XML Parsing Error: not well-formed

As a workaround, right-click in the Audit Trail page and select the option for viewing the source to see the complete XML.

16.2 Configuration Issues and Workarounds

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

- [Section 16.2.1, "Changing the Driver Name to Support XA Drivers"](#)

16.2.1 Changing the Driver Name to Support XA Drivers

If your data sources require support for XA drivers, you must change the driver name on Oracle WebLogic Server. This is particularly true for environments in which BPEL processes assume XA is present when calling database adapters and JMS adapters.

Change the driver name through one of the following methods.

- Edit in Oracle WebLogic Server Administration Console.
 1. Log into Oracle WebLogic Server Administration Console.
 2. In the left pane, select **Domain Structure**.
 3. Select **Services > JDBC > Data Source > SOADatasource > Connection Pool**.
 4. For the **Driver Class Name**, change the value to `oracle.jdbc.xa.client.OracleXADataSource`.
This provides support for the XA driver.
 5. Restart the server.

- Edit the `soaDataSource-jdbc.xml` file.
 1. Open the `soaDataSource-jdbc.xml` file on Oracle WebLogic Server.
 2. Change the `SOADatasource` driver name from `oracle.jdbc.OracleDriver` to `oracle.jdbc.xa.client.OracleXADataSource`.

```
<?xml version="1.0" encoding="UTF-8"?>
<jdbc-data-source
/. . .
. . .
/ <name>SOADatasource</name>
<jdbc-driver-params>
  <url>jdbc:oracle:thin:@adc60086fems.us.oracle.com:1537:co0yd570</url>
  <driver-name>*oracle.jdbc.xa.client.OracleXADataSource*</driver-name>
  <properties>
    <property>
      <name>user</name>
      <value>fusion_soainfra</value>
    </property>
  </properties>
/ . . .
. . ./
</jdbc-driver-params>
/. . .
. . ./
</jdbc-data-source>
```

16.3 Documentation Errata

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

- [Section 16.3.1, "setPriority Method is Not Supported"](#)

16.3.1 setPriority Method is Not Supported

Section "13.2.5 How to Use `bpelx:exec` Built-in Methods" of Chapter 13, "Incorporating Java and Java EE Code in a BPEL Process" of the *Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite* describes the `setPriority` method. This method is not supported in 11g Release 1.

Oracle Business Activity Monitoring

This chapter describes issues associated with Oracle Business Activity Monitoring (Oracle BAM). It includes the following topics:

- [Section 17.1, "General Issues and Workarounds"](#)
- [Section 17.2, "Documentation Errata"](#)

17.1 General Issues and Workarounds

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

- [Section 17.1.1, "Oracle BAM Client System Requirements"](#)
- [Section 17.1.2, "Some Product Features Previews Only"](#)
- [Section 17.1.3, "Accessibility Compliance Limitation"](#)
- [Section 17.1.4, "Oracle Business Activity Monitoring Upgrade-Related Issues"](#)
- [Section 17.1.5, "JDBC Data Source Statement-Cache-Size Must Be Set to Zero For Oracle BAM"](#)
- [Section 17.1.6, "Database Must Be Started Before Oracle BAM"](#)
- [Section 17.1.7, "Do Not Restart Oracle BAM Using Oracle Enterprise Manager Fusion Middleware Control When Reports Are Open"](#)
- [Section 17.1.8, "Login Prompt Appears in the Web Browser or in a Dialog Box"](#)
- [Section 17.1.9, "Number Formatting Does Not Follow Browser Locale Setting"](#)
- [Section 17.1.10, "Datetime and Timestamp Filters Honor Server Time Zone"](#)
- [Section 17.1.11, "Data entered in Active Data Cache Using ICommand does not honor the Time Zone Offset"](#)
- [Section 17.1.12, "Portfolios Demo Shows Error After Running Script"](#)
- [Section 17.1.13, "Batched Messages Lost on BPEL Server Restart"](#)
- [Section 17.1.14, "Failover Causes Oracle BAM Web Applications Errors"](#)
- [Section 17.1.15, "Oracle BAM Scripts Require Modification on IBM AIX and SUN SOLARIS SPARC Platforms"](#)
- [Section 17.1.16, "Oracle Data Integrator IKM and LKM Operations For Oracle BAM Fail During RAC or Whole Server Migration Failover"](#)
- [Section 17.1.17, "Limitations With Single EAR and Two Oracle BAM Targets in Oracle Enterprise Manager Fusion Middleware Control"](#)

- [Section 17.1.18, "Oracle Enterprise Manager Fusion Middleware Control MBean Browser Does Not Validate Values"](#)
- [Section 17.1.19, "Unable To Extend Tablespace"](#)
- [Section 17.1.20, "Unable to Create or View Report With User With No Permissions on System Folder"](#)
- [Section 17.1.21, "Opening Report on Two Systems Causes Language Mix"](#)
- [Section 17.1.22, "External Data Object on a Table Beginning With an Underscore Throws Exception"](#)
- [Section 17.1.23, "Oracle BAM Event Engine Cannot Call WS-Security-Enabled Web Services"](#)
- [Section 17.1.24, "Use Single Quotation Marks in ICommand Web Service Export Command"](#)
- [Section 17.1.25, "Alert Fires Multiple Times Using COUNTDISTINCT Aggregate"](#)
- [Section 17.1.26, "Select Higher Time Groupings in Crosstab Views"](#)
- [Section 17.1.27, "Oracle Data Integrator Loading to External Data Object Not Raising Error"](#)
- [Section 17.1.28, "Invoking an Oracle Data Integrator Scenario With Date Input From Oracle BAM Alert Rule"](#)
- [Section 17.1.29, "Multi-Byte-Named Database Tables Cannot Be Used for External Data Objects"](#)
- [Section 17.1.30, "Do Not Use Time Dimension For Drilling Down in a Collapsed List"](#)
- [Section 17.1.31, "Alert Dependencies Must Be Maintained During Migration"](#)

17.1.1 Oracle BAM Client System Requirements

Platforms:

Microsoft Windows Intel x86-32:

- Microsoft Windows XP Professional, Service Pack 2 or higher
- Microsoft Windows Vista

Web Browsers:

- Microsoft Internet Explorer 6.0, Service Pack 1 or higher
- Microsoft Internet Explorer 7.0

Hardware:

- 1 CPU at 1.2 GHz or faster minimum (a faster processor may be necessary to view complex dashboards)
- 512 MB RAM minimum
- 5 MB of free disk space

Display:

- Oracle BAM Active Studio requires 1024 x 768 minimum resolution
- Oracle BAM Active Viewer requires 800 x 600 or higher resolution

Additional Requirements for Optional Excel View in Oracle BAM Active Viewer or Oracle BAM Active Studio:

The Oracle BAM Excel view type requires that Microsoft Excel version XP, 2003, or 2007 is installed on the client computer.

Notes:

If you are using the Microsoft Windows pop-up blocker, or any other tool that blocks pop-up browser windows, you must configure it to allow pop-up windows while using the Oracle BAM Web applications. Turn off pop-up blockers in Microsoft Internet Explorer for the URL on which the Oracle BAM Web applications are hosted.

The Microsoft Internet Explorer installation on client systems must be a standard version, and it must not include customizations such as add-in tool bars or hot bars for other Web sites.

17.1.2 Some Product Features Previews Only

Preview features are for evaluation only.

ICommand Web Service is a preview feature.

Saving reports in MHT format is a preview feature. Save Offline, e-mailing rendered reports, and e-mailing a report in Alerts save the report in the MHT format.

The following report views are preview versions: P-Chart, R-Chart, S-Chart, Columnar, Crosstab, Summary Crosstab, Matrix, Excel, Column Group, and Row Group.

17.1.3 Accessibility Compliance Limitation

This version of Oracle Business Activity Monitoring does not comply with accessibility standards provided in other Oracle products. Future versions plan to comply with these standards.

17.1.4 Oracle Business Activity Monitoring Upgrade-Related Issues

For a complete list of Oracle BAM upgrade issues, see the following:

- [Section 3.1.1, "Patches Required to Address Specific Upgrade and Compatibility Requirements"](#), which includes information on an Oracle Database patch that is required before you perform an Oracle BAM schema upgrade.
- [Section 3.1.5, "Oracle BAM Upgrade Issues"](#), which consolidates various known issues and workarounds when upgrading Oracle BAM to 11g.
- [Section 3.3.1, "Documentation Errata for Oracle Fusion Middleware Upgrade Guide for Oracle SOA Suite, WebCenter, and ADF"](#), which includes some documentation additions for upgrading Oracle BAM to 11g.

17.1.5 JDBC Data Source Statement-Cache-Size Must Be Set to Zero For Oracle BAM

For single instance database installs, the statement cache size will already be set to 0 (zero) by default. Do not change this to a non-zero value.

For installs against a RAC database, the statement cache size must manually be set to 0 for each RAC data source; otherwise, data corruption may occur and the Oracle BAM Active Data Cache may need to be restored from a backup (or reinitialized if no backups are available).

17.1.6 Database Must Be Started Before Oracle BAM

Oracle BAM applications are not functional if the database on which Oracle BAM depends is started few minutes later than Oracle BAM Server.

17.1.7 Do Not Restart Oracle BAM Using Oracle Enterprise Manager Fusion Middleware Control When Reports Are Open

If the Oracle BAM Web applications component is started and stopped from Oracle Enterprise Manager Fusion Middleware Control while a report is open either in Active Studio or Active Viewer, the user may find that creating a new report after this restart could cause a Null Pointer Exception such as:

```
NULLPOINTEREXCEPTION_REPORTSERVER_PIECHART_INITIALIZE
```

If this happens, the workaround is to restart the managed server in which Oracle BAM is running.

17.1.8 Login Prompt Appears in the Web Browser or in a Dialog Box

The login prompt will appear when a user session is expired.

If a login prompt appears in the Web browser or a dialog (for example, in one of the panes of Active Studio), and the space is not able to accommodate the prompt in the pop-up, close the window, log out if necessary, and log in again.

17.1.9 Number Formatting Does Not Follow Browser Locale Setting

Oracle BAM does not format numbers according to locale information set in the Web browser.

Currently Oracle BAM does the following:

- Format dates as per browser locale.
- Change the language as per browser locale.

17.1.10 Datetime and Timestamp Filters Honor Server Time Zone

Filters on datetime and timestamp data types use the Oracle BAM Server time zone for condition evaluations. Time zone personalization in user preferences has no effect on these evaluations. Also, the filters using the Active Now feature use Oracle BAM Server time zone for Now evaluations.

17.1.11 Data entered in Active Data Cache Using ICommand does not honor the Time Zone Offset

If the following is set, 11/26/2008T17:30:10.0000000+05:30, for a datetime or timestamp column of a data object, The Oracle BAM Active Data Cache should interpret it to be a value in IST, but the +05:30 offset is ignored and the ADC considers the value to be in the Oracle BAM Server time zone (which is PST). So, no matter what offset is used (+05:30 or any other country's offset), or what time zone notation (such as IST or PST), or GMT notation (11/26/2008T12:00:10Z), Oracle BAM Active Data Cache considers the datetime value string, ignores the time zone offset, and considers the datetime to be in PST. Thus, 11/26/2008T17:30:10.0000000 and 11/26/2008T12:00:10 are both are considered as PST values, where as they are exactly same values--one represented in IST and another one in GMT.

17.1.12 Portfolios Demo Shows Error After Running Script

The `1stage.sh` (`1stage.bat`) file for the Oracle BAM Portfolios demo is meant to clean up the data accumulated in the demo's data objects (such as, after a demo run), and reset it to the data originally contained in those data objects. Currently, running `1stage.sh` changes the IDs of the data in the data object, which results in the Too Many Values error in the KPI views, or one pie becoming too big in the right side pie chart.

Check the Oracle BAM page on Oracle Technology Network for the updated demo files:

<http://www.oracle.com/technology/products/integration/bam/index.html>

17.1.13 Batched Messages Lost on BPEL Server Restart

An Oracle BAM sensor action cannot be notified of BPEL events, and the messages sent to Oracle BAM from the BPEL server are only stored in memory; therefore, when the BPEL server restarts, all the messages still on the BPEL side are lost.

This behavior is by design, and there is no workaround.

17.1.14 Failover Causes Oracle BAM Web Applications Errors

In some cases failover could result in faulty Oracle BAM Web application sessions. For example, you may see Page Not Found errors in any of the Oracle BAM Web application frames or dialogs. If this is encountered, close all Oracle BAM Web application browser sessions, log out of the Oracle BAM start page, and close that browser, too. Restart your sessions.

17.1.15 Oracle BAM Scripts Require Modification on IBM AIX and SUN SOLARIS SPARC Platforms

Fixes to shell scripts in `$OH/bam/bin`:

The following files in `$ORACLE_HOME/bam/bin` require manual edits to enable them to work properly on the IBM AIX and SUN SOLARIS SPARC platforms. They do not need to be modified if you are not executing them on IBM AIX nor SUN SOLARIS SPARC. Modify them to read as follows:

Note: `bam_odi_configuration.sh`, `morpheus`, and `registerusers` require changes in the SunOS section.

Note: `bam_odi_configuration.sh`, `morpheus`, `registerusers`, and `icommand` require the addition of an AIX section.

Note: all other sections listed below are included for reference and no changes are required.

bam_odi_configuration.sh:

```
if [ `uname -s` = 'SunOS' ]; then
  JVM_ARGS="$JVM_ARGS -Xms512M"
  JVM_ARGS="$JVM_ARGS -Xmx1024M"
  #set perm gen for non JRockit
  if [ ! -d "$JAVA_HOME/jre/lib/sparcv9/jrockit" ]; then
    JVM_ARGS="$JVM_ARGS -XX:PermSize=256M"
    JVM_ARGS="$JVM_ARGS -XX:MaxPermSize=512M"
  fi
fi
```

```
JVM_ARGS="$JVM_ARGS -d64"
elif [ `uname -s` = 'HP-UX' ]; then
    JVM_ARGS="$JVM_ARGS -Xms512M"
    JVM_ARGS="$JVM_ARGS -Xmx1024M"
    JVM_ARGS="$JVM_ARGS -XX:PermSize=256M"
    JVM_ARGS="$JVM_ARGS -XX:MaxPermSize=512M"
    JVM_ARGS="$JVM_ARGS -d64"
elif [ `uname -s` = 'AIX' ]; then
    JVM_ARGS="$JVM_ARGS -Xms512M"
    JVM_ARGS="$JVM_ARGS -Xmx1024M"
    JVM_ARGS="$JVM_ARGS -XX:PermSize=256M"
    JVM_ARGS="$JVM_ARGS -XX:MaxPermSize=512M"
    JVM_ARGS="$JVM_ARGS
-Djavax.xml.datatype.DatatypeFactory=org.apache.xerces.jaxp.datatype.DatatypeFacto
ryImpl
-Djava.endorsed.dirs=$ORACLE_HOME/bam/modules/org.apache.xalan_2.7.1"
else
    JVM_ARGS="$JVM_ARGS -Xms128M"
    JVM_ARGS="$JVM_ARGS -Xmx512M"
fi
```

morpheus:

```
if [ `uname -s` = 'SunOS' ]; then
    JVM_ARGS="$JVM_ARGS -Xms512M"
    JVM_ARGS="$JVM_ARGS -Xmx1024M"
    #set perm gen for non JRockit
    if [ ! -d "$JAVA_HOME/jre/lib/sparcv9/jrockit" ]; then
        JVM_ARGS="$JVM_ARGS -XX:PermSize=256M"
        JVM_ARGS="$JVM_ARGS -XX:MaxPermSize=512M"
    fi
    JVM_ARGS="$JVM_ARGS -d64"
elif [ `uname -s` = 'HP-UX' ]; then
    JVM_ARGS="$JVM_ARGS -Xms512M"
    JVM_ARGS="$JVM_ARGS -Xmx1024M"
    JVM_ARGS="$JVM_ARGS -XX:PermSize=256M"
    JVM_ARGS="$JVM_ARGS -XX:MaxPermSize=512M"
    JVM_ARGS="$JVM_ARGS -d64"
elif [ `uname -s` = 'AIX' ]; then
    JVM_ARGS="$JVM_ARGS -Xms512M"
    JVM_ARGS="$JVM_ARGS -Xmx1024M"
    JVM_ARGS="$JVM_ARGS -XX:PermSize=256M"
    JVM_ARGS="$JVM_ARGS -XX:MaxPermSize=512M"
    JVM_ARGS="$JVM_ARGS
-Djavax.xml.datatype.DatatypeFactory=org.apache.xerces.jaxp.datatype.DatatypeFacto
ryImpl
-Djava.endorsed.dirs=$ORACLE_HOME/bam/modules/org.apache.xalan_2.7.1"
else
    JVM_ARGS="$JVM_ARGS -Xms128M"
    JVM_ARGS="$JVM_ARGS -Xmx512M"
fi
```

registerusers:

```
if [ `uname -s` = 'SunOS' ]; then
    JVM_ARGS="$JVM_ARGS -Xms512M"
    JVM_ARGS="$JVM_ARGS -Xmx1024M"
    #set perm gen for non JRockit
    if [ ! -d "$JAVA_HOME/jre/lib/sparcv9/jrockit" ]; then
```

```

        JVM_ARGS="$JVM_ARGS -XX:PermSize=256M"
        JVM_ARGS="$JVM_ARGS -XX:MaxPermSize=512M"
    fi
    JVM_ARGS="$JVM_ARGS -d64"
    JVM_ARGS="$JVM_ARGS -Dweblogic.security.TrustKeyStore=DemoTrust"
elif [ `uname -s` = 'HP-UX' ]; then
    JVM_ARGS="$JVM_ARGS -Xms512M"
    JVM_ARGS="$JVM_ARGS -Xmx1024M"
    JVM_ARGS="$JVM_ARGS -XX:PermSize=256M"
    JVM_ARGS="$JVM_ARGS -XX:MaxPermSize=512M"
    JVM_ARGS="$JVM_ARGS -d64"
    JVM_ARGS="$JVM_ARGS -Dweblogic.security.TrustKeyStore=DemoTrust"
elif [ `uname -s` = 'AIX' ]; then
    JVM_ARGS="$JVM_ARGS -Xms512M"
    JVM_ARGS="$JVM_ARGS -Xmx1024M"
    JVM_ARGS="$JVM_ARGS -XX:PermSize=256M"
    JVM_ARGS="$JVM_ARGS -XX:MaxPermSize=512M"
    JVM_ARGS="$JVM_ARGS"
-Djavax.xml.datatype.DatatypeFactory=org.apache.xerces.jaxp.datatype.DatatypeFacto
ryImpl
-Djava.endorsed.dirs=$ORACLE_HOME/bam/modules/org.apache.xalan_2.7.1"
    JVM_ARGS="$JVM_ARGS -Dweblogic.security.TrustKeyStore=DemoTrust"
else
    JVM_ARGS="$JVM_ARGS -Xms128M"
    JVM_ARGS="$JVM_ARGS -Xmx512M"
    JVM_ARGS="$JVM_ARGS -Dweblogic.security.TrustKeyStore=DemoTrust"
fi

```

icommand:

```

if [ `uname -s` = 'SunOS' ]; then
    JVM_ARGS="$JVM_ARGS -Xms512M"
    JVM_ARGS="$JVM_ARGS -Xmx1024M"
    #set perm gen for non JRockit
    if [ ! -d "$JAVA_HOME/jre/lib/sparcv9/jrockit" ]; then
        JVM_ARGS="$JVM_ARGS -XX:PermSize=256M"
        JVM_ARGS="$JVM_ARGS -XX:MaxPermSize=512M"
    fi
    JVM_ARGS="$JVM_ARGS -d64"
elif [ `uname -s` = 'HP-UX' ]; then
    JVM_ARGS="$JVM_ARGS -Xms512M"
    JVM_ARGS="$JVM_ARGS -Xmx1024M"
    JVM_ARGS="$JVM_ARGS -XX:PermSize=256M"
    JVM_ARGS="$JVM_ARGS -XX:MaxPermSize=512M"
    JVM_ARGS="$JVM_ARGS -d64"
elif [ `uname -s` = 'AIX' ]; then
    JVM_ARGS="$JVM_ARGS -Xms512M"
    JVM_ARGS="$JVM_ARGS -Xmx1024M"
    JVM_ARGS="$JVM_ARGS -XX:PermSize=256M"
    JVM_ARGS="$JVM_ARGS -XX:MaxPermSize=512M"
    JVM_ARGS="$JVM_ARGS"
-Djavax.xml.datatype.DatatypeFactory=org.apache.xerces.jaxp.datatype.DatatypeFacto
ryImpl
-Djava.endorsed.dirs=$ORACLE_HOME/bam/modules/org.apache.xalan_2.7.1"
else
    JVM_ARGS="$JVM_ARGS -Xms128M"
    JVM_ARGS="$JVM_ARGS -Xmx512M"
fi

```

17.1.16 Oracle Data Integrator IKM and LKM Operations For Oracle BAM Fail During RAC or Whole Server Migration Failover

When an interface involving Oracle BAM IKM and LKM modules is in execution when either the RAC database fails over or the Oracle BAM Server undergoes whole server migration, then, at the instant that the failover starts, the Oracle Data Integrator session reports an exception for that particular step, and the execution for the entire interface is halted.

The user will have to re-execute that interface. If commit size was set to zero (for any of the IKM SQL to Oracle BAM-based interfaces), the entire transaction is rolled back. In those cases where a different commit size was used, the user will have to take adequate steps to avoid data duplication in the target data store upon re-execution.

17.1.17 Limitations With Single EAR and Two Oracle BAM Targets in Oracle Enterprise Manager Fusion Middleware Control

Oracle BAM presents the following limitations because in this release Oracle BAM Web applications and Oracle BAM Server are only deployed in a single EAR, but are represented in Oracle Enterprise Manager Fusion Middleware Control using two separate targets:

- Along with two custom targets, Oracle BAM Server and Oracle BAM Web applications, The Oracle BAM application also appears as a generic J2EE application in the Application Deployments list in Oracle Enterprise Manager Fusion Middleware Control navigation tree, and in the Farm home page. It is recommended that the user only use custom Oracle BAM targets (OracleBAMServer and OracleBAMWeb), the internal application target (oracle-bam) should not be used.

Additional information about the generic oracle-bam J2EE application target: The generic J2EE application target (oracle-bam) despite being an internal application, still appears under parent Application Deployments and not in the sub-folder Internal Applications of Application Deployments. Moving oracle-bam generic J2EE application target to Internal Applications folder has been deferred.

- The Stop and Start commands in the Oracle BAM Server and Oracle BAM Web applications menus in Oracle Enterprise Manager Fusion Middleware Control pages does not stop or start the corresponding target only, it stops the entire Oracle BAM application (Oracle BAM Server and Oracle BAM Web applications).
- Viewing any J2EE metrics in the context of Oracle BAM Server or Oracle BAM Web applications actually presents the view for entire J2EE application. (From performance page and WebLogic Server page the user gets access to the J2EE application metric).
- WebLogic Server (Managed Server) home page shows three deployed applications for each Oracle BAM install (two custom targets and one generic J2EE application target). Corresponding to each target there are few J2EE application metrics shown. Because J2EE metrics correspond to each deployment, the metrics values get repeated for all of the Oracle BAM targets. The workaround is displaying metric values only against one target and the other two showing n/a.

17.1.18 Oracle Enterprise Manager Fusion Middleware Control MBean Browser Does Not Validate Values

The MBean browser in Oracle Enterprise Manager Fusion Middleware Control does not have any validation in place to check whether the entered value is correct or not.

17.1.19 Unable To Extend Tablespace

When you see the `Unable to extend tablespace` error message, you can do the following:

- Increase the tablespace size.
- If you cleared a large amount of data from a data object, and expect the tablespace to have more data, you might still see this error. The table space release is not synchronous, and you must run command `ALTER TABLE table_name SHRINK SPACE`.

17.1.20 Unable to Create or View Report With User With No Permissions on System Folder

A user assigned to a non-Administrator role may be unable to create or view reports, but has the privileges to do so, and gets the following error:

```
DATAOBJECTPERMISSIONMISSINGEXCEPTION_ACTIVESTUDIO_
REPORTEDITOR_EDITREPORT
```

Exception Message BAM-01257: Insufficient permission to perform the requested action.

This is due to the user not having at least Read permissions on the `/System` folder in Oracle BAM Architect.

17.1.21 Opening Report on Two Systems Causes Language Mix

The same user opening a report on two different computers with different language settings causes a language mix in the Oracle BAM user interface.

A single user should not log in simultaneously on different computers with two different language settings.

17.1.22 External Data Object on a Table Beginning With an Underscore Throws Exception

An external data object can be created on a table that begins with an underscore (`_`), but an exception occurs when checking the contents of the table in Oracle BAM Architect.

17.1.23 Oracle BAM Event Engine Cannot Call WS-Security-Enabled Web Services

As part of an Oracle BAM alert action, Oracle BAM Event Engine can call external Web services. However, for secure Web services, Oracle BAM Event Engine supports calling only HTTP Basic authentication protected Web services in this release. Configuring an alert action to call WS-Security enabled Web services is not supported.

17.1.24 Use Single Quotation Marks in ICommand Web Service Export Command

Using double quotation marks (`"`) around the `file` value in ICommand export does not work.

Use single quotation marks (`'`) instead of double quotation marks to specify the `file` value.

```
<?xml version="1.0" encoding="utf-8"?><IstanteCommands><export name='/Samples/Film
Sales' file='c:\do_with_data.xml' type="dataobject"/></IstanteCommands>
```

17.1.25 Alert Fires Multiple Times Using COUNTDISTINCT Aggregate

When operation COUNTDISTINCT-based aggregate is chosen in Group filters in data object and report based alerts, the user might see the alert firing multiple times, even if the alert criterion was satisfied only once in the data. This behavior is seen when bulk data object operations are performed. That is, if multiple rows are inserted, deleted, updated, or upserted in the data object at one time.

17.1.26 Select Higher Time Groupings in Crosstab Views

Grouping by Week in a Crosstab or Chart view could cause group values for Day of Month or Day of Week to be calculated incorrectly for weeks that include the end of one month and the beginning of another.

Include Day of Year in the grouping along with Day of Month or Day of Week.

17.1.27 Oracle Data Integrator Loading to External Data Object Not Raising Error

Loading to an external data object in Oracle BAM using Oracle Data Integrator (using IKM) is supposed to fail and raise error message because this scenario is not supported. However, instead of raising an error, the IKM SQL to Oracle BAM (insert) operation used to load data into an external data object in Oracle BAM reports success and displays the number of rows inserted, when no rows were actually inserted.

17.1.28 Invoking an Oracle Data Integrator Scenario With Date Input From Oracle BAM Alert Rule

When you must pass a date input through an Oracle BAM alert rule invocation to an Oracle Data Integrator scenario, it is recommended that you set up the Oracle Data Integrator scenario to use an alphanumeric datatype variable instead of date datatype. Using a date datatype variable may lead to a parse exception within the Oracle Data Integrator agent which results in a failure to invoke the scenario successfully.

When this alphanumeric datatype variable is used within the definition of the Oracle Data Integrator interface, use the TO_DATE function along with the format in which the date is expected. For example, with a project level variable named alphVariableName, the function usage would be:

```
TO_DATE('#alphVariableName', 'YYYY-MM-DD')
```

Within the Oracle BAM alert rule definition (for the **Run an ODI scenario** action), pass the date to be input in the same format.

17.1.29 Multi-Byte-Named Database Tables Cannot Be Used for External Data Objects

An Oracle BAM external data object can not be created based on an external database table with a multi-byte name.

17.1.30 Do Not Use Time Dimension For Drilling Down in a Collapsed List

Drilling down on a time or date dimension in a collapsed list view causes an exception. Use chart views only to drill down on time or date dimensions.

17.1.31 Alert Dependencies Must Be Maintained During Migration

When there is an alert (for example, Alert B) that is created as a dependent on another alert (Alert A), as in migration or upgrade, the alerts must be imported to the target system in order of dependency (Alert B must be imported before Alert A).

17.2 Documentation Errata

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

- [Section 17.2.1, "Additional Instructions for Oracle Data Integrator Integration Installation"](#)
- [Section 17.2.2, "Output Values for Oracle Data Integrator Knowledge Modules"](#)
- [Section 17.2.3, "Running Oracle Data Integrator Agent as a Daemon With Oracle BAM Embedded"](#)
- [Section 17.2.4, "Introduction to Using the Oracle Data Integrator With Oracle Business Activity Monitoring"](#)
- [Section 17.2.5, "JDBC Timeout Configuration Properties"](#)
- [Section 17.2.6, "Default Port Numbers Documented Incorrectly"](#)
- [Section 17.2.7, "Custom Port or Protocol For registerusers Utility"](#)
- [Section 17.2.8, "Parameter -adminpswd Is Not an Option For registerusers Utility"](#)
- [Section 17.2.9, "Active Rules Count in Oracle Enterprise Manager Fusion Middleware Control"](#)
- [Section 17.2.10, "Quotation Marks Not Valid in Any Oracle BAM Object Name"](#)
- [Section 17.2.11, "Correction to Drill-Across Target Configuration Step"](#)
- [Section 17.2.12, "Negative Offset Value Is Valid in Active Now Configuration"](#)
- [Section 17.2.13, "Columnar Report Limitations"](#)
- [Section 17.2.14, "ID is Required Field in Action Form Templates Data Object"](#)
- [Section 17.2.15, "ADCServerName Property Configured in BAMCommandConfig.xml File"](#)
- [Section 17.2.16, "Configuring the Number of Rows for External Data Objects"](#)
- [Section 17.2.17, "Oracle BAM jsessionid Persistent Cookie"](#)
- [Section 17.2.18, "Online Help Topics For Excel View Tabs Missing"](#)
- [Section 17.2.19, "Active Now Figure 5-10 and figure 5-11 Are Reversed"](#)
- [Section 17.2.20, "Time Unit Definitions for Datetime Filters"](#)
- [Section 17.2.21, "Additional Information About Prompt and Parameter Configuration"](#)
- [Section 17.2.22, "Report Viewer Application Role Permissions"](#)
- [Section 17.2.23, "Global Change Data Object Feature"](#)
- [Section 17.2.24, "Oracle BAM Adapter Batching Configuration File Location"](#)
- [Section 17.2.25, "Connection Pool Factory Changes Require Oracle BAM Server Restart"](#)
- [Section 17.2.26, "Payload Type for Oracle BAM Web Services is String"](#)

17.2.1 Additional Instructions for Oracle Data Integrator Integration Installation

Two items are added to the Oracle BAM-Oracle Data Integrator manual installation instructions:

1) The environment variable `JAVA_HOME` must be set to Java version 1.6.x in the environment in which an Oracle Data Integrator application will be invoked. This means that Java version 1.6.x must be installed on the machine. To set the environment variable:

On UNIX, follow the procedure for the shell script to create the environment variable `JAVA_HOME`. This can be done in a startup script (such as `.cshrc` in the user's home directory) or on the command line before invoking Oracle Data Integrator.

2) In the instructions where the user is instructed to modify the `odiparams` script the following must also be done:

ODI_ADDITIONAL_JAVA_OPTIONS Modification

```
ODI_ADDITIONAL_JAVA_OPTIONS="-Djava.util.logging.config.file=../lib/bam_
odi.logging.properties"
```

17.2.2 Output Values for Oracle Data Integrator Knowledge Modules

The note in *Oracle Fusion Middleware User's Guide for Oracle Business Activity Monitoring*, Table 34-3 Oracle BAM Knowledge Modules, currently states:

During execution, the number of upsert operations are reported in the No. of Updates field, because the Oracle Data Integrator Operator user interface does not have a No. of Upserts field.

The following information is appended to that note:

Further, the count for all of the inserts and updates to the Oracle BAM database are reported in the Updates field, and are not reported separately.

17.2.3 Running Oracle Data Integrator Agent as a Daemon With Oracle BAM Embedded

There are several ways to run Oracle Data Integrator scenarios in which Oracle BAM functionality has been embedded. The Oracle BAM documentation provides instructions on how to install Oracle BAM integration components for Oracle Data Integrator. These instructions suffice for running Oracle BAM in Oracle Data Integrator in every circumstance except if running the Oracle Data Integrator agent as a daemon. In this case, please follow these instructions:

1. On the Oracle BAM host, go to the `ORACLE_HOME\bam\ODI\tools\wrapper\conf` directory.
2. Copy the two files contained in that directory (`snpsagent.conf.bam` and `readme.txt`) to the machine on which the Oracle Data Integrator agent will be running as a daemon, in the `ODI_HOME\tools\wrapper\conf` directory.
3. Follow the instructions in the `readme.txt` file in that directory to configure the Oracle Data Integrator agent to run with Oracle BAM.

The `agent.sh` file (on UNIX) will pick up the same environment variables as do the other Oracle Data Integrator applications (such as Designer, Topology, Operator). This means that as long as the Oracle Data Integrator integration installation has been performed on the Oracle Data Integrator directory in which `agent.sh` will run, no additional steps are needed to run the Oracle Data Integrator agent as either a standalone application or as a daemon on UNIX platforms.

17.2.4 Introduction to Using the Oracle Data Integrator With Oracle Business Activity Monitoring

The following statement in Section 34.1 "Introduction to Using the Oracle Data Integrator With Oracle Business Activity Monitoring," has been updated:

Oracle Data Integrator cannot insert data into Oracle BAM read-only fields of type Lookup, Calculated, Auto-incrementing integer, and Timestamp. These fields are automatically populated.

The statement includes the following in addition to the current text:

Although Oracle Data Integrator allows you to select these fields as target fields, running Oracle Data Integrator with these fields populated will throw an exception.

17.2.5 JDBC Timeout Configuration Properties

If you have any long running database operations that exceed the defaults, and encounter JDBC timeouts indicated by the exception `ORA-01013 user requested cancel of current operation`, you can increase the values in the following configuration properties accordingly:

```
<ActiveDataCache_Update_Command_Timeout>
```

```
<ActiveDataCache_Query_Command_Timeout>
```

These properties specify the timeout, in seconds, for JDBC Update and Query commands, respectively.

Both of these properties have default values of sixty seconds to protect the Oracle BAM Active Data Cache from deadlock situations. It is recommended that the properties are increased only as much as necessary to prevent deadlock.

17.2.6 Default Port Numbers Documented Incorrectly

The correct default port numbers are

```
ADCServerPort: 9001
```

```
ApplicationURL: 9001
```

```
registerusers utility: 9001
```

17.2.7 Custom Port or Protocol For registerusers Utility

If a non-default port or protocol (like for SSL) is used, then the user must change these settings in the `SOA_ORACLE_HOME/bam/config/UserRegisterConfig.xml` file:

```
<ADCServerPort>9001</ADCServerPort>
```

```
<Communication_Protocol>t3</Communication_Protocol>
```

17.2.8 Parameter -adminpswd Is Not an Option For registerusers Utility

The Oracle BAM `registerusers` utility, used to register users in Oracle BAM, currently has the `-adminpswd` parameter in which users can enter a password in clear text.

This parameter is no longer be an option for users.

17.2.9 Active Rules Count in Oracle Enterprise Manager Fusion Middleware Control

The documentation in *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite*, Section 22.2.2 "Monitoring the Event Engine Component," information about Active Rules currently states:

Active Rules displays the number of alert rules that are active (not expired or invalid) in Oracle BAM Event Engine. Active Rules displays the total number of alert rules in Oracle BAM Event Engine, which is the sum of alerts created for all of the Oracle BAM users.

The following information is appended to that statement:

Alerts based on reports that have multiple views will result in creation of multiple alert rules, so the number of Active Rules may be different from the overall number of alerts that are active for all users.

17.2.10 Quotation Marks Not Valid in Any Oracle BAM Object Name

A single or double quotation mark in an Oracle BAM object name, such as a data object, report, or enterprise message source name, will cause a runtime error.

Do not include single or double quotation marks in an Oracle BAM object name.

17.2.11 Correction to Drill-Across Target Configuration Step

In the section "To configure a drill-across target:" step 8, line 3: "the field value represented in that bar" should be "the *group* value represented by that bar."

17.2.12 Negative Offset Value Is Valid in Active Now Configuration

When using **Now Mode** in prompts and parameters, the user can enter negative values for the **Offset** to select an interval in past. In filters, the user can select options **from now** and **ago**, which also support a negative value for offset.

17.2.13 Columnar Report Limitations

Columnar reports and views support active data updates only, and only under the following conditions: the updates do not change the grouping of a record, and the report does not span multiple pages or frames.

17.2.14 ID is Required Field in Action Form Templates Data Object

In Oracle Fusion Middleware User's Guide for Oracle Business Activity Monitoring, Chapter 4, "Creating and Using Views," the following statement is incorrect:

"8. It is not necessary to specify the **ID**; the system creates it."

The following statement is correct:

"8. Specify the **ID**; the system requires it."

17.2.15 ADCServerName Property Configured in BAMCommandConfig.xml File

The `ADCServerName` property is configured in the `BAMCommandConfig.xml` file as well as in the `BAMServerConfig.xml` file.

See "Configuring Server Name" in *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite* for information about how to set the property.

17.2.16 Configuring the Number of Rows for External Data Objects

The maximum number of rows to fetch from external data sources is controlled by `Import_MaxSize` property which is defaulted to -1 (negative one). The property gets a value of 64000 from `ADCMaxViewsetRowCount` when `Import_MaxSize` property is set to -1, so the net default is 64000.

If you need to increase the number of rows to be fetched, you can do so in the `BAMServerConfig.xml` file. Increasing this value beyond 64000 can have performance implications, so it should only be increased as much as necessary.

Normally, this increase may not be required. It may be required only in the cases where you must run a report that has an aggregate column on the external data object that has more than 64000 rows (for example, sum, count, average).

17.2.17 Oracle BAM jsessionid Persistent Cookie

The Oracle BAM `jsessionid` cookie is persisted on disk on the client side. The lifetime of the cookie is one week.

The cookie is maintained on client side and is used for:

1) Authentication mechanism. The first time a user logs in, the browser keeps the login credentials. If another browser window is opened, the user does not have to log in again. As long as the browser window is open it will update the cookie every 10 seconds. When it becomes stale the user is redirected to the login page.

2) Maintaining sticky sessions. When using a pool of Oracle BAM servers, the load balancer uses the cookie to maintain sticky sessions, so that all requests go to the same Oracle BAM Server. This is required because an open report is registered for receiving active data from a particular Oracle BAM Server.

A side effect of the cookie is that it bypasses authentication, which becomes more pronounced with single-sign-on. The cookie is persisted to disk because multiple browser windows may be contained in separate processes.

If there is a security concern, contact Oracle Support Services.

17.2.18 Online Help Topics For Excel View Tabs Missing

The help topics for Oracle BAM Excel view Macro and Data Transfer properties are not available in the translated versions of Oracle BAM online help.

The English version includes the appropriate topics, and these features are documented in the *Oracle Fusion Middleware User's Guide for Oracle Business Activity Monitoring*.

17.2.19 Active Now Figure 5-10 and figure 5-11 Are Reversed

Figures 5-10 and 5-11 are reversed in *Oracle Fusion Middleware User's Guide for Oracle Business Activity Monitoring*.

17.2.20 Time Unit Definitions for Datetime Filters

In *Oracle Fusion Middleware User's Guide for Oracle Business Activity Monitoring*, Chapter 5 "Manipulating Data in Views," on page 5-3, the following information is added to define time units for filter expressions on datetime fields:

Week is based on a Sunday through Saturday week, Quarter is based on the typical fiscal year January through December with Q1 starting January 1, and year is based on a January through December year.

17.2.21 Additional Information About Prompt and Parameter Configuration

Field Type Prompts and Parameters

In *Oracle Fusion Middleware User's Guide for Oracle Business Activity Monitoring*, Chapter 8 "Using Prompts and Parameters," the following information is added for further information about developing parameters using the Field type.

Field is a type that allows you to select data object fields as the values passed to the parameter, rather than values within a field. For example, choosing this type allows the user to change the field by which data is grouped in a chart while viewing a report.

While configuring the input definition for a parameter of type Field, you will choose only fields from the data object, and not values from a field.

The ALL, NULL, or BLANK values are not presented when creating parameters of prompts of type Field.

User can leave value unselected is not presented as an option when using the Field type.

When Field is chosen, and you select a field of type datetime, you are also presented with the option to create a time group. To add a time group, click Add. For more information about time groups see "Configuring Time Groups" in *Oracle Fusion Middleware User's Guide for Oracle Business Activity Monitoring* Chapter 4 "Creating and Using Views."

Datetime Type Prompts and Parameters

When a parameter type of datetime is chosen you can also configure a time window (that is, you can filter the data by time) within which data is to be displayed by configuring the Now Mode. See "Using Active Now" in *Oracle Fusion Middleware User's Guide for Oracle Business Activity Monitoring* Chapter 5 "Manipulating Data in Views" for more information.

17.2.22 Report Viewer Application Role Permissions

In *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite* Section 23.3.4 "Understanding Oracle BAM Application Roles," Report Viewer Permissions currently reads:

ActiveViewer: Has full access to Oracle BAM Active **Studio** application functionality

The corrected text reads:

ActiveViewer: Has full access to Oracle BAM Active **Viewer** application functionality

17.2.23 Global Change Data Object Feature

The following information is added to *Oracle Fusion Middleware User's Guide for Oracle Business Activity Monitoring* Chapter 3 "Creating and Managing Reports."

Changing the Data Object

You can edit a report and change the data object you selected for a specific view, or any occurrence of a data object used throughout the entire report. The data object you select must contain at least the same fields as the originally selected data object. The

data object you choose might contain additional fields. The data objects that do not apply are disabled.

You can change the dataobject for a specific view by using the View Editor **Data Objects** tab, or you can replace a data object for entire report by using **Global Change Data Object** action.

To change all occurrences of a data object in a report:

1. While the report is open for editing, click **Global Change Data Object** in the **Actions** list.
2. In the Global Change Data Object dialog box, click **Browse** to select the currently used data object (the data object you want to replace).
3. Click **Browse** by the second field to select the replacement data object, and click **OK**.

17.2.24 Oracle BAM Adapter Batching Configuration File Location

In section 21.8 of the *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite*, the following location is given for the configuration file in which to edit Oracle BAM adapter batching properties:

```
BAM_DOMAIN_HOME/servers/BAMManagedServer/tmp/_WL_
user/oracle-bam-11.1.1/tmpdir/APP-INF/classes/config/
```

The Oracle BAM adapter batching properties must be edited in the `BAMCommonConfig.xml` file that is a part of `oracle-bam-adapter.rar` file, not the configuration file on Oracle BAM Server as indicated in the documentation.

To edit the `BAMCommonConfig.xml` file:

1. Extract it from the Oracle BAM adapter RAR which is located in the `oracle_home/soa/connectors` directory.
2. Edit the batching properties.
3. Repackage and redeploy the Oracle BAM adapter.

17.2.25 Connection Pool Factory Changes Require Oracle BAM Server Restart

In section 21.7.1 "Configuring Oracle BAM Connection Factories," in *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite*, the following note is added:

Note: If you change any property in an existing connection factory for the Oracle BAM adapter, you must restart both Oracle WebLogic Server and Oracle BAM Server for the changes to take effect.

17.2.26 Payload Type for Oracle BAM Web Services is String

Occurrences of `xmlPayload(xsd:any)` are replaced with `xmlPayload(xsd:string)` for all Oracle BAM Web Services.

Oracle Business Rules

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

- [Section 18.1, "General Issues and Workarounds"](#)
- [Section 18.2, "Configuration Issues and Workarounds"](#)

18.1 General Issues and Workarounds

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

- [Section 18.1.1, "The MigrateRuleRepository Command Can Return an Incorrect Error Message"](#)
- [Section 18.1.2, "Migration of Common Java Classes with Aliases Applied"](#)
- [Section 18.1.3, "Alias and Visibility Settings Not Always Applied to Migrated Dictionary"](#)
- [Section 18.1.4, "Manual Updates Required for Release 10.1.3.x Migrated Dictionaries"](#)
- [Section 18.1.5, "Migrator Does not Migrate Certain Java Fact Type Properties"](#)
- [Section 18.1.6, "Migrator Throws a RUL-05003 Warning in Some Cases"](#)
- [Section 18.1.7, "Runtime Changes to Dictionary May Cause Error with Decision Point"](#)
- [Section 18.1.8, "Decision Table Find Gaps with Overlap Does Not Produce Correct Rules"](#)

18.1.1 The MigrateRuleRepository Command Can Return an Incorrect Error Message

If the `MigrateRuleRepository` utility is used with an existing migrated dictionary structure in the destination path, the following error is returned:

```
oracle.rules.tools.migrator.MigrationException: failed to connect to destination repository
C:\migration\FooRepository-migrated\Foo\INITIAL
```

This error should report a message indicating that a migrated dictionary structure already exists in the destination location.

Workaround:

The workaround is to delete the migrated dictionary structure in the destination path, and run the `MigrateRuleRepository` utility again.

18.1.2 Migration of Common Java Classes with Aliases Applied

In Oracle Fusion Middleware 11g Release 1 (11.1.1), there is the concept of the "built-in" dictionary which is linked to by all other dictionaries. The built-in dictionary includes fact types for several common Java classes, including: `Object`, `String`, `BigInteger`, `BigDecimal`, `Calendar`, `XMLGregorianCalendar`, `List`, and `JAXBElement`.

There is a limitation when you are migrating a Release 10.1.3.x dictionary to Oracle Fusion Middleware 11g Release 1 (11.1.1). In Oracle Business Rules Release 10.1.3.x, all classes had to be imported into each dictionary, including `Object` which was imported by default. Thus, a user could import the common Java class fact types and change the aliases for properties, methods, and fields. In Oracle Fusion Middleware 11g Release 1 (11.1.1), for such classes users cannot specify custom aliases and these fact types are not migrated from a Release 10.1.3.x dictionary that is being migrated to Oracle Fusion Middleware 11g Release 1 (11.1.1). Thus, if an alias is applied for a common Java class that is part of the built-in dictionary, in Oracle Fusion Middleware 11g Release 1 (11.1.1) these aliases are discarded and the aliases are not available to use in rules.

Workaround:

There is no workaround for this issue.

18.1.3 Alias and Visibility Settings Not Always Applied to Migrated Dictionary

During dictionary migration from Oracle Business Rules Release 10.1.3.x, Java classes are imported into the new Oracle Fusion Middleware 11g Release 1 (11.1.1) dictionary and then aliases and visibility settings are applied. A bug in the migration prevents the identification of some methods so that alias and visibility settings can be applied.

Workaround:

In such cases, the alias and visibility settings that applied for the Oracle Business Rules Release 10.1.3.x dictionary must be manually applied to the destination Oracle Fusion Middleware 11g Release 1 (11.1.1) dictionary.

18.1.4 Manual Updates Required for Release 10.1.3.x Migrated Dictionaries

Restricted Simple Types

Oracle Business Rules Release 10.1.3.x uses JAXB 1.0. In JAXB 1.0 restricted simple types do not have any special support in the generated Java classes, and are mapped to a property with the same type as the simple type. Oracle Business Rules for Oracle Fusion Middleware 11g Release 1 (11.1.1) uses JAXB 2.0. In JAXB 2.0, restricted simple types of string type are transformed into Java enum values. Because of this difference, after migrating a Release 10.1.3.x dictionary, places in the dictionary that previously used raw strings to represent the restricted values must be manually updated to use the Java enum values.

`xsd:dateTime` in Migrated Dictionaries

Oracle Business Rules Release 10.1.3.x uses JAXB 1.0. In JAXB 1.0, `xsd:dateTime` types are mapped to `java.util.Calendar`. Oracle Business Rules for Oracle Fusion Middleware 11g Release 1 (11.1.1) uses JAXB 2.0. In JAXB 2.0, `xsd:dateTime` types

are mapped to `XMLGregorianCalendar`, which more accurately contains the values of an `xsd:dateTime` element. Thus, in a dictionary migrated from Release 10.1.3.x, comparisons between properties may no longer function correctly because `Calendar` implements a method `compareTo` and `XMLGregorianCalendar` implements a method `compare`. Manual changes are required in the dictionary to change the comparisons. Alternatively, in Oracle Fusion Middleware 11g Release 1 (11.1.1) you can use a `Duration` to compare most common date and time formats. Making this change in a migrated dictionary requires manual changes to the data model and to the rules that use the imported fact types.

Invalid Expressions in Migrated Dictionary

Oracle Business Rules for Oracle Fusion Middleware 11g Release 1 (11.1.1) supports rich type-checking that invalidates some expressions migrated from Release 10.1.3.x. For example, if an instance of `Integer` is referenced to call the `intValue()` method, this may produce a validation warning if `Integer` has not been imported into the data model. The solution to this issue is to import `Integer` into the data model.

Index-based or Iterator-based Iteration in Collections with RL Functions

In Release 10.1.3.x, it was necessary in functions and RL actions to use index-based or iterator-based iteration over collections with raw RL. In Oracle Fusion Middleware 11g Release 1 (11.1.1), the pre-defined action type "for" implements the for-each iteration loop construct and can replace most uses of these older iteration constructs.

Calling Functions to Return New Variable Instances

In Release 10.1.3.x, it was not possible to invoke a constructor in the initialization expression for a variable. In Oracle Fusion Middleware 11g Release 1 (11.1.1) variables are called globals. Due to this Release 10.1.3.x limitation, in some Release 10.1.3.x dictionaries, there are function calls to initialize expressions and to invoke the constructor and return the new instance. In Oracle Fusion Middleware 11g Release 1 (11.1.1), you can use the `new` operator in initialization expressions.

18.1.5 Migrator Does not Migrate Certain Java Fact Type Properties

In Release 10.1.3.x, a property was created for a fact type if the fact type had either a setter or getter. In Oracle Fusion Middleware 11g Release 1 (11.1.1), a property is created only if there is both a setter and a getter for the property.

18.1.6 Migrator Throws a RUL-05003 Warning in Some Cases

In Oracle Fusion Middleware 11g Release 1 (11.1.1), there is a requirement that Java and XML fact types in a dictionary have a single-inheritance chain as determined by visible fact types. This limitation prevents multiple-inheritance chains, including interfaces, from causing runtime exceptions in the engine. The user must specify a single-inheritance chain by marking classes which should not be considered in an inheritance chain as non-visible. When a multiple-inheritance chain is detected during validation, the follow warning is returned:

RUL-05003: The visible fact type "Foo" should only inherit from one visible fact type, but inherits from visible fact types "Bar" and "Baz".

In this case, marking either Bar or Baz as non-visible will fix this warning.

18.1.7 Runtime Changes to Dictionary May Cause Error with Decision Point

Saving any dictionary in a repository causes all decision points using that repository to refresh their rule session pools, even if the dictionary which they use did not change. This degrades performance, but will not cause errors in general.

Performing an action which causes a "delete" notification to occur will cause the decision point to attempt to refresh its rule session pool. An example of this is `RuleRepository.saveAs`, which first deletes the dictionary with the target name and then saves the new dictionary with that name. This results in a race condition if the decision point attempts to load the dictionary after it has been deleted but before the new one has been saved.

18.1.8 Decision Table Find Gaps with Overlap Does Not Produce Correct Rules

In a decision table where sibling cell values overlap in any condition row except for the last, the rules recommended by the "gap analysis" feature may be incorrect. A sibling cell is a cell in the same row and with the same parent cell or no parent cell. An example of overlap is one cell with "true" and a sibling with "-".

18.2 Configuration Issues and Workarounds

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

- [Section 18.2.1, "Too Many Open Files Message When Deploying a Business Rules Project"](#)

18.2.1 Too Many Open Files Message When Deploying a Business Rules Project

If you see the error "Too Many Open Files" while deploying an Oracle Business Rules Decision Component, you might need to increase the file descriptor limit.

The "Too many open files" issue is due to JDK6 bugs. These bugs could occur at runtime or at compile time, depending on the number of JAR files used and a few other variations around the use of file descriptors by the JDK/JRE.

Workaround for this issue is to increase the limit of file descriptors. Per-process, per-user file descriptor limit can be preconfigured by default to the value 1024. If you increase this limit to 4096 or larger, the new value should resolve this issue.

These are the potentially relevant JDK6 bugs,

http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6533291

http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6485027

http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6400872

http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6456960

http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6206485

http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6446657

And a blog entry describes this issue at

<http://coldfused.blogspot.com/2007/02/mystery-of-too-many-open-files.html>

The command to increase per-process, per-user file descriptor differs across Operating Systems and shells. It is typically done with `ulimit` on UNIX platforms so consult the man pages for `ulimit` for your Operating System and shell.

For example:

```
$ ulimit -n 4096
```


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

- [Section 19.1, "General Issues and Workarounds"](#)
- [Section 19.2, "Configuration Issues and Workarounds"](#)
- [Section 19.3, "Documentation Errata"](#)

19.1 General Issues and Workarounds

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

- [Section 19.1.1, "Multi-lingual Support Depends on Database Character Set"](#)
- [Section 19.1.2, "SOAP Web Service With Attachments is Not Supported"](#)
- [Section 19.1.3, "Oracle Mediator - BPEL Process Manager Callback Processing"](#)
- [Section 19.1.4, "Raw XML Cannot Be Viewed for Non-English Characters"](#)

19.1.1 Multi-lingual Support Depends on Database Character Set

If you want to use multi-language support feature for some functions in Oracle Mediator, then, to avoid any unexpected results, you must ensure that these characters are supported by Database character set. For example, for Unit Test function, if the initial message payload in Unit Test includes characters that are not supported by Database character set, then you will see that the characters fail to display correctly in Unit Test part of the Oracle Enterprise Manager Fusion Middleware Control Console. This issue does not occur for a Database that supports Unicode characters.

19.1.2 SOAP Web Service With Attachments is Not Supported

In Oracle Mediator, when you call a SOAP Web Service with attachments you will not be able to perform a payload manipulation using the Assign or Transform functions. It fails with an exception because SOAP with attachments is not supported in Oracle Mediator if you use the Assign or Transform functions.

Workaround

When calling a SOAP Web Service with attachments, use Oracle Service Bus instead of Oracle Mediator.

19.1.3 Oracle Mediator - BPEL Process Manager Callback Processing

If Oracle Mediator calls a BPEL Process with callback processing and timeout, it is a best practice to explicitly handle the Callback exceptions returned from Oracle Mediator, in BPEL process. This is to ensure that the global transaction associated with Callback processing gets committed and is not rolled back. This way, the timeout handler configured in Oracle Mediator will not kick in even if the Callback handling in Oracle Mediator fails.

19.1.4 Raw XML Cannot Be Viewed for Non-English Characters

If there are non-ASCII characters in the XML code, then you will get a popup with the following error message, when you click the **View Raw XML** link on the Mediator Audit Trail tab in Oracle Enterprise Manager Fusion Middleware Control Console:

XML Parsing Error: not well-formed

Typically, this error appears when the XML code contains non-English characters.

Workaround

Right-click the popup and chose the browser option for viewing the source of the web page to view the actual XML content.

19.2 Configuration Issues and Workarounds

There are no configuration issues for Oracle Mediator.

19.3 Documentation Errata

There are no documentation errata for Oracle Mediator.

Oracle SOA Suite Common Functionality

This chapter describes runtime and common functionality issues associated with Oracle SOA Suite. It includes the following topics:

- [Section 20.1, "General Issues and Workarounds"](#)
- [Section 20.2, "Configuration Issues and Workarounds"](#)
- [Section 20.3, "Documentation Errata"](#)

20.1 General Issues and Workarounds

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

- [Section 20.1.1, "Cannot Attach Policies to Adapters in Oracle Enterprise Manager Fusion Middleware Control Console"](#)
- [Section 20.1.2, "BPEL Process and Oracle Mediator Partner Links Must Be Explicitly Wired in SOA Composite Editor"](#)
- [Section 20.1.3, "Storing Application Artifacts in a Source Control System and Deploying Them with the ant Utility"](#)
- [Section 20.1.4, "Schema Does Not Expand to Match the XML Schema Expansion Depth Set in XSL Preferences"](#)
- [Section 20.1.5, "Best Practice for Starting and Stopping a Managed Server"](#)
- [Section 20.1.6, "Composite-to-Composite Calls Fail If Audit Level of Second Composite is Set to Off"](#)
- [Section 20.1.7, "Persisting BPEL Instance Faults into the Database"](#)
- [Section 20.1.8, "Understanding Issues with BPEL Process Global Transactions and Adapter Local Transactions"](#)
- [Section 20.1.9, "Descriptions for Data Source JNDI Fields are Interchanged"](#)
- [Section 20.1.10, "Limitations on Viewing XML Data on the Audit Trail Page with Internet Explorer 7"](#)
- [Section 20.1.11, "Display of XML Content Getting Cut Off with Mozilla Firefox"](#)
- [Section 20.1.12, "Duplicate XML Declarations in XML Source Results in Audit Trail Errors with Mozilla Firefox"](#)
- [Section 20.1.13, "Granting the Same Role to the Same User Twice Produces an Inaccurate Message with WLST"](#)
- [Section 20.1.14, "Receiving an Empty Namespace Tag in an Output Message"](#)

- [Section 20.1.15, "Nonrecoverable BPEL Process Fault Displays as Successfully Recovered"](#)
- [Section 20.1.16, "Recovered Instances Can Continue to Display as Faulted"](#)
- [Section 20.1.17, "BPEL Process Messages May Remain Visible in the Recovery Page During Recovery"](#)
- [Section 20.1.18, "Exception Message to Ignore After a Faulted Instance is Terminated"](#)
- [Section 20.1.19, "Attributes are not Passed in the <body> Tag of a SOAP Payload"](#)
- [Section 20.1.20, "Intermittent Deployment Failures with Composites that Include Human Workflow Service Components"](#)
- [Section 20.1.21, "Using UTF-8 Native Encoding for Composite Test Case Message Files"](#)
- [Section 20.1.22, "Non-ASCII Business Event Definition Names Do Not Conform to XML Standards"](#)
- [Section 20.1.23, "Server URL Logic when HTTP and HTTPS are Enabled"](#)
- [Section 20.1.24, "Fault Policy Retry Action May Not Execute with Multiple Faults in the Same Flow"](#)
- [Section 20.1.25, "Faulted Oracle B2B Instances Caused by a Policy Violation Cannot Be Aborted"](#)
- [Section 20.1.26, "Inbound Composite Application Does Not Invoke After Restarting the SOA Infrastructure"](#)
- [Section 20.1.27, "Mediator Instances Can Display as Running After Transaction Completion"](#)
- [Section 20.1.28, "Specifying SSO Credentials with the Deploy SOA Composite, Undeploy SOA Composite, and Redeploy SOA Composite Wizards"](#)
- [Section 20.1.29, "Manually Map Elements with Nillable Attributes in the XSLT Mapper"](#)
- [Section 20.1.30, "Restarting the SOA Infrastructure Does Not Activate Endpoints When a Retired Composite is Activated"](#)
- [Section 20.1.31, "Mismatch Between the Number of SOA Composite Application Instances and Service Component Instances"](#)
- [Section 20.1.32, "Null Pointer Exception Occurs When a Faulted Instance State Changes to Human Intervention for Some Audit Tracking Settings"](#)
- [Section 20.1.33, "Handling Business and Remote Faults in the Calling BPEL Processes"](#)
- [Section 20.1.34, "Recovery of Multiple BPEL Faults Does Not Work on All Selected Faults"](#)

20.1.1 Cannot Attach Policies to Adapters in Oracle Enterprise Manager Fusion Middleware Control Console

You cannot attach security policies to adapters included in a SOA composite application in Oracle Enterprise Manager Fusion Middleware Control Console. This is the expected behavior. For example, perform the following steps:

1. From the **SOA Infrastructure** menu, select a SOA composite application that uses a technology adapter (for example, a file adapter).
2. In the **Service and References** section, select the adapter.
3. Select the **Policies** tab.

Note that the following message is displayed.

```
policies can be attached to web service bindings and soa components
```

20.1.2 BPEL Process and Oracle Mediator Partner Links Must Be Explicitly Wired in SOA Composite Editor

If you add an Oracle mediator or BPEL process partner link to your BPEL process in Oracle BPEL Designer and connect either partner link to your BPEL process through an invoke activity, the wiring is not automatically reflected above in the SOA Composite Editor. You must explicitly wire the Oracle mediator or BPEL process service component to your BPEL process again in the SOA Composite Editor.

As a best practice, always create and wire Oracle mediator and BPEL process service components in the SOA Composite Editor, instead of in Oracle BPEL Designer.

Note that this is not an issue with human task or business rule partner links in Oracle BPEL Designer; both are also automatically wired in the SOA Composite Editor.

20.1.3 Storing Application Artifacts in a Source Control System and Deploying Them with the ant Utility

If you store application artifacts in a source control system that you later want to reuse for deployment with ant, the following changes are required if the application has metadata service (MDS)-based references.

Assume the original Oracle JDeveloper application has file-based MDS references such as the following:

```
<metadata-store-usage id="mstore-usage_1">
  <metadata-store
class-name="oracle.mds.persistence.stores.file.FileMetadataStore">
    <property value="{oracle.home}/integration"
      name="metadata-path"/>
    <property value="seed" name="partition-name"/>
  </metadata-store>
```

Modify this code to use database-based MDS references in the *Application_Directory/.adf/META-INF/adf-config.xml* file, as shown below:

```
<metadata-store-usage id="mstore-usage_1">
  <metadata-store
class-name="oracle.mds.persistence.stores.db.DBMetadataStore">
    <property name="jdbc-userid" value="{mdsuser}"/>
    <property name="jdbc-password" value="{mdspassword}"/>
    <property name="jdbc-url"
value="jdbc:oracle:thin:@{db.host.name}:{db.host.port}:{db.sid}"/>
    <property name="partition-name" value="soa-infra"/>
  </metadata-store>
```

Check the modified application with these *adf-config.xml* entries into a source control system. The following concrete example of a modified *adf-config.xml* file is provided.

```
<metadata-store-usage id="mstore-usage_1">
  <metadata-store
class-name="oracle.mds.persistence.stores.db.DBMetadataStore">
    <property name="jdbc-userid" value="soainfra_mds"/>
    <property name="jdbc-password" value="soainfra_mds"/>
    <property name="jdbc-url"
value="jdbc:oracle:thin:@myhost56.us.oracle.com:15739:db2825"/>
    <property name="partition-name" value="soa-infra"/>
  </metadata-store>
```

You can use a variable for the user ID and password and replace the values prior to ant deployment in the application.

If the MDS database has a JNDI name, then use the following entries in adf-config.xml:

```
<metadata-store
class-name="oracle.mds.persistence.stores.db.DBMetadataStore">
  <property name="jndi-datasource" value="{db.jndi.name}"/>
  <property name="partition-name" value="soa-infra"/>
</metadata-store>
```

20.1.4 Schema Does Not Expand to Match the XML Schema Expansion Depth Set in XSL Preferences

If you select **Tools > Preferences > XSL Maps**, note that the expansion depth level is set to 6 by default. However, when automapping a nonrecursive schema, the expansion depth level is actually $6 - 2 = 4$.

Even if you consider the tree to include the source as a root element, the depth level is $-1 (6 - 1 = 5)$.

20.1.5 Best Practice for Starting and Stopping a Managed Server

As a best practice, it is always recommended that you start and stop a managed server through one, but not both, of the following methods. Do *not* mix these methods, such as starting the managed server from the command line and stopping it from Oracle Enterprise Manager Fusion Middleware Control Console, or vice versa.

- **Oracle Enterprise Manager Fusion Middleware Control Console**
With this method, the node manager must be up and running. The node manager tracks all managed server startups and shutdowns performed from Oracle Enterprise Manager Fusion Middleware Control Console. With this method, the server state is not an issue.
- **Command line**
With this method, the node manager does not track the server state. Therefore, if you start the server from the command line and shut it down from Oracle Enterprise Manager Fusion Middleware Control Console, the Oracle WebLogic Administration Server accesses the node manager to determine its status, which returns a state of Unknown.

Perform the following steps to stop and start the server from Oracle Enterprise Manager Fusion Middleware Control Console.

1. Expand the WebLogic domain.
2. Select the managed server (for example, named soa_server1).
3. Select **Control > Shut Down**.

4. Select **Control > Start Up**.

For information on starting and stopping managed servers from the command line, see *Oracle Fusion Middleware Installation Guide for Oracle SOA Suite*.

20.1.6 Composite-to-Composite Calls Fail If Audit Level of Second Composite is Set to Off

You can receive a `sql.BatchUpdateException` error and an instance failure under the following scenario:

- SOA composite application A calls SOA composite application B.
- Both composites are in the *same* SOA Infrastructure.
- The audit level for composite B is set to **Off**.

As a workaround, set the audit level for composite B to another value in Oracle Enterprise Manager Fusion Middleware Control Console, such as **Production**, **Development**, **Inherit**, or **Minimal**.

20.1.7 Persisting BPEL Instance Faults into the Database

You must explicitly add fault handling functionality into your BPEL process service component to catch Oracle Web Service Manager (OWSM) faults, system faults, schema validation faults, JTA faults, and so on, and commit them and the associated BPEL instance to the database. For example:

```
<faultHandlers>
  <catch faultName="bpelx:owsmPolicyFault">
    <invoke name="ReplyOnFault" inputVariable="output" partnerLink="client"
           portType="tns:FlowCallback" operation="onResult"/>
  </catch>
</faultHandlers>
```

Not adding this functionality results in these faults *not* being handled. This results in the entire transaction being rolled back, and these faults *not* being persisted into the database. Subsequent queries do not show these faults.

20.1.8 Understanding Issues with BPEL Process Global Transactions and Adapter Local Transactions

BPEL processes run in global transactions, while other Oracle SOA Suite components, such as adapters, run in local transactions. This can cause inconsistencies with the information displayed in Oracle Enterprise Manager Fusion Middleware Control Console.

For example, assume you have a main synchronous BPEL process that invokes an asynchronous BPEL process. There is one database adapter insert in the main synchronous BPEL process before the invocation of the asynchronous BPEL process. There is a second database adapter insert in the asynchronous BPEL process, at which point a fault is expected to be thrown.

The expected behavior is as follows:

- An initial insert into the database is performed from the main process that completes successfully as expected.
- The second insert also executes in the asynchronous process, but after encountering the fault, the BPEL process rolls back the initial insert.

However, in Oracle Enterprise Manager Fusion Middleware Control Console, the second database insert also shows as having completed successfully, instead of the having faulted.

This is because the database adapter invocation is logged (instance tracked) in a local transaction that is not part of the global BPEL JTA transaction. Therefore, the database adapter invocation completes successfully, but the subsequent BPEL process incurs a global rollback.

```
<invoke name="Invoke_1" inputVariable="Invoke_1_insert_InputVariable"
  partnerLink="db" portType="ns1:db_ptt" operation="insert"/>
. . .
. . .
<throw name="Throw_2" faultName="bpelx:rollback"/>
```

At that point, instance tracking has already recorded the outbound invocation as successful (in a local transaction). If the adapter throws an exception, instance tracking logs this as a fault. Also note that some partner links may invoke a file adapter, which cannot be rolled back, even if the BPEL process later throws a `bpelx:rollback`.

20.1.9 Descriptions for Data Source JNDI Fields are Interchanged

In the SOA Infrastructure Common Properties page of Oracle Enterprise Manager Fusion Middleware Control Console, the descriptions for **Server Data Source JNDI** and **Server Transaction Data Source JNDI** are interchanged. However, the **Configure** links go to the correct locations.

20.1.10 Limitations on Viewing XML Data on the Audit Trail Page with Internet Explorer 7

If you are using Internet Explorer 7, and click the **view XML document** link on the Audit Trail page in Oracle Enterprise Manager Fusion Middleware Control Console, data is not displayed. Instead, you are prompted to save or open the page. If you select to open the file, no data is displayed and you are again prompted to save or open the file. Instead, you must save the XML document and view it separately in a text editor.

As a workaround, use Mozilla FireFox to view the data directly after clicking the **view XML document** link.

20.1.11 Display of XML Content Getting Cut Off with Mozilla Firefox

If you are using Mozilla Firefox and click an activity on the Flow tab of a BPEL process service component instance in Oracle Enterprise Manager Fusion Middleware Control Console, the popup window that displays the XML content gets cut off on the right side. You must use the scroll bar at the bottom on this window to move to the right and display all XML content. If you use Internet Explorer, this is not an issue.

20.1.12 Duplicate XML Declarations in XML Source Results in Audit Trail Errors with Mozilla Firefox

If you use Mozilla Firefox to click the **view XML document** link on the Audit Trail page in Oracle Enterprise Manager Fusion Middleware Control Console, an error message similar to the following can be displayed:

```
XML Parsing Error: XML or text declaration not at start of entity
Location:
http://myhost.us.oracle.com:7001/em/faces/ai/sca/share/audit/xmlAuditDetail.
jsp?detailId=0&_afLoop=10355217141136524&_afWindowMode=0&_afWindowId=_new
```


Line Number 1, Column 39:<?xml version="1.0" encoding="UTF-8"?><?xml version = '1.0' encoding = 'UTF-8'?>

This error occurs if the XML source already includes an XML declaration (for example, <?xml version = '1.0' encoding = 'UTF-8'?>).

```
<?xml version = '1.0' encoding = 'UTF-8'?>
<task xmlns="http://xmlns.oracle.com/bpel/workflow/task">
  <title>Approve Discount</title>
  <payload xmlns="http://xmlns.oracle.com/bpel/workflow/task">
    <discountandshipping
      xmlns:discountandshipping="http://www.globalcompany.com/ns/OrderBooking/rules"
      xmlns="http://www.globalcompany.com/ns/OrderBooking/rules">
      <price>5000.0</price>
    . . . . .
    . . . . .
  </task>
```

During processing, Oracle Enterprise Manager Fusion Middleware Control Console adds a *second* XML declaration. This results in duplicate XML declarations, which causes Mozilla Firefox to report an error.

As a workaround, use Internet Explorer.

20.1.13 Granting the Same Role to the Same User Twice Produces an Inaccurate Message with WLST

1. Create a domain with Oracle WebCache and extend it with Oracle SOA Suite.
2. Associate the Oracle WebCache application with LDAP and grant the admin role to a user (for example, user name test) in Oracle Internet Directory using the WebLogic Scripting Tool (WLST).
3. Grant the same role (admin role) to the same user again (test).

You expect to see a WLST error message such as the following:

```
This particular user already has admin role to access your application
```

Instead, you receive the following message, which is inaccurate:

```
Command FAILED, Reason: Cannot add principal to application role
```

20.1.14 Receiving an Empty Namespace Tag in an Output Message

The XML representation from an XSL file may differ from that used in a scenario in which a message is passed through with a transformation being performed or in which an assign activity is used, even though the XMLs are syntactically and semantically the same. For example, if you use a mediator service component to map an inbound payload that includes an element without a namespace to an outbound payload, you may receive an empty namespace tag in the output message.

```
<Country xmlns="">US</Country>
```

This is the correct behavior. A blank namespace, xmlns="", is automatically added.

20.1.15 Nonrecoverable BPEL Process Fault Displays as Successfully Recovered

If you attempt to recover from a fault and the maximum number of retries is reached without a successful recovery, a nonrecoverable fault occurs. However, the recoverable count in the **Component Metrics** section of the **Dashboard** tab of a SOA

composite application in Oracle Enterprise Manager Fusion Middleware Control Console is incremented instead of the nonrecoverable count.

20.1.16 Recovered Instances Can Continue to Display as Faulted

If an asynchronous BPEL process encounters a transaction rollback scenario because of any underlying exception error, it rolls back to the last dehydration activity. If this is a new instance, and a receive activity was the first dehydration activity, the BPEL process service engine creates a recoverable invoke. When you click **Recover** to recover the invoke on the **Recovery** tab of the BPEL process service engine in Oracle Enterprise Manager Fusion Middleware Control Console, the service engine creates a new instance. This instance may run to completion with no exception error. However, you continue to see the older instance identified as faulted.

20.1.17 BPEL Process Messages May Remain Visible in the Recovery Page During Recovery

Once a message is submitted for recovery, the BPEL process service engine may take time to complete the action. This typically takes less than several seconds. During this time, the message remains visible in the Recovery page. Duplicate attempts to recover the same message in that period are ignored by the server. Refresh the page every few seconds to receive the latest recovery status.

20.1.18 Exception Message to Ignore After a Faulted Instance is Terminated

Once a faulted instance is terminated, the status is correctly displayed in Oracle Enterprise Manager Fusion Middleware Control Console. However, an exception error can appear on the SOA Infrastructure side:

```
The action "abort" cannot be performed on the instance "11106" because of its
current state ("closed.faulted")
```

This message can be ignored. The exception appears in the SOA Infrastructure logs: `soa_server1.out/soa-diagnostic log`.

20.1.19 Attributes are not Passed in the <body> Tag of a SOAP Payload

The `wsu:Id` attributes in SOAP <body> elements are not passed to a SOAP outbound endpoint due to a limitation with converting a SOAP mediator message to a normalized message.

20.1.20 Intermittent Deployment Failures with Composites that Include Human Workflow Service Components

You can receive the following error message when deploying a SOA composite application that includes a human workflow service component from Oracle Enterprise Manager Fusion Middleware Control Console:

```
oracle.fabric.common.FabricDeploymentException:
oracle.fabric.common.FabricException: Deployment Failed: Unable to find a
WSDL that has a definition for service
```

As a workaround, use the following WebLogic Scripting Tool (WLST) commands to enable metadata archive (MAR) deployment:

1. Obtain the list of metadata labels in the metadata service (MDS) repository:

```
listMetadataLabels(application='application_name',server='server_name')
```

2. Check if the returned list contains a label named `preDeployLabelNumber`.
3. If it does, delete the label using the following command:

```
deleteMetadataLabel(application='application_name',server='server_name',name='predeployed_label_number')
```

where:

- `application_name` must be `soa-infra`.
 - `server_name` is the managed server name. Note that the default value is `soa_server1`, which you may have changed during Oracle SOA Suite installation and configuration.
 - `predeployed_label_number` is the label that you identified in Step 2.
4. Restart the managed server (for example, `soa_server1`).

20.1.21 Using UTF-8 Native Encoding for Composite Test Case Message Files

Oracle recommends that you run Oracle JDeveloper on a UTF-8 native-encoded operating system such as Linux. If this is not the case (for example, you run Oracle JDeveloper on Windows), and you need to save content to XML format, then do not select **Save As** to save the format as XML.

For example, when defining the contents of test cases to initiate inbound messages or emulate outbound messages, you can generate sample messages and select **Save As** to save the message as an XML file. You can then use the file to load the message. The saved XML file is in Oracle JDeveloper operating system native encoding. However, at runtime, the XML file is expected to be in UTF-8 encoding, and unreadable payload data is created.

As a workaround, save the sample message in the test case itself.

20.1.22 Non-ASCII Business Event Definition Names Do Not Conform to XML Standards

If you enter a non-ASCII name in the **Event Definition Name** field of the Event Definition Name dialog, the namespace in the **Namespace** field automatically uses the event definition name as a suffix. If you click **OK**, the non-ASCII namespace is created for the event. In the business event's `.edl` file, you can see the `targetNamespace` element contains non-ASCII characters. However, this does not conform to the current XML 1.0 specification supported by SOA components, as described in the following excerpt:

In Namespaces in XML 1.0, a namespace is identified by a URI reference defined in RFC 3986, which requires escaping for non-ASCII characters.

In 11g Release 1, you cannot escape non-ASCII characters.

20.1.23 Server URL Logic when HTTP and HTTPS are Enabled

When a SOA server instance has only an HTTP listener port enabled (a nonzero value for the port), the generated server URL used by Oracle SOA Suite (for example, to generate callback URLs, to build the abstract WSDL annotation in an exposed service WSDL, and so on) also has an HTTP scheme.

Similarly, if the SOA server instance has only an HTTPS listener enabled, the server URL also has an HTTPS scheme. However, if both the HTTP and HTTPS listener ports are enabled, the default SOA server URL value has the HTTP scheme. If you use Oracle JDeveloper to create a reference to a composite running on such an instance, the composite `<import>` has an `http` URL. If you want the WSDL to be retrieved through HTTPS, edit the resulting composite in **Source** view. In addition, the default calculated server and callback URLs can be overridden in the `soa-infra-config.xml` file.

20.1.24 Fault Policy Retry Action May Not Execute with Multiple Faults in the Same Flow

The fault policy retry action may not execute with multiple faults in the same flow. This may be because the retry count has already been reached for any of the previous faults.

For example, assume you define a fault policy with two fault conditions: `fault1` and `fault2`. For both fault conditions, the retry action is specified with a retry count of three. Assume `fault1` occurs and the retry action executes three times. You correct the problem for `fault1` by modifying the payload, but ensure that `fault2` is to be raised when the instance is resubmitted. You then resubmit the faulted instance using Oracle Enterprise Manager Fusion Middleware Control Console. You expect the second fault condition, `fault2`, to retry three times as per the fault policy specification. However, this does not occur because the maximum number of retries was already executed for the previous `fault1` fault condition.

20.1.25 Faulted Oracle B2B Instances Caused by a Policy Violation Cannot Be Aborted

You cannot abort a faulted Oracle B2B instance due to a policy violation. For example:

1. Set up Oracle B2B for the host and remote trading partners using EDIFACT. In this scenario, you have two SOA composite applications communicating through B2B instances on each side (host trading partner and remote trading partner).
2. Attach a policy (for example, **authorization_denyall_policy**) to the EDIFACT inbound composite BPEL service component.
3. Enqueue the message from an initiator such that the inbound composite in the responding Oracle B2B gets invoked.

The reference binding component of the inbound composite gets called and is successful. However, since **authorization_denyall_policy** is attached to the BPEL component, this fails with an authorization error.

4. Go to the **Instances** tab in Oracle Enterprise Manager Fusion Middleware Control Console and find the faulted instance.

Note that this instance cannot be aborted. However, note that Oracle Enterprise Manager Fusion Middleware Control Console still reports success.

20.1.26 Inbound Composite Application Does Not Invoke After Restarting the SOA Infrastructure

For a SOA composite application with a binding component, a problem occurs in the following scenario:

1. Stop an inbound composite application in Oracle Enterprise Manager Fusion Middleware Control Console.

2. Restart the SOA Infrastructure.
3. Start the composite.

The composite application does not work as intended. For example, in an application that includes Oracle B2B, the inbound composite does not get invoked when you enqueue a message from the outbound side.

4. As a workaround, perform either of the following steps after Step 3:
 - a. Restart the managed server.
 - b. Restart the server and redeploy the composite.

20.1.27 Mediator Instances Can Display as Running After Transaction Completion

A mediator service component relies on a successful commit of a local transaction to know whether an instance is recoverable. Even if a graceful shutdown is correctly implemented, and all transactions are allowed to complete (within the given time out window), there can still be a local transaction that is denied because it fails to occur within the time out window. For example, assume the following:

1. A database adapter posts a message.
2. A mediator service component receives the message, sets its state to running, and invokes a BPEL process service component, whose state is also set to running.
3. A JMS adapter is invoked, and encounters and throws an exception. The reference fault tables are updated.
4. The BPEL process receives the exception, marks its state as completed with a fault, and rethrows the exception to the mediator.
5. The BPEL process triggers an asynchronous persistence of its audit information as the global transaction is rolled back.
6. The mediator receives the exception and persists the fault information in its error tables (in a separate local transaction).
7. The mediator sets its state to faulted.

If the server is shut down before the transaction can complete (for example, between Steps 5 through 7), the mediator instance can remain in a running state. The corresponding composite instance whose state is inferred from the components also displays as running. As the global transaction is rolled back, the message can be retried and reprocessed by the inbound adapter. Note that in this scenario, no mediator instances are lost.

20.1.28 Specifying SSO Credentials with the Deploy SOA Composite, Undeploy SOA Composite, and Redeploy SOA Composite Wizards

If Oracle Enterprise Manager Fusion Middleware Control Console is run in a single sign-on (SSO)-enabled environment, you are prompted to re-enter the user name and password credentials as part of the last step of the Deploy SOA Composite, Undeploy SOA Composite, and Redeploy SOA Composite wizards. This information is only requested once per Oracle Enterprise Manager Fusion Middleware Control Console session.

20.1.29 Manually Map Elements with Nillable Attributes in the XSLT Mapper

An automapping schema that has elements with nillable attributes maps the nillable attributes, but does not map the elements. For example, mapping the following source:

```
<?xml version= '1.0' encoding= 'UTF-8' ?>
. . .
. . .
  <element name="MovieProcess">
    <complexType>
      <sequence>
        <element name="Director" type="string" nillable="true"/>
        <element name="casting" type="string" nillable="true"/>
      </sequence>
    </complexType>
  </element>
</schema>
```

to the following target:

```
<?xml version= '1.0' encoding= 'UTF-8' ?>
. . .
. . .
  <element name="Movies">
    <complexType>
      <sequence>
        <element name="name" type="string" nillable="true"/>
        <element name="starring" type="string" nillable="true"/>
      </sequence>
    </complexType>
  </element>
</schema>
```

Results in the nillable attributes being mapped, but not the elements.

```
<xsl:template match="/">
  <ns1:Movies>
    <ns1:name>
      <xsl:attribute name="xsi:nil">
        <xsl:value-of select="/ns1:MovieProcess/ns1:Director/@xsi:nil"/>
      </xsl:attribute>
    </ns1:name>
    <ns1:starring>
      <xsl:attribute name="xsi:nil">
        <xsl:value-of select="/ns1:MovieProcess/ns1:casting/@xsi:nil"/>
      </xsl:attribute>
    </ns1:starring>
  </ns1:Movies>
</xsl:template>
```

As a workaround, you must manually map elements with the `xsi:nil` attribute.

1. Use the Find Node dialog in the XSLT Mapper to search for elements. This dialog is available by right-clicking in the source or target schema and selecting **Find**.
2. Drag from the source element to the target element.
3. At the bottom of the Auto Map Preferences dialog, deselect the **Enable Auto Map** check box.

This results in the following mapping:

```
<xsl:template match="/">
  <ns1:Movies>
    <ns1:name>
      <xsl:attribute name="xsi:nil">
        <xsl:value-of select="/ns1:MovieProcess/ns1:Director/@xsi:nil"/>
      </xsl:attribute>
```

```

        <xsl:value-of select="/ns1:MovieProcess/ns1:Director"/>
    </ns1:name>
    <ns1:starring>
        <xsl:attribute name="xsi:nil">
            <xsl:value-of select="/ns1:MovieProcess/ns1:casting/@xsi:nil"/>
        </xsl:attribute>
        <xsl:value-of select="/ns1:MovieProcess/ns1:casting"/>
    </ns1:starring>
</ns1:Movies>
</xsl:template>

```

20.1.30 Restarting the SOA Infrastructure Does Not Activate Endpoints When a Retired Composite is Activated

If a SOA composite application with adapter endpoints is in a retired state, the endpoints are not activated if you perform the following actions:

- Restart the SOA Infrastructure
- Activate the SOA composite application

This is because files, records, and so on are not be picked up by the endpoint adapters. As a workaround, redeploy the SOA composite application after restarting the SOA Infrastructure.

20.1.31 Mismatch Between the Number of SOA Composite Application Instances and Service Component Instances

The number of SOA composite application instances may not always match the number of service component instances displaying in Oracle Enterprise Manager Fusion Middleware Control Console.

A SOA composite application instance is first created when the composite is invoked. When the service components within the composite receive a subsequent invocation, a corresponding service component instance is created that refers to the composite instance ID previously created.

There can be scenarios under which the composite instance is created, but the underlining service component instance is not created. For example:

- The composite instance is created, but the invocation has not yet reached the service component due to a system failure.
- The composite instance is created, but the invocation fails payload validation and is rejected. In this case, invocation does not reach the underlining service components.

You can also have orphaned service component instances for which no SOA composite application instance has been created.

For more information about SOA composite application instances, service component instances, and orphaned instances, see *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite*.

20.1.32 Null Pointer Exception Occurs When a Faulted Instance State Changes to Human Intervention for Some Audit Tracking Settings

You can receive a `NullPointerException` error when changing the state of a faulted instance to human intervention using a fault policy file after it failed to recover by executing the retry action. For example, assume you perform the following tasks:

1. Create a SOA composite application that includes the following:
 - An inbound file adapter service binding component
 - A mediator service component
 - An outbound file adapter reference binding component
2. Add a fault policy to the composite with the following settings:
 - Call the `ora-retry` action when a fault occurs.
 - Specify `retryFailureAction=ora-human-intervention` in the `ora-retry` action.
3. Set the audit tracking levels as follows:

For This Level...	Set Audit Tracking To...
SOA Infrastructure	Development
SOA composite application	Off
Mediator service engine	Production
Mediator service component	Development

4. Deploy the SOA composite application.
5. Create an instance of the SOA composite application.
6. Create a fault.
7. Note the following details:
 - The retry action is executed based on the count defined in the fault policy file.
 - After completing the specified retry count, the faulted instance state changes to human intervention.
 - During the human intervention state change, a `NullPointerException` is logged in the server log files.

Note that the instance is recoverable and there is no loss of functionality, even though the `NullPointerException` occurred.

20.1.33 Handling Business and Remote Faults in the Calling BPEL Processes

Oracle recommends that you handle both business and remote faults in BPEL processes during design time. If remote exceptions are not handled in the calling BPEL process, you can see discrepancies in the overall SOA composite application instance state and the server component instance states associated with the composite. For example, a situation may occur in which the composite instance is in a faulted state, while the service component instances are in a completed state. If the caller handles the remote exceptions, then the states of composite and component instances are accurate.

20.1.34 Recovery of Multiple BPEL Faults Does Not Work on All Selected Faults

If you select **Continue** from the **Recovery Action** list when performing a bulk recovery of faulted instances, and the continue operation fails for any instance, the bulk recovery stops at that point. The remaining instances are not recovered. As a workaround, you must recover the remaining instances separately with a new bulk recovery operation.

20.2 Configuration Issues and Workarounds

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

- [Section 20.2.1, "Order of Precedence for Audit Level Settings"](#)
- [Section 20.2.2, "Setting the Audit Level at the BPEL Process Service Component Level"](#)
- [Section 20.2.3, "Increasing Database Connection Values"](#)
- [Section 20.2.4, "Increasing Memory to Recover from Compilation Errors"](#)
- [Section 20.2.5, "Improving the Loading of Oracle Enterprise Manager Fusion Middleware Control Console"](#)
- [Section 20.2.6, "Oracle SOA Suite Integration with an ADF-BC Service"](#)
- [Section 20.2.7, "Using ADF Binding to Invoke a Composite Application from a JSP/Java Class"](#)
- [Section 20.2.8, "Increasing the XA Transaction Timeout Value"](#)
- [Section 20.2.9, "PermGen Space Out-of-Memory Error"](#)

20.2.1 Order of Precedence for Audit Level Settings

[Table 20–1](#) provides examples of the order of precedence for audit level settings.

Table 20–1 Examples of Order of Precedence

Component	Composite	Service Engine	SOA Infrastructure	Which Setting Takes Precedence?
No property	Off	Production	Development	Composite. The audit level is set to Off . The service engine and SOA Infrastructure audit levels do not take effect.
No property	Inherit	Development	Production	Service engine. The audit level is set to Development . The payload is shown in the assign activity. The SOA Infrastructure audit level does not take effect.
No property	Inherit	Inherit	Production	SOA Infrastructure. The audit level is set to Production .
No property	Inherit	Production/ Development /Off/Inherit	Off	The overall audit is not shown. The composite inherits the audit level from the SOA Infrastructure. The payload is shown in the assign activity based on the service engine audit level setting.

Table 20–1 (Cont.) Examples of Order of Precedence

Component	Composite	Service Engine	SOA Infrastructure	Which Setting Takes Precedence?
Development	Off	Production	Development	Composite. Since the composite audit level is set to Off , the overall audit is not shown. The service engine audit level is shown, but the Development setting for the component takes precedence. The payload is shown in the assign activity based on the component audit level setting of Development .
Inherit	Off	Production	Development	Composite. Since the composite audit level is set to Off , the overall audit is not shown. The service engine audit level is not shown because Off is inherited from the composite.

Notes:

- When the composite audit level is set to **Off**, there is no audit trail generated for this composite and all service engines used within the composite.
- When the composite audit level is set to **Inherit**, it always inherits from the settings of the SOA Infrastructure.
- When the composite audit level is set to **Off**, the component inherits from the service engine settings.

For more information about audit levels and the order of precedence, see *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite*.

20.2.2 Setting the Audit Level at the BPEL Process Service Component Level

You can set the audit level for a BPEL process service component. This setting takes precedence over audit level settings at the SOA Infrastructure, service engine, and SOA composite application levels. The service component level setting is only available for BPEL processes and is *not* supported for the mediator, human workflow, and business rule service components.

There are two ways to set the audit level for BPEL process service components. Supported values are *Off*, *Minimal*, *Inherit*, *Development*, and *Production*.

- In the System MBean Browser of Oracle Enterprise Manager Fusion Middleware Control Console:
 1. In the navigation tree, expand the **SOA** folder.
 2. Right-click **soa-infra**, and select **Administration > System MBean Browser**.
 3. Select **Application Defined MBeans > oracle.soa.config > Server: *server_name* > SCAComposite > Composite_Name > SCAComposite.SCAComponent > BPEL_Service_Component > Properties >**

4. Click the **Add** icon.
 5. Expand the **Element_number** folder.
 6. From the **many** list, select **false**.
 7. In the **name** field, enter `bpel.config.auditLevel`.
 8. In the **value** field, enter a value.
 9. Click **Apply**.
- In Oracle JDeveloper:
 1. Set the `bpel.config.auditLevel` property to an appropriate value in the `composite.xml` file of your SOA project.

```
<component name="BPELProcess">
  <implementation.bpel src="BPELProcess.bpel" />
  <property name="bpel.config.auditLevel">Off</property>
</component>
```

20.2.3 Increasing Database Connection Values

You can receive the following error message because of slow connections to the database.

```
Exception [TOPLINK-4002] (Oracle TopLink - 11g Release 1 (11.1.1.1.0) (Build 090304)): oracle.toplink.exceptions.DatabaseException
Internal Exception: java.sql.SQLException: Internal error: Cannot obtain
XAConnection weblogic.common.resourcepool.ResourceDeadException: Pool
SOADatasource has been disabled because of hanging connection tests, cannot
allocate resources to applications.
```

As a workaround, perform the following steps:

1. Open the `$DOMAIN_HOME/bin/setSOADomainEnv.sh` file.
2. Uncomment the lines shown in bold.

```
# 8331492: Value of weblogic.resourcepool.max_test_wait_secs is 10
# seconds. It can be increased by uncommenting line below if your database
# connections are slow. See SOA documentation for more details.
EXTRA_JAVA_PROPERTIES="${EXTRA_JAVA_PROPERTIES}
-Dweblogic.resourcepool.max_test_wait_secs=30"
export EXTRA_JAVA_PROPERTIES
```

3. Save your changes and restart the managed Oracle WebLogic Server.

20.2.4 Increasing Memory to Recover from Compilation Errors

If you receive out-of-memory errors during compilation of a SOA composite application, perform the following steps to increase memory.

1. Open the `ant-sca-compile.xml` file in the `$ORACLE_HOME/bin` directory.
2. Under the `scac` element, increase the memory setting. For example:

```
<jvmarg value="-Xmx512M"/>
```

20.2.5 Improving the Loading of Oracle Enterprise Manager Fusion Middleware Control Console

If Oracle SOA Suite pages in Oracle Enterprise Manager Fusion Middleware Control Console take a long time to load, you can improve the load time by disabling the fetching and displaying of instance count information. The improvement is considerable if the load on SOA Infrastructure is high. By default, this option is not set.

1. Open the `BEA_HOME/user_projects/domains/your_domain_name/bin/startWeblogic.sh` file.
2. Go to the section above the following lines in the file.

```
# START WEBLOGIC
echo "starting weblogic with Java version:"
```

3. Add the following line above these lines.

```
JAVA_OPTIONS="-Dem.soa.disableCounts=true ${JAVA_OPTIONS}"
```

4. Restart the Oracle Weblogic Administration Server for the changes to take effect.

This property setting disables the instance and fault count metrics shown in all pages. For example, this setting causes the following sections to not display in the SOA Infrastructure Dashboard page:

- The **Running** and **Total** headers and values in the **Recent Composite Instances** section.
- The **Instances** and **Faulted Instances** columns and values in the **Deployed Composites** section.

20.2.6 Oracle SOA Suite Integration with an ADF-BC Service

When invoking an ADF-BC service as an external reference from a SOA composite application, enter the ADF-BC application name appended with `JBOServiceRegistry` in the **Registry** field of the Create ADF-BC dialog.

For example, if the ADF BC application to invoke is named `hrApp`, then enter `hrApp_JBOServiceRegistry` in the **Registry** field.

The application name to enter is displayed in the **Application name** field of the Edit EAR Deployment Profile Properties dialog in Oracle JDeveloper. This dialog can be accessed from the **Application** menu of the application by selecting **Application Properties > Deployment > Edit**.

Additional configuration tasks must also be performed on the ADF-BC application side. For more information, see Section "Using an ADF-BC Service with the SOA Platform."

20.2.7 Using ADF Binding to Invoke a Composite Application from a JSP/Java Class

If a SOA composite application uses Web service (WS) binding to define an endpoint reference, the composite cannot be invoked from a JSP/Java class. WS binding is defined with the `binding.ws port="" location=""` tag in the `composite.xml` file:

```
<service name="client_ep" ui:wsdlLocation="BPEL.wsdl">
  <interface.wsdl interface="http://xmlns.oracle.com/Application/Project/
    BPEL#wsdl.interface(BPEL)"/>
  <binding.ws port="http://xmlns.oracle.com/App/BPELProj/
    BPELProcess#wsdl.endpoint(bpel_client_ep/BPELProcess_pt)"/>
```

```
</service>
```

Instead, use ADF binding. After deployment of the composite with ADF binding, invocation from a JSP/Java class is successful.

```
<service name="client_ep" ui:wSDLLocation="BPEL.wsdl">
  <interface.wSDL interface="http://xmlns.oracle.com/Application/Project/
    BPEL#wsdl.interface(BPEL)"/>
  <binding.adf serviceName="bpel_client" registryName="" />
</service>
```

20.2.8 Increasing the XA Transaction Timeout Value

If you send notifications for parallel task assignments in human workflow, you can see the transaction close, SQL exceptions appear, and notification processing take a long time at runtime. If this occurs, increase the XA transaction timeout for an XA data source in Oracle WebLogic Server Administration Console. When set, this value overrides the value of the global transaction timeout.

1. Click **Lock and Edit**.
2. Choose **Services > Data Sources**.
3. Click the specific data source.
4. Click the **Transaction** tab.
5. Select **Set XA Transaction Timeout**.
6. In the **XA Transaction Timeout** field, specify the value of the transaction timeout.
7. Click **Save**.
8. Log into SQL*Plus.
9. Set the `distributed_lock_timeout` value.

```
SQL> alter system set distributed_lock_timeout=value scope=spfile;
```

Oracle recommends that you set `distributed_lock_timeout` to a value greater than or equal to that set in Step 6.

10. Shut down and restart your database after running this command.
11. Verify that the setting has changed.
12. Set this parameter to the same value for all instances in an Oracle Real Application Cluster.

```
SQL> show parameter distributed_lock_timeout;
```

20.2.9 PermGen Space Out-of-Memory Error

If you get PermGen Space Out-of-Memory errors in the SOA managed server, perform these steps:

1. Open the `$DOMAIN_HOME/bin/setSOADomainEnv.sh` file.
2. Increase the following values:

```
if [ "${JAVA_VENDOR}" != "Oracle" ] ; then
  DEFAULT_MEM_ARGS="${DEFAULT_MEM_ARGS} -XX:PermSize=128m
-XX:MaxPermSize=256m"
  PORT_MEM_ARGS="${PORT_MEM_ARGS} -XX:PermSize=256m -XX:MaxPermSize=512m"
fi
```

to these values:

```
if [ "${JAVA_VENDOR}" != "Oracle" ] ; then
    DEFAULT_MEM_ARGS="${DEFAULT_MEM_ARGS} -XX:PermSize=512m
-XX:MaxPermSize=1024m"
    PORT_MEM_ARGS="${PORT_MEM_ARGS} -XX:PermSize=512m -XX:MaxPermSize=1024m"
fi
```

20.3 Documentation Errata

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

- [Section 20.3.1, "Editing the setSOADomainEnv File for Large Payload Scenarios"](#)
- [Section 20.3.2, "The Distributed Adapter Property Is Not Supported in 11g"](#)
- [Section 20.3.3, "Using the Oracle Service Registry"](#)
- [Section 20.3.4, "Configuring SOA Composite Applications for Two-Way SSL Communication"](#)
- [Section 20.3.5, "Faults Column of Deployed Composites Section Renamed to Faulted Instances"](#)
- [Section 20.3.6, "Abort Fault Recovery Action Does Not Terminate the Entire Instance"](#)

20.3.1 Editing the setSOADomainEnv File for Large Payload Scenarios

Section "53.2.5 Using Correct Settings for Large Payload Scenarios" of Chapter 53, "Processing Large Documents" of the *Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite* incorrectly says to add the following line of syntax to the `setDomainEnv.sh` file.

```
-Dweblogic.resourcepool.max_test_wait_secs=30
```

Instead, you must uncomment this existing line in the `setSOADomainEnv.sh` file.

20.3.2 The Distributed Adapter Property Is Not Supported in 11g

Chapter 33, "Configuring Service and Reference Binding Components" in the *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite* incorrectly states that the Oracle FTP Adapter and Oracle File Adapter support the `Distributed` property. The `Distributed` property is not supported in the 11g release.

20.3.3 Using the Oracle Service Registry

Section "A.4 Publishing and Browsing the Oracle Service Registry" in Appendix A, "BPEL Process Activities and Services" of the *Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite* describes how to use Oracle Service Registry with a SOA composite application. Here is some additional information about this section:

- The procedures in this section describe how to configure Oracle Service Registry against a separately installed Oracle SOA Suite runtime, and not against the embedded Oracle WebLogic Server in Oracle JDeveloper.
- Oracle Service Registry 10.3 deploys to the 10.3.0.0 version of Oracle WebLogic Server.

- Oracle Service Registry 10.3 does not support the 10.3.1.0 version of Oracle WebLogic Server.
- After configuring the inquiry URL on the SOA Infrastructure Common Properties page of Oracle Enterprise Manager Fusion Middleware Control Console, ensure that you restart the SOA Infrastructure. See *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite* for additional details.
- For more information about Oracle Service Registry, visit the following URL:
<http://www.oracle.com/technology/goto/regrep>

20.3.4 Configuring SOA Composite Applications for Two-Way SSL Communication

Step 2 of Section "6.2 Configuring SOA Composite Applications for Two-Way SSL Communication" of Chapter 6, "Securing SOA Composite Applications" of *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite* mentions that for two-way SSL, the keystore information (location and password) is required. This sentence can be ignored.

In addition, perform the following steps to enable two-way SSL for a SOA composite application to invoke another SOA composite application or another non-SOA application.

Note: Both the server and client are assumed to have been configured for SSL with mutual authentication.

1. On the client side, provide the keystore location in `$DOMAIN_HOME/config/soa-infra/configuration/soa-infra-config.xml`.

```
<keystoreLocation>absolute_path_to_the_keystore_location_and_the_file_name</keystoreLocation>
```
2. During design time in Oracle JDeveloper, update the reference section in the `composite.xml` file with the `oracle.soa.two.way.ssl.enabled` property.

```
<reference name="Service1"
  ui:wSDLLocation=". . .">
  <interface.wSDL interface=". . ."/>
  <binding.ws port=". . .">
    <property name="oracle.soa.two.way.ssl.enabled">true</property>
  </binding.ws>
</reference>
```
3. In Oracle Enterprise Manager Fusion Middleware Control Console, select **WebLogic Domain** > *domain_name*.
4. Right-click *domain_name* and select **Security** > **Credentials**.
5. Click **Create Map**.
6. In the **Map Name** field, enter a name (for example, SOA), and click **OK**.
7. Click **Create Key**.
8. Enter the following details.

Field	Description
Select Map	Select the map created in Step 6 (for this example, SOA).

Field	Description
Key	Enter a key name.
Type	Select Password .
User Name	Enter the keystore user name
Password	Enter the password that you created for the keystore.

9. Modify the `composite.xml` syntax to use `https` and `sslport` to invoke a SOA composite application. For example, change the syntax shown in bold:

```
<?xml version="1.0" encoding="UTF-8" ?>
<!-- Generated by Oracle SOA Modeler version 1.0 at [4/1/09 11:01 PM]. -->
<composite name="InvokeEchoBPELSync"
revision="1.0"
label="2009-04-01_23-01-53_994"
mode="active"
state="on"
xmlns="http://xmlns.oracle.com/sca/1.0"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xmlns:wsp="http://schemas.xmlsoap.org/ws/2004/09/policy"
xmlns:orawsp="http://schemas.oracle.com/ws/2006/01/policy"
xmlns:ui="http://xmlns.oracle.com/soa/designer/">
<import
namespace="http://xmlns.oracle.com/CustomApps/InvokeEchoBPELSync/BPELProcess1"
location="BPELProcess1.wsdl" importType="wsdl"/>
<import namespace="http://xmlns.oracle.com/CustomApps/EchoBPELSync/
BPELProcess1" location="http://hostname:port/soa-infra/services/default/EchoBPEL
Sync/BPELProcess1.wsdl"
importType="wsdl"/>

to use https and sslport:

location="https://hostname:sslport/soa-infra/services/default/EchoBPELSync
/BPELProcess1.wsdl"
```

20.3.5 Faults Column of Deployed Composites Section Renamed to Faulted Instances

Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite includes screen shots of the SOA Infrastructure Dashboard page in Oracle Enterprise Manager Fusion Middleware Control Console. In the **Deployed Composites** section of the Dashboard page, the **Faults** column has been renamed to **Faulted Instances**.

20.3.6 Abort Fault Recovery Action Does Not Terminate the Entire Instance

The online help for the **Faults** tab of the Instance of *Composite_Name* page states that the abort recovery action aborts the entire instance. The entire instance is not aborted; only the current action in progress is aborted. Because of this, the instance can still be in a completed state. Note that the abort recovery action is different from aborting an instance on the **Instances** tab of the SOA Infrastructure or a SOA composite application.

Oracle Technology Adapters

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

- [Section 21.1, "General Issues and Workarounds"](#)
- [Section 21.2, "Configuration Issues and Workarounds"](#)
- [Section 21.3, "Documentation Errata"](#)

21.1 General Issues and Workarounds

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

- [Section 21.1.1, "Oracle JCA Adapters Issues and Workarounds"](#)
- [Section 21.1.2, "Oracle JCA Adapter for Files/FTP Issues and Workarounds"](#)
- [Section 21.1.3, "Oracle JCA Adapter for AQ Issues and Workarounds"](#)
- [Section 21.1.4, "Oracle JCA Adapter for JMS Issues and Workarounds"](#)
- [Section 21.1.5, "Oracle JCA Adapter for Database Issues and Workarounds"](#)
- [Section 21.1.6, "Oracle JCA Adapter for MQ Series Issues and Workarounds"](#)
- [Section 21.1.7, "Oracle JCA Adapter for Socket Issues and Workarounds"](#)
- [Section 21.1.8, "Native Format Builder Issues and Workarounds"](#)
- [Section 21.1.9, "Oracle Adapter for Oracle Applications Issues and Workarounds"](#)

21.1.1 Oracle JCA Adapters Issues and Workarounds

This section describes issues and workarounds that are applicable to all adapters: Oracle AQ Adapter, Oracle JMS Adapter, Oracle Files/FTP Adapter, Oracle MQ Series Adapter, Oracle Database Adapter, and Oracle Socket Adapter.

This section includes the following issue:

- [Section 21.1.1.1, "ECID Propagation Is Not Supported by Oracle Technology Adapters"](#)
- [Section 21.1.1.2, "Retry Occurs for the Specified Retry Interval Even on Undeploying the Composite"](#)
- [Section 21.1.1.3, "Outbound Adapter Does Not Perform an Outbound Retry If the Outbound Adapter Throws an Exception with GLOBAL_RETRY"](#)

21.1.1.1 ECID Propagation Is Not Supported by Oracle Technology Adapters

ECID (Execution Context Identifier) propagation is not supported by Oracle Technology adapters. The ECID is used to keep track of message flow in Oracle Enterprise Manager, and hence this feature is not available in Oracle Technology adapters.

21.1.1.2 Retry Occurs for the Specified Retry Interval Even on Undeploying the Composite

Adapter references for which retries are specified at the binding level, continues to retry for the cumulative retry interval (retry count * retry interval) even after the composite is undeployed.

If you have configured the retries, as shown in the following example:

```
<property name="jca.retry.count" type="xs:integer" many="false"
override="may">20</property>
<property name="jca.retry.interval" type="xs:integer" many="false"
override="may">10</property>
```

Based on this configuration the interval should be 200 seconds, and even if the composite is undeployed after 30 seconds during the retry, the retry continues till the cumulative retry interval (retry count * retry interval) is reached.

21.1.1.3 Outbound Adapter Does Not Perform an Outbound Retry If the Outbound Adapter Throws an Exception with GLOBAL_RETRY

If an outbound adapter throws an exception with GLOBAL_RETRY, then the retry configured at the outbound adapter level will not take effect. The retry falls back to the caller which could be a BPEL process. It is observed that the retry happens from the inbound to the BPEL process (caller of BPEL process) in either of the following transaction semantics in Oracle BPEL process:

Scenario 1:

```
<property name="bpel.config.transaction">requiresNew</property>
<property name="bpel.config.oneWayDeliveryPolicy">sync</property>
```

Scenario 2:

```
<property name="bpel.config.transaction">required</property>
<property name="bpel.config.oneWayDeliveryPolicy">sync</property>
```

If the adapter throws a LOCAL_RETRY, then the retry configured at the outbound adapter level will take effect.

Note that for the inbound retry to work, Oracle BPEL process must not have any dehydration points.

21.1.2 Oracle JCA Adapter for Files/FTP Issues and Workarounds

This section describes the following issues and workarounds related to Oracle File and FTP Adapters:

It includes the following sections:

- [Section 21.1.2.1, "Files Lost During an SOA Server Failover"](#)
- [Section 21.1.2.2, "DOM Parsing Exception at Run Time"](#)

- [Section 21.1.2.3, "Rejection Handling Not Working Properly for XML-Debatching Scenarios"](#)
- [Section 21.1.2.4, "JCA Property Updates from Enterprise Manager Console Are Not Applied If a Logical Directory Is Used"](#)
- [Section 21.1.2.5, "Prerequisite for Oracle FTP Adapter Debatching Scenarios on FTPS"](#)
- [Section 21.1.2.6, "Chunked Read Feature Not Supported for Secure FTP"](#)
- [Section 21.1.2.7, "Editable Append Property With Dynamic File Name"](#)

21.1.2.1 Files Lost During an SOA Server Failover

The Oracle File Adapter picks up a file from an inbound directory, processes the file, and sends the processed file to an output directory. However, during this process if a failover occurs in an SOA managed server, then the file may be lost because of the nontransactional nature of Oracle File Adapter. As a result, some files read by the inbound adapter may not be sent to the output directory. You must configure the Oracle File Adapter for high availability, to ensure that files are not lost during a failover.

21.1.2.2 DOM Parsing Exception at Run Time

When Oracle File and FTP Adapters read a Unicode XML file with byte order mark (BOM), a DOM parsing exception is thrown at runtime. If the Unicode XML file does not use BOM, then an exception is not thrown.

21.1.2.3 Rejection Handling Not Working Properly for XML-Debatching Scenarios

In case of debatching scenarios with XML payloads that have errors such as extra tags and spurious data, output files are created along with the rejected messages.

21.1.2.4 JCA Property Updates from Enterprise Manager Console Are Not Applied If a Logical Directory Is Used

If Oracle File and FTP Adapters use logical directories for inbound or outbound operations, then JCA property updates from Oracle Enterprise Manager Console are not applied.

21.1.2.5 Prerequisite for Oracle FTP Adapter Debatching Scenarios on FTPS

You must use a synchronous process in case of Oracle FTP Adapter debatching scenarios on FTP over SSL (FTPS) for large payloads. If a synchronous process is not used, then the FTP server throws the error code, 421.

21.1.2.6 Chunked Read Feature Not Supported for Secure FTP

The Chunked Read feature of Oracle FTP Adapter is not supported for SFTP (Secure FTP) using SSH transport.

21.1.2.7 Editable Append Property With Dynamic File Name

When a dynamic file name is specified for an output file, the Append property must not be edited. However, the Oracle Enterprise Manager Fusion Middleware Control Console allows you to edit the Append property even when you specify a dynamic file name for an output file. Ensure that you do not edit the Append property when you specify a dynamic file name for an output file.

When using a dynamic file name the value of the `Append` property must be `false`. By default, the value of the `Append` property is `false` and this must not be edited while using a dynamic file name.

21.1.3 Oracle JCA Adapter for AQ Issues and Workarounds

This section describes the following issue and workaround related to Oracle AQ Adapter:

It includes the following section:

- [Section 21.1.3.1, "Oracle AQ Adapter Reading Field from Object Type Depends on Server Locale Encoding"](#)
- [Section 21.1.3.2, "Oracle AQ Adapter Does Not Dequeue Messages from Queues in Oracle E-Business Suite Applications"](#)

21.1.3.1 Oracle AQ Adapter Reading Field from Object Type Depends on Server Locale Encoding

In an SOA project that contains outbound AQ adapter, Mediator or BPEL, and an inbound AQ adapter, when you select the business payload option as **Field within the Object**, the national characters are garbled. This issue depends on server locale encoding and exists only on native locale. However, when the server is running on UTF-8 encoding, this issue does not exist.

21.1.3.2 Oracle AQ Adapter Does Not Dequeue Messages from Queues in Oracle E-Business Suite Applications

It is recommended that you use Oracle Adapter for Oracle Applications to dequeue from queues in E-Business Suite Applications and *not* Oracle AQ Adapter.

21.1.4 Oracle JCA Adapter for JMS Issues and Workarounds

This section describes the following issues and workarounds related to Oracle JMS Adapter:

- [Section 21.1.4.1, "Example of Flow Control Settings for Oracle JMS Adapter"](#)
- [Section 21.1.4.2, "Oracle JMS Adapter Re-entrant Wizard Displays a Warning Message When the Destination and JNDI Names Are Invalid"](#)
- [Section 21.1.4.3, "Distributed Topic in Clustered Environment Creates Extra Messages"](#)

21.1.4.1 Example of Flow Control Settings for Oracle JMS Adapter

Anytime the exception `weblogic.messaging.kernel.QuotaException: Quota blocking time exceeded and no quota available` is encountered, WLS JMS provider allows flow control settings that you can tweak to control the number of messages that are produced/consumed.

For more information about tweaking the control settings, see

<http://e-docs.bea.com/wls/docs90/ConsoleHelp/pagehelp/JMSjmsconnectionjmsconnectionfactoryconfigflowcontroltitle.html>

The following is an example of the flow control settings used and the various thresholds for a message carrying a payload size of 5k:

```
Config JMSServer:
  Message Buffer Size:5000
```

```

Config JMSConnectionFactory:
    Flow Control:
    Flow Maximum: 30
    Flow Minimum: 1
    Flow Interval: 10
    Flow Step: 10

check Flow Control Enabled
    Default Delivery: Send Timeout: 3000000

Config JMS Destinations:
    Bytes Threshold High: 50000
    Bytes Threshold Low: 50
    Messages Threshold High: 100
    Messages Threshold Low: 1
    Set Quota

```

21.1.4.2 Oracle JMS Adapter Re-entrant Wizard Displays a Warning Message When the Destination and JNDI Names Are Invalid

While migrating a project from one environment to another, Oracle JMS Adapter Wizard populates the Destination and JNDI name fields in edit mode in the following pages:

- Consume Operation Parameters page
- Produce Operation Parameters page
- Request Operation Parameters page
- Reply Operation Parameters page
- Request/Reply Operation Parameters page

However, if you click **Next**, the Adapter Configuration Wizard validates whether this is a valid destination, and accordingly, displays a warning message if found to be invalid. You have the option to proceed or enter a valid destination.

21.1.4.3 Distributed Topic in Clustered Environment Creates Extra Messages

When you use Oracle JMS adapter with a distributed topic deployed in a cluster, the scenario would result in more messages processed than the actual number of messages passed to the topic.

Each subscriber to the topic is handed a copy of the message to be processed by WLS JMS. So, the number of processed messages will be equal to the number of active subscribers on the distributed topic. This is a known behavior of Oracle WebLogic JMS in Oracle WebLogic Application Server 10.3.

21.1.5 Oracle JCA Adapter for Database Issues and Workarounds

This section describes the following issues and workarounds related to Oracle Database Adapter:

- [Section 21.1.5.1, "The Value Of the Active Unit Of Work Property Is Not Saved for Outbound SELECT Operation"](#)
- [Section 21.1.5.2, "The Binding Fault Retries During Remote Fault Is Not Captured in the Oracle Enterprise Manager Console"](#)

21.1.5.1 The Value Of the Active Unit Of Work Property Is Not Saved for Outbound SELECT Operation

While configuring an outbound Oracle Database Adapter to perform a SELECT operation, if you select **Get Active Unit of Work** in the Adapter Configuration Wizard - Advanced Option page, then the value of the `GetActiveUnitofWork` property is not saved in the `.jca` file.

The workaround for this issue is to manually add this property in the `.jca` file of the Oracle Database Adapter, as shown in the following example:

```
<property name="GetActiveUnitOfWork" value="true"/>
```

21.1.5.2 The Binding Fault Retries During Remote Fault Is Not Captured in the Oracle Enterprise Manager Console

Consider a scenario in which the Oracle Database Adapter retries the transaction at remote fault (that is, when the database is down) in a condition where the binding fault retry is specified in the `composite.xml` file, and there is no fault policy defined. In such a scenario, the binding fault retry performed by the Oracle Database Adapter is not captured in the Audit Trail in the Oracle Enterprise Manager Console.

21.1.6 Oracle JCA Adapter for MQ Series Issues and Workarounds

This section describes the following issues and workarounds related to Oracle MQ Series Adapter:

- [Section 21.1.6.1, "Oracle MQ Series Adapter Does Not Support Asynchronous Request-Response Pattern for Mediator"](#)
- [Section 21.1.6.2, "Oracle MQ Series Adapter Does Not Perform an Outbound Retry If the Outbound Resource Is XA"](#)
- [Section 21.1.6.3, "Oracle MQ Series Hangs If the Channel Is Brought Down in a Cluster Environment"](#)
- [Section 21.1.6.4, "Adding Additional Encoding Not Supported"](#)

21.1.6.1 Oracle MQ Series Adapter Does Not Support Asynchronous Request-Response Pattern for Mediator

Oracle MQ Series Adapter does not support asynchronous request-response pattern (where Mediator is the server).

21.1.6.2 Oracle MQ Series Adapter Does Not Perform an Outbound Retry If the Outbound Resource Is XA

If you select the outbound resource as XA, then the Oracle MQ Series Adapter throws an exception and does not retry because it does not support an outbound retry with outbound resource as XA. On the other hand, if the outbound resource is non-XA, then the retry happens correctly.

21.1.6.3 Oracle MQ Series Hangs If the Channel Is Brought Down in a Cluster Environment

When working with more than one managed server, if you try to bring down the channel, then Oracle MQ Series hangs. This occurs in both Windows and UNIX operating systems.

21.1.6.4 Adding Additional Encoding Not Supported

Standard Java encodings and their mappings are provided with the MQ Series Adapter but the Adapter Configuration Wizard does not support addition of additional Java encodings that you may require.

To add support for the standard Java encodings that are not provided in the list, you can perform the following steps:

1. Extract the `MQSeriesAdapter.jar` file from the `MQSeriesAdapter.rar` file.
2. Extract the `mq.properties` file from the `MQSeriesAdapter.jar` file.
3. Add the entry in the `mq.properties` file. This file has two entries for a mapping between MQ Series encoding and Java encoding. For each new encoding that you require, you must make two entries to the `mq.properties` file. Make an entry for the MQ Series encoding to the corresponding Java encoding and the other entry for the Java encoding to the corresponding MQ Series encoding.

21.1.7 Oracle JCA Adapter for Socket Issues and Workarounds

This section describes the following issue and workaround related to Oracle Socket Adapter:

- [Section 21.1.7.1, "Oracle Socket Adapter Not Supported On a Cluster-Based Environment"](#)

21.1.7.1 Oracle Socket Adapter Not Supported On a Cluster-Based Environment

Oracle Socket Adapter is not supported on a cluster-based environment. If you try to deploy an inbound Oracle Socket Adapter in a clustered environment, then one of the managed servers throws an error message that the server's port is already in use.

21.1.8 Native Format Builder Issues and Workarounds

This section describes the following issue and workaround related to Native Format Builder:

- [Section 21.1.8.1, "Delimited by White Space Option Not Supported in NXSD"](#)

21.1.8.1 Delimited by White Space Option Not Supported in NXSD

In the Specify Delimiter's page of the Native Format Builder wizard, the `White space` (any number of `tab`, `space`) option in the Delimited by list is not supported.

21.1.9 Oracle Adapter for Oracle Applications Issues and Workarounds

This section describes the following general issues and workarounds related to Oracle Adapter for Oracle Applications:

- [Section 21.1.9.1, "Populating Default Values for Record Types While Using PL/SQL APIs"](#)
- [Section 21.1.9.2, "Re-creating Wrapper Packages While Using Existing PL/SQL SOA Composites Against a Different Release Instance"](#)
- [Section 21.1.9.3, "Locating SQL Scripts in XSD Folder and Recreating Wrapper Packages for Concurrent Program SOA Composites When Deploying them to Different Instances"](#)

- [Section 21.1.9.4, "Using Old Retry Property Names for Business Event Inbound Retry to Work Properly"](#)
- [Section 21.1.9.5, "Retried Instances of Adapter for Oracle Applications Have Non-unique ECIDs"](#)
- [Section 21.1.9.6, "Reselecting Applications Database Connection from the Wizard Will Not Work at Design Time"](#)
- [Section 21.1.9.7, "Rejection Handling Is Not Working"](#)
- [Section 21.1.9.8, "Manually Adding Rule Function and Out Agent Values in the Event Subscription While Connecting to an 11.5.9 Instance"](#)

21.1.9.1 Populating Default Values for Record Types While Using PL/SQL APIs

Certain PL/SQL APIs exposed from Oracle E-Business Suite take record types as input. Such APIs expect default values to be populated for parameters within these record types for successful execution.

The default values are `FND_API.G_MISS_CHAR` for characters, `FND_API.G_MISS_DATE` for dates, and `FND_API.G_MISS_NUM` for numbers. Adapter for Oracle Applications can default these values when the parameters within the record type are passed as nil values, as shown in the following example:

```
<PRICE_LIST_REC>
<ATTRIBUTE1 xsi:nil="true"/>
<ATTRIBUTE2 xsi:nil="true"/>
<ATTRIBUTE3 xsi:nil="true"/>
...
</PRICE_LIST_REC>
```

This can be achieved with the help of a function in a Transform activity, or by directly passing the XML input with nil values and then assigning them to the record types within an Assign activity.

21.1.9.2 Re-creating Wrapper Packages While Using Existing PL/SQL SOA Composites Against a Different Release Instance

When a user has a SOA composite of a PL/SQL API created against an Oracle E-Business Suite Release 11i instance and intends to use it against the Release 12 instance or vice versa, for the compatibility in the target instance, the wrapper package of the SOA composite must be recreated. This approach updates the signature in the generated wrapper SQL file for the target instance and avoids the possible confusion whether the signature is the same or has changed in the target instance.

21.1.9.3 Locating SQL Scripts in XSD Folder and Recreating Wrapper Packages for Concurrent Program SOA Composites When Deploying them to Different Instances

When a user creates a Partner Link by selecting a concurrent program through Adapter for Oracle Applications, the SQL script that creates a wrapper package to submit the concurrent request is getting generated under the XSD folder in the composite artifacts and is not directly under the root composite folder. Therefore, if a user creates the composite against one Oracle E-Business Suite instance and deploys it on a different Oracle E-Business Suite instance, the user needs to find the script under the XSD folder and run the same against the target instance.

21.1.9.4 Using Old Retry Property Names for Business Event Inbound Retry to Work Properly

For business event inbound retry to work properly with Adapter for Oracle Applications in this release, users need to use the older retry property names `retryMaxCount` and `retryInterval` in place of the new `jca.retry.properties` `jca.retry.count` and `jca.retry.interval`.

21.1.9.5 Retried Instances of Adapter for Oracle Applications Have Non-unique ECIDs

All retried instances of Adapter for Oracle Applications share the same ECID. The ECID of the original instance also does not match the ECIDs of the corresponding retried instances.

21.1.9.6 Reselecting Applications Database Connection from the Wizard Will Not Work at Design Time

When multiple applications database connections are created in Oracle JDeveloper, if a user selects one database connection in the Adapter Configuration Wizard and clicks the Next button, but then realizes that a different database connection should have been chosen, instead of clicking the Back button to reselect a new database connection, he or she has to cancel the Wizard and restart the process. Clicking the Back button and reselecting a different database connection will not work in this release.

21.1.9.7 Rejection Handling Is Not Working

In case of an occurrence of a fault when a composite fails to process a message, the rejected message will not be handled appropriately by Adapter for Oracle Applications in this release.

21.1.9.8 Manually Adding Rule Function and Out Agent Values in the Event Subscription While Connecting to an 11.5.9 Instance

When trying to create a new business event Partner Link with Oracle E-Business Suite Release 11.5.9, the associated event subscription is also created with the values for Rule Function and Out Agent as blank. As a result, the subscription will not be executed when the business event is raised.

The workaround is to manually edit the subscription by adding the value `WF_RULE.DEFAULT_RULE` as the Rule Function and `WF_BPEL_QAGENT<system_name>` as the Out Agent.

21.2 Configuration Issues and Workarounds

There are no known configuration issues at this time.

21.3 Documentation Errata

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

- [Section 21.3.1, "Incorrect Information in Retryable Exceptions for Outbound Interaction"](#)
- [Section 21.3.2, "The DBActivationSpec Property Undying Is Always True in 11g"](#)

21.3.1 Incorrect Information in Retryable Exceptions for Outbound Interaction

Section 2.10.2.1.1, "Retryable Exceptions for Outbound Interaction" in Chapter Adapter Life-Cycle Management includes the following information, which is not true for outbound interactions:

Note that reply activity failure retries are one less than the `jca.retry.count` value that you specify. For example, if the `jca.retry.count` is 5, then you would expect the adapter to retry six times ((1 try plus 5 retries). However, it retries only four times, and you see only 5 instances in the Oracle Enterprise Manager Console.

21.3.2 The DBActivationSpec Property Undying Is Always True in 11g

Section 9.3.6.2, "Undying" in Chapter Oracle JCA Adapter for Database states that the new Undying property is supported. Instead, Undying is now always *true*, so the configuration property has been removed.

Oracle WebLogic Communication Services

This chapter describes issues associated with Oracle WebLogic Communication Services (OWLCS). It includes the following topics:

- [Section 22.1, "General Issues and Workarounds"](#)
- [Section 22.2, "Configuration Issues and Workarounds"](#)

22.1 General Issues and Workarounds

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

- [Section 22.1.1, "Active SIP Session and APP Session Count Show as -1 in Clustered Configuration"](#)
- [Section 22.1.2, "Oracle WebLogic Server Pack/Unpack Tool Does Not Function in OWLCS"](#)
- [Section 22.1.3, "Oracle WebLogic Server Cloning Tool Does Not Function in OWLCS"](#)
- [Section 22.1.4, "Messages Metrics Rendered as Unavailable in the Performance Page for User Messaging Server"](#)

22.1.1 Active SIP Session and APP Session Count Show as -1 in Clustered Configuration

In the Administration Console, the **Monitoring -> General** tab displays *Undefined* for the Active SIP Session Count and Active Application Session Count attributes when monitoring a replicated WebLogic SIP Server deployment. There is currently no workaround for this problem.

22.1.2 Oracle WebLogic Server Pack/Unpack Tool Does Not Function in OWLCS

The Pack/Unpack tool in Oracle WebLogic Server does not work in this OWLCS release. There is no workaround currently available.

22.1.3 Oracle WebLogic Server Cloning Tool Does Not Function in OWLCS

The Cloning tool in Oracle WebLogic Server does not work in this OWLCS release. There is no workaround currently available.

22.1.4 Messages Metrics Rendered as Unavailable in the Performance Page for User Messaging Server

When no metric data is found, for example when no messages have been sent or received after server setup, the Metrics Performance page will display *Unavailable*. This is not a problem with the software, and the Performance reporting is operating properly. As soon as *Send* and *Receive* traffic exists, the Performance page will display results normally.

22.2 Configuration Issues and Workarounds

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

- [Section 22.2.1, "Launch_sash Option Error"](#)
- [Section 22.2.2, "Same User Who Installed WLS/WLSS Product Must Perform Uninstall"](#)
- [Section 22.2.3, "Uppercase Usernames Cause Reregistration and Presence Subscription Failures"](#)
- [Section 22.2.4, "Running the uninstall.sh Script in Text Mode Does Not Uninstall the Product"](#)
- [Section 22.2.5, "SIP Monitor in F5 Networks BigIP Does Not Work in UDP Mode"](#)
- [Section 22.2.6, "SIP Container Does Not Bind to IPV6 Interfaces for Listening on Windows"](#)
- [Section 22.2.7, "JAWS Unable to Read Some Install Screens"](#)
- [Section 22.2.8, "Configure VoiceXML Driver Receive URLs Correctly"](#)

22.2.1 Launch_sash Option Error

An error has been reported when using the `launch_sash` command with the `-e` option. For example:

```
MW_HOME/user_projects/domains/base_domain/bin/launch_sash.sh -p
8001 -n weblogic -w welcome1 -a presenceapplication -e "xcap
appusage list"
```

does not properly process the `xcap appusage list` argument because the double quote (") is mishandled.

To work around this problem, issue the command at the `sash` prompt directly.

22.2.2 Same User Who Installed WLS/WLSS Product Must Perform Uninstall

In order to perform a clean uninstall, ensure that the same user (privileges) who accomplished the install also accomplishes the uninstall.

22.2.3 Uppercase Usernames Cause Reregistration and Presence Subscription Failures

When a user is created with an uppercase username, then the following occurs:

- Initial registration progresses normally, resulting in successful registration with Oracle Communicator.

- Presence subscriptions fails.
- After a few minutes, Oracle Communicator displays `Server Refused Registration (403)`.
- User's account is locked and sign-in is blocked for 30 minutes.

To work around this issue, set *Trusted Authentication Hosts* for the SIP Container by doing the following (from the Administration Console):

1. Click **SipServer** in the left pane.
2. Click the **SIP Security** tab.
3. In Trusted Authentication Hosts, add the IP address of your server (that is running OWLCS).
4. Save and restart OWLCS.

Note: Using this workaround, presence functionality will fail for clients running on the same machine as the OWLCS server. Such cases (both Oracle Communicator and server running on the same machine) are mostly for demonstration and development environments. For these cases, ensure you create users with lowercase usernames.

Reregistration and presence subscription failures can also occur when users are created with `privateId` being different than the username part of the `publicId`.

For example, if `privateId` is `test.user1` and `publicId` is `sip:test.user1@example.com`, everything works because `test.user1` is the username part of the `publicId` `sip:test.user1@example.com`.

But if `privateId` is `tuser1` and `publicId` is `sip:test.user1@example.com`, the username part of the `publicId` is not the same as `privateId`. In this case, the first registration succeeds with Oracle Communicator, but reregistrations and presence subscriptions fail. Apply the same workaround (configure trusted host as described above) to resolve this issue.

22.2.4 Running the `uninstall.sh` Script in Text Mode Does Not Uninstall the Product

Perform uninstallation using the Administration Console to ensure that all components are uninstalled. Ensure that you use the same user privilege as when you installed.

22.2.5 SIP Monitor in F5 Networks BigIP Does Not Work in UDP Mode

When using the F5 Networks BigIP load balancer for a cluster of SIP engines and the SIP monitor in BigIP is used for failure detection, it must be configured to operate (sending OPTIONS requests) over TCP and not UDP. UDP mode will not work (the pool will indicate that the servers are down).

22.2.6 SIP Container Does Not Bind to IPV6 Interfaces for Listening on Windows

Due to limitations in the Windows IPv6 stack, the SIP Container cannot bind to IPv6 sockets for listening.

22.2.7 JAWS Unable to Read Some Install Screens

Due to an issue with the OWLCS Core Platform CIE-based installer, the JAWS tool cannot correctly read the installation screens. To work around this issue, you must run

the installer in silent mode. For information on Silent Mode installation, see *Oracle WebLogic Communication Services Installation Guide*.

22.2.8 Configure VoiceXML Driver Receive URLs Correctly

In a clustered (high-availability) environment with Oracle HTTP Server (OHS) configured, do not use the OHS port to configure the VoiceXML Driver Receive URLs. Using the OHS port to configure the VoiceXML Driver Receive URLs will cause a conflict with the drivers.

Each Voice XML Driver must be configured with its own WLS server's port (as described in the parameters' documentation).

Web Services Security and Administration

This chapter describes issues associated with Web services security and administration, including Oracle Web Services Manager. It includes the following topics:

- [Section 23.1, "Security Issues and Workarounds"](#)
- [Section 23.2, "General Issues and Workarounds"](#)

Note: See also [Section 12.33, "Web Services and XML Issues and Workarounds."](#)

23.1 Security Issues and Workarounds

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

- [Section 23.1.1, "Preventing Denial of Service Attack and Recursive Node Attack"](#)
- [Section 23.1.2, "Guidelines for Using @SecurityPolicy Annotation"](#)
- [Section 23.1.3, "Resolving CertificateExpiredException for SAML Holder of Key Policies"](#)
- [Section 23.1.4, "Restarting Applications After Attaching Policies to ADF and WebCenter Applications"](#)
- [Section 23.1.5, "Attaching Policies to ADF and WebCenter Web Services in a Cluster"](#)
- [Section 23.1.6, "Naming Policies—oracle_<polycyname> is Not Valid"](#)
- [Section 23.1.7, "Using Multibyte User Credentials with wss_http_token_* Policy"](#)
- [Section 23.1.8, "Importing Custom Policies—Delay Before Policy is Available"](#)
- [Section 23.1.9, "Importing Custom Policies Before Attaching and Deploying to a Service Application"](#)
- [Section 23.1.10, "Performing a Bulk Upload of Policies"](#)
- [Section 23.1.11, "Reviewing Policy Configuration Override Values After Detaching a Client Policy"](#)
- [Section 23.1.12, "Deprecated and Unsupported Oracle Access Manager Policies"](#)

23.1.1 Preventing Denial of Service Attack and Recursive Node Attack

Generally, DoS and recursive node attacks are prevented by XML Firewall solutions. Oracle SOA Suite provides capabilities to prevent denial of service attack and recursive node attack by configuring the envelope size and nesting limits in the `SCABindingProperties.xml` and `oracle-webservices.xml`. For more information, see "Configuring Security in Web Services" in *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle SOA Suite*.

23.1.2 Guidelines for Using @SecurityPolicy Annotation

The SecurityPolicy annotations used for policy attachment to ADF and WebCenter versus WebLogic Web services are unique and not interchangeable. A security policy attachment defined in your Web service application **will not be enforced** in the following scenarios:

- If you attach a security policy to a ADF or WebCenter Web service using the `weblogic.wsee.jws.jaxws.owsm.SecurityPolicy` annotation.
- If you attach a security policy to a WebLogic (Java EE) Web service using the `oracle.webservices.annotations.SecurityPolicy` annotation.

To guarantee that a security policy attachment is enforced in your Web service application, ensure that you use the appropriate annotation in your application code:

- `oracle.webservices.annotations.SecurityPolicy`—Use to attach policies to ADF or WebCenter Web services.
- `weblogic.wsee.jws.jaxws.owsm.SecurityPolicy`—Use to attach policies to WebLogic (Java EE) Web services.

23.1.3 Resolving CertificateExpiredException for SAML Holder of Key Policies

For SAML holder of key policies (for example, `oracle/wss10_saml_hok_with_message_protection_service_policy`), a `CertificateExpiredException` is returned if the an expired certificate is present in the keystore, regardless of whether this certificate is being referenced. To resolve this exception, remove the expired certificate from the keystore.

23.1.4 Restarting Applications After Attaching Policies to ADF and WebCenter Applications

After attaching a policy to a Web service in an ADF or WebCenter Web service application, you need to stop and then restart the application for the change to take effect. You need to wait approximately 30 seconds (or the equivalent of the configured Graceful Shutdown Timeout time) between stopping and restarting the application. During this time, the server is allowing all global transactions to complete before shutting down the application. If you do not wait the configured Graceful Shutdown Timeout time, then the application will not be restarted appropriately and you will not be able to access it.

To avoid waiting the graceful shutdown timeout period, you can restart the application twice.

23.1.5 Attaching Policies to ADF and WebCenter Web Services in a Cluster

Policy attachment is not synchronized automatically for ADF and WebCenter Web services in a cluster. When using ADF and WebCenter Web services in a cluster, you must attach and/or detach policies to each instance of the cluster.

23.1.6 Naming Policies—oracle_<policyname> is Not Valid

You cannot prefix the name of a policy with "oracle_". For example, oracle_wss_http_token_service_policy is not a valid policy name. You must rename the policy to remove "oracle_" as the prefix.

When you export a policy using Oracle Enterprise Manager, the policy XML file is renamed from oracle/<policyname> to oracle_<policyname>. Before importing the policy file, you need to remove "oracle_" from the policy name. Otherwise, you will receive exceptions when trying to use the policy.

You can import the policy file using Oracle Enterprise Manager or MDS WLST. If importing the policy file using the MDS WLST commands, ensure that you import it within the oracle directory. For more information, see "Importing Web Service Policies" in *Oracle Fusion Middleware Security and Administrator's Guide for Web Services*.

23.1.7 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 "Predefined Policies" in *Oracle Fusion Middleware Security and Administrator's Guide for Web Services*.

23.1.8 Importing Custom Policies—Delay Before Policy is Available

After importing a custom policy, there will be a delay before the policy is available.

23.1.9 Importing Custom Policies Before Attaching and Deploying to a Service Application

It is recommended that you import custom policies before attaching and deploying them to a service application.

If you deploy an application with policies that do not exist in the Metadata Store (MDS), and subsequently import the policies, you need to restart the server for the policy attachment count to be updated.

23.1.10 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*.

23.1.11 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.

23.1.12 Deprecated and Unsupported Oracle Access Manager Policies

The following OAM scenario is **deprecated** for Oracle Fusion Middleware 11g R1:

- Authentication between ADF client and SOA service using Oracle WSM OAM security policies. In this scenario, the ADF client sends the ObSSOCookie in the Oracle proprietary SOAP header. It is recommended that you use a SAML-based policy instead.

The following Oracle Access Manager (OAM) scenarios are **not supported** in Oracle Fusion Middleware 11g R1:

- Authentication through Oracle WSM OAM service policy using ObSSOCookie in the HTTP header.
- Authentication through Oracle WSM OAM service policy using ObSSOCookie in a proprietary SOAP header of the request sent by another service.

In each case, clients should send a SAML token instead of an ObSSOCookie.

23.2 General Issues and Workarounds

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

- [Section 23.2.1, "Testing Web Services If Oracle Web Services Manager Is Not Installed"](#)
- [Section 23.2.2, "Error When Testing a WS-Addressing Policy Attached to a SOA Composite"](#)
- [Section 23.2.3, "Refreshing Stale Display After Assertion Deletion"](#)
- [Section 23.2.4, "Configuring Unit of Maximum Request Size"](#)
- [Section 23.2.5, "Reviewing Localization Limitations"](#)

23.2.1 Testing Web Services If Oracle Web Services Manager Is Not Installed

If you do not elect to install Oracle Web Services Manager during your Oracle Fusion Middleware installation, the Web services test page available using Oracle Enterprise Manager will be broken.

To resolve this issue, uncomment the `active.protocol` property in the `$domain_home/config/fmwconfig/policy-accessor-config.xml` file and set it as follows:

```
<property name="active.protocol">classpath</property>
```

You must restart the server in order for the change to take effect.

23.2.2 Error When Testing a WS-Addressing Policy Attached to a SOA Composite

If you attach a WS-Addressing policy to a SOA Composite and then attempt to test the Web service in Fusion Middleware Control, you might see the following error:

```
java.lang.Exception: oracle.sysman.emSDK.webservices.wsdlapi.SoapTestException: A  
required header representing a Message Addressing Property is not present
```

To work around this problem, click the **Parse WSDL** button on the Web services test page, and then re-test the Web service on the Test Web Services page:

1. Enable the **Custom** option for WS-Addressing.
2. Enter the **Policy URI**.

3. Click **Test Web Service**.

23.2.3 Refreshing Stale Display After Assertion Deletion

If you add an assertion to a policy and subsequently delete it, in some cases the assertion details may still be displayed in the details area. If this occurs, click on another assertion in the Assertions list to refresh the display.

23.2.4 Configuring Unit of Maximum Request Size

When configuring the Web service endpoint for a SOA, ADF, or WebCenter Web service, if you set the Maximum Request Size to -1, indicating that there is no maximum request size, then the Unit of Maximum Request Size setting is irrelevant and defaults to bytes.

23.2.5 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.

Part VII

Communication Services

Part VII contains the following chapters:

- [Chapter 24, "Oracle Complex Event Processing"](#)
- [Chapter 25, "Oracle User Messaging Service"](#)

Oracle Complex Event Processing

This chapter describes issues associated with Oracle Complex Event Processing (Oracle CEP). It includes the following topics:

- [Section 24.1, "General Issues and Workarounds"](#)
- [Section 24.2, "Configuration Issues and Workarounds"](#)
- [Section 24.3, "Documentation Errata"](#)

24.1 General Issues and Workarounds

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

- [Section 24.1.1, "Deprecated API and Schemas"](#)
- [Section 24.1.2, "Adapter Changes"](#)
- [Section 24.1.3, "New and Deprecated Options in the Deployer Tool"](#)
- [Section 24.1.4, "Changes in Management, Monitoring, and JMX"](#)
- [Section 24.1.5, "Using stopwlevs.sh With Multiple Servers on the Same Host"](#)
- [Section 24.1.6, "Monitor Service may Underestimate Latency For Application-Timestamped Channels"](#)
- [Section 24.1.7, "Connecting to Oracle CEP Server Using JConsole may Throw Benign Null Pointer Exceptions"](#)
- [Section 24.1.8, "Variable Duration Non-Event Detection is not Supported in This Release"](#)
- [Section 24.1.9, "JMSAdapterMBean Getter Methods for New Connection and User and Password"](#)

24.1.1 Deprecated API and Schemas

[Table 24–1](#) lists Java API deprecated in 11g Release 1 (11.1.1) and the replacement API, if any.

Table 24–1 Deprecated Java API

Deprecated API	Replacement API
<code>com.bea.wlevs.ede.api.Stream</code>	<code>com.bea.wlevs.ede.api.EventChannel</code>
<code>com.bea.wlevs.ede.api.EventSender</code>	<code>com.bea.wlevs.ede.api.RelationSender</code> <code>com.bea.wlevs.ede.api.StreamSender</code>
<code>com.bea.wlevs.ede.api.EventSink</code>	<code>com.bea.wlevs.ede.api.RelationSink</code> <code>com.bea.wlevs.ede.api.StreamSink</code>
<code>com.bea.wlevs.ede.api.EventSource</code>	<code>com.bea.wlevs.ede.api.RelationSource</code> <code>com.bea.wlevs.ede.api.StreamSource</code>
<code>com.bea.wlevs.management.configuration.StageMBean</code> methods relating to event record and playback	<code>com.bea.wlevs.management.configuratio n.RecordPlaybackMBean</code> <code>com.bea.wlevs.management.configuratio n.StageMBean</code> method <code>getRecordPlaybackMBean</code> returning <code>RecordPlaybackMBean</code>

[Table 24–2](#) lists Oracle CEP schema deprecated in 11g Release 1 (11.1.1) and the replacement schema, if any.

Table 24–2 Deprecated Oracle CEP Schema

Deprecated Schema	Deprecated in Assembly File?	Deprecated in Component Configuration File?	Replacement Schema
<code>wlevs:stream</code>	Yes	Yes	<code>wlevs:channel</code>
<code>wlevs:metadata</code>	Yes	N/A	<code>wlevs:property</code>
<code>wlevs:function attribute epl-name</code>	Yes	N/A	<code>wlevs:function attribute function-name</code>
<code>wlevs:adapter attribute manageable</code>	Yes	N/A	None.
<code>wlevs:channel attribute manageable</code>	Yes	N/A	None.
<code>wlevs:adapter attribute monitoring</code>	N/A	Yes	None.
<code>wlevs:channel attribute monitoring</code>	N/A	Yes	None.
<code>wlevs:processor attribute monitoring</code>	N/A	Yes	None.

For information on deprecated Oracle CQL syntax, see:

- [Section 24.3.9, "Outer Join Operator "\(+\)" is Deprecated"](#)

24.1.2 Adapter Changes

The programming model for adapters has changed as follows:

- [Outbound Adapters](#)
- [Lifecycle Callback Methods for Adapters](#)
- [Runnable Adapters](#)
- [Adapter Factories](#)
- [Publishing Adapter Providers](#)
- [StockTick Event Type Replaced by OracleStockTick](#)

Outbound Adapters

Adapters can now also be outbound; previously they were only inbound.

Lifecycle Callback Methods for Adapters

Spring tags for adapters now include attributes for setting lifecycle callback methods via the EPN assembly file.

Runnable Adapters

For adapters that want to run in a thread, their Java class should now implement `com.bea.wlevs.ede.api.RunnableBean`.

Adapter Factories

Programmers are no longer required to create an adapter factory when creating adapters. You only need to create an adapter factory if you want to share adapters among applications.

Publishing Adapter Providers

Adapter providers are factories for adapters that are published through the OSGi service registry.

Previously, the only way of advertising adapter providers was to use Spring-DM only, like this:

```
<osgi:service interface="com.bea.wlevs.ede.api.AdapterFactory" ref="myBean">
  <osgi:service-properties>
    <entry key="type" value="SocketAdapterType" />
  </osgi:service-properties>
</osgi:service>
```

However, Spring-DM does not support exporting and importing an OSGi service in the same application so the above approach is deprecated.

Now, you should declare providers with the `wlevs:factory` tag like this:

```
<wlevs:factory provider-name="SocketAdapterType" ref="myBean">
```

This will work whether the adapters are in the same application or not.

Note that if your adapters and providers are colocated (both in the same application) using a provider is optional; you could just instantiate the adapter directly.

Failure to make this change may result in an application that fails to start and eventually times out.

StockTick Event Type Replaced by OracleStockTick

When using the loadgen adapter, note that the `StockTick` event is now named `OracleStockTick`.

24.1.3 New and Deprecated Options in the Deployer Tool

The `-start` and `-stop` commands of the Deployer tool have been deprecated.

When using the `-install` command to install an application, Oracle CEP automatically starts it after all internal initialization tasks have completed. Subsequently, if you stop and start the Oracle CEP server instance, the application is automatically stopped and started, respectively.

The Deployer tool has two new options: `-suspend` and `-resume`. Users should use `-suspend` to suspend a currently running application, and `-resume` for it to resume running.

"Deployer Command-Line Reference" in the *Oracle CEP Administrator's Guide*.

24.1.4 Changes in Management, Monitoring, and JMX

The management framework of Oracle CEP has been overhauled in this release.

Oracle CEP no longer supports the JRMP protocol. Instead, JMX clients must use the more secure MSA protocol for both local and remote access to the Oracle CEP JMX server. When you connect to the Oracle CEP JMX server that is running on `localhost` or on a remote host, you must always use the JMX URL `service:jmx:msarmi://HOST-NAME:PORT/jndi/jmxconnector` so that you are always using the MSA connector (where `HOST-NAME` is either `localhost` or the name of the remote host and `PORT` is the Oracle CEP server JNDI port).

For more information, see:

- "Accessing the Oracle CEP JMX Server" in the *Oracle CEP Administrator's Guide*
- "Configuring JMX" in the *Oracle CEP Administrator's Guide*

24.1.5 Using `stopwlevs.sh` With Multiple Servers on the Same Host

Consider a scenario where you start two servers on the same host, for example, with server 1 listening on port 9002 and server 2 listening on port 9022. If you then use `stopwlevs.sh` in the server 1 domain directory, the server listening on port 9002 is stopped. If you then use `stopwlevs.sh` in the server 2 domain directory, the stop operation fails due to connection reset error.

Workaround: use the `stopwlevs.sh` command line argument `-url` or `-listenPort` to specify a port other than 9002.

24.1.6 Monitor Service may Underestimate Latency For Application-Timestamped Channels

The monitor service may underestimate the latency time of events that are being processed through the CQL processor when application-timestamped channels are being used and `is-totally-ordered` is not enabled.

24.1.7 Connecting to Oracle CEP Server Using JConsole may Throw Benign Null Pointer Exceptions

When you connect to Oracle CEP server using JConsole (with or without the `wlevsjconsole.sh` script), JConsole may throw a `java.lang.NullPointerException`.

Workaround: click **OK** in the exception dialog box and proceed. The exception does not affect the JMX connection or Oracle CEP server.

24.1.8 Variable Duration Non-Event Detection is not Supported in This Release

Fixed duration non-event pattern detection *is* supported in 11g Release 1 (11.1.1). When you create a query for fixed duration non-event detection, you may use the `DURATION` clause with constant value and time unit, such as `DURATION 5 SECONDS`, or just a constant value such as `DURATION 5`.

Variable duration non-event pattern detection is *not* supported in 11g Release 1 (11.1.1). That is, you may *not* use the DURATION clause with an arbitrary arithmetic expression, such as DURATION c1+4.

Recurring non-event pattern detection *is* supported in 11g Release 1 (11.1.1) but only for the fixed duration case. That is, you may use a DURATION clause with a MULTIPLES OF clause but only for a duration that is a constant value.

For documentation errata related to this issue, see [Section 24.3.7, "Variable Duration Non-Event Detection is not Supported in This Release"](#).

24.1.9 JMSAdapterMBean Getter Methods for New Connection and User and Password

The following methods have been added to `com.bea.wlevs.management.configuration.JMSAdapterMBean`:

- `getConnectionUser`
- `getConnectionPassword`
- `getConnectionEncryptedPassword`

The following attributes have been added to the `wlevs_application_config.xsd` element `jms-adapter`:

- `connection-user`
- `connection-password`
- `connection-encrypted-password`

When Oracle CEP acquires the JNDI `InitialContext`, it uses the user and password (or encrypted-password) settings.

When Oracle CEP calls the `createConnection` method on the `javax.jms.ConnectionFactory` to create a connection to the JMS destination (JMS queue or topic), it uses the `connection-user` and `connection-password` (or `connection-encrypted-password`) settings, if configured. Otherwise, Oracle CEP uses the user and password (or encrypted-password) settings.

You can use the `connection-user` and `connection-password` (or `connection-encrypted-password`) settings in applications where one security provider is used for JNDI access and a separate security provider is used for JMS access.

24.2 Configuration Issues and Workarounds

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

- [Section 24.2.1, "Accessing Signal Generation Dashboard With Firefox Version 3.0 on Windows"](#)
- [Section 24.2.2, "Starting a Server in a Domain Without Deployed Applications"](#)
- [Section 24.2.3, "VPN Software and Multicast Traffic"](#)
- [Section 24.2.4, "Starting Oracle CEP Visualizer With Firefox"](#)
- [Section 24.2.5, "Uploading Files Using Oracle CEP Visualizer With Firefox and SSL"](#)
- [Section 24.2.6, "A Channel Cannot be a Foreign Stage When Connected to an Oracle CQL Processor"](#)

- [Section 24.2.7, "Exceptions Thrown When Using Oracle CEP Visualizer with FireFox"](#)
- [Section 24.2.8, "Oracle CEP IDE for Eclipse is Incompatible With Required FireFox 3 Libraries on Linux"](#)
- [Section 24.2.9, "Configuring Oracle CEP Native Clustering Using IPv6 on Linux"](#)
- [Section 24.2.10, "Multi-Byte Characters are not Supported by loadgen"](#)
- [Section 24.2.11, "Oracle CEP Server Will not Start if the Keystore and Private Key Passwords are Different"](#)

24.2.1 Accessing Signal Generation Dashboard With Firefox Version 3.0 on Windows

When accessing the signal generation example dashboard (at URL <http://localhost:9002/signalgeneration/dashboard.html>) using the Firefox browser version 3.0 on Windows, you will get an error when you click **Start**.

Workaround: use Internet Explorer version 7 to access the signal generation example dashboard.

24.2.2 Starting a Server in a Domain Without Deployed Applications

When you start a server in a domain with no deployed applications, the `Server STARTED` message may not appear in the command window from which you ran the server start script, even though the server has successfully started.

24.2.3 VPN Software and Multicast Traffic

Active VPN software is known to have unpredictable behavior on multicast traffic. Additionally, having both Cisco VPN and Nortel VPN installed breaks multicast traffic.

24.2.4 Starting Oracle CEP Visualizer With Firefox

When using Oracle CEP Visualizer with the Firefox browser (version 3.0, SSL, and JDK 1.6), the first time you access a Oracle CEP Visualizer page it will render slowly, sometimes up to 30 seconds.

24.2.5 Uploading Files Using Oracle CEP Visualizer With Firefox and SSL

When using Oracle CEP Visualizer, you may get an error if you try to upload a file using the Firefox browser and SSL.

This is a known problem (<http://bugs.adobe.com/jira/browse/FP-226>) with Adobe Flex that affects Oracle CEP Visualizer.

24.2.6 A Channel Cannot be a Foreign Stage When Connected to an Oracle CQL Processor

If a channel is connected to an Oracle CQL processor, it cannot be a foreign stage.

24.2.7 Exceptions Thrown When Using Oracle CEP Visualizer with FireFox

When using Oracle CEP Visualizer with FireFox:

- Do not set the Jetty scratch directory to a path with a space in it. Doing so will cause `FileNotFoundException`.

- Ignore `EOFException` thrown on the server side; these exceptions will not cause client side failure.

24.2.8 Oracle CEP IDE for Eclipse is Incompatible With Required FireFox 3 Libraries on Linux

The Oracle CEP IDE for Eclipse uses Eclipse 3.3, which is incompatible with required FireFox 3 libraries on Linux. In this case, Eclipse will crash on startup with a JVM core dump and error message like this:

```
# An unexpected error has been detected by Java Runtime Environment:
#
# SIGSEGV (0xb) at pc=0x00bc80ac, pid=18044, tid=3086637584
#
# Java VM: Java HotSpot(TM) Client VM (11.3-b02 mixed mode, sharing
linux-x86)
# Problematic frame:
# C [libc.so.6+0x710ac] memcpy+0x1c
#
# An error report file with more information is saved as:
# /usr/local/bt/workspace/testruntime/eclipse/hs_err_pid18044.log
```

Workaround: perform the following procedure.

1. Change to the root user on your Linux machine.
2. Prevent Eclipse from loading the `libc.so` library noted in the core dump error message:

```
mv libc.so libc.so.orig
```

Note: This will disable FireFox 3 on this machine. To use FireFox 3, you must change the name of this library back to `libc.so`.

3. Follow the instructions outlined in the Eclipse Linux crash support Wiki page:
http://wiki.eclipse.org/IRC_FAQ#I_just_installed_Eclipse_on_Linux.2C_but_it_does_not_start._What_is_the_problem.3F

In particular, ensure that the JVM you are using with Eclipse is:

- explicitly pointed to in the `eclipse.ini` file, and
- JDK 1.6 or higher

24.2.9 Configuring Oracle CEP Native Clustering Using IPv6 on Linux

When using Oracle CEP native clustering on Linux with IPv6, you may see an error like the one shown in [Example 24-1](#) after restarting a member of a cluster.

Example 24-1 Oracle CEP Server Log evs4j Error

```
<Error> <evs4j> <BEA-2049005> <The cluster member 3 is considered to have failed>
```

Workaround: perform the following procedure:

1. Using the editor of your choice, open the `startwlevs.sh` script for the affected Oracle CEP sever.

The `startwlevs.sh` server start script is located in the server directory under the main domain directory. For example, the default server directory of the HelloWorld domain is located in `ORACLE_CEP_HOME/ocp_11.1/samples/domains/helloworld_domain/defaultserver`, where `ORACLE_CEP_HOME` refers to the main Oracle CEP installation directory, such as `/oracle_cep`.

2. Edit the `startwlevs.sh` script to add the `-Djava.net.preferIPv4Stack=true` property to the java command line:

```
"$JAVA_HOME/bin/java" $JVM_ARGS $DEBUG_ARGS -Djava.net.preferIPv4Stack=true  
-Dwlevs.home="$USER_INSTALL_DIR" -Dbea.home="$BEA_HOME" -jar "${USER_INSTALL_  
DIR}/bin/wlevs.jar" $ARGS
```
3. Save and close the `startwlevs.sh` script.
4. Start the affected Oracle CEP server using the modified `startwlevs.sh` script.

24.2.10 Multi-Byte Characters are not Supported by loadgen

The loadgen utility supports only ASCII characters. It does not support multi-byte character sets.

24.2.11 Oracle CEP Server Will not Start if the Keystore and Private Key Passwords are Different

The passwords for the keystore and the alias for the SSL private key must be the same. If they are not, the Oracle CEP Server will not start.

For more information, see [Section 24.3.12, "Oracle CEP Server Will not Start if the Keystore and Private Key Passwords are Different"](#).

24.3 Documentation Errata

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

- [Section 24.3.1, "Installer File Names are Incorrect"](#)
- [Section 24.3.2, "Reference to Additional Oracle CEP Samples Missing"](#)
- [Section 24.3.3, "Colt Aggregate Function Example Output Incomplete"](#)
- [Section 24.3.4, "User-Defined Single Row Function Does not Implement an Interface"](#)
- [Section 24.3.5, "JMS Adapter Properties Topic Missing"](#)
- [Section 24.3.6, "Configuring Severity for an Individual Module Procedure Missing Some Component Name Constants"](#)
- [Section 24.3.7, "Variable Duration Non-Event Detection is not Supported in This Release"](#)
- [Section 24.3.8, "DURATION Clause Examples Incorrect"](#)
- [Section 24.3.9, "Outer Join Operator "\(+\)" is Deprecated"](#)
- [Section 24.3.10, "Patch Client Section is Missing"](#)
- [Section 24.3.11, "Avoiding a Single Point of Failure for Oracle CEP Visualizer Access"](#)

- Section 24.3.12, "Oracle CEP Server Will not Start if the Keystore and Private Key Passwords are Different"
- Section 24.3.13, "Colt Functions DurbinWatson and sampleStandardDeviation are not Supported"
- Section 24.3.14, "Oracle CQL Built-In Function Names Must be Lower Case"
- Section 24.3.15, "Adapter Example Source Uses Deprecated APT"

24.3.1 Installer File Names are Incorrect

The installer file names in the following sections are incorrect:

- "Installing Oracle CEP in Graphical Mode" in the *Oracle CEP Getting Started*
- "Installing Oracle CEP in Console Mode" in the *Oracle CEP Getting Started*

Table 24–3 lists the correct installer file names for each supported platform.

Table 24–3 Oracle CEP Installers

Platform	Installer File Name
Linux 32-bit	ofm_osep_linux_11.1.1.1.0_32_disk1_1of1.bin
Linux x86 64-bit	ofm_osep_linux_11.1.1.1.0_64_disk1_1of1.bin
Solaris 64-bit	ofm_osep_solaris_11.1.1.1.0_64_disk1_1of1.bin

24.3.2 Reference to Additional Oracle CEP Samples Missing

"Overview of the Samples Provided in the Distribution Kit" in the *Oracle CEP Getting Started* should include the following information:

"Additional Oracle CEP sample code can be found at http://www.oracle.com/technology/sample_code/products/event-driven-architecture".

24.3.3 Colt Aggregate Function Example Output Incomplete

"Functions: Colt Aggregate" in the *Oracle CEP CQL Language Reference* contains incomplete example output for the following functions:

- AUTOCORRELATION
- DURBINWATSON
- HARMONICMEAN
- SAMPLESTANDARDDEVIATION
- TRIMMEDMEAN

24.3.4 User-Defined Single Row Function Does not Implement an Interface

The introductory paragraph in "How to Implement a User-Defined Single-Row Function" in the *Oracle CEP CQL Language Reference* reads:

"You implement a user-defined single-row function by implementing a Java class that implements the SingleElementFunction interface."

It should read:

"You implement a user-defined single-row function by implementing a Java class that provides a public constructor and a public method that is invoked to execute the function."

Step 2 of this procedure should read:

"Compile the user-defined function Java implementation class and register the class in your Oracle CEP application assembly file as [Example 24–2](#) shows."

Example 24–2 Single-Row User Defined Function for an Oracle CQL Processor

```
<wlevs:processor id="testProcessor">
  <wlevs:listener ref="providerCache"/>
  <wlevs:listener ref="outputCache"/>
  <wlevs:cache-source ref="testCache"/>
  <wlevs:function function-name="mymod" exec-method="execute" />
    <bean class="com.bea.wlevs.example.function.MyMod"/>
  </wlevs:function>
</wlevs:processor>
```

Specify the method that is invoked to execute the function using the `wlevs:function` element `exec-method` attribute. This method must be public and must be uniquely identifiable by its name (that is, the method cannot have been overridden).

For more information, see "wlevs:function" in the *Oracle CEP IDE Developer's Guide for Eclipse*.

24.3.5 JMS Adapter Properties Topic Missing

"Viewing and Changing the Configuration of a Stage" in the *Oracle CEP Visualizer User's Guide* is missing a topic on the JMS Adapter stage.

24.3.6 Configuring Severity for an Individual Module Procedure Missing Some Component Name Constants

"Configuring Severity for an Individual Module" in the *Oracle CEP Administrator's Guide* is missing some of the valid logging component name constants you can use. [Table 24–4](#) provides the complete list.

Table 24–4 Logging Component Name Constants

Component Name Constant	Description
Adapters	Applies to log messages from adapter instances running on the Oracle CEP server.
Cache	Applies to log messages from caching systems and cache instances running on the Oracle CEP server.
Channel	Applies to log messages from channels running on the Oracle CEP server.
CQLProcessor	Applies to log messages from Oracle CQL processors running on the Oracle CEP server.
EplProcessor	Applies to log messages from EPL processors running on the Oracle CEP server.
Ede	Applies to log messages from the Event-Driven Environment, the Oracle CEP server event-dispatching infrastructure.

Table 24–4 (Cont.) Logging Component Name Constants

Component Name Constant	Description
EventTrace	<p>When set to Info or Debug, allows you to trace events as they flow through the EPN for all applications. You can dynamically change the severity of this log key using Oracle CEP Visualizer.</p> <p>At the Info severity, you see log messages like:</p> <pre><May 26, 2009 5:53:49 PM PDT> <Info> <EventTrace> <BEA-000000> <Application [helloworld], Stage [helloworldOutputChannel] received insert event></pre> <p>At the Debug severity, the log messages include details of the event:</p> <pre><May 26, 2009 6:02:34 PM PDT> <Debug> <EventTrace> <BEA-000000> <Application [helloworld], Stage [helloworldOutputChannel] received insert event [HelloWorldEvent: HelloWorld - the current time is: 6:02:34 PM]></pre>
Lifecycle	Applies to log messages from Oracle CEP server and application lifecycle operations.
Management	Applies to log messages from Oracle CEP server general JMX-related management API operations.
Monitor	Applies to log messages from the Oracle CEP server monitoring service.
Recplay	Applies to log messages from Oracle CEP server event recording and playback operations.
Spring	Applies to log messages from Spring container operations.
Stream	Applies to log messages from stream instances running on the Oracle CEP server.

24.3.7 Variable Duration Non-Event Detection is not Supported in This Release

"DURATION Clause" in the *Oracle CEP CQL Language Reference* describes using the DURATION clause for non-event detection. This section should distinguish between the following:

- For fixed duration non-event detection, you use the DURATION clause with a constant value and time unit or just a constant value.
- For variable duration non-event detection, you use the DURATION clause with an arbitrary arithmetic expression.
- For recurring non-event detection, you use the DURATION clause with a MULTIPLES OF clause.

Fixed duration non-event pattern detection *is* supported in 11g Release 1 (11.1.1). When you create a query for fixed duration non-event detection, you may use the DURATION clause with constant value and time unit, such as DURATION 5 SECONDS, or just a constant value such as DURATION 5.

Variable duration non-event pattern detection *is not* supported in 11g Release 1 (11.1.1). That is, you may *not* use the DURATION clause with an arbitrary arithmetic expression, such as DURATION c1+4.

Recurring non-event pattern detection *is* supported in 11g Release 1 (11.1.1) but only for the fixed duration case. That is, you may use a DURATION clause with a MULTIPLES OF clause but only for a duration that is a constant value.

The title of "Non-Event Detection" in the *Oracle CEP CQL Language Reference* should read "Fixed Duration Non-Event Detection".

24.3.8 DURATION Clause Examples Incorrect

The following examples in "DURATION Clause" in the *Oracle CEP CQL Language Reference* are incorrect and should read as shown below:

- Example 15-8 "MATCH_RECOGNIZE with DURATION Clause Stream Output"

```
Timestamp  Tuple Kind  Tuple11000:      +          10,8825000:      +
10,38000:      +          10,1850000:      +          10,1962000:      +
10,
```

- Example 15-11 "MATCH_RECOGNIZE with DURATION MULTIPLES OF Clause Stream Output"

```
Timestamp  Tuple Kind  Tuple 11000:      +          10,88,637 25000:      +
10,, 38000:      +          10,18,18 48000:      +          10,19,37 58000:
+          10,19,37 68000:      +          10,20,57 82000:      +
10,, 92000:      +          10,,102000:      +          10,,112000:      +
10,,
```

The paragraph after Example 15-8:

"Now the further tuples that arrive until 11000 all match B. Since the duration is 10 we output a match at time $1000+10000=11000$. Note that the last of the tuples that match B is chosen (the one with the value 15) since the greedy quantifier * in the pattern regular expression AB* suggests as many B matches as possible should be matched. Since the sequence of tuples from 1000 through 11000 match the pattern AB* and nothing else a match is reported at 11000."

Should read:

"Since the duration is 10 we output a match as soon as input at time $1000+10000=11000$ is received (the one with the value 12). Since the sequence of tuples from 1000 through 9000 match the pattern AB* and nothing else a match is reported as soon as input at time 11000 is received."

24.3.9 Outer Join Operator "(+)" is Deprecated

"Comparison Conditions" in the *Oracle CEP CQL Language Reference* refers to the deprecated outer join operator (+). Oracle recommends that you not use the (+) join operator. Use the LEFT OUTER JOIN and RIGHT OUTER JOIN syntax described below.

"Outer Joins" in the *Oracle CEP CQL Language Reference* refers to the deprecated outer join operator (+). This section should read as follows:

An outer join extends the result of a simple join. An outer join returns all rows that satisfy the join condition and also returns some or all of those rows from one table for which no rows from the other satisfy the join condition.

[Example 24-3](#) shows how to create a query q5 that uses a left outer join between streams S0, with schema (c1 integer, c2 float), and S1, with schema (c1 integer, c2 float).

Example 24-3 Outer Joins

```
<query id="q5"><![CDATA[
  SELECT a.c1+b.c1
  FROM S0[range 5] AS a LEFT OUTER JOIN S1[range 3] AS b
```

```

        ON b.c2 = a.c2
        WHERE b.c2 > 3
    ]]></query>

```

Use the ON clause to specify a join condition. Doing so lets you specify join conditions separate from any search or filter conditions in the WHERE clause.

You can perform the following types of outer join:

- [Section 24.3.9.1, "Left Outer Join"](#)
- [Section 24.3.9.2, "Right Outer Join"](#)

24.3.9.1 Left Outer Join

To write a query that performs an outer join of streams A and B and returns all stream elements from A (a left outer join), use the LEFT OUTER JOIN syntax in the FROM clause as [Example 24–4](#) shows. For all stream elements in A that have no matching stream elements in B, Oracle CEP returns null for any select list expressions containing stream elements of B.

Example 24–4 Left Outer Joins

```

<query id="q5"><![CDATA[
    SELECT a.c1+b.c1
    FROM S0[range 5] AS a LEFT OUTER JOIN S1[range 3] AS b
    ON b.c2 = a.c2
    WHERE b.c2 > 3
]]></query>

```

24.3.9.2 Right Outer Join

To write a query that performs an outer join of streams A and B and returns all stream elements from B (a right outer join), use the RIGHT OUTER JOIN syntax in the FROM clause as [Example 24–5](#) shows. For all stream elements in B that have no matching stream elements in A, Oracle CEP returns null for any select list expressions containing stream elements of A.

Example 24–5 Right Outer Joins

```

<query id="q5"><![CDATA[
    SELECT a.c1+b.c1
    FROM S0[range 5] AS a RIGHT OUTER JOIN S1[range 3] AS b
    ON b.c2 = a.c2
    WHERE b.c2 > 3
]]></query>

```

24.3.10 Patch Client Section is Missing

"Installing Oracle CEP" in the *Oracle CEP Getting Started* is missing information on using the patch client.

For more information, see *Oracle Smart Update Installing Patches and Maintenance Packs*.

24.3.11 Avoiding a Single Point of Failure for Oracle CEP Visualizer Access

The procedures in "Creating an Oracle CEP Multi-Server Domain Using Oracle CEP Native Clustering" in the *Oracle CEP Administrator's Guide* and "Creating an Oracle CEP Multi-Server Domain Using Oracle Coherence" in the *Oracle CEP Administrator's Guide* contain steps that read:

"To improve performance, consider disabling Oracle CEP Visualizer access on all but one server in the domain."

Should read:

"To avoid a single point of failure, consider enabling Oracle CEP Visualizer on a small subset of n machines in the domain. Note that enabling Oracle CEP Visualizer on a given Oracle CEP Server may impact the performance of the server depending on the Oracle CEP Visualizer workload."

24.3.12 Oracle CEP Server Will not Start if the Keystore and Private Key Passwords are Different

"Creating an Oracle CEP Standalone-Server Domain Using the Configuration Wizard in Graphical Mode" in the *Oracle CEP Administrator's Guide* step 11 reads:

"Enter and confirm the password for the Oracle CEP domain identity keystore.

By default, the password for the certificate private key will be the same as the identity keystore; if you want it to be different, uncheck **Use Keystore Password** and enter the private key password."

Should read:

"Enter and confirm the password for the Oracle CEP domain identity keystore.

By default, the password for the certificate private key will be the same as the identity keystore; the Oracle CEP Server will not start if otherwise. Do not uncheck **Use Keystore Password** and do not enter a private key password."

"Configuring SSL to Secure Network Traffic" in the *Oracle CEP Administrator's Guide* is missing the following procedure:

24.3.12.1 How to Create a Keystore Manually

By default, the Configuration Wizard creates a default key-store certificate file, called `evsidentity.jks`, in the `DOMAIN_DIR/servername/ssl` directory; its password is the same as that entered when creating a server with the Configuration Wizard. Optionally, you can manually create your own keystore.

To create a key-store manually:

1. Use the JDK keytool command to generate a keystore:

```
keytool -genkey -alias evsidentity -keyalg RSA -validity 10958 -keystore  
evsidentity.jks -keysize 1024
```

2. Enter the keystore password, as prompted:

```
Enter keystore password:
```

3. Enter the keystore attributes, as prompted:

```
What is your first and last name?  
[Unknown]: CEP  
What is the name of your organizational unit?  
[Unknown]: SOA  
What is the name of your organization?  
[Unknown]: ORACLE  
What is the name of your City or Locality?  
[Unknown]: SF  
What is the name of your State or Province?  
[Unknown]: CA
```

```

What is the two-letter country code for this unit?
[Unknown]:  US
Is CN=CEP, OU=SOA, O=ORACLE, L=SF, ST=CA, C=US correct?
[no]:  y

```

4. When prompted for a key password, do not enter a password; just press RETURN:

```

Enter key password for <evsidentity>
(RETURN if same as keystore password):

```

Note: The Oracle CEP Server will not start unless the password for certificate private key is the same as the password for the identity keystore.

5. Using your favorite XML editor, open the Oracle CEP server `config.xml` file.

By default, the Configuration Wizard creates the `config.xml` file in the `ORACLE_CEP_HOME/user_projects/domains/DOMAIN_DIR/servername/config` directory, where `ORACLE_CEP_HOME` refers to the Oracle CEP installation directory (such as `d:/oracle_cep`), `DOMAIN_DIR` refers to the domain directory (such as `my_domain`), and `servername` refers to the server instance directory (such as `server1`).

6. Configure the `ssl` element.

[Example 24-6](#) shows the default `ssl` element the Configuration Wizard creates.

Example 24-6 Default `ssl` Element

```

<ssl>
  <name>sslConfig</name>
  <key-store>KEYSTORE_PATH</key-store>
  <key-store-pass>
    <password>PASSWORD</password>
  </key-store-pass>
  <key-store-alias>KEYSTORE_ALIAS</key-store-alias>
  <key-manager-algorithm>SunX509</key-manager-algorithm>
  <ssl-protocol>TLS</ssl-protocol>
  <enforce-fips>false</enforce-fips>
  <need-client-auth>false</need-client-auth>
</ssl>

```

Where:

- `KEYSTORE_PATH` is the file path to the keystore file (the file name is from the `-keystore` argument to the `keytool` command).
- `PASSWORD` is the cleartext keystore password.
- `KEYSTORE_ALIAS` is the keystore alias (from the `-alias` argument to the `keytool` command).

7. Save and close the `config.xml` file.

8. Encrypt the cleartext password in the `key-store-pass` element `password` child element of the `config.xml` file by using the `encryptMSAConfig` utility.

See "The `encryptMSAConfig` Command-Line Utility" in the *Oracle CEP Administrator's Guide*.

24.3.13 Colt Functions DurbinWatson and sampleStandardDeviation are not Supported

Oracle CEP does not support Colt functions `DurbinWatson` and `sampleStandardDeviation`.

The following sections should be omitted:

- "DURBINWATSON" in the *Oracle CEP CQL Language Reference*
- "SAMPLESTANDARDDEVIATION" in the *Oracle CEP CQL Language Reference*

24.3.14 Oracle CQL Built-In Function Names Must be Lower Case

In the following sections, all built-in function names should be lower case:

- "Functions: Single-Row" in the *Oracle CEP CQL Language Reference*
- "Functions: Aggregate" in the *Oracle CEP CQL Language Reference*
- "Functions: Colt Single-Row" in the *Oracle CEP CQL Language Reference*
- "Functions: Colt Aggregate" in the *Oracle CEP CQL Language Reference*
- "Functions: java.lang.Math" in the *Oracle CEP CQL Language Reference*

24.3.15 Adapter Example Source Uses Deprecated API

In "Event Sources and Event Sinks" in the *Oracle CEP IDE Developer's Guide for Eclipse*, should use the API `StreamSink` and `RelationSink` and `StreamSource` and `RelationSource` instead of the deprecated `EventSource` and `EventSink` API.

Similarly, the following areas of the *Oracle CEP IDE Developer's Guide for Eclipse* should also use the API `StreamSink` and `RelationSink` and `StreamSource` and `RelationSource` instead of the deprecated `EventSource` and `EventSink` API:

- [Section 24.3.15.1, "Implementing an Adapter or Event Bean as an Event Source"](#)
- [Section 24.3.15.2, "Implementing an Adapter or Event Bean as an Event Sink"](#)
- [Section 24.3.15.3, "com.bea.wlevs.management.Activate"](#)
- [Section 24.3.15.4, "com.bea.wlevs.management.Prepare"](#)
- [Section 24.3.15.5, "com.bea.wlevs.management.Rollback"](#)

24.3.15.1 Implementing an Adapter or Event Bean as an Event Source

"Implementing an Adapter or Event Bean as an Event Source" in the *Oracle CEP IDE Developer's Guide for Eclipse* should read as follows:

This section describes how to create an inbound adapter that acts as an event source because it receives incoming data and generates events that it sends to the next component in the EPN. Because event beans are functionally the same, the guidelines also apply to programming event beans that act as event sources.

The inbound adapter class typically reads the stream of incoming data, such as from a market data feed, converts it into an Oracle CEP event type that is understood by the rest of the application, and sends the event to the next component in the network.

The following example shows the adapter class of the `HelloWorld` sample; see the explanation after the example for coding guidelines that correspond to the Java code in bold.

```
package com.bea.wlevs.adapter.example.helloworld;
```

```

import java.text.DateFormat;
import java.util.Date;

import com.bea.wlevs.ede.api RunnableBean;
import com.bea.wlevs.ede.api StreamSender;
import com.bea.wlevs.ede.api StreamSource;
import com.bea.wlevs.event.example.helloworld.HelloWorldEvent;

public class HelloWorldAdapter implements RunnableBean, StreamSource {

    private static final int SLEEP_MILLIS = 300;

    private DateFormat dateFormat;
    private String message;
    private boolean suspended;

    private StreamSender eventSender;

    public HelloWorldAdapter() {
        super();
        dateFormat = DateFormat.getTimeInstance();
    }

    public void run() {
        suspended = false;
        while (!isSuspended()) { // Generate messages forever...

            generateHelloMessage();

            try {
                synchronized (this) {
                    wait(SLEEP_MILLIS);
                }
            } catch (InterruptedException e) {
                e.printStackTrace();
            }
        }
    }

    public void setMessage(String message) {
        this.message = message;
    }

    private void generateHelloMessage() {
        String message = this.message + dateFormat.format(new Date());
        HelloWorldEvent event = new HelloWorldEvent();
        event.setMessage(message);

        eventSender.sendInsertEvent(event);
    }

    public void setEventSender(StreamSender sender) {
        eventSender = sender;
    }

    public synchronized void suspend() {
        suspended = true;
    }

    private synchronized boolean isSuspended() {
        return suspended;
    }
}

```

Follow these guidelines when programming the adapter Java class; code snippets of the guidelines are shown in bold in the preceding example:

- Import the interfaces and classes of the Oracle CEP API:

```
import com.bea.wlevs.ede.api.StreamSender;
import com.bea.wlevs.ede.api.StreamSource;
import com.bea.wlevs.ede.api RunnableBean;
```

Because the adapter is an event source it must implement the `StreamSource` interface. If you want the adapter to run in a thread, also implement `RunnableBean`. The `StreamSender` interface sends event types to the next component in your application network. For full details of these APIs, see *Oracle CEP Java API Reference*.

- Import the application-specific classes that represent the event types used in the application:

```
import com.bea.wlevs.event.example.helloworld.HelloWorldEvent
```

The `com.bea.wlevs.event.example.helloworld.HelloWorldEvent` class is a `JavaBean` that represents the event type used in the application.

- The adapter class must implement the `StreamSource` and `RunnableBean` interfaces because it is an event source and will run in its own thread:

```
public class HelloWorldAdapter implements RunnableBean, StreamSource {
```

The `StreamSource` interface provides the `StreamSender` that you use to send events.

- Because the adapter implements the `RunnableBean` interface, your adapter must then implement the `run()` method:

```
public void run() {...
```

This is where you should put the code that reads the incoming data, such as from a market feed, and convert it into an Oracle CEP event type, and then send the event to the next component in the network. Refer to the documentation of your data feed provider for details on how to read the incoming data. See Section 14.2.2.2, "Accessing Third-Party JAR Files" for information about ensuring you can access the vendor APIs if they are packaged in a third-party JAR file.

In the `HelloWorld` example, the adapter itself generates the incoming data using the `generateHelloMessage()` private method. This is just for illustrative purposes and is not a real-world scenario. The `generateHelloMessage()` method also includes the other typical event type programming tasks:

```
HelloWorldEvent event = new HelloWorldEvent();
event.setMessage(message);

eventSender.sendInsertEvent(event);
```

The `HelloWorldEvent` is the event type used by the `HelloWorld` example; the event type is implemented with a `JavaBean` and is registered in the EPN assembly file using the `<wlevs:event-type-repository>` tag. See Section 1.5, "Creating Oracle CEP Event Types" for details. The `setMessage()` method sets the properties of the event; in typical adapter implementations this is how you convert a particular property of the incoming data into an event type property. Finally, the `StreamSender.sendEvent()` method sends this new event to the next component in the network.

- Because your adapter implements `StreamSource`, you must implement the `setEventSender()` method, which passes in the `StreamSender` that you use to send events:

```
public void setEventSender(StreamSender sender) { ...
```

- If, as is typically the case, your adapter implements `SuspendableBean`, you must implement the `suspend()` method that stops the adapter when, for example, the application is undeployed:

```
public synchronized void suspend() throws Exception { ...
```

24.3.15.2 Implementing an Adapter or Event Bean as an Event Sink

"Implementing an Adapter or Event Bean as an Event Sink" in the *Oracle CEP IDE Developer's Guide for Eclipse* should read as follows:

The following sample code shows a Spring bean from HelloWorld application that acts as an event sink; see the explanation after the example for the code shown in bold:

```
package com.bea.wlevs.example.helloworld;

import com.bea.wlevs.ede.api.StreamSink;
import com.bea.wlevs.event.example.helloworld.HelloWorldEvent;

public class HelloWorldBean implements StreamSink {

    public void onInsertEvent(Object event) {
        if (event instanceof HelloWorldEvent) {
            HelloWorldEvent helloWorldEvent = (HelloWorldEvent) event;
            System.out.println("Message: " + helloWorldEvent.getMessage());
        }
    }
}
```

The programming guidelines shown in the preceding example are as follows:

- Your bean must import the event type of the application, which in the HelloWorld case is `HelloWorldEvent`:

```
import com.bea.wlevs.event.example.helloworld.HelloWorldEvent;
```

- Your bean must implement the `com.bea.wlevs.ede.api.StreamSink` interface:

```
public class HelloWorldBean implements StreamSink {...
```

- The `StreamSink` interface has a single method that you must implement, `onInsertEvent(java.lang.Object)`, which is a callback method for receiving events. The parameter of the method is an `Object` that represents the actual event that the bean received from the component that sent it the event:

```
public void onInsertEvent(Object event)
```

- The data type of the events is determined by the event type you registered in the EPN assembly file of the application. In the example, the event type is `HelloWorldEvent`; the code first ensures that the received event is truly a `HelloWorldEvent`:

```
if (event instanceof HelloWorldEvent) {
    HelloWorldEvent helloWorldEvent = (HelloWorldEvent) event;
```

This event type is a JavaBean that was configured in the EPN assembly file as shown:

```
<wlevs:event-type-repository>
  <wlevs:event-type type-name="HelloWorldEvent">
    <wlevs:class>
      com.bea.wlevs.event.example.helloworld.HelloWorldEvent
    </wlevs:class>
  </wlevs:event-type>
</wlevs:event-type-repository>
```

See Section 1.4, "Creating the EPN Assembly File" for procedural information about creating the EPN assembly file, and Appendix D, "Schema Reference: EPN Assembly spring-wlevs-v11_0_0_0.xsd" for reference information.

- Events are instances of the appropriate JavaBean, so you access the individual properties using the standard `getXXX()` methods. In the example, the `HelloWorldEvent` has a property called `message`:

```
System.out.println("Message: " + helloWorldEvent.getMessage());
```

For complete API reference information about the Oracle CEP APIs described in this section, see the *Oracle CEP Java API Reference*.

24.3.15.3 com.bea.wlevs.management.Activate

"Example @Activate Annotation" in the *Oracle CEP IDE Developer's Guide for Eclipse* should read as follows:

```
package com.bea.wlevs.adapter.example.helloworld;
...
import com.bea.wlevs.configuration.Activate;
import com.bea.wlevs.ede.api RunnableBean;
import com.bea.wlevs.ede.api.StreamSender;
import com.bea.wlevs.ede.api.StreamSource;
import com.bea.wlevs.event.example.helloworld.HelloWorldEvent;

public class HelloWorldAdapter implements RunnableBean, StreamSource {
...
    @Activate
    public void activateAdapter(HelloWorldAdapterConfig adapterConfig) {
        this.message = adapterConfig.getMessage();
    }
...
}
```

24.3.15.4 com.bea.wlevs.management.Prepare

"Example @Prepare Annotation" in the *Oracle CEP IDE Developer's Guide for Eclipse* should read as follows:

```
package com.bea.wlevs.adapter.example.helloworld;
...
import com.bea.wlevs.configuration.Prepare;
import com.bea.wlevs.ede.api RunnableBean;
import com.bea.wlevs.ede.api.StreamSender;
import com.bea.wlevs.ede.api.StreamSource;
import com.bea.wlevs.event.example.helloworld.HelloWorldEvent;

public class HelloWorldAdapter implements RunnableBean, StreamSource {
...
    @Prepare
    public void checkConfiguration(HelloWorldAdapterConfig adapterConfig) {
```

```

        if (adapterConfig.getMessage() == null
            || adapterConfig.getMessage().length() == 0) {
            throw new RuntimeException("invalid message: " + message);
        }
    }
    ...
}

```

24.3.15.5 com.bea.wlevs.management.Rollback

"Example @Rollback Annotation" in the *Oracle CEP IDE Developer's Guide for Eclipse* should read as follows:

```

package com.bea.wlevs.adapter.example.helloworld;
...
import com.bea.wlevs.configuration.Rollback;
import com.bea.wlevs.ede.api RunnableBean;
import com.bea.wlevs.ede.api.StreamSender;
import com.bea.wlevs.ede.api.StreamSource;
import com.bea.wlevs.event.example.helloworld.HelloWorldEvent;

public class HelloWorldAdapter implements RunnableBean, StreamSource {
    ...
    @Rollback
    public void rejectConfigurationChange(HelloWorldAdapterConfig adapterConfig) {
    }
}

```

Oracle User Messaging Service

This chapter describes issues associated with Oracle User Messaging Service. It includes the following topics:

- [Section 25.1, "General Issues and Workarounds"](#)
- [Section 25.2, "Configuration Issues and Workarounds"](#)
- [Section 25.3, "Documentation Errata"](#)

25.1 General Issues and Workarounds

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

- [Section 25.1.1, "XML File Handle Left Open after Upload Fails"](#)
- [Section 25.1.2, "Messages Metrics Rendered as Unavailable in the Performance Page for User Messaging Server"](#)
- [Section 25.1.3, "UMS URLs Unavailable After Restart"](#)
- [Section 25.1.4, "User Preferences User Interface Renders Improperly"](#)

25.1.1 XML File Handle Left Open after Upload Fails

If an error occurs when uploading a user messaging preferences XML file using the WLST `manageUserMessagingPrefs` command, the XML file handle is left open. On the Microsoft Windows platform, this file cannot be deleted until you exit the WLST shell.

25.1.2 Messages Metrics Rendered as Unavailable in the Performance Page for User Messaging Server

When no metric data is found, for example when no messages have been sent or received after server setup, the Metrics Performance page will display *Unavailable*. This is not a problem with the software, and the Performance reporting is operating properly. As soon as *Send* and *Receive* traffic exists, the Performance page will display results normally.

25.1.3 UMS URLs Unavailable After Restart

Upon restarting the UMS server (*usermessagingserver*) from Oracle Enterprise Manager Fusion Middleware Control or through Oracle WebLogic Console, you may get an error: `Error 503--Service Unavailable` when attempting to access any URLs served by the UMS server, such as the User Preferences UI (*/sdpmessaging/userprefs-ui*) or the various Web Services endpoints. This error occurs intermittently in cases when

the Oracle WebLogic Server is heavily loaded (such as with a SOA instance). To work around this issue:

- Restart the UMS server again (two or more restarts may be required).
- If multiple UMS server restarts are not sufficient, then restart the entire Oracle WebLogic Server instance.

25.1.4 User Preferences User Interface Renders Improperly

Intermittent UI rendering errors have been reported in some languages, due to the generation of a corrupted .css file. If you experience problems, follow these steps to work around the issue:

1. Delete the cached, auto-generated .css file for the affected locale (or simply, all locales) on the server located at `DOMAIN_HOME/servers/<server_name>/tmp/_WL_user/usermessagingserver/<random_name>/public/adf/styles/cache` and restart the *usermessagingserver* application using Oracle Enterprise Manager Fusion Middleware Control. Have all users clear their browser caches.

The next time the UI is accessed from a browser, a new .css file will be generated for the desired locale, and it is very likely that it will be a valid .css file. If not, repeat this process a couple of times.

2. If the previous solution does not work, disable content compression in the `web.xml` file of the User Preferences Web Module located at `DOMAIN_HOME/servers/<server_name>/tmp/_WL_user/usermessagingserver/<random_name>/sdpMessagingUserPrefs-UI-web.war`. In particular, extract `web.xml`, add the following `<context-param/>` to it:

```
<context-param>
  <param-name>org.apache.myfaces.trinidad.DISABLE_CONTENT_
  COMPRESSION</param-name>
  <param-value>true</param-value>
</context-param>
```

Then, re-archive it to the war module.

Finally, restart the *usermessagingserver* application using Oracle Enterprise Manager Fusion Middleware Control.

25.2 Configuration Issues and Workarounds

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

- [Section 25.2.1, "Configure VoiceXML Driver Receive URLs Correctly"](#)
- [Section 25.2.2, "UMS Driver Configuration Changes Not Immediately Effective"](#)
- [Section 25.2.3, "JavaMail Truncates Attachments"](#)

25.2.1 Configure VoiceXML Driver Receive URLs Correctly

In a clustered (high-availability) environment with Oracle HTTP Server (OHS) configured, do not use the OHS port to configure the VoiceXML Driver Receive URLs. Using the OHS port to configure the VoiceXML Driver Receive URLs will cause a conflict with the drivers.

Each Voice XML Driver must be configured with its own WLS server's port (as described in the parameters' documentation).

25.2.2 UMS Driver Configuration Changes Not Immediately Effective

When you change a driver's configuration and then restart the driver, the changes will not take effect until all managed connections in the pool are destroyed (900 seconds [15 minutes] by default). Take one of these actions to ensure that the connections are destroyed:

- When performing driver configuration changes, stop the driver application and wait for 15 minutes. Then re-start the driver application.

Note: If you follow this recommendation and the wait time of 900 seconds (15 minutes) is too long, you can reduce the time using the Oracle WebLogic Server Administration Console as follows:

1. Click **Deployments**.
2. Select the desired UMS Driver deployment.
3. Click the **Resource Adapter Type** module.
4. Click **Configuration > Outbound Connection Pools**.
5. Click the **DriverConnectionFactory** group.
6. Click **Connection Pool**.
7. Edit the value of *Shrink Frequency Seconds* (for example, set to *120 seconds*).
8. Click **Save**, and save the changes to a deployment plan file when prompted.
9. Restart the UMS driver deployment to include the new plan.

Remember that if *Shrink Frequency* is reduced to a short interval, it may eventually have a negative impact on the performance of the driver as idle connections will be recycled frequently.

OR

- Restart the entire Oracle WebLogic Server after performing driver configuration changes. The new changes will take effect immediately upon server re-start.

25.2.3 JavaMail Truncates Attachments

UMS and Oracle Fusion Middleware use Sun's JavaMail (<http://java.sun.com/products/javamail/>) for various mail and messaging operations. JavaMail is used extensively in the UMS email driver, as well as in Oracle Fusion Middleware Webservices (including the UMS Parlay X API) to handle MIME-encoded content.

Oracle Fusion Middleware Release 11gR1 includes JavaMail version 1.4. This version of JavaMail has a bug that may cause multipart web service content (SOAP attachments) larger than 8kb to be truncated. This behavior will occur when using the UMS Parlay X SendMessage interface; if the message content is a multipart object, the content beyond 8kb may either be truncated silently, or the operation may fail if the truncation causes a decoding failure.

This issue is resolved in JavaMail version 1.4.1. In order for the new JavaMail library to take effect, it must be made available in the Oracle WebLogic Server system classpath so it is available to the web service infrastructure.

To accomplish this, use the `PATCH_CLASSPATH` environment variable. Libraries and directories listed in this classpath are prepended to the system classloader's classpath. You can either set this environment variable manually in your environment each time you start a server where UMS is running, or edit `DOMAIN_HOME/bin/setDomainEnv.sh` (UNIX) or `DOMAIN_HOME/bin/setDomainEnv.cmd` (Windows), updating the line where `PATCH_CLASSPATH` is set, making sure to include the path to the JavaMail 1.4.1 library.

25.3 Documentation Errata

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

- [Section 25.3.1, "Finding User Messaging Preferences URL"](#)

25.3.1 Finding User Messaging Preferences URL

The User Messaging Service documentation (in both the Developer's and Administrator's guides) did not list the location of the User Messaging Preferences UI. The standalone user interface is available at:

`http://<host>:<port>/sdpmessaging/userprefs-ui`

The User Messaging Preferences UI is also embedded in the SOA Worklist application. You can access it from the Worklist application by choosing **Preferences > Notification**.

Part VIII

Oracle Identity Management

Part VIII contains the following chapters:

- [Chapter 26, "Oracle Directory Integration Platform"](#)
- [Chapter 27, "Oracle Identity Federation"](#)
- [Chapter 28, "Oracle Internet Directory"](#)
- [Chapter 29, "Oracle Platform Security Services"](#)
- [Chapter 30, "SSL Configuration in Oracle Fusion Middleware"](#)
- [Chapter 31, "Oracle Virtual Directory"](#)

Oracle Directory Integration Platform

This chapter describes issues associated with Oracle Directory Integration Platform. It includes the following topics:

- [Section 26.1, "General Issues and Workarounds"](#)
- [Section 26.2, "Configuration Issues and Workarounds"](#)
- [Section 26.3, "Documentation Errata"](#)

26.1 General Issues and Workarounds

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

- [Do Not Use localhost as Oracle Internet Directory Hostname When Configuring Oracle Directory Integration Platform](#)
- [Non-LDAP Profiles Must Be Created and Managed Using manageSyncProfiles](#)
- [syncProfileBootstrap Not Supported for SSL Mode 2 Server-Only Authentication](#)
- [DIP Tester Utility Not Currently Supported for 11g Release 1 \(11.1.1\)](#)
- [Validate All Map Rules Feature Not Supported in SSL Mode 2 - Server Only Authentication](#)
- [Erroneous Exception or Error Messages When Deleting and Deregistering Profiles After Upgrade](#)

26.1.1 Do Not Use localhost as Oracle Internet Directory Hostname When Configuring Oracle Directory Integration Platform

When configuring Oracle Directory Integration Platform against an existing Oracle Internet Directory—using either the installer's Install and Configure installation option or the Oracle Identity Management 11g Release 1 (11.1.1) Configuration Wizard—you must specify the hostname for Oracle Internet Directory using only its fully qualified domain name (such as myhost.example.com). *Do not* use localhost as the Oracle Internet Directory hostname even if Oracle Directory Integration Platform and Oracle Internet Directory are collocated on the same host.

If you use localhost as the Oracle Internet Directory hostname, you will not be able to start the Oracle WebLogic Managed Server hosting Oracle Directory Integration Platform.

26.1.2 Non-LDAP Profiles Must Be Created and Managed Using `manageSyncProfiles`

All non-LDAP synchronization profiles, such as for databases, must be created and managed using the `manageSyncProfiles` command-line utility. Do not attempt to create or manage non-LDAP synchronization profiles using Fusion Middleware Control.

26.1.3 `syncProfileBootstrap` Not Supported for SSL Mode 2 Server-Only Authentication

The `syncProfileBootstrap` utility, which performs the initial migration of data between a connected target directory and Oracle Internet Directory based on a synchronization profile or LDIF file, is *not* supported for SSL mode 2 (Server-Only Authentication).

The `syncProfileBootstrap` utility is supported only for SSL mode 0 (No SSL) and SSL mode 1 (No Authentication).

26.1.4 DIP Tester Utility Not Currently Supported for 11g Release 1 (11.1.1)

At the time of publication of these Release Notes, the DIP Tester utility is not supported for Oracle Directory Integration Platform 11g Release 1 (11.1.1).

Monitor My Oracle Support (formerly MetaLink) for updates regarding DIP Tester support for Oracle Directory Integration Platform 11g Release 1 (11.1.1). You can access My Oracle Support at <http://metalink.oracle.com>.

While the DIP Tester utility is not currently supported for Oracle Directory Integration Platform 11g Release 1 (11.1.1), you can use the `manageSyncProfiles` command and its `testProfile` operation to test a disabled synchronization profile to ensure it will successfully perform synchronization. Refer to the "Managing Synchronization Profiles Using `manageSyncProfiles`" section in the *Oracle Fusion Middleware Integration Guide for Oracle Identity Management* for more information about the `testProfile` operation.

26.1.5 Validate All Map Rules Feature Not Supported in SSL Mode 2 - Server Only Authentication

The **Validate All Map Rules** feature available on a synchronization profile's Mapping tab in Fusion Middleware Control, is not supported for profiles configured to use SSL Mode 2 - Server Only Authentication. Do not use the **Validate All Map Rules** feature if the profile is configured for SSL Mode 2 - Server Only Authentication is configured.

Note: The **Validate All Map Rules** feature is supported for profiles configured for SSL Mode 0 - No SSL.

26.1.6 Erroneous Exception or Error Messages When Deleting and Deregistering Profiles After Upgrade

After upgrading Oracle Directory Integration Platform to 11g Release 1 (11.1.1), you may see exception messages after deregistering a profile using the `manageSyncProfiles` command-line utility or after deleting a profile using Fusion Middleware Control. These messages are erroneous and can be ignored, as the profile is deleted despite the exception or error message that appear.

26.2 Configuration Issues and Workarounds

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

- [Controlling the Frequency of DBConnection Failure Exceptions in Log Files](#)
- [Oracle Directory Integration Platform Components Not Visible in Oracle Enterprise Manager Fusion Middleware Control Interface](#)
- [Foreign Security Principal File for Microsoft Active Directory Not Included](#)

26.2.1 Controlling the Frequency of DBConnection Failure Exceptions in Log Files

If Oracle Directory Integration Platform cannot communicate with the database for Oracle Internet Directory, DBConnection failure exceptions are written to the Oracle Directory Integration Platform log file. You can control the frequency of these exceptions by using the `manageDIPServerConfig` command-line utility to adjust the `quartzdbretryinterval` parameter. This parameter determines how often Oracle Directory Integration Platform's Quartz scheduler attempts to reconnect to the database. For example:

```
manageDIPServerConfig set -h myhost.mycompany.com -p 7005 -D login_ID \
-attr quartzdbretryinterval -val 30
```

26.2.2 Oracle Directory Integration Platform Components Not Visible in Oracle Enterprise Manager Fusion Middleware Control Interface

Oracle Directory Integration Platform components must be configured with the correct Oracle Internet Directory host, port, and SSL mode connection information to be visible in the Fusion Middleware Control interface. You can view these configuration settings using the `manageDIPServerConfig` command-line utility and its `list` operation. If you find any errors, you can update the settings using `manageDIPServerConfig` and its `set` operation.

26.2.3 Foreign Security Principal File for Microsoft Active Directory Not Included

The foreign security principal file for Microsoft Active Directory, `activeimp.cfg.fsp`, that was included in Oracle Directory Integration Platform Release 10g, is not included in 11g Release 1 (11.1.1). This file is required if you are synchronizing entries from multiple domain controllers and also global groups involving foreign security principals as members. The `activeimp.cfg.fsp` should be in the `$ORACLE_HOME/ldap/odi/conf/` directory.

To workaround this issue, create the `activeimp.cfg.fsp` file by opening a text file and entering the following information

Note: In the following example, `DOMAIN_B` and `DOMAIN_C` represent the trusted domains for `DOMAIN_A`. `PROFILE_NAME_FOR_DOMAIN_B` and `PROFILE_NAME_FOR_DOMAIN_C` represent the profiles used to synchronized domains B and C respectively.

```
[INTERFACEDetails]
Reader: oracle.ldap.odip.gsi.ActiveReader
[TRUSTEDPROFILES]
prof1: PROFILE_NAME_FOR_DOMAIN_B
```

```
prof2: PROFILE_NAME_FOR_DOMAIN_C
[FSPMAXSIZE]
val: 1000
*
```

26.3 Documentation Errata

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

- [Correction for Location of Log File](#)
- [Correction for Path to user_projects Directory](#)
- [Clarification for Configuring Oracle Directory Integration Platform for SSL Mode 2 Server-Only Authentication Procedure](#)
- [Corrections for Configuring the Third-Party Directory Connector for Synchronization in SSL Mode Procedure](#)
- [Correction for Adding Mapping Plug-Ins When Extending Mappings Using Custom Plug-ins](#)
- [Missing Documentation for Detecting and Removing an Expired Certificate](#)
- [Correction for Invoking Fusion Middleware Control](#)
- [Correction for Viewing Oracle Directory Integration Platform Registration Information Using the ldapsearch Utility](#)
- [Missing Information for quartzdbretryinterval Parameter in manageDIPServerConfig Documentation](#)
- [Correction for Oracle Directory Integration Platform Installation Options](#)
- [Clarification for Directory Synchronization Service Terminology](#)
- [Clarification for TESTDBIMPORT Profile Attributes](#)
- [Corrections for Configuring Mapping Rules Documentation](#)
- [Correction for Location of Sample Bootstrapping Parameter Files](#)
- [Clarification for Enabling Password Synchronization from Oracle Internet Directory to a Third-Party Directory](#)
- [Correction for Example of One-to-One Distinguished Name Mapping](#)
- [Corrections for Supported Attribute Mapping Rules and Examples Documentation](#)
- [Correction for Tasks After Configuring with a Third-Party Directory Documentation](#)
- [Corrections for ldapbindssl Commands](#)
- [Correction for Installing the Oracle Password Filter for Microsoft Active Directory](#)
- [Correction for Location of Master Domain Mapping Rules](#)

26.3.1 Correction for Location of Log File

The location for the Oracle Directory Integration Platform log file that is documented in the *Oracle Fusion Middleware Integration Guide for Oracle Identity Management* is incorrect.

The correct location of the Oracle Directory Integration Platform log file is:

```
MW_HOME/user_projects/domains/DOMAIN_NAME/servers/NAME_OF_MANAGED_SERVER/logs/NAME_OF_MANAGED_SERVER-diagnostic.log
```

26.3.2 Correction for Path to user_projects Directory

The *Oracle Fusion Middleware Integration Guide for Oracle Identity Management* contains some incorrect references for the path to the user_projects directory. The user_projects directory is located under the MW_HOME directory, where MW_HOME represents the root directory where Oracle Fusion Middleware is installed.

26.3.3 Clarification for Configuring Oracle Directory Integration Platform for SSL Mode 2 Server-Only Authentication Procedure

In Chapter 4, "Managing the Oracle Directory Integration Platform," of the *Oracle Fusion Middleware Integration Guide for Oracle Identity Management*, the procedure for "Configuring Oracle Directory Integration Platform for SSL Mode 2 Server-Only Authentication" requires a clarification.

Step 8 should be as follows:

Use the `keytool` to put the certificate in the java keystore. You can find `keytool` in the `$JAVA_HOME/bin` directory. For example:

```
keytool -importcert -trustcacerts -alias ALIAS -file PATH_TO_CERTIFICATE \
-keystore LOCATION_OF_JKS_FILE
```

26.3.4 Corrections for Configuring the Third-Party Directory Connector for Synchronization in SSL Mode Procedure

In Chapter 17, "Configuring Synchronization with a Third-Party Directory," of the *Oracle Fusion Middleware Integration Guide for Oracle Identity Management*, the procedure for "Configuring the Third-Party Directory Connector for Synchronization in SSL Mode" is incorrect.

The correct procedure is as follows:

1. Generate a certificate for the connected directory. Only the trust point certificate from the server is required. Put the certificate in the connected directory's certificate store.
2. Export the trusted Certificate Authority (CA) certificates to Base 64 encoded format.
3. Import the trusted CA certificates to the Java KeyStore (JKS) using the `keytool` command. If Oracle Directory Integration Platform is already using an existing JKS, identify the location of it using the `-keystore PATH_TO_JKS` option. If Oracle Directory Integration Platform does not already have a JKS to use, `keytool` will create one at the location identified by the `-keystore PATH_TO_JKS` option.

For example:

```
keytool -importcert -trustcacerts -alias mycert -file PATH_TO_CERTIFICATE \
-keystore PATH_TO_JKS
```

If this is the first time you are using the JKS identified by the `-keystore PATH_TO_JKS` option, you must provide its password and also perform the following steps a and b:

- a. Update the Directory Integration Platform configuration with the location and password used in step 3 by using the `manageDIPServerConfig` command. For example:

```
manageDIPServerConfig set -h HOST -p PORT -D WLS_USER \
-attribut keystorelocation -value PATH_TO_CERTIFICATE
```

- b. Update the credential in the Credential Store Framework (CSF) using the following WLST command and replacing the `PASSWORD` variable with the password used when the keystore was created:

```
createCred(map="dip", key="jksKey", user="jksUser",
password="PASSWORD", desc="jks password")
```

4. Modify the third-party directory connection information, including the host name, profile, and `connectedDirectoryURL` attribute, using the modify operation of the `manageSyncProfiles` command.

```
manageSyncProfiles update -profile profile_name -file myMapFile
```

When you configure the `connectedDirectoryURL` attribute, use the following format:

```
host:port:sslmode
```

Supported values for `sslmode` are as follows:

Table 26–1 Supported Values for `sslmode` in `connectedDirectoryURL` Attribute

Supported <code>sslmode</code> Value	Description
0	No SSL mode. Supported for all directory types.
1	No Authentication mode. No certificate. Supported only for Oracle Internet Directory.
2	Server-Only Authentication mode. Requires certificate. Supported for all directory types.

5. If you used a new JKS in step 3, you must restart the Oracle Directory Integration Platform in SSL mode. If you used an existing JKS in step 3, go to step 6 now.
6. Add a test user and verify that it synchronizes successfully. If the test user does not synchronize successfully, then troubleshoot your SSL configuration.

Note: The Oracle Directory Integration Platform does not support SSL in client/server authentication mode.

26.3.5 Correction for Adding Mapping Plug-Ins When Extending Mappings Using Custom Plug-ins

In Chapter 6, "Configuring Directory Synchronization," of the *Oracle Fusion Middleware Integration Guide for Oracle Identity Management*, the procedure for adding mapping plug-ins when extending mappings using custom plug-ins is incorrect.

The following is the correct procedure:

1. Copy the mapping plug-in JAR file to the following location on the Oracle Directory Integration Platform component.

On UNIX systems:

```
MW_HOME/user_projects/domains/DOMAIN_NAME/servers/MANAGED_SERVER_NAME/
stage/DIP/11.1.1.1.0/DIP/APP-INF/lib/
```

On Windows systems:

```
MW_HOME\user_projects\domains\DOMAIN_NAME\servers\MANAGED_SERVER_NAME\tmp\
_WL_user\DIP_11.1.1.1.0\RANDOM_CHARACTERS\APP-INF\lib\
```

Note: On Windows systems, the Java ClassLoader locks jar files it has loaded classes from, which prevents you from overwriting jar files in exploded applications. Copying the mapping plug-in JAR file to the directory described above on Windows systems allows you to overwrite jar files in exploded applications.

2. Restart the WebLogic Managed Server hosting Oracle Directory Integration Platform.

26.3.6 Missing Documentation for Detecting and Removing an Expired Certificate

The *Oracle Fusion Middleware Integration Guide for Oracle Identity Management* does not include information about detecting and removing an expired certificate. Use the keytool utility in the `$JAVA_HOME/bin` directory to manage Oracle Directory Integration Platform certificates.

To list the valid dates for a trusted certificate in the keystore, execute the keytool utility as follows:

```
$JAVA_HOME/bin/keytool -list -v -keystore PATH_TO_KEYSTORE
```

To delete a trusted certificate from the keystore, execute the keytool utility as follows:

```
$JAVA_HOME/bin/keytool -delete -alias mycert -keystore PATH_TO_KEYSTORE
```

Note: You will be prompted for the password to the keystore while executing these commands.

For general information about certificate expiration, see Chapter 7, "Managing Keystores, Wallets, and Certificates," of the *Oracle Fusion Middleware Administrator's Guide*.

26.3.7 Correction for Invoking Fusion Middleware Control

In Chapter 3, "Administering Oracle Directory Integration Platform," of the *Oracle Fusion Middleware Integration Guide for Oracle Identity Management*, the "Using Fusion Middleware Control" procedure contains an error.

Step 2 currently states: "In the left panel topology tree, expand the farm, then *Fusion Middleware*, then Identity and Access. Alternatively, from the farm home page, expand Fusion Middleware, then Identity and Access. Oracle Directory Integration Platform components are listed in both places." However, there is no Fusion Middleware entry in the left panel topology tree, though there is a Fusion Middleware entry on the farm home page.

The correct step 2 is: "In the left panel topology tree, expand the farm, then Identity and Access. Alternatively, from the farm home page, expand Fusion Middleware, then

Identity and Access. Oracle Directory Integration Platform components are listed in both places."

26.3.8 Correction for Viewing Oracle Directory Integration Platform Registration Information Using the ldapsearch Utility

In Chapter 4, "Managing the Oracle Directory Integration Platform," of the *Oracle Fusion Middleware Integration Guide for Oracle Identity Management*, the "Viewing Oracle Directory Integration Platform Registration Information Using the ldapsearch Utility" section contains an error.

The example command to view registration information for the Oracle Directory Integration Platform component using the ldapsearch utility is missing the required objectclass option.

The correct command to view registration information for the Oracle Directory Integration Platform component using the ldapsearch utility is the following:

```
ldapsearch -p 3060 -h my_host -D binddn -q  
-b cn=odisrv,cn=Registered Instances,cn=Directory Integration  
Platform,cn=Products,cn=OracleContext -s base "objectclass=*"
```

26.3.9 Missing Information for quartzdbretryinterval Parameter in manageDIPServerConfig Documentation

In Chapter 4, "Managing the Oracle Directory Integration Platform," of the *Oracle Fusion Middleware Integration Guide for Oracle Identity Management*, the "Managing Oracle Directory Integration Platform Using manageDIPServerConfig" section does not include information about the quartzdbretryinterval parameter.

You can use the manageDIPServerConfig command-line utility to manage the quartzdbretryinterval parameter, which controls how often Oracle Directory Integration Platform's Quartz scheduler attempts to reconnect to the Oracle Internet Directory database. For example:

```
manageDIPServerConfig set -h myhost.mycompany.com -p 7005 -D login_ID \  
-attr quartzdbretryinterval -val 30
```

26.3.10 Correction for Oracle Directory Integration Platform Installation Options

In Chapter 1, "Introduction to Oracle Identity Management Integration," of the *Oracle Fusion Middleware Integration Guide for Oracle Identity Management*, the "Oracle Identity Management Installation Options" section contains the following statement:

"By default, Oracle Directory Integration Platform is installed as part of Oracle Directory Services."

Oracle Directory Integration Platform *is not* installed by default as part of Oracle Directory Services as the document states. Oracle Directory Integration Platform can be installed simultaneously with other Oracle Identity Management components or by itself. To install Oracle Directory Integration Platform by itself, an Oracle Internet Directory component must already be installed.

Refer to the *Oracle Fusion Middleware Installation Guide for Oracle Identity Management* for complete information about installing Oracle Directory Integration Platform.

26.3.11 Clarification for Directory Synchronization Service Terminology

The *Oracle Fusion Middleware Integration Guide for Oracle Identity Management* uses the terms "Oracle Directory Synchronization Service" and "Oracle Directory Integration Platform Synchronization Service" in several places. These terms are a general reference to the DIPSync Enterprise JavaBean (EJB).

26.3.12 Clarification for TESTDBIMPORT Profile Attributes

In Chapter 9, "Synchronizing with Relational Database Tables," of the *Oracle Fusion Middleware Integration Guide for Oracle Identity Management*, Table 9-1, "Directory Integration Profile for TESTDBIMPORT" lists attributes and values for the example TESTDBIMPORT integration profile. Table 26–2 contains clarifications for two attributes and values:

Table 26–2 Clarifications for Directory Integration Profile for TESTDBIMPORT

Attribute	Value
Advanced Configuration Information (odip.profile.configfile)	Maintains configuration details which are not individually maintained in LDAP attributes.
Mapping File (odip.profile.mapfile)	Attribute for storing mapping rules.

26.3.13 Corrections for Configuring Mapping Rules Documentation

In Chapter 6, "Configuring Directory Synchronization," of the *Oracle Fusion Middleware Integration Guide for Oracle Identity Management*, the "Configuring Mapping Rules" section contains the following two errors:

- The following information included in the section is incorrect:
 "Mapping rules are organized in a fixed, tabular format, and you must follow that format carefully. Each set of mapping rules appears between a line containing only the word *DomainRules* and a line containing only three number signs (###)."
 The correct information is:
 Mapping rules are organized in a fixed, tabular format, and you must follow that format carefully. Each set of mapping rules appears between a line containing only the word *DomainRules* or *AttributeRules* and a line containing only three number signs (###).
- In the "Attribute-Level Mapping" sub-section, the document states: "In a newly created synchronization profile, mapping rules are empty."
 This is incorrect, as newly created synchronization profiles contain attribute mapping rules by default.

26.3.14 Correction for Location of Sample Bootstrapping Parameter Files

The *Oracle Fusion Middleware Integration Guide for Oracle Identity Management* states that sample bootstrapping parameter files are located in the \$ORACLE_HOME/ldap/odi/samples/ directory. This is incorrect.

The sample bootstrapping parameter files are located in the \$ORACLE_HOME/ldap/odi/conf/ directory.

26.3.15 Clarification for Enabling Password Synchronization from Oracle Internet Directory to a Third-Party Directory

In Chapter 17, "Configuring Synchronization with a Third-Party Directory," of the *Oracle Fusion Middleware Integration Guide for Oracle Identity Management*, the "Enabling Password Synchronization from Oracle Internet Directory to a Third-Party Directory" section requires clarification.

The section states the following: "To synchronize passwords from Oracle Internet Directory to a third-party directory, you must enable the password policy and reversible password encryption in the Oracle Internet Directory server."

To clarify, you must enable reversible password encryption in the Oracle Internet Directory server *only* if the hashing algorithm between Oracle Internet Directory and the third-party directory is incompatible or unsupported.

For example, IBM Tivoli Directory Server and Sun Java System Directory Server support similar hashing algorithms as Oracle Internet Directory. Therefore, to synchronize passwords from Oracle Internet Directory to IBM Tivoli Directory Server or Sun Java System Directory Server, you must enable *only* the password policy in the Oracle Internet Directory server.

However, to synchronize passwords from Oracle Internet Directory to Microsoft Active Directory or Novell eDirectory, which both do not support similar hashing algorithms as Oracle Internet Directory, you must enable the password policy *and* reversible password encryption in the Oracle Internet Directory server.

Refer to the "Enabling Password Synchronization from Oracle Internet Directory to a Third-Party Directory" section in the *Oracle Fusion Middleware Integration Guide for Oracle Identity Management* for more information.

26.3.16 Correction for Example of One-to-One Distinguished Name Mapping

Example 6-2, "Example of One-to-One Distinguished Name Mapping," in Chapter 6, "Configuring Directory Synchronization," of the *Oracle Fusion Middleware Integration Guide for Oracle Identity Management*, contains an error.

The example includes the following text:

If you plan to synchronize the entry `cn=groups,dc=us,dc=mycompany,dc=com` under `cn=users,dc=us,dc=mycompany,dc=com` then the domain mapping rule is as follows:

```
cn=groups,dc=us,dc=mycompany,dc=com:cn=users,dc=us,dc=mycompany,dc=com
```

This example domain mapping rule is incorrect. The following is the correct domain mapping rule to synchronize the entry `cn=groups,dc=us,dc=mycompany,dc=com` under `cn=users,dc=us,dc=mycompany,dc=com`:

```
cn=groups,dc=us,dc=mycompany,dc=com:cn=groups,cn=users,dc=us,dc=mycompany,dc=com
```

26.3.17 Corrections for Supported Attribute Mapping Rules and Examples Documentation

In Chapter 6, "Configuring Directory Synchronization," of the *Oracle Fusion Middleware Integration Guide for Oracle Identity Management*, the following corrections are needed for the "Supported Attribute Mapping Rules and Examples" section:

- `trunc1(str, char)`: Truncates the string up to and including the first occurrence of the specified `char`. For example:

```
mail : : : uid : : inetorgperson : trunc1(mail, '@')
```

- `truncr(str, char)`: Truncates everything in the string that appears on the right side of the specified `char`. For example:

```
mail : : : uid : : inetorgperson : truncr(mail, '@')
```

26.3.18 Correction for Tasks After Configuring with a Third-Party Directory Documentation

In Chapter 23, "Managing Integration with a Third-Party Directory," of the *Oracle Fusion Middleware Integration Guide for Oracle Identity Management*, the "Tasks After Configuring with a Third-Party Directory" section contains an error.

Step 3, which states "Start the Oracle Directory Integration Platform using the configuration set that corresponds to that of the profile," is inaccurate and unnecessary.

You should ignore this step.

26.3.19 Corrections for ldapbindssl Commands

In the *Oracle Fusion Middleware Integration Guide for Oracle Identity Management*, examples for the `ldapbindssl` command use the `-q` option, which allows you to be prompted for password input, instead of passing it on the command line. The `-q` option *is not* supported for the `ldapbindssl` command. You must use the `-w` option and identify the password on the command line when executing the `ldapbindssl` command.

26.3.20 Correction for Installing the Oracle Password Filter for Microsoft Active Directory

In Chapter 19, "Deploying the Oracle Password Filter for Microsoft Active Directory," of the *Oracle Fusion Middleware Integration Guide for Oracle Identity Management*, the procedure for "Installing the Oracle Password Filter for Microsoft Active Directory" contains an error.

Step 16 states the following:

"If this is the first time you have installed the Oracle Password Filter, select Yes to upload schema extensions to Oracle Internet Directory when prompted. Otherwise, select No. The Reboot Domain Controller page displays."

This is incorrect. You should *always* select No. You do not want to upload schema extensions to Oracle Internet Directory because it comes preloaded with the schema extension attributes required for the Microsoft Active Directory Password filter.

26.3.21 Correction for Location of Master Domain Mapping Rules

In Chapter 17, "Configuring Synchronization with a Third-Party Directory," of the *Oracle Fusion Middleware Integration Guide for Oracle Identity Management*, the "Understanding the `expressSyncSetup` Command" states the following:

"Master domain mapping rules are located in `$ORACLE_HOME/ldap/odi/samples`."

This is incorrect. Master domain mapping rules are located in the `$ORACLE_HOME/ldap/odi/conf/` directory.

Oracle Identity Federation

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

- [Section 27.1, "General Issues and Workarounds"](#)
- [Section 27.2, "Configuration Issues and Workarounds"](#)
- [Section 27.3, "Documentation Errata"](#)

27.1 General Issues and Workarounds

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

- [Section 27.1.1, "Database Table for Authentication Engine must be in Base64 Format"](#)

27.1.1 Database Table for Authentication Engine must be in Base64 Format

When using a database table as the authentication engine, and the password is stored hashed as either MD5 or SHA, it must be in base64 format.

The hashed password can be either in the base64-encoded format or with a prefix of {SHA} or {MD5}. For example:

```
{SHA}qUqP5cyxm6YcTAhz05Hph5gvu9M=
```

27.2 Configuration Issues and Workarounds

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

- [Section 27.2.1, "WLST Environment Setup when SOA and OIF are in Same Domain"](#)
- [Section 27.2.2, "Oracle Virtual Directory Requires LSA Adapter"](#)
- [Section 27.2.3, "Settings for Remote WS-Fed SP Must be Changed Dynamically"](#)
- [Section 27.2.4, "Required Property when Creating a WS-Fed Trusted Service Provider"](#)
- [Section 27.2.5, "Federated Identities Table not Refreshed After Record Deletion"](#)
- [Section 27.2.6, "Default Authentication Scheme is not Saved"](#)
- [Section 27.2.7, "Configuring 10g to Work with 11g Oracle Identity Federation using Artifact Profile"](#)

27.2.1 WLST Environment Setup when SOA and OIF are in Same Domain

If your site contains Oracle SOA Suite and Oracle Identity Federation in the same domain, the WLST setup instructions in the *Oracle Fusion Middleware Administrator's Guide for Oracle Identity Federation* are insufficient for WLST to correctly execute Oracle Identity Federation commands.

This can happen if you install an IdM domain, then extend it with an Oracle SOA install; the SOA installer changes the `ORACLE_HOME` environment variable. This breaks the Oracle Identity Federation WLST environment, as it relies on the IdM value for `ORACLE_HOME`.

Take these steps to enable the use of WLST commands:

1. Execute the instructions described in Section 9.1.1, *Setting up the WLST Environment*, in the *Oracle Fusion Middleware Administrator's Guide for Oracle Identity Federation*.
2. Copy `OIF-ORACLE_HOME/fed/script/*.py` to `WL_HOME/common/wlst`.
3. Append the `CLASSPATH` environment variable with `OIF-ORACLE_HOME/fed/scripts`.

27.2.2 Oracle Virtual Directory Requires LSA Adapter

To use Oracle Virtual Directory as an Oracle Identity Federation user store or an authentication engine, you must configure a Local Storage Adapter, and the context root must be created as required at installation or post-install configuration time.

For details about this task, see the chapter *Creating and Configuring Oracle Virtual Directory Adapters* in the *Oracle Fusion Middleware Administrator's Guide for Oracle Virtual Directory*.

27.2.3 Settings for Remote WS-Fed SP Must be Changed Dynamically

On the Edit Federations page, the Oracle Identity Federation (OIF) settings for remote WS-Fed service provider contain a property called **SSO Token Type**; you can choose to either inherit the value from the IdP Common Settings page or override it here. The number of properties shown in 'OIF Settings' depends on the value of **SSO Token Type**.

If you choose to override **SSO Token Type** with a different value (for example, by changing from SAML2.0 to SAML1.1), the number of properties shown in 'OIF Settings' does not change until you click the **Apply** button.

Also, if you have overridden the value for **Default NameID Format** to 'Persistent Identifier' or 'Transient/One-Time Identifier', then changed the **SSO Token Type** value from 'SAML2.0' to 'SAML1.1' or 'SAML1.0', you will notice that the value for **Default NameID Format** is now blank. To proceed, you must reset this property to a valid value from the list.

27.2.4 Required Property when Creating a WS-Fed Trusted Service Provider

When you create a WS-Fed Trusted Service Provider, you must set the value for the 'Use Microsoft Web Browser Federated Sign-On' property with these steps:

1. In Fusion Middleware Control, navigate to **Federations**, then **Edit Federations**.
2. Choose the newly create WS-Fed Trusted Service Provider and click **Edit**.

3. In the 'Trusted Provider Settings' section, set the value for Use Microsoft Web Browser Federated Sign-On by checking or unchecking the check-box.
4. Click **Apply**.

27.2.5 Federated Identities Table not Refreshed After Record Deletion

When the federation store is XML-based, a record continues to be displayed in the federated identities table after it is deleted.

The following scenario illustrates the issue:

1. The federation data store is XML.
2. Perform federated SSO, using "map user via federated identity".
3. In Fusion Middleware Control, locate the Oracle Identity Federation instance, and navigate to **Administration**, then **Identities**, then **Federated Identities**.
4. Click on the created federation record and delete it.

After deletion, the federated record is still in the table. Further attempts at deleting the record result in an error.

The workaround is to manually refresh the table by clicking **Search**.

27.2.6 Default Authentication Scheme is not Saved

Problem

This problem is seen when you configure Oracle Access Manager in Fusion Middleware Control as a Service Provider Integration Module. It is not possible to set a default authentication scheme since the default is set to a certain scheme (say OIF-password-protected) but the radio button is disabled.

Solution

Take these steps to set the preferred default authentication scheme:

1. Check the **Create** check-box for the scheme that is currently set as the default but disabled.
2. Check the **Create** check-box(es) for the authentication scheme(s) that you would like to create.
3. Click the radio button of the scheme that you wish to set as the default.
4. Uncheck the **Create** check-box of the scheme in Step 1 only if you do not want to create the scheme.
5. Provide all the required properties in the page.
6. Click the **Configure Oracle Access Manager** button to apply the changes.

The default authentication scheme is now set to the one that you selected.

Note: In addition, when trying to remove any authentication scheme, ensure that you do not remove the default scheme; if you must remove the scheme, change the default to another authentication scheme before you remove the scheme.

27.2.7 Configuring 10g to Work with 11g Oracle Identity Federation using Artifact Profile

In the SAML 1.x protocol, for a 10g Oracle Identity Federation server to work with an 11g Oracle Identity Federation server using the Artifact profile, you need to set up either basic authentication or client cert authentication between the two servers.

For instructions, see:

- Section 6.9 Protecting the SOAP Endpoint, in the *Oracle Fusion Middleware Administrator's Guide for Oracle Identity Federation*, 11g Release 1 (11.1.1)
- Section 6.5.13.2 When Oracle Identity Federation is an SP, in the *Oracle Identity Federation Administrator's Guide*, 10g (10.1.4.0.1)

27.3 Documentation Errata

This section describes documentation errata for the *Oracle Fusion Middleware Administrator's Guide for Oracle Identity Federation*, part number E13400-01. It includes the following topics:

- [Section 27.3.1, "Incorrect SP Integration Engine Code Example"](#)
- [Section 27.3.2, "Incorrect Logout Service Code Examples"](#)
- [Section 27.3.3, "Clarification on Setting up Single Sign-On for SAML 1.x and WS-Federation"](#)
- [Section 27.3.4, "Managed Server Startup Script Name and Windows Instructions"](#)
- [Section 27.3.5, "Incorrect URL Error Property Names"](#)
- [Section 27.3.6, "Configuring the Sun One Proxy Server"](#)
- [Section 27.3.7, "Setting the Sensor Weight Property"](#)
- [Section 27.3.8, "Different Passwords for Keystore and Private Key not Supported"](#)

27.3.1 Incorrect SP Integration Engine Code Example

Section 3.2.5.3.5, Sample Integration Module 2: Customized Single Sign-On Integration, of the *Oracle Fusion Middleware Administrator's Guide for Oracle Identity Federation* contains incorrect sample code titled "Implementation of domainapplication.jsp".

Replace this code with the following corrected code:

```
<%@page buffer="5" autoFlush="true" session="false"%>
<%@page language="java" import="java.net.*, java.util.*"%>
<%
response.setHeader("Cache-Control", "no-cache");
response.setHeader("Pragma", "no-cache");
response.setHeader("Expires", "Thu, 29 Oct 1969 17:04:19 GMT");

Cookie[] cookies = request.getCookies();
String userid = null;
Date timeout = null;
for(int i = 0, size = (cookies != null ? cookies.length : 0); i < size; i++) {
    String name = cookies[i].getName();
    if ("spintegrationcookie".equals(name)){
        String value = cookies[i].getValue();
        StringTokenizer st = new StringTokenizer(value, "*");
        userid = st.nextToken();
    }
}
```

```

        timeout = new Date(Long.parseLong(st.nextToken()));
        break;
    }
}
if (userid == null || userid.length() == 0) {
    request.setAttribute("oracle.security.fed.sp.engineid", TEST_ENGINE_ID);
    request.setAttribute("oracle.security.fed.sp.usedefault", Boolean.TRUE);
    request.setAttribute("oracle.security.fed.sp.relaystate",
        "/engine/domainapplication.jsp");
    request.getSession().getServletContext().getContext("/fed").getRequestDispatcher("/sp/startssso").forward(request, response);
    return;
}
%>
Welcome <%=userid%>. You are logged until <%=timeout%>

```

27.3.2 Incorrect Logout Service Code Examples

Section 3.2.5.4.3, Logout Service Example #1, of the *Oracle Fusion Middleware Administrator's Guide for Oracle Identity Federation* contains incorrect sample code titled "Implementation of logout.jsp".

Replace this code with the following corrected code:

```

<%@page buffer="5" autoFlush="true" session="false"%>
<%@page language="java" import="java.net.*"%>
<%
    response.setHeader("Cache-Control", "no-cache");
    response.setHeader("Pragma", "no-cache");
    response.setHeader("Expires", "Thu, 29 Oct 1969 17:04:19 GMT");

    request.getSession().removeAttribute("feduserid");

    request.setAttribute("oracle.security.fed.sp.engineid", TEST_ENGINE_ID);

    request.getSession().getServletContext().getContext("/fed").getRequestDispatcher("/user/logoutretsso").forward(request, response);
%>

```

Section 3.2.5.4.4, Logout Service Example #2, contains incorrect sample code titled "Implementation of domainlogout.jsp".

Replace this code with the following corrected code:

```

<%@page buffer="5" autoFlush="true" session="false"%>
<%@page language="java" import="java.net.*"%>
<%
    response.setHeader("Cache-Control", "no-cache");
    response.setHeader("Pragma", "no-cache");
    response.setHeader("Expires", "Thu, 29 Oct 1969 17:04:19 GMT");

    Cookie cookie = new Cookie("spintegrationcookie", "");
    cookie.setDomain(".us.oracle.com");
    cookie.setPath("/");
    cookie.setMaxAge(0);
    response.addCookie(cookie);

    request.setAttribute("oracle.security.fed.sp.engineid", TEST_ENGINE_ID);

    request.getSession().getServletContext().getContext("/fed").getRequestDispatcher("

```

```
/user/logoutretsso").forward(request, response);  
%>
```

27.3.3 Clarification on Setting up Single Sign-On for SAML 1.x and WS-Federation

Section 4.3.5, Set Up Single Sign-On for SAML 1.x and WS-Federation, of the *Oracle Fusion Middleware Administrator's Guide for Oracle Identity Federation* requires clarification of the procedure titled "Fill in the Required Attributes for SAML 1.x".

Change Step 4d of this procedure to read as follows:

In the **Initiate SSO Provider ID Parameter** field, enter the name of the parameter that the peer provider uses to identify the provider ID of the service provider. For an Oracle Identity Federation peer identity provider, the parameter name must be "providerid".

Immediately following Step 4e, add the following:

For example, an Oracle Identity Federation peer identity provider might have the following Initiate SSO URL, using the configuration entered in steps b, c, and d above:

```
http://saml.example.com/fed/idp/initiatesso?TARGET=<protected-resource-url>&p  
roviderid=<sp-provider-id-uri>
```

27.3.4 Managed Server Startup Script Name and Windows Instructions

Section 3.2.3.3, Integrate Oracle Access Manager as an SP Integration Module, of the *Oracle Fusion Middleware Administrator's Guide for Oracle Identity Federation* in the sub-section "Update the Oracle WebLogic Server Environment", Step 3, second bullet mentions the use of the following script:

```
$DOMAIN/bin/startManagedServer.sh
```

The script name is incorrect. The correct script name should be:

```
startManagedWebLogic.sh (on Linux)
```

```
startManagedWebLogic.cmd (on Windows)
```

Also, the discussion provides only Linux instructions. The following text is needed for Windows:

- Open the `$DOMAIN/bin/startManagedWebLogic.cmd` file. Add the following:

```
set PATH=%PATH%;AccessSDK_InstallDir\oblix\lib
```
- Start managed server from the command line (not the administration console).

27.3.5 Incorrect URL Error Property Names

In section 6.13.3, "Redirect to Target URLs at Error", of the *Oracle Fusion Middleware Administrator's Guide for Oracle Identity Federation*, the following text:

Set the string property ornnn from the serverconfig configuration group to the URL to which the user should be redirected when Oracle Identity Federation returns the error, where nnn is 401, 404, or 500. (Thus, you can set the or401, or404, and or500 properties.)

should be replaced with:

Set the string property or urlerrornnn from the serverconfig configuration group to the URL to which the user should be redirected when Oracle Identity Federation returns

the error, where `nnn` is 401, 404, or 500. (Thus, you can set the `urlerror401`, `urlerror404`, and `urlerror500` properties.)

27.3.6 Configuring the Sun One Proxy Server

For details about configuring the Sun One proxy server for Oracle Identity Federation, see Guidelines for Modifying the `obj.conf` File in the document titled *Oracle Fusion Middleware Using Web Server Plug-Ins with Oracle WebLogic Server*, Part Number E14395-01.

27.3.7 Setting the Sensor Weight Property

In section 7.1.2.1, "About Sensor Weights", of the *Oracle Fusion Middleware Administrator's Guide for Oracle Identity Federation*, the instructions under Set the Sensor Weight contain a typographical error.

Change `"-oracle.dms.sensors=level"` to read `"-Doracle.dms.sensors=level"`. Note that this change must be made in two places.

27.3.8 Different Passwords for Keystore and Private Key not Supported

Oracle Identity Federation only supports configuring one password for signing and encryption keystores, and uses that password to open both the keystore and the private key. This means that if a keystore is configured with different store password and key password, an error will occur when Oracle Identity Federation tries to access the private key.

To avoid this error, ensure that the private key password for the configured key alias is the same as the keystore password.

Note: In Oracle Identity Federation 11g Release 1 (11.1.1), if you change the key password to match the keystore password, you must remove the old keystore/wallet from the configuration.

Oracle Internet Directory

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

- [Section 28.1, "General Issues and Workarounds"](#)
- [Section 28.2, "Configuration Issues and Workarounds"](#)
- [Section 28.3, "Documentation Errata"](#)

28.1 General Issues and Workarounds

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

- [Section 28.1.1, "ODSM Browser Window Becomes Unusable"](#)
- [Section 28.1.2, "Creating Attribute Uniqueness Constraint Fails if Attribute Name is Not Lowercase"](#)
- [Section 28.1.3, "Replication Server in New Oracle Internet Directory Instance Fails to Start"](#)
- [Section 28.1.4, "Replication Wizard Generates Errors After You Click Refresh"](#)
- [Section 28.1.5, "Do Not Delete Primary Node From the Replicas Page of the Replication Wizard"](#)
- [Section 28.1.6, "In ldapdelete Command -V Should Be The Last Parameter"](#)
- [Section 28.1.7, "Uppercase Characters in Database SID Cause Replication Information Display Problems in Fusion Middleware Control"](#)
- [Section 28.1.8, "On Windows, Change SSL Port to No-Auth Before Upgrade"](#)
- [Section 28.1.9, "ODSM Does Not Warn You if You Remove an Equality Matching Rule"](#)

28.1.1 ODSM Browser Window Becomes Unusable

Under certain circumstances, after you launch ODSM from Fusion Middleware Control, then select a new ODSM task, the browser window might become unusable. For example, the window might refresh repeatedly, appear as a blank page, fail to accept user input, or display a null pointer error.

As a workaround, go to the URL: `http://host:port/odsm`, where *host* and *port* specify the location where ODSM is running, for example, `http://myserver.example.com:7005/odsm`. You can then use the ODSM window to log in to a server.

28.1.2 Creating Attribute Uniqueness Constraint Fails if Attribute Name is Not Lowercase

When you specify an attribute name for which you want to enforce value uniqueness, the operation fails if the attribute name contains uppercase letters. This occurs whether you use ODSM or the LDAP tools. You might see a message from the server indicating that the attribute is not indexed, even though it actually is indexed.

As a workaround, always use lowercase names when specifying an attribute for which you want to enforce value uniqueness.

28.1.3 Replication Server in New Oracle Internet Directory Instance Fails to Start

If you create a new Oracle Internet Directory instance that uses the same Oracle Database as an existing instance, then try to start the replication server on the new instance, the replication server fails to start. The reason is that the replication server's wallet contains an invalid password. You must change the wallet password using `remtool`. Proceed as follows:

1. Connect to the host where the new instance is installed.
2. Set the `ORACLE_HOME` and `ORACLE_INSTANCE` environment variables.
3. Execute:

```
remtool -pchgwlpwd -bind newinstance_host:port/replication_dn_pwd
```

where *replication_dn_pwd* is, by default, the same as the ODS schema password.

Then start the replication server.

28.1.4 Replication Wizard Generates Errors After You Click Refresh

While you are using the replication wizard in Oracle Enterprise Manager Fusion Middleware Control, you might encounter errors after clicking **Refresh**. To resolve these errors, log out of the wizard and log back in again.

28.1.5 Do Not Delete Primary Node From the Replicas Page of the Replication Wizard

While you are setting up multimaster replication by using the replication wizard in Oracle Enterprise Manager Fusion Middleware Control, the default information about the primary node appears as the first entry on the Replicas page. Due to a bug, the wizard allows you to delete this entry. Do not do so! Deleting the primary node might cause inconsistent results on the subsequent wizard pages.

28.1.6 In `ldapdelete` Command `-v` Should Be The Last Parameter

For certain platforms command `ldapdelete` considers everything after `-v`, as parameter. A typical `ldapdelete` command looks like this:

```
ldapdelete -h hostname -p portname -v 's' -D cn=orcladmin -w welcome1
```

For Linux x86-64 and Microsoft Windows x64 the command mentioned here works fine. However, for Solaris Operating System (SPARC 64-Bit), AIX Based Systems (64-Bit), HP-UX PA-RISC (64-Bit), HP-UX Itanium platforms the above command fails.

Workaround

Use the flag `-v` as the last parameter when running the `ldapdelete` command. For example:


```
ldapdelete -h hostname -p portname -D cn=orcladmin -w welcome1 -v 's'
```

28.1.7 Uppercase Characters in Database SID Cause Replication Information Display Problems in Fusion Middleware Control

The `replicaid` value of a replica subentry has the form `OIDhost_DBSID`, where `DBSID` is the SID of the Oracle Database used by Oracle Internet Directory. Because of a bug, when the SID portion of the `replicaid` value contains uppercase characters, Oracle Enterprise Manager Fusion Middleware Control does not display replication information properly. Specifically, replication agreements do not appear on the Oracle Internet Directory home page and the Replication tab of the Shared Parameters page is greyed out, even though replication agreements exist.

As a workaround, use only lowercase characters in the SID. If you have already created the database with uppercase letters in the SID, you must change the DN of the replica subentry so that characters in the SID portion of the `replicaid` are all lowercase. The command syntax is:

```
ldapmoddn -h OIDhost -p OIDport -b "orclreplicaid=OIDhost_oldDBSID,cn=replication configuration" -R "orclreplicaid=OIDhost_newDBSID" -r
```

For example, the following command changes the SID portion of the `replicaid` value in the replica subentry DN from `DB456` to `db456`:

```
ldapmoddn -h Linux123 -p 3060 \
  -b "orclreplicaid=Linux123_DB456,cn=replication configuration" \
  -R "orclreplicaid=Linux123_db456" -r
```

28.1.8 On Windows, Change SSL Port to No-Auth Before Upgrade

On Windows, if Oracle Internet Directory's SSL port is configured for SSL Server Authentication Mode in 10g, you must change it to SSL No Authentication Mode prior to the upgrade to 11g Release 1 (11.1.1). If Oracle Directory Integration Platform is connected to Oracle Internet Directory's SSL port using SSL Server Authentication Mode, you must also reconfigure Oracle Directory Integration Platform to connect to Oracle Internet Directory using SSL No Authentication Mode mode prior to the upgrade to 11g Release 1 (11.1.1). For more information, see *Oracle Internet Directory Administrator's Guide* and *Oracle Identity Management Integration Guide* in the 10g (10.1.4.0.1) documentation library.

After the upgrade, reconfigure both Oracle Internet Directory and Oracle Directory Integration Platform for SSL Server Authentication Mode mode using wallets. For more information, see Chapter 25, "Configuring Secure Sockets Layer (SSL)" in *Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory* and Chapter 4, "Managing the Oracle Directory Integration Platform" in *Oracle Fusion Middleware Integration Guide for Oracle Identity Management* in the 11g Release 1 (11.1.1) library.

These changes are not required on Linux or UNIX-based operating systems.

28.1.9 ODSM Does Not Warn You if You Remove an Equality Matching Rule

You cannot search for an attribute unless that attribute is indexed. You cannot index an attribute unless it has an equality matching rule. Due to a bug, however, ODSM does not warn you if remove an equality matching rule from an attribute. Avoid doing so if you need to index that attribute.

28.2 Configuration Issues and Workarounds

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

- [Section 28.2.1, "Server Chaining Entry for eDirectory is Missing"](#)
- [Section 28.2.2, "After Upgrade, Instance-Specific orclmaxldapconns Attribute is Missing"](#)
- [Section 28.2.3, "After Upgrade, Enabling Referential Integrity Might Require Additional Steps"](#)

28.2.1 Server Chaining Entry for eDirectory is Missing

Oracle Internet Directory server chaining supports the following external servers:

- Microsoft Active Directory
- Sun Java System Directory Server, formerly known as SunONE iPlanet
- Novell eDirectory

As shipped in 11g Release 1 (11.1.1), the container `cn=OID Server Chaining, cn=subconfigsubentry` has no entry for eDirectory. You must create `cn=oidscedir, cn=OID Server Chaining, cn=subconfigsubentry` in order to configure server chaining for eDirectory. For detailed information about creating this entry, see Note 821214.1.1 on My Oracle Support (formerly MetaLink), <http://metalink.oracle.com>.

28.2.2 After Upgrade, Instance-Specific orclmaxldapconns Attribute is Missing

When you upgrade Oracle Internet Directory to 11g Release 1 (11.1.1) from an earlier version, the attribute `orclmaxldapconns` is missing from the instance-specific configuration entry. Because of the missing attribute, the maximum number of concurrent connections per server process is always equal to the default value of 1024. You cannot update this value or list it in searches.

The workaround is to create the attribute `orclmaxldapconns` in the schema, then set the value in the desired instance-specific configuration entry. Proceed as follows:

1. Create an LDIF file with the following content:

```
dn: cn=subschemasubentry
changetype: modify
add: attributetypes
attributetypes: ( 2.16.840.1.113894.1.1.611 NAME 'orclmaxldapconns' EQUALITY
integerMatch SYNTAX '1.3.6.1.4.1.1466.115.121.1.27' SINGLE-VALUE )
```

2. Execute the following command:

```
ldapmodify -D cn=orcladmin -q -p portNum -h hostname -f ldifFile
```

3. Set the `orclmaxldapconns` value in the desired instance-specific configuration entry. For example, to set `orclmaxldapconns` to 2000 in the component `oid1`, create an LDIF file with the following content:

```
dn: cn=oid1,cn=osldlapd,cn=subconfigsubentry
changetype: modify
replace: orclmaxldapconns
orclmaxldapconns: 2000
```

4. Then execute the `ldapmodify` command as shown in Step 2.

This issue occurs only in upgraded directories and not in fresh installations.

28.2.3 After Upgrade, Enabling Referential Integrity Might Require Additional Steps

In the "Configuring Referential Integrity" chapter in *Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory*, you are instructed to use `oiddiag` to identify violations in the DIT and correct them if you get an error when attempting to enable referential integrity. Sometimes, however, `oiddiag` reports that the DIT contains duplicate entries, but the LDAP tools do not list the duplicates. In that case, you cannot use LDAP tools to rectify the problem. If you encounter this situation, you must use SQL*Plus to delete the entry. Proceed as follows:

1. Stop all currently running Oracle Internet Directory instances connected to the same Oracle Database.

```
$ORACLE_INSTANCE/bin/opmnctl stopall
```

2. Execute the following SQL*Plus commands to clean up the duplicate DNs.

```
$ sqlplus /nolog
SQL> connect / as sysdba
SQL> delete from ct_orclnormdn where attrvalue like
'%cn=osdldapd,cn=subregistrysubentry';
SQL> commit;
```

3. Restart Oracle Internet Directory on all instances connected to the same Oracle Database.

```
$ORACLE_INSTANCE/bin/opmnctl startall
```

After completing these steps, you should be able to enable referential integrity by using Oracle Enterprise Manager Fusion Middleware Control, as described in the "Configuring Referential Integrity" chapter in *Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory*.

28.3 Documentation Errata

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

- [Section 28.3.1, "Incorrect Command for Retrieving ODSM'S Java Keystore Password"](#)
- [Section 28.3.2, "Missing Documentation for Updating a Trusted Certificate Upon Its Expiration"](#)
- [Section 28.3.3, "Incorrect Attribute for Hashing Algorithm Specification"](#)
- [Section 28.3.4, "Need Not Update Registration When Changing Ports by Using Fusion Middleware Control"](#)
- [Section 28.3.5, "StopManagedWeblogic.sh and StartManagedWeblogic.sh Command Lines In Appendix P are Incomplete"](#)
- [Section 28.3.6, "Errors In Updating Component Registration Section Of Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory"](#)
- [Section 28.3.7, "Wrong Label for orclmaxconnincache on Server Properties Page, Performance Tab"](#)
- [Section 28.3.8, "Incorrect Default Value Listed for orclsizelimit"](#)
- [Section 28.3.9, "Not All Dynamic Groups are Included in Group Query Result"](#)

- [Section 28.3.10, "Only Oracle Database 11.1.0.7 Requires Patches for Database Vault"](#)
- [Section 28.3.11, "Function Return Codes for DBMS_LDAP_UTL Functions are Incorrect"](#)
- [Section 28.3.12, "Indexing an Existing Attribute by Using ODSM: Documentation is Inconsistent"](#)

28.3.1 Incorrect Command for Retrieving ODSM'S Java Keystore Password

In Appendix O, "Oracle Directory Services Manager Keystore Management," in *Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory*, the command for retrieving ODSM's Java Keystore Password is incorrect. The correct command sequence is as follows:

```
$ORACLE_HOME/common/bin/wlst.sh
connect()
listCred( map="ODSMMap", key="ODSMKey.Wallet" )
```

After the `connect()` command, you will be prompted for your WebLogic username and password, and for the server URL. An example server URL is `t3://stadd54:7001`.

28.3.2 Missing Documentation for Updating a Trusted Certificate Upon Its Expiration

Appendix O, "Oracle Directory Services Manager Keystore Management," in *Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory* should have included information about certificate expiration.

To list the valid dates for the certificate, list its contents as described in Appendix O, "Oracle Directory Services Manager Keystore Management," in *Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory*

When the certificate has expired, delete it as described in Appendix O.

For general information about certificate expiration, see Chapter 7 of *Oracle Fusion Middleware Administrator's Guide*. Note, however, that ODSM does not provide a web based user interface for managing its keystore. You must manage ODSM's key store by using `keytool`.

28.3.3 Incorrect Attribute for Hashing Algorithm Specification

In Chapter 29 of *Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory*, the section entitled "Userpassword Verifiers and Authentication to the Directory" contains the following sentence:

The directory server hashes this password by using the hashing algorithm specified in the DSE attribute `userpassword`.

This is incorrect. It should say:

The directory server hashes this password by using the hashing algorithm specified in the DSE attribute `orclcryptoscheme`.

28.3.4 Need Not Update Registration When Changing Ports by Using Fusion Middleware Control

In the *Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory*, you are instructed to update the registration of an Oracle Internet Directory component in

a registered Oracle instance whenever you change `orclhostname`, `orclnonsslport`, `orclnonsslport`, or `userpassword`. This content is found in the section of Chapter 8 entitled "Updating the Component Registration of an Oracle Instance by Using `opmnctl`," in Table 9-1, and in other places in Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory

This should be modified to say that when you update one of these attributes by using `ldapmodify` or ODSM, you must restart the server and update the registration. When you update one of these attributes using Oracle Enterprise Manager Fusion Middleware Control, however, you must restart the server but you need not refresh registration. Fusion Middleware Control updates the registration of the component for you.

28.3.5 StopManagedWeblogic.sh and StartManagedWeblogic.sh Command Lines In Appendix P are Incomplete

In Appendix P, "Stopping and Starting the Oracle Stack," in *Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory*, the command lines shown for the commands `stopManagedWebLogic.sh` and `startManagedWebLogic.sh` are incomplete.

The complete command line to stop WebLogic managed components is:

```
MW_HOME/user_projects/domains/DOMAIN_NAME/bin/stopManagedWebLogic.sh \
{SERVER_NAME} {ADMIN_URL} {USER_NAME} {PASSWORD}
```

The complete command line to start WebLogic managed components is:

```
MW_HOME/user_projects/domains/DOMAIN_NAME/bin/startManagedWebLogic.sh \
SERVER_NAME {ADMIN_URL}
```

When executing these scripts:

- The default value for `DOMAIN_NAME` is `IDMDomain`
- `SERVER_NAME` represents the name of the Oracle WebLogic Managed Server. Its default value is `wls_ods1`.
- You will be prompted for values for `USER_NAME` and `PASSWORD` if you do not provide them as options when you execute the script.
- The value for `ADMIN_URL` will be inherited if you do not provide it as an option when you execute the script.

28.3.6 Errors In Updating Component Registration Section Of Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory

There are errors in the section of Chapter 8 entitled "Updating the Component Registration of an Oracle Instance by Using `opmnctl`" in *Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory*.

- In Table 8-1, there are two rows with the attribute `orclnonsslport`. One of these should be `orclsslport`.
- In the command syntax and example for `opmnctl updatecomponentregistration`, the option `-port` should be `-Port`.

28.3.7 Wrong Label for orclmaxconnincache on Server Properties Page, Performance Tab

The Oracle Enterprise Manager Fusion Middleware Control field associated with `orclmaxconnincache` is listed as "Size of privilege group membership cache (user)" in Chapter 33, Tuning and Sizing Oracle Internet Directory, in *Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory*. It is actually "Number of users in privilege group membership cache."

28.3.8 Incorrect Default Value Listed for orclsizelimit

The default value for the instance-specific configuration entry attribute `orclsizelimit` in 11g Release 1 (11.1.1) is 10000. The value is listed incorrectly as 1000 in several places in *Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory*, including:

- Chapter 33, Tuning and Sizing
- Chapter 40, Managing and Monitoring Replication
- Table Q-1, Standard Error Messages

It is also listed incorrectly in Chapter 4, Oracle Internet Directory Replication Management Tools, in *Oracle Fusion Middleware User Reference for Oracle Identity Management*.

28.3.9 Not All Dynamic Groups are Included in Group Query Result

In the introduction to the "Managing Dynamic and Static Groups" chapter in *Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory*, there is a note indicating that when you query for the groups that a user belongs to, dynamic groups are automatically included in the result. Actually, only `labeleduri`-based dynamic groups are automatically included in the result. Dynamic groups based on the `CONNECT_BY` assertion have to be explicitly queried.

28.3.10 Only Oracle Database 11.1.0.7 Requires Patches for Database Vault

In the Database Vault section of the "Configuring Data Privacy" chapter in *Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory*, you are instructed to download and install patches for Bug 7244497 and Bug 7291157. You only need to do this for Oracle Database 11.1.0.7. The bugs have been fixed in later versions of Oracle Database.

28.3.11 Function Return Codes for DBMS_LDAP_UTL Functions are Incorrect

In Table 11-61, Function Return Codes, in Chapter 11 of *Oracle Fusion Middleware Application Developer's Guide for Oracle Identity Management*, some of the codes are incorrect and some are missing. The following codes should be removed:

Table 28-1 Function Return Codes

Name	Return Code	Description
<code>ACCT_TOTALLY_LOCKED_EXCEPTION</code>	-14	Returned by <code>DBMS_LDAP_UTL.authenticate_user()</code> function when a user account is locked. This error is based on the password policy set in the subscriber oracle context.
<code>AUTH_PASSWD_CHANGE_WARN</code>	-15	This return code is deprecated.

The following codes should be added:

Table 28–2 Function Return Codes

Name	Return Code	Description
ACCT_TOTALLY_LOCKED_EXCEPTION	9001	Returned by DBMS_LDAP_UTL.authenticate_user() function when a user account is locked.
PWD_EXPIRED_EXCEPTION	9000	Returned by DBMS_LDAP_UTL.authenticate_user() function when a user's password has expired.
PWD_EXPIRE_WARN	9002	Returned by DBMS_LDAP_UTL.authenticate_user() function when the user's password is about to expire.
PWD_MINLENGTH_ERROR	9003	Returned by DBMS_LDAP_UTL.authenticate_user() function when the user's password is less than pwdMinLength.
PWD_NUMERIC_ERROR	9004	Returned by DBMS_LDAP_UTL.authenticate_user() function when
PWD_NULL_ERROR	9005	Returned by DBMS_LDAP_UTL.authenticate_user() function when
PWD_INHISTORY_ERROR	9006	Returned by DBMS_LDAP_UTL.authenticate_user() function when the password has previously been used and the password policy does not allow password reuse.
PWD_ILLEGALVALUE_ERROR	9007	Returned by DBMS_LDAP_UTL.authenticate_user() function when the password is illegal.
PWD_GRACELOGIN_WARN	9008	Returned by DBMS_LDAP_UTL.authenticate_user() function during a grace login period.
PWD_MUSTCHANGE_ERROR	9009	Returned by DBMS_LDAP_UTL.authenticate_user() function when the user is required to reset the password upon login.
USER_ACCT_DISABLED_ERROR	9050	Returned by DBMS_LDAP_UTL.authenticate_user() function when the user's account has been disabled.

28.3.12 Indexing an Existing Attribute by Using ODSM: Documentation is Inconsistent

In the introductory section of Chapter 19, Managing Directory Schema, it is stated that you can use Oracle Directory Services Manager to index an attribute only at the time when you create it, and that you cannot use Oracle Directory Services Manager to index an already existing attribute.

Later in the chapter, the section "Adding an Index to an Existing Attribute by Using Oracle Directory Services Manager" appears to contradict the introductory section.

Actually, both of those sections should be clarified to indicate at you can use ODSM to add an index to an attribute that exists but has not been used yet.

Oracle Platform Security Services

This chapter describes notes on topics associated with Oracle Platform Security Services (OPSS), in the following sections:

- [Section 29.1, "General Issues and Workarounds"](#)
- [Section 29.2, "Configuration Issues and Workarounds"](#)
- [Section 29.3, "Documentation Errata"](#)

The following documents are relevant to topics included in this chapter:

- *Oracle Fusion Middleware Security Guide*
- *Oracle Fusion Middleware Security Overview*
- *Oracle Fusion Middleware Administrator's Guide*

29.1 General Issues and Workarounds

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

- [Section 29.1.1, "Mandatory Patches for OPSS"](#)
- [Section 29.1.2, "ASCII Characters in Policy Store"](#)
- [Section 29.1.3, "Search Strategy when XML Policy Store Contains Certain ASCII Characters"](#)
- [Section 29.1.4, "Missing Newline Characters in XML Policy Store"](#)
- [Section 29.1.5, "Cataloging Oracle Internet Directory Attributes"](#)
- [Section 29.1.6, "Missing Policies in Policy Store Reassociated to Oracle Internet Directory"](#)
- [Section 29.1.7, "Issues with Audit Reports"](#)

29.1.1 Mandatory Patches for OPSS

This section lists patches required for OPSS:

- [Section 29.1.1.1, "Mandatory Patch for Oracle Internet Directory 10.1.4.3"](#)
- [Section 29.1.1.2, "DSA unwilling to perform Error when Using Oracle Internet Directory 10.1.4.3 as Policy Store"](#)

29.1.1.1 Mandatory Patch for Oracle Internet Directory 10.1.4.3

If using Oracle Internet Directory 10.1.4.3 with OPSS, a mandatory one-off patch for bug number 8351672 is recommended on top of Oracle Internet Directory 10.1.4.3.

Download the patch for your platform from Oracle Support at <http://myoraclesupport.oracle.com>.

To ensure optimal performance, the following Oracle Internet Directory tuning is recommended:

```
ldapmodify -D cn=orcladmin -w <password> -v <<EOF
dn: cn=dsacnfig,cn=configsets,cn=oracle internet directory
changetype: modify
add: orclnmemfiltprocess
orclnmemfiltprocess: (objectclass=orcljaznpermission)
orclnmemfiltprocess: (objectclass=orcljazngrantee)
EOF
```

29.1.1.2 DSA unwilling to perform Error when Using Oracle Internet Directory 10.1.4.3 as Policy Store

Problem

When using Oracle Internet Directory 10.1.4.3 as a policy store, the use of special characters like '*', '(', ')', '\ ' in the RFC 2252/2253 filter results in error 53 (DSA unwilling to perform).

Solution

The patch for Bug 7711351 must be applied to Oracle Internet Directory 10.1.4.3.

29.1.2 ASCII Characters in Policy Store

Strings in a policy store cannot contain any special ASCII character in the range [0, 15].

29.1.3 Search Strategy when XML Policy Store Contains Certain ASCII Characters

The following characters:

```
< " & $ ? * , / \ ` : ( ) ^ ' % + { }
```

are not recommended as part of an Application Role name when using the XML Policy Store.

If it becomes necessary to use one of these characters when creating a role, when you search the XML Policy Store with the `ApplicationPolicy.searchAppRoles()` API you must ensure that such characters are escaped in the input in order to provide correct results.

For example, if you have an Application Role named "applicationRole^\$" it will need to be searched as `ApplicationPolicy.searchAppRoles("applicationRole\\^\\$")` to find it in the polycystore.

As an alternative, you could use a wild card in the search expression without including these special characters - for example:

```
ApplicationPolicy.searchAppRoles("applicationRole*")
```

Note: This is not an issue with the LDAP Policy Store.

29.1.4 Missing Newline Characters in XML Policy Store

In an XML file-based policy store, a new-line character is required between the closing of a `<permission>` or `<principal>` tag and the opening of the following one.

Following are examples of strings illustrating incorrect and correct formats.

Incorrect example fragment of policy store:

```
<permission>
  <class>java.lang.RuntimePermission</class>
  <name>getClassLoader</name>
</permission> <permission>
  <class>java.io.FilePermission</class>
  <name>/foo</name>
  <actions>read,write</actions>
</permission>
```

Correct example fragment of policy store:

```
<permission>
  <class>java.lang.RuntimePermission</class>
  <name>getClassLoader</name>
</permission>
<permission>
  <class>java.io.FilePermission</class>
  <name>/foo</name>
  <actions>read,write</actions>
</permission>
```

29.1.5 Cataloging Oracle Internet Directory Attributes

An Oracle Internet Directory attribute used in a search filter must be indexed.

For detailed instructions on how to manage attribute catalogs and to identify whether an attribute is indexed, see the following sections in *Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory*:

- Adding an Index to a New Attribute by Using Oracle Directory Services Manager
- Adding an Index to an Existing Attribute by Using Oracle Directory Services Manager
- Dropping an Index from an Attribute by Using Oracle Directory Services Manager
- Indexing an Attribute for Which Data Exists by Using Oracle Directory Services Manager
- Creating and Dropping Indexes from Existing Attributes Using Catalog

The command `ldapmodify`, whose syntax is illustrated below, can also be used to index attributes specified in an LDIF file:

```
>ldapmodify -h <host> -p <port> -D <bind DN> -w <bind password> -v -f <catalogue
modify ldif file name>
```

For example, the above command can be used with the following sample LDIF file to catalog the attributes `createtimestamp` and `modifytimestamp`:

```
dn: cn=catalogs
changetype: modify
add: orclindexedattribute
orclindexedattribute: modifytimestamp
```

orclindexedattribute: createtimestamp

The following sections detail Oracle Internet Directory attributes that must be indexed. For the patch required for Oracle Internet Directory 10.1.4.3, see [Section 29.1.1.1, "Mandatory Patch for Oracle Internet Directory 10.1.4.3"](#).

List of OPSS Attributes Required to Be Cataloged

Each of the following OPSS attributes must be cataloged:

orclrolescope

orclassignedroles

orclApplicationCommonName

orclAppFullName

orclCSFAlias

orclCSFKey

orclCSFName

orclCSFDBUrl

orclCSFDBPort

orclCSFCredentialType

orclCSFExpiryTime

modifytimestamp

createtimestamp

orcljpsassignee

29.1.6 Missing Policies in Policy Store Reassociated to Oracle Internet Directory

Problem

When an XML file-based policy store is reassociated to use Oracle Internet Directory, the re-association may report that it completed successfully. At runtime, however, the system may not behave as expected. Granted code-based policies, that are supposed to be present in the system policy after migration, may be missing. As a result the server may report a stack trace that resembles this stack:

```
<BEA-000000> <JspServlet: initialization complete>
####<May 4, 2009 8:32:50 AM PDT> <Error> <HTTP> <ap626atg> <WLS_Spaces>
<[ACTIVE] ExecuteThread: '3' for queue: 'weblogic.kernel.Default
(self-tuning)''> <<WLS Kernel>> <> <> <1241451170341> <BEA-101020>
<[ServletContext@20193148[app:webcenter module:/webcenter path:/webcenter
spec-version:2.5]] Servlet failed with Exception
java.security.AccessControlException: access denied
(oracle.security.jps.service.policystore.PolicyStoreAccessPermission
context=APPLICATION,name=webcenter getApplicationPolicy)
    at
java.security.AccessControlContext.checkPermission(AccessControlContext.java:323)
    at
java.security.AccessController.checkPermission(AccessController.java:546)
    at
oracle.security.jps.util.JpsAuth$AuthorizationMechanism$3.checkPermission(JpsAuth.
java:348)
    at
```

```

oracle.security.jps.util.JpsAuth$Diagnostic.checkPermission(JpsAuth.java:268)
    at
oracle.security.jps.util.JpsAuth$AuthorizationMechanism$6.checkPermission(JpsAuth.
java:372)
    at oracle.security.jps.util.JpsAuth.checkPermission(JpsAuth.java:408)
    at oracle.security.jps.util.JpsAuth.checkPermission(JpsAuth.java:431)
    at
oracle.security.jps.internal.policystore.AbstractPolicyStore.checkPolicyStoreAccess
sPermission(AbstractPolicyStore.java:246)
    at
oracle.security.jps.internal.policystore.ldap.LdapPolicyStore.getApplicationPolicy
(LdapPolicyStore.java:281)
    at
oracle.security.jps.internal.policystore.PolicyUtil.getGrantedAppRoles(PolicyUtil.
java:898)
    at
oracle.security.jps.internal.policystore.PolicyUtil.getJpsAppRoles(PolicyUtil.java
:1354)
    at
oracle.security.jps.wls.JpsWlsSubjectResolver$1.run(JpsWlsSubjectResolver.java:273
)
    at
oracle.security.jps.wls.JpsWlsSubjectResolver$1.run(JpsWlsSubjectResolver.java:270
)
    at java.security.AccessController.doPrivileged(Native Method)

```

Here the permission:

```

oracle.security.jps.service.policystore.PolicyStoreAccessPermission
context=APPLICATION,name=webcenter getApplicationPolicy

```

is granted to a code base, and the authorization decision is evaluating to false.

Solution

Check the AdminServer diagnostic logs for messages like these:

```

AdminServer-diagnostic.log:[2009-05-28T02:27:52.249-07:00] [AdminServer]
[NOTIFICATION] [JPS-00072] [oracle.jps.config] [tid: Thread-39] [ecid:
0000I66Z0KH0fplp4sm3Ui1A7_Rl00002s,1:5001] [arg: 11.1.1.1.0] [arg: 11.1.1.0.0]
Policy schema upgrade not required. Store Schema version 11.1.1.1.0 is compatible
to the seed schema version 11.1.1.0.0
AdminServer-diagnostic.log:[2009-05-28T02:28:58.012-07:00] [AdminServer]
[NOTIFICATION] [JPS-00078] [oracle.jps.config] [tid: Thread-39] [ecid:
0000I66Z0KH0fplp4sm3Ui1A7_Rl00002s,1:5001] [arg: 11.1.1.1.0] [arg: 11.1.1.0.0]
Credential store schema upgrade not required. Store Schema version 11.1.1.1.0 is
compatible to the seed schema version 11.1.1.0.0

```

A message of this type suggests that the schema was never seeded during the re-association. If the correct schema is not seeded in the Oracle Internet Directory server, the system will not work as expected. To ensure that the schema is seeded during re-association:

1. Remove the cn=OPSS container under the cn=OracleSchemaVersion container in the Oracle Internet Directory server.
2. Start with a clean working instance of an OPSS policy store using the file-based store.
3. Re-associate this file-based store to the Oracle Internet Directory server.

Check the AdminServer diagnostic logs to confirm that the OPSS LDAP schema was seeded in the LDAP server by looking for this message:

```
AdminServer-diagnostic.log:[2009-05-29T07:18:18.002-07:00] [AdminServer]
[NOTIFICATION] [JPS-00078] [oracle.jps.config] [tid: Thread-12] [ecid:
0000I61Z0MH0fplp4sm3Ui1A7_L100002s,1:5001] [arg: 11.1.1.0.0] Policy schema
version set to 11.1.1.0.0
```

If re-associating to a Release 11g Oracle Internet Directory server, the schema version should read: 11.1.1.1.0

If re-associating to a Release 10.1.4.3 Oracle Internet Directory server, the schema version should read: 11.1.1.0.0

The PolicyStore schema version is set in the Oracle Internet Directory server under this container:

```
cn=PolicyStore,cn=OPSS,cn=OracleSchemaVersion
```

Similarly, the CredentialStore schema version is set in the Oracle Internet Directory server under this container:

```
cn=CredentialStore,cn=OPSS,cn=OracleSchemaVersion
```

29.1.7 Issues with Audit Reports

The following issues have been observed with the Common Audit Framework reports available in Oracle Business Intelligence Publisher.

Issues with the User Activities Dashboard

Navigate to **Common Reports**, then **User Activities**, then **Dashboard**. The following issues are observed:

- For hyperlinks corresponding to certain data strings, the event is not displayed correctly. For example, if the data consists of a string containing a percent sign, such as `cn=%host%.us.oracle.com`, when you click on the corresponding event hyperlink, the event is not correctly displayed on the resulting report since the percent sign is not processed correctly. A similar issue may be seen if there are embedded spaces in the string.
- When you navigate to a report using the hyperlink corresponding to Authentication Success, Authentication Failures, Authorization Success, or Authorization Failures, no data is displayed.

Issue with the Component Name and Application Name Filters

For these report filters, not all the filter options may be displayed as expected.

For example, on the All Events report, if the report contains data rows for Oracle Internet Directory (OID) as well as rows for Oracle Identity Federation (OIF), the Component Name drop-down should show All, OID, and OIF options; however, it may show only the All and OID filter options. This prevents you from filtering the report with the missing options (OIF in the example).

Solution

Apply the one-off patch for Bug 8524140.

29.2 Configuration Issues and Workarounds

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

- [Section 29.2.1, "Oracle Fusion Middleware Audit Framework"](#)
- [Section 29.2.2, "User and Role API Customization"](#)

29.2.1 Oracle Fusion Middleware Audit Framework

This section describes configuration issues for the Oracle Fusion Middleware Audit Framework. It contains these topics:

- [Section 29.2.1.1, "Custom Configuration is Retained when the Audit Level Changes"](#)
- [Section 29.2.1.2, "Audit Reports do not Display Translated Text in Certain Locales"](#)
- [Section 29.2.1.3, "Audit Reports Always Display in English"](#)

29.2.1.1 Custom Configuration is Retained when the Audit Level Changes

When auditing is configured at the custom audit level, and you subsequently use WLST to switch to a different (non-custom) audit level, the custom audit settings are retained unless you explicitly remove those custom settings.

Note: This behavior only occurs when using WLST; if you use Fusion Middleware Control to manage audit configuration, the custom audit settings are cleared when you switch from the custom audit level to a different audit level.

An example illustrates this behavior:

1. Custom audit level is set for a component's policy. An audit filter is specified as part of the configuration.
2. At run-time, audit data is collected according to the specified filter.
3. The component's audit policy is now changed from custom audit level to, say, the low audit level using the WLST `setauditpolicy` command. However, the filter that was set up as part of the custom audit level persists in the audit configuration.
4. Audit data is now collected based on the low audit level, not the custom level.
5. The component's audit policy is changed back to custom level. An additional filter is added; this filter is appended to the originally configured filter. Unless the original filter is explicitly deleted, it remains part of the configuration.
6. At run-time, audit data is collected based on all prevailing filters at the custom level.

29.2.1.2 Audit Reports do not Display Translated Text in Certain Locales

The standard audit reports packaged with Oracle Business Intelligence Publisher support a number of languages for administrators. Oracle Business Intelligence Publisher can start in different locales; at start-up, the administrator can specify the language of choice by setting the preferred locale in Preferences.

Due to this bug, if Oracle Business Intelligence Publisher is started on any of these 3 locales:

- zh_CN (simplified chinese)
- zh_TW (traditional chinese)
- pt_BR (portuguese brazilian)

then users cannot see the report in that locale (the entire report including labels, headers, titles and so on appears in English), while the other locales display the translated text as expected. For example, when Oracle Business Intelligence Publisher is started in zh_CN, the text cannot be seen in zh_CN even though the preferred locale is set to zh_CN; information is displayed in English.

This issue will be fixed in a future release of Oracle Business Intelligence Publisher.

29.2.1.3 Audit Reports Always Display in English

The standard audit reports packaged with Oracle Business Intelligence Publisher support a number of languages.

Due to this bug, report titles and descriptions are always displayed in English even when they are translated.

This issue will be fixed in a future release of Oracle Business Intelligence Publisher.

29.2.2 User and Role API Customization

Oracle Fusion Middleware supports providers that enable the User and Role API to interact with custom identity stores.

For details about creating a custom User and Role provider, see the OPSS page in Oracle Technology Network at:

http://www.oracle.com/technology/products/id_mgmt/opss/index.html

29.3 Documentation Errata

This section describes documentation errata. It contains these topics:

- [Section 29.3.1, "WLST Updates"](#)
- [Section 29.3.2, "Configuring LDAP Policy Stores"](#)
- [Section 29.3.3, "Developing with the Credential Store Framework"](#)
- [Section 29.3.4, "Developing with the User and Role API"](#)
- [Section 29.3.5, "Documentation Errata for the Oracle Fusion Middleware Security Overview"](#)
- [Section 29.3.6, "Configuring Single Sign-On in Oracle Fusion Middleware"](#)

29.3.1 WLST Updates

This section contains updates for documentation errata pertaining to WLST commands and usage.

- [Section 29.3.1.1, "Granting Policies to Anonymous and Authenticated Roles with WLST Commands"](#)
- [Section 29.3.1.2, "Application Stripe for Versioned Applications in WLST Commands"](#)

29.3.1.1 Granting Policies to Anonymous and Authenticated Roles with WLST Commands

Several WLST commands require the specification of the principal name and the principal class for a role involved in the operation.

For example, the following invocation adds a principal to the role with application stripe myApp and name myAppRole:

```
grantAppRole.py -appStripe myApp -appRoleName myAppRole
                -principalClass myPrincipalClass -principalName myPrincipal
```

When in such commands the principal refers to the authenticated role or the anonymous role, the principal names and principal classes are fixed and *must* be one of the following pairs:

- **Authenticated role**
 - Name: authenticated-role
 - Class:


```
oracle.security.jps.internal.core.principals.JpsAuthenticatedRoleImpl
```
- **Anonymous role**
 - Name: anonymous-role
 - Class:


```
oracle.security.jps.internal.core.principals.JpsAnonymousRoleImpl
```

The list of WLST commands that required principal name and class specification are the following:

- grantAppRole
- revokeAppRole
- grantPermission
- revokePermission
- listPermissions

29.3.1.2 Application Stripe for Versioned Applications in WLST Commands

Several WLST commands require the specification of an application stripe. By default, the application stripe is the application name, if the application is not versioned. When the application is versioned, however, the application name and the application stripe are not identical.

For example, the name of a versioned application with name myApp and version 1 is displayed myApp (v1.0) in Oracle Fusion Middleware Control pages, but the application stripe of this application is myApp#v1.0.

In general, an application with display name appName (vers) has application stripe appName#vers. It is this last string that should be passed as the application stripe in WLST commands, as illustrated in the following invocation:

```
>listAppRoles myApp#v1.0
```

The list of WSLT commands that can use stripe specification are the following:

- createAppRole

- deleteAppRole
- grantAppRole
- revokeAppRole
- listAppRoles
- listAppRoleMembers
- grantPermission
- revokePermission
- listPermissions
- deleteAppPolicies

29.3.2 Configuring LDAP Policy Stores

The following sections provide guidelines for setting OPSS parameters, properties, and profiling:

- [Section 29.3.2.1, "OPSS System Properties for JVM"](#)
- [Section 29.3.2.2, "LDAP Policy Store Property Configuration for Maximum performance"](#)
- [Section 29.3.2.3, "Profiling LDAP Policy Store APIs"](#)

29.3.2.1 OPSS System Properties for JVM

[Table 29–1](#) lists some recommended special settings for OPSS system properties. These are typically specified in the script that starts Oracle WebLogic Server.

Table 29–1 OPSS System Properties for JVM

Property Name	Value	Description
domain.home	\$DOMAIN_HOME	Required for code-based grants that depend on the value of this system property. This property <i>must</i> be set as a command-line parameter due to JVM bootstrapping restrictions.
jps.authz	ACC	Different from current out-of-the-box setting, which is DEBUG_ACC. Setting -Djps.auth=ACC reduces runtime and debugging overhead.
jps.policystore.hybrid.mode	false	Different from current out-of-the-box setting, which is true. Setting -Djps.policystore.hybrid.mode=false reduces runtime overhead.
jps.combiner.optimize	true	Different from current out-of-the-box setting, which is false. Setting -Djps.combiner.optimize=true improves Java2 authorization performance.
jps.combiner.optimize.lazyeval	true	Different from current out-of-the-box setting, which is false. Setting -Djps.combiner.optimize.lazyeval=true improves Java2 authorization performance.

29.3.2.2 LDAP Policy Store Property Configuration for Maximum performance

Table 29–2 lists the properties that are required to be present in an LDAP policy store service instance. The properties of an instance can be specified and modified with the script described in section E.1 in *Oracle Fusion Middleware Security Guide*.

Table 29–2 LDAP Policy Store Service Instance Properties

Name	Default	Recommended	Description
oracle.security.jps.policystore.rolemember.cache.type	STATIC	STATIC	Role Member Cache Type.
oracle.security.jps.policystore.rolemember.cache.strategy	FIFO	FIFO	Role Member Cache Strategy.
oracle.security.jps.policystore.rolemember.cache.size	1000	5000	Role Member Cache Size.
oracle.security.jps.policystore.policy.lazy.load.enable	true	true	Enable Policy Lazy Load.
oracle.security.jps.policystore.policy.cache.strategy	PERMISSION_FIFO	PERMISSION_FIFO	Permission Cache Strategy.
oracle.security.jps.policystore.policy.cache.size	1000	1000	Permission Cache Size.
oracle.security.jps.policystore.cache.updateable	true	true	If true, policy cache is incrementally updated for management operations.
oracle.security.jps.policystore.refresh.enable	true	true	To refresh enabling.
oracle.security.jps.policystore.refresh.purge.timeout	43200000	43200000	Forced policy store refresh time in milliseconds.
oracle.security.jps.ldap.policystore.refresh.interval	600000	600000	Policy store refresh polling time in milliseconds.

29.3.2.3 Profiling LDAP Policy Store APIs

Table 29–3 lists loggers to profile the timing of several LDAP policy store runtime APIs. These profilers are specified with Oracle Fusion Middleware Control pages, as explained in section I.1.1.4 in the *Oracle Fusion Middleware Security Guide*.

Table 29–3 OPSS Profilers

Category	Logger Name	Log Level	Profiles
refresh	oracle.security.jps.policystore.refresh.full.profiler	FINE	The time taken by refresh for policies.
refresh	oracle.security.jps.policystore.refresh.partial.profiler	FINE	The time taken by fine-grained various activities during policy refresh.
policy management APIs	oracle.security.jps.policystore.management.profiler	FINE	The time taken by selective policy management APIs (getAllAppRoleEntries, searchAppRoles).

Table 29–3 (Cont.) OPSS Profilers

Category	Logger Name	Log Level	Profiles
policy runtime APIs	oracle.security.jps.policy.store.runtime.profiler	FINE	The time taken by on-demand loading (during cache miss) of direct roles and the granted permissions for a given user.
OPSS Filter and EJB Interceptor	oracle.security.jps.policy.store.runtime.profiler	FINE	The time taken to compute the application roles for the give subject by the OPSS filter and the OPSS EJB interceptor.
Category	Logger Name	Log Level	Profiles
refresh	oracle.security.jps.policy.store.refresh.full.profiler	FINE	The time taken by refresh for policies.
refresh	oracle.security.jps.policy.store.refresh.partial.profiler	FINE	The time taken by fine-grained various activities during policy refresh.
policy management APIs	oracle.security.jps.policy.store.management.profiler	FINE	The time taken by selective policy management APIs (getAllAppRoleEntries, searchAppRoles).
policy runtime APIs	oracle.security.jps.policy.store.runtime.profiler	FINE	The time taken by on-demand loading (during cache miss) of direct roles and the granted permissions for a given user.
OPSS Filter and EJB Interceptor	oracle.security.jps.policy.store.runtime.profiler	FINE	The time taken to compute the application roles for the give subject by the OPSS filter and the OPSS EJB interceptor.

29.3.3 Developing with the Credential Store Framework

This section specifies corrections to Chapter 17, Developing with the Credential Store Framework, of the *Oracle Fusion Middleware Security Guide*.

- [Section 29.3.3.1, "Updates to Example 1: JavaSE Application with Wallet Store"](#)
- [Section 29.3.3.2, "Updates to Example 2: JavaEE Application with Wallet Store"](#)

29.3.3.1 Updates to Example 1: JavaSE Application with Wallet Store

In section 17.7.2, "Example 1: JavaSE Application with Wallet Store", in the example `jazn-data.xml`, change the name elements as follows:

Change:

```
<name>*context=SYSTEM,mapName=pc_map,keyName=**</name>
```

to:

```
<name>context=SYSTEM,mapName=pc_map,keyName=*</name>
```

Change:

```
<name>*context=SYSTEM,mapName=gc_map,keyName=gc_key*</name>
```

to:

```
<name>context=SYSTEM,mapName=gc_map,keyName=gc_key</name>
```

29.3.3.2 Updates to Example 2: JavaEE Application with Wallet Store

In section 17.7.3, "Example 2: JavaEE Application with Wallet Store", in the example `jazn-data.xml`, change the `codesource` element to include the deployed application name as follows:

Change:

```
<codesource>    <url>file:${domain.home}/servers/${weblogic.Name}/tmp/_WL_
user/-</url></codesource>
```

to:

```
<codesource>
    <url>file:${domain.home}/servers/${weblogic.Name}
    /tmp/_WL_user/myTestApp/-</url>
</codesource>
```

29.3.4 Developing with the User and Role API

This section specifies corrections to Chapter 19, *Developing with the User and Role API*, of the *Oracle Fusion Middleware Security Guide*.

A Note about Using the User and Role APIs

As a general rule of thumb, authentication should only be performed by authentication providers, not through the User and Role APIs.

Additionally, it is recommended that authentication providers be configured with the connect DN of a user that does not have write privileges.

Additional Information for Example 1: Searching for Users

Section 19.7.1 "Example 1: Searching for Users", shows the following search filter:

```
.
.
SimpleSearchFilter sf = oidStore.getSimpleSearchFilter(
    UserProfile.NAME, SimpleSearchFilter.TYPE_EQUAL, null);
.
.
```

When searching for users, you invoke `UserProfile`, as in the above example. When searching for groups, however, you use `RoleProfile` instead.

29.3.5 Documentation Errata for the Oracle Fusion Middleware Security Overview

In the Oracle Fusion Middleware Security Overview, Section 4.6 Lockdown contains an incorrect link. The link should reference "Securing Applications" in *Oracle Fusion Middleware Securing a Production Environment for Oracle WebLogic Server*.

29.3.6 Configuring Single Sign-On in Oracle Fusion Middleware

Oracle Fusion Middleware 11g supports two new single sign-on solutions that applications can use to establish and enforce perimeter authentication:

- Oracle Access Manager solutions
- Oracle Single Sign-On (OSSO) solution

This section describes known issues in the chapter that describes these solutions in *Oracle Fusion Middleware Security Guide*. The following items will be corrected in the book with the next release:

- [Section 29.3.6.1, "Converting Oracle Access Manager Certificates to Java Keystore Format"](#)
- [Section 29.3.6.2, "Establishing Trust Between Oracle HTTP Server and Oracle WebLogic Server"](#)
- [Section 29.3.6.3, "Establishing Trust Between Oracle WebLogic Server and Other Entities"](#)
- [Section 29.3.6.4, "Configuring mod_weblogic"](#)
- [Section 29.3.6.5, "Using OAMCfgTool to Create an Authentication Scheme"](#)
- [Section 29.3.6.6, "Configuring Providers for the Authenticator in a WebLogic Domain"](#)
- [Section 29.3.6.7, "Public URL Patterns"](#)
- [Section 29.3.6.8, "OAMCfgTool and Password Entry"](#)
- [Section 29.3.6.9, "Oracle Access Manager Solution with No Fusion Middleware: Applications Deployed on a Stand-Alone Oracle WebLogic Server"](#)
- [Section 29.3.6.10, "Known Issues: Oracle Access Manager Provider JAR Files and OAMCfgTool"](#)
- [Section 29.3.6.11, "Oracle SSO Failure - Unable to process request"](#)
- [Section 29.3.6.12, "SSO Users Specified in "Users to Always Audit" Must Be Uppercase"](#)
- [Section 29.3.6.13, "OSSO Solution for Applications Deployed on a Stand Alone WebLogic Server"](#)

29.3.6.1 Converting Oracle Access Manager Certificates to Java Keystore Format

Skip this task; it is no longer required.

29.3.6.2 Establishing Trust Between Oracle HTTP Server and Oracle WebLogic Server

This task in the section "Configuring Oracle Access Manager Identity Assertion for Single Sign-On" is the same whether you are using Oracle Access Manager or Oracle Application Server for single sign-on. Therefore, it will be renamed as follows:

"Establishing Trust Between Oracle WebLogic Server and Other Entities"

In the WebLogic Administration Console, there is no General tab or View Domain-Wide Security Settings link. As a result, steps 2, 3, and 4 in the following procedure will be corrected as shown here to reflect the actual navigation path and tab names in the WebLogic Administration Console:

To configure a connection filter to allow requests from the host of the 11g Oracle HTTP Server

1. Log in to the Oracle WebLogic Administration Console.
2. Click Domain under Domain Configurations.
3. Click the Security tab, click the Filter tab.

4. Click the Connection Logger Enabled attribute to enable the logging of accepted messages for use when debugging problems relating to server connections.
5. Specify the connection filter to be used in the domain:
 - Default Connection Filter: In the Connection Filter attribute field, specify `weblogic.security.net.ConnectionFilterImpl`.
 - Custom Connection Filter: In the Connection Filter attribute field, specify the class that implements the network connection filter, which should also be specified in the CLASSPATH for Oracle WebLogic Server.
6. Enter the appropriate syntax for the connection filter rules.
7. Click Save.
8. Restart the Oracle WebLogic Server.
9. Proceed to "Configuring the Authentication Scheme, Policy Domain, and WebGate Profile for the Identity Asserter".

29.3.6.3 Establishing Trust Between Oracle WebLogic Server and Other Entities

This topic is the same whether you are using OSSO or Oracle Access Manager. In the WebLogic Administration Console, there is no General tab or View Domain-Wide Security Settings link. As a result, steps 2, 3, and 4 in the following procedure will be corrected as shown here to reflect the actual navigation path and tab names in the WebLogic Administration Console:

To configure a connection filter to allow requests from the host of the 11g Oracle HTTP Server

1. Log in to the Oracle WebLogic Administration Console.
2. Click **Domain** under Domain Configurations.
3. Click the Security tab, click the Filter tab.
4. Click the Connection Logger Enabled attribute to enable the logging of accepted messages for use when debugging problems relating to server connections.
5. Specify the connection filter to be used in the domain:
 - Default Connection Filter: In the Connection Filter attribute field, specify `weblogic.security.net.ConnectionFilterImpl`.
 - Custom Connection Filter: In the Connection Filter attribute field, specify the class that implements the network connection filter, which should also be specified in the CLASSPATH for Oracle WebLogic Server.
6. Enter the appropriate syntax for the connection filter rules.
7. Click **Save**.
8. Restart the Oracle WebLogic Server.
9. Proceed to ["To create a form authentication scheme, policy domain, and access polices with OAMCfgTool"](#).

29.3.6.4 Configuring mod_weblogic

The topic "Confirming mod_weblogic for Oracle Access Manager Identity Asserter", states:

If the `mod_weblogic` configuration is not present in the Web server `httpd.conf` file, requests cannot be proxied from the HTTP server to Oracle WebLogic Server.

The information will be changed as follows:

With Oracle HTTP Server 11g, the `mod_weblogic` configuration is present in `mod_wl_ohs.conf` by default, and the path of this file is included in `httpd.conf`. If the `mod_weblogic` configuration is not present then you must make edit `httpd.conf`.

29.3.6.5 Using OAMCfgTool to Create an Authentication Scheme

The following changes will be made:

- In Step 1, the actual location of OAMCfgTool on Oracle Technology might be different than the one states.
- A new step 2 will be added to ensure that you have the appropriate JDK installed before running OAMCfgTool:

To create a form authentication scheme, policy domain, and access polices with OAMCfgTool

1. ... (step unchanged)
2. Confirm that JDK 1.6 (or the latest version) is installed and configured.
3. ... (step unchanged)

29.3.6.6 Configuring Providers for the Authenticator in a WebLogic Domain

The following change will be made in the procedure "To configure providers for the Oracle Access Manager Authenticator in a WebLogic domain", Step 4, e: **OAM Authenticator, Advanced Configuration:**

The password shared by AccessGate and Access Server for simple communication modes is named Simple mode pass phrase, as described in Table 10–7.

29.3.6.7 Public URL Patterns

When using OAMCfgTool to create access policies for the Oracle Access Manager Identity Asserter, the URL pattern in the policy for a public URI should be `/.../public/.../`. However, the URL pattern might not be set in the policy.

This has no impact on functionality. However, this might cause confusion because of statements in the chapter.

29.3.6.8 OAMCfgTool and Password Entry

Oracle Fusion Middleware Security Guide, chapter "Configuring Single Sign-On in Oracle Fusion Middleware", section "About Using OAMCfgTool" will be updated with the following information for the next release:

- By default, OAMCfgTool will prompt for required passwords on the command line in a secure way if you do not enter them. For example:

```
Enter app_agent_password:
Enter ldap_userpassword:
Enter oam_aaa_passphrase:
Processed input parameters
```

- A `-noprompt` option is available to avoid the password prompt

29.3.6.9 Oracle Access Manager Solution with No Fusion Middleware: Applications Deployed on a Stand-Alone Oracle WebLogic Server

If you are configuring the Oracle Access Manager solution for an application on a stand-alone WebLogic Server (without Oracle Fusion Middleware), the chapter "Configuring Single Sign-On in Oracle Fusion Middleware" in the Oracle Fusion Middleware Security Guide instructs you to acquire certain required files from the Oracle Technology Network.

Note: The phrase *No Fusion Middleware Application* refers to applications deployed on a stand-alone Oracle WebLogic Server.

The book currently contains the following incorrect details:

Incorrect: No Fusion Middleware Application

Correct: Applications Deployed on a Stand Alone WebLogic Server

Note: The phrase *No Fusion Middleware Application* refers to applications deployed on a stand-alone Oracle WebLogic Server.

Correct Locations of OAMCfgTool and Provider for Stand-Alone Oracle WebLogic Server:

When you are deploying applications on a stand-alone WebLogic Server (without Oracle Fusion Middleware), retrieve the following items as indicated here:

- **OAMCfgTool:** Oracle Access Manager 10g (10.1.4.3) **Server** media:
oamcfgtool<version>.zip
- **oamAuthnProvider.zip:** Oracle Access Manager 10g (10.1.4.3) WebGate for Oracle HTTP Server 11g media:
oamAuthnProvider<version number>.zip

Incorrect OAMCfgTool Location for Stand-Alone Oracle WebLogic Server:

No Fusion Middleware Application: ... Obtain OAMCfgTool, as follows.

1. Log in to Oracle Technology Network at: ...
2. Locate the OAMCfgTool ZIP file with Oracle Access Manager 10g (10.1.4.3) WebGate for Oracle HTTP Server 11g:

oamcfgtool<version>.zip

Correct OAMCfgTool Location for Stand-Alone Oracle WebLogic Server:

No Fusion Middleware Application: ... Obtain OAMCfgTool, as follows.

1. Log in to Oracle Technology Network at: ...
2. Locate OAMCfgTool on Oracle Access Manager 10g (10.1.4.3) **Server** media:

oamcfgtool<version>.zip

29.3.6.10 Known Issues: Oracle Access Manager Provider JAR Files and OAMCfgTool

For other known issues, see this topic in chapter 10 of the *Oracle Fusion Middleware Security Guide*.

29.3.6.11 Oracle SSO Failure - Unable to process request

Problem

You receive a message stating:

Oracle SSO Failure - Unable to process request

Either the requested URL was not specified in terms of a fully-qualified host name or Oracle HTTP Server single sign-on is incorrectly configured.

Please notify your administrator.

Solution

Modify the Oracle HTTP Server `httpd.conf` file to include a port number in the `ServerName` and restart the Web server. For example:

From: `ServerName host.domain.com`

To: `ServerName host.domain.com:port`

29.3.6.12 SSO Users Specified in "Users to Always Audit" Must Be Uppercase

When you specify SSO users in the Oracle HTTP Server audit configuration, "Users to Always Audit" section, the SSO user name must be specified in uppercase characters.

A comma-separated list of users can be specified to force the audit framework to audit events initiated by these users. Auditing occurs regardless of the audit level or filters that have been specified. This is true for all authentication types.

For more information, see section "Managing Audit Policies" in chapter "Configuring and Managing Auditing" in the *Oracle Fusion Middleware Security Guide*.

29.3.6.13 OSSO Solution for Applications Deployed on a Stand Alone WebLogic Server

The *Oracle Fusion Middleware Security Guide* describes how to configure single sign-on (SSO) for applications that are deployed on Oracle Fusion Middleware Oracle WebLogic Server. However, details for applications that are deployed on a stand-alone Oracle WebLogic Server are provided here only.

Differences between the two environments include:

- **Oracle Fusion Middleware with OSSO:** The required OSSO Identity Asserter (`ossoiap.jar`) is provided automatically when you install Oracle Fusion Middleware: Oracle Identity Management, Oracle SOA Suite, or Oracle WebCenter is required.

Note: Oracle Fusion Middleware with OSSO enables you to use either the Oracle HTTP Server 10g or 11g Web server.

- **Stand-Alone Oracle WebLogic Server with OSSO:** The required OSSO Identity Asserter (`ossoiap.jar`) must be acquired from the Oracle Web Tier, as described here.

Note: Stand-Alone Oracle WebLogic Server with OSSO requires Oracle HTTP Server 11g Web server.

Whether you use OSSO for Oracle Fusion Middleware applications or other applications, the Identity Asserter performs the same functions as those illustrated and described in "Using the OSSO Identity Asserter" in the chapter "Configuring Single Sign-On in Oracle Fusion Middleware" of the *Oracle Fusion Middleware Security Guide*.

Also included in the following note are additional, optional details you can use to configure and test Single Logout for session invalidation and synchronization between the SSO cookie and the JSESSIONID cookie. Required files must also be acquired from the Oracle Web Tier, as described here.

Task overview: Deploying and configuring the OSSO Identity Asserter for applications on a stand-alone WebLogic Server

1. Install Oracle WebLogic Server 10.3.1 and other required components as follows:
 - a. Perform Step 1, a-d as described in the "Task overview: Deploying and configuring the OSSO Identity Asserter" in "New Users of the OSSO Identity Asserter" in the *Oracle Fusion Middleware Security Guide*.
 - b. Skip Step 1e and instead deploy your application.
2. Create a WebLogic security domain with the weblogin domain extension template that is supplied with Oracle WebLogic Server and can be used from `$WLS_HOME/common/bin/config.sh`.
3. Configure `mod_weblogic` to forward requests to Oracle WebLogic Server, as explained in "Configuring `mod_weblogic`" in "New Users of the OSSO Identity Asserter" in the *Oracle Fusion Middleware Security Guide*.
4. Register and configure the module `mod_osso` with the 10g SSO Server as a partner application, as described in "New Users of the OSSO Identity Asserter" in the *Oracle Fusion Middleware Security Guide*:
 - a. Perform steps described in "Registering Oracle HTTP Server `mod_osso` with OSSO Server 10.1.4".
 - b. Perform steps described in "Configuring `mod_osso` to Protect Web Resources".
5. Add Authentication Providers to the appropriate security domain as follows:
 - a. Acquire the OSSO Identity Asserter (`ossoiap.jar` from the Oracle Web Tier at:
`$ORACLE_INSTANCE/modules/oracle.ossoiap_11.1.1/ossoiap.jar`
 - b. Copy `ossoiap.jar` into `$WLS_HOME/wlserver_10.x/server/lib/mbeantype`, then restart the Oracle WebLogic Server.
 - c. Configure providers as described in "Adding Providers to a WebLogic Domain for OSSO" in "New Users of the OSSO Identity Asserter" in the *Oracle Fusion Middleware Security Guide*.
6. Configure the Oracle WebLogic Connection Filtering mechanism to create access control lists and accept requests from the hosts where Oracle HTTP Server and the front-end Web server are running, as explained in "Establishing Trust Between Oracle WebLogic Server and Other Entities" in "New Users of the OSSO Identity Asserter" in the *Oracle Fusion Middleware Security Guide*.

Note: Test the secured application to ensure that it is working with the default authenticator using the Oracle WebLogic Server host and port.

7. Configure the application authentication method for the OSSO Identity Asserter (all `web.xml` files in the application EAR file must include `CLIENT-CERT` in the element `auth-method`), as explained in *Configuring the Application for the OSSO Identity Asserter* in "New Users of the OSSO Identity Asserter" in the *Oracle Fusion Middleware Security Guide*.

Note: Test the application with users authenticated by OSSO while accessing the application with the Oracle HTTP Server host and port.

8. **Optional:** You can configure and test Single Logout [Session Invalidation and synchronization between the SSO cookie and JSESSIONID cookie] as follows:

See Also: "Synchronizing the User and SSO Sessions: SSO Synchronization Filter" in *New Users of the OSSO Identity Asserter* in the *Oracle Fusion Middleware Security Guide* for details on SSOFilter

- a. Acquire `ssofilter.jar` and configure Oracle WebLogic Server to use it as follows:

1. Acquire `ssofilter.jar` from the Oracle Web Tier at:

`$ORACLE_INSTANCE/modules/oracle.ssofilter_11.1.1/ssofilter.jar`

2. Copy it to an appropriate directory in Oracle Middleware home: `WLS_INSTALL/Oracle/Middleware/modules` directory, for example.

3. Add the absolute path of `ssofilter.jar` to the Oracle WebLogic Server classpath (by editing the `setDomainEnv.sh` script `POST_CLASSPATH` variable or `CLASSPATH` variable).

- b. Deploy `system-filters.war` as a system filter, as follows:

1. Acquire `system-filters.war` from the Oracle Web Tier at:

`$ORACLE_INSTANCE/modules/oracle.jrf_11.1.1/system-filters.war`

2. Copy `system-filters.war` to an appropriate directory in Oracle Middleware home: `WLS_INSTALL/Oracle/Middleware/modules` directory, for example.

3. Deploy `system-filters.war` as an application library: From the WebLogic Administration Console, click **Deployment**, select **New**, and choose the location of file.

4. Restart the Oracle WebLogic Server, if asked.

- c. Enable Logs to verify that the SSOFilter is working, as follows:

1. From the WebLogic Administration Console, click **Domain**, **Environment**, **Servers**, **AdminServer**.

2. Click the **Logging** tab.

3. From the **Advanced** drop-down, select "Minimum Severity to Log" as "Debug".

4. From the Advanced drop-down, "Message destinations", select LogFile: Severity Level as "Debug".
 5. Save changes and restart the Oracle WebLogic Server.
- d. Confirm that the SSOFilter is loaded as a system filter:
 1. Open the AdminServer.log file in *DomainHome/Servers/AdminServer/log/AdminServer.log*.
 2. Search for "SSOFilter" and confirm that you can see <Debug> messages, which indicate SSOFilter initialization and confirm a filter load
 - e. Test the filter functionality to confirm that the SSO and JSESSIONID cookie are cleaned up after user logout and that attempts to access the application after logout require another login.

Note: You must have OSSO Identity Asserter configured in the WebLogic security domain, otherwise the filter will automatically disable during its initialization.

- f. Test logout with applications to confirm that the session ends cleanly.

SSL Configuration in Oracle Fusion Middleware

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

- [Section 30.1, "General Issues and Workarounds"](#)
- [Section 30.2, "Configuration Issues and Workarounds"](#)

30.1 General Issues and Workarounds

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

- [Section 30.1.1, "orapki Command-line Tool in Oracle SOA Suite and Oracle WebCenter Environments"](#)
- [Section 30.1.2, "Replacement User Certificates for Oracle Wallets"](#)
- [Section 30.1.3, "Incorrect Message or Error when Importing a Wallet"](#)

30.1.1 orapki Command-line Tool in Oracle SOA Suite and Oracle WebCenter Environments

The `orapki` PKI command-line tool does not work in Oracle SOA Suite and Oracle WebCenter installations.

Take these steps to resolve this issue:

- Apply the one-off patch for this problem.
- Set the environment variable `JRE_HOME` to point to the Java runtime environment.

The `JRE_HOME` variable must be set so that the `orapki` tool can find the java executable.

30.1.2 Replacement User Certificates for Oracle Wallets

The Oracle wallets used by Oracle HTTP Server, Oracle Web Cache, and Oracle Internet Directory, as well as the keystore used by Oracle Virtual Directory, include a Verisign root key (Serial#: 02:ad:66:7e:4e:45:fe:5e:57:6f:3c:98:19:5e:dd:c0) that expires Jan 07, 2010 15:59:59 PST.

Customers using the user certificate signed by this root key will need to obtain a replacement user certificate signed by their Certificate Authority (CA), and import that CA's root key into the Oracle wallet.

See the *Oracle Fusion Middleware Administrator's Guide* for steps to import a root key into an Oracle wallet.

30.1.3 Incorrect Message or Error when Importing a Wallet

Problem 1

Fusion Middleware Control displays an incorrect message when you specify an invalid wallet password while attempting to import a wallet. The issued message "Cannot create p12 without password." is incorrect. Instead, it should notify the user that the password is incorrect and request a valid password.

Problem 2

Fusion Middleware Control displays an incorrect message when you attempt to import a password-protected wallet as an autologin wallet. The issued message "Cannot create p12 without password." does not provide complete information. Instead, it should notify the user that importing a password-protected wallet requires a password.

Problem 3

If you attempt to import an autologin wallet as a password-protected wallet using either Fusion Middleware Control or WLST, a `NullPointerException` error is displayed.

30.2 Configuration Issues and Workarounds

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

- [Section 30.2.1, "Tools for Importing DER-encoded Certificates"](#)
- [Section 30.2.2, "Using a Keystore Not Created with WLST or Fusion Middleware Control"](#)
- [Section 30.2.3, "Components May Enable All Supported Ciphers"](#)

30.2.1 Tools for Importing DER-encoded Certificates

You cannot use Oracle Enterprise Manager Fusion Middleware Control or the `WLST` command-line tool to import DER-encoded certificates or trusted certificates into an Oracle wallet or a JKS keystore.

Instead, use other tools that are available for this purpose.

- To import DER-encoded certificates or trusted certificates into an Oracle wallet, use:
 - Oracle Wallet Manager or
 - `orapki` command-line tool
- To import DER-encoded certificates or trusted certificates into a JKS keystore, use the `keytool` utility.

30.2.2 Using a Keystore Not Created with WLST or Fusion Middleware Control

If an Oracle wallet or JKS keystore was created with tools such as `orapki` or `keytool`, it must be imported prior to use. Specifically:

- For Oracle HTTP Server, Oracle Webcache, and Oracle Internet Directory, if a wallet was created using `orapki` or Oracle Wallet Manager, in order to view or manage it in Fusion Middleware Control you must first import it with either Fusion Middleware Control or the WLST `importWallet` command.
- For Oracle Virtual Directory, if a keystore was created using `keytool`, in order to view or manage it in Fusion Middleware Control you must first import it with either Fusion Middleware Control or the WLST `importKeyStore` command.

30.2.3 Components May Enable All Supported Ciphers

Customers should be aware that when no cipher is explicitly configured, some 11g Release 1 (11.1.1) components enable all supported SSL ciphers including DH_Anon (Diffie-Hellman Anonymous) ciphers.

At this time, Oracle HTTP Server is the only component known to set ciphers like this.

Configure the components with the desired cipher(s) if DH_Anon is not wanted.

Oracle Virtual Directory

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

- [Section 31.1, "General Issues and Workarounds"](#)
- [Section 31.2, "Configuration Issues and Workarounds"](#)
- [Section 31.3, "Documentation Errata"](#)

31.1 General Issues and Workarounds

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

- [Oracle Directory Services Manager Browser Window is Not Usable](#)
- [Exceptions May Occur in Oracle Directory Services Manager When Managing Multiple Oracle Virtual Directory Components and One is Stopped](#)
- [Identifying the DN Associated with an Access Control Point in Oracle Directory Services Manager](#)
- [Issues With Oracle Virtual Directory Metrics in Fusion Middleware Control](#)

31.1.1 Oracle Directory Services Manager Browser Window is Not Usable

In some circumstances, after you launch Oracle Directory Services Manager from Fusion Middleware Control, then select a new Oracle Directory Services Manager task, the browser window might become unusable. For example, the window might refresh repeatedly, appear as a blank page, fail to accept user input, or display a null pointer error.

As a workaround, go to the URL: `http://host:port/odsm`, where *host* and *port* specify the location where Oracle Directory Services Manager is running, for example, `http://myserver.example.com:7005/odsm`. You can then use the Oracle Directory Services Manager window to log in to a server.

31.1.2 Exceptions May Occur in Oracle Directory Services Manager When Managing Multiple Oracle Virtual Directory Components and One is Stopped

Under certain circumstances, when managing multiple Oracle Virtual Directory components from the same Oracle Directory Services Manager session, exception or error messages may appear if you stop one of the Oracle Virtual Directory components. For example, you are managing Oracle Virtual Directory components named ovd1 and ovd2 from the same Oracle Directory Services Manager session. Both

ovd1 and ovd2 are configured and running. If you stop ovd1, an exception or Target Unreachable message may appear when you try to navigate Oracle Directory Services Manager.

To workaround this issue, exit the current Oracle Directory Services Manager session, close the web browser, and then reconnect to Oracle Virtual Directory components in a new Oracle Directory Services Manager session.

31.1.3 Identifying the DN Associated with an Access Control Point in Oracle Directory Services Manager

When you create an Access Control Point (ACP) using Oracle Directory Services Manager, the Relative Distinguished Name (RDN) of the DN where you created the ACP appears in the navigation tree on the left side of the screen. For example, if you create an ACP at the DN of **cn=ForExample,dc=us,dc=sales,dc=west**, then **cn=ForExample** appears in the navigation tree. After clicking an ACP in the navigation tree, its settings appear in the right side of the screen and the RDN it is associated with appears at the top of the page.

To identify the DN associated with an ACP, move the cursor over ("mouse-over") the ACP entry in the navigation tree. The full DN associated with the ACP will be displayed in a tool-tip dialog box.

Mousing-over ACPs in the navigation tree is useful when you have multiple ACPs associated with DNs that have identical RDNs, such as:

ACP 1 = cn=ForExample,dc=us,dc=sales,dc=west

ACP 2 = cn=ForExample,dc=us,dc=sales,dc=east

31.1.4 Issues With Oracle Virtual Directory Metrics in Fusion Middleware Control

This topic describes issues with Oracle Virtual Directory metrics in Fusion Middleware Control, including:

- [Some Oracle Virtual Directory Metrics Displayed in Fusion Middleware Control are Incorrect](#)
- [Configuring Operation-Specific Plug-Ins to Allow Performance Metric Reporting in Fusion Middleware Control After Upgrading to 11g Release 1 \(11.1.1\)](#)

31.1.4.1 Some Oracle Virtual Directory Metrics Displayed in Fusion Middleware Control are Incorrect

In Fusion Middleware Control, the **Distinct Connected Users** metric on the Oracle Virtual Directory Home page, and the **Total No of Users Currently Connected** metric on the Oracle Virtual Directory Performance Summary page, display incorrect information.

If you want to resolve this issue, contact Oracle Support and request a patch.

31.1.4.2 Configuring Operation-Specific Plug-Ins to Allow Performance Metric Reporting in Fusion Middleware Control After Upgrading to 11g Release 1 (11.1.1)

If you upgraded an Oracle Virtual Directory Release 10g installation with plug-ins configured to execute on specific operations, such as add, bind, get, and so on, to 11g Release 1 (11.1.1), you may have to update those operation-specific plug-ins before you can use Fusion Middleware Control to view performance metrics.

After upgrading to 11g Release 1 (11.1.1) and performing some initial operations to verify the upgrade was successful, check the Oracle Virtual Directory home page in Fusion Middleware Control. You should see data for the Current Load and Average Response Time and Operations metrics.

If you do not see any data for these metrics, you must update the plug-ins configured to execute on specific operations. The work-around is to add the Performance Monitor plug-in to the operation-specific plug-in's configuration chain.

Perform the following steps to add the Performance Monitor plug-in to the operation-specific plug-in's configuration chain:

1. If the operation-specific plug-in is a Global-level plug-in, edit the `server.os_xml` file located in the `ORACLE_INSTANCE/config/OVD/NAME_OF_OVD_COMPONENT/` directory.

If the operation-specific plug-in is an adapter-level plug-in, edit the `adapters.os_xml` file located in the `ORACLE_INSTANCE/config/OVD/NAME_OF_OVD_COMPONENT/` directory.

Note: If multiple adapters are configured, you must perform steps 2 and 3 for every adapter configuration in the `adapters.os_xml` file.

2. Locate the `pluginChains` element in the file. For example, if the Dump Transactions plug-in is configured to execute on the `get` operation, you will see something similar to the following:

Example 31–1 Dump Transactions Plug-In Configured for get Operation

```
<pluginChains xmlns="http://xmlns.oracle.com/iam/management/ovd/config/plugins">
  <plugins>
    <plugin>
      <name>Dump Transactions</name>

<class>com.octetstring.vde.chain.plugins.DumpTransactions.DumpTransactions</class>
      <initParams>
        <param name="loglevel" value="info"/>
      </initParams>
    </plugin>
    <plugin>
      <name>Performance Monitor</name>

<class>com.octetstring.vde.chain.plugins.performance.MonitorPerformance</class>
      <initParams/>
    </plugin>
  </plugins>
  <default>
    <plugin name="Performance Monitor"/>
  </default>
  <get>
    <plugin name="Dump Transactions">
      <namespace>ou=DB,dc=oracle,dc=com </namespace>
    </plugin>
  </get>
</pluginChains>
```

3. Add the following Performance Monitor plug-in element within the operation-specific configuration chain:

```
<plugin name="Performance Monitor"/>
```

For example:

Example 31–2 Adding the Performance Monitor to the Operation-Specific Plug-In Configuration Chain

```
<pluginChains xmlns="http://xmlns.oracle.com/iam/management/ovd/config/plugins">
  <plugins>
    <plugin>
      <name>Dump Transactions</name>

<class>com.octetstring.vde.chain.plugins.DumpTransactions.DumpTransactions</class>
      <initParams>
        <param name="loglevel" value="info"/>
      </initParams>
    </plugin>
    <plugin>
      <name>Performance Monitor</name>

<class>com.octetstring.vde.chain.plugins.performance.MonitorPerformance</class>
      <initParams/>
    </plugin>
  </plugins>
  <default>
    <plugin name="Performance Monitor"/>
  </default>
  <get>
    <plugin name="Dump Transactions">
      <namespace>ou=DB,dc=oracle,dc=com </namespace>
    </plugin>
    <plugin name="Performance Monitor"/>
  </get>
</pluginChains>
```

4. Save the file.
5. Restart Oracle Virtual Directory.

Note: Refer to ["Updating New Plug-Ins to Execute on Operations Which Have Existing Operation-Specific Plug-Ins Configured"](#) for more information related to operation-specific plug-ins in Oracle Virtual Directory 11g Release 1 (11.1.1).

31.2 Configuration Issues and Workarounds

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

- [Updating New Plug-Ins to Execute on Operations Which Have Existing Operation-Specific Plug-Ins Configured](#)
- [Configuring a No-Authentication SSL Connection Between Oracle Virtual Directory and a Proxy LDAP Directory](#)
- [Deploying Enterprise User Security Plug-ins for Microsoft Active Directory and Sun Java System Directory Server](#)
- [Database Adapter Character Requirements for Oracle Database Table and Column Names](#)

31.2.1 Updating New Plug-Ins to Execute on Operations Which Have Existing Operation-Specific Plug-Ins Configured

If you upgraded an Oracle Virtual Directory Release 10g installation with plug-ins configured to execute on specific operations, such as add, bind, get, and so on, to 11g Release 1 (11.1.1), then add new plug-ins using Oracle Directory Services Manager, the new plug-ins will not execute on operations that have operation-specific plug-ins configured.

For example, if you upgraded to 11g Release 1 (11.1.1) with the Dump Transactions plug-in configured to execute on the get operation, then add a new plug-in named *NEW_PLUG-IN* using Oracle Directory Services Manager, the *NEW_PLUG-IN* will not execute for the get operation.

To work-around this issue, you must add the new plug-in configuration to the existing operation-specific plug-in chain by performing the following steps:

1. If the new plug-in created by Oracle Directory Services Manager is a Global-level plug-in, edit the `server.os_xml` file located in the `ORACLE_INSTANCE/config/OVD/NAME_OF_OVD_COMPONENT/` directory.

If the new plug-in created by Oracle Directory Services Manager is an adapter-level plug-in, edit the `adapters.os_xml` file located in the `ORACLE_INSTANCE/config/OVD/NAME_OF_OVD_COMPONENT/` directory.

Note: If multiple adapters are configured, you must perform steps 2–4 for every adapter configuration in the `adapters.os_xml` file.

2. Locate the configuration for the new plug-in created by Oracle Directory Services Manager. It will be in the default section of the file. For example, if you added a new plug-in named *NEW_PLUG-IN* using Oracle Directory Services Manager:

Example 31–3 Locating New Plug-In Configuration Chain in Default Section of File

```
<default>
  <plugin name="Performance Monitor"/>
  <plugin name="NEW_PLUG-IN">
    <namespace>dc=my_ns,dc=com</namespace>
  </plugin>
  <plugin name="Dump Transactions"/>
</default>
<get>
  <plugin name="Performance Monitor"/>
  <plugin name="Dump Transactions"/>
</get>
```

3. Copy the configuration for the new plug-in.
4. Paste the configuration for the new plug-in into the configuration for the existing operation-specific plug-in chain. For example:

Example 31–4 Pasting New Plug-In Configuration into Existing Operation-Specific Configuration Chain

```
<default>
  <plugin name="Performance Monitor"/>
  <plugin name="NEW_PLUG-IN">
    <namespace>dc=my_ns,dc=com</namespace>
  </plugin>
```

```
<plugin name="Dump Transactions"/>
</default>
<get>
  <plugin name="Performance Monitor"/>
  <plugin name="NEW_PLUG-IN">
    <namespace>dc=my_ns,dc=com</namespace>
  </plugin>
  <plugin name="Dump Transactions"/>
</get>
```

5. Save the file.
6. Restart Oracle Virtual Directory.

31.2.2 Configuring a No-Authentication SSL Connection Between Oracle Virtual Directory and a Proxy LDAP Directory

To configure a No-Authentication SSL connection between Oracle Virtual Directory and a proxy LDAP directory, you must perform the steps described in the "Configuring a No-Authentication SSL Connection Between Oracle Virtual Directory and a Proxy LDAP Directory" section of the *Oracle Fusion Middleware Administrator's Guide for Oracle Virtual Directory*.

Note: This procedure includes using Oracle Directory Services Manager to create and configure an LDAP Adapter—and—manually editing the `adapters.os_xml` file.

When you configure the No-Authentication SSL connection, be sure you manually edit the `adapters.os_xml` file. The adapter configuration is not complete until you do so, despite the information that may appear in Oracle Directory Services Manager.

For example, to configure a No-Authentication SSL connection between Oracle Virtual Directory and Oracle Internet Directory, you must first create and configure the LDAP Adapter for Oracle Internet Directory using Oracle Directory Services Manager. Next, you must manually edit this adapter's configuration in the `adapters.os_xml` file as follows:

- Locate the `<ssl>` and `</ssl>` tags for the Oracle Internet Directory LDAP Adapter.
- Enter the following anonymous ciphers values within the `<cipherSuites>` and `</cipherSuites>` tags:

```
<ssl>
  <protocols>SSLv3,TLSv1</protocols>
  <cipherSuites>
    <cipher>SSL_DH_anon_WITH_3DES_EDE_CBC_SHA</cipher>
    <cipher>SSL_DH_anon_EXPORT_WITH_DES40_CBC_SHA</cipher>
    <cipher>SSL_DH_anon_EXPORT_WITH_RC4_40_MD5</cipher>
    <cipher>SSL_DH_anon_WITH_DES_CBC_SHA</cipher>
    <cipher>SSL_DH_anon_WITH_RC4_128_MD5</cipher>
  </cipherSuites>
</ssl>
```

See: The "Configuring a No-Authentication SSL Connection Between Oracle Virtual Directory and a Proxy LDAP Directory" section of the *Oracle Fusion Middleware Administrator's Guide for Oracle Virtual Directory* for complete information.

Note: In the "Configuring a No-Authentication SSL Connection Between Oracle Virtual Directory and a Proxy LDAP Directory" section of the *Oracle Fusion Middleware Administrator's Guide for Oracle Virtual Directory*, the `SSL_VERSION`, `SSL_VERSION1`, and `SSL_VERSION2` strings are variables within the `<protocols>` tags used to represent various types of SSL—they do not represent explicit text you should configure.

Replace the `SSL_VERSION` variables within the `<protocols>` tags with the appropriate SSL types for your environment.

31.2.3 Deploying Enterprise User Security Plug-ins for Microsoft Active Directory and Sun Java System Directory Server

In Oracle Virtual Directory Release 10g (10.1.4.2.0), the Enterprise User Security mappings for Microsoft Active Directory and Sun Java System Directory Server were deployed by default when you installed Oracle Virtual Directory. These mappings *are not* deployed by default in Oracle Virtual Directory 11g Release 1 (11.1.1).

You can deploy these mappings by referring to Chapter 14, "Managing Oracle Virtual Directory Mappings," in the *Oracle Fusion Middleware Administrator's Guide for Oracle Virtual Directory*.

Note: This issue also affects the "Integrating with Oracle's Enterprise User Security" procedures in the *Oracle Fusion Middleware Administrator's Guide for Oracle Virtual Directory*. Refer to "[Corrections for Integrating with Oracle's Enterprise User Security Documentation](#)" for more information.

31.2.4 Database Adapter Character Requirements for Oracle Database Table and Column Names

When creating Database Adapters for Oracle databases in Oracle Virtual Directory 11g Release 1 (11.1.1), use only alphanumeric characters or the following special characters in database table and column names: Dollar sign (\$), underscore (_), and pound/hash (#).

When you create a Database Adapter for Oracle databases, be sure you:

- Do not use non-ASCII characters in database table and column names
- Do not surround database table and column names with double quotation marks ("), for example, do not use `"tablename"` or `"columnname"`

If you do not following these character requirements for database table and column names when you create Database Adapters for Oracle databases, you will encounter an ORA-00904 or LocalLDAPException error if you try to use Oracle Directory Services Manager's Data Browser to view the data in the database.

31.3 Documentation Errata

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

- [Correction for Invoking Fusion Middleware Control Documentation](#)
- [Corrections for Configuring Oracle Virtual Directory Server Settings Using WLST Documentation](#)
- [Missing Documentation for Updating a Trusted Certificate After it Expires](#)
- [Corrections for Creating Database Adapters for Oracle TimesTen In-Memory Database Documentation](#)
- [Corrections for Oracle Communications Universal User Profile Diameter Adapters Documentation](#)
- [Correction for Dump Transactions Plug-In's Log Level Documentation](#)
- [Corrections for Integrating with Oracle's Enterprise User Security Documentation](#)
- [Clarifications for Migrating Local Store Adapter Data Documentation](#)

31.3.1 Correction for Invoking Fusion Middleware Control Documentation

In Chapter 8, "Getting Started with Administering Oracle Virtual Directory," of the *Oracle Fusion Middleware Administrator's Guide for Oracle Virtual Directory*, the "Invoking Fusion Middleware Control to Manage Oracle Virtual Directory" procedure contains an error.

Step 2 currently states: "In the left panel topology tree, expand the farm, *then Fusion Middleware*, then Identity and Access. Alternatively, from the farm home page, expand Fusion Middleware, then Identity and Access. Oracle Virtual Directory components are listed in both places." However, there is no Fusion Middleware entry in the left panel topology tree, though there is a Fusion Middleware entry on the farm home page.

The correct step 2 is: "In the left panel topology tree, expand the farm, then Identity and Access. Alternatively, from the farm home page, expand Fusion Middleware, then Identity and Access. Oracle Virtual Directory components are listed in both places."

31.3.2 Corrections for Configuring Oracle Virtual Directory Server Settings Using WLST Documentation

In Chapter 9, "Configuring and Managing the Oracle Virtual Directory Server," of the *Oracle Fusion Middleware Administrator's Guide for Oracle Virtual Directory*, the "Configuring Oracle Virtual Directory Server Settings Using WLST" procedure contains an error.

In step 4, there is a list of all Oracle Virtual Directory server configuration MBean attributes and an example command for setting them. The current example for the SchemaLocations attribute is incorrect.

The correct example for setting the SchemaLocations attribute is:

Add (on one command-line):

```
invoke('addSchemaLocation', jarray.array([java.lang.String('schema.myschema.xml')], java.lang.Object), jarray.array(['java.lang.String'], java.lang.String))
```

Delete (on one command-line):

```
invoke('deleteSchemaLocation',jarray.array([java.lang.String('schema.myschema.xml')],java.lang.Object),jarray.array(['java.lang.String'],java.lang.String))
```

31.3.3 Missing Documentation for Updating a Trusted Certificate After it Expires

In Chapter 8, "Getting Started with Administering Oracle Virtual Directory," of the *Oracle Fusion Middleware Administrator's Guide for Oracle Virtual Directory*, the "Managing Oracle Directory Services Manager's Key Store" section does not include information about updating a trusted certificate after it expires.

To list the valid dates for the certificate, list its contents as described in the "Listing the Contents of the Trusted Certificate" procedure in the same section. When the certificate has expired, delete it as described in the "Deleting the Trusted Certificate" procedure in the same section.

For general information about certificate expiration, see Chapter 7, "Managing Keystores, Wallets, and Certificates," of the *Oracle Fusion Middleware Administrator's Guide*.

Note: Oracle Directory Services Manager does not provide a web based user interface for managing its keystore. You must manage Oracle Directory Services Manager's key store by using `keytool`.

31.3.4 Corrections for Creating Database Adapters for Oracle TimesTen In-Memory Database Documentation

In Chapter 12, "Creating and Configuring Oracle Virtual Directory Adapters," of the *Oracle Fusion Middleware Administrator's Guide for Oracle Virtual Directory*, the procedure for Creating Database Adapters for Oracle TimesTen In-Memory Database is incorrect.

The following is the correct procedure to create Database Adapters for Oracle TimesTen In-Memory Database:

1. If native Oracle TimesTen libraries are not accessible to Oracle Virtual Directory, you must install the Oracle TimesTen In-Memory Database client.
2. In Oracle Virtual Directory's `opmn.xml` file, add the location of the Oracle TimesTen libraries and add the location of the Oracle TimesTen JDBC driver to the class-path. The `opmn.xml` file is located in the following directory:

`ORACLE_INSTANCE/config/OPMN/opmn/`

To set the location of the Oracle TimesTen libraries:

Add the `LD_LIBRARY_PATH` environment variable for UNIX and Linux platforms, or add the `PATH` environment variable on Windows.

For example, on UNIX and Linux platforms, you add the `LD_LIBRARY_PATH` environment variable as follows, where `TIMESTEN_HOME` represents the directory where you installed the Oracle TimesTen software:

Example 31–5 Setting the Location of the Oracle TimesTen Libraries on UNIX/Linux

```
<ias-component id="ovd1">
  <process-type id="OVD" module-id="OVD">
    <environment>
      <variable id="TNS_ADMIN" value="$ORACLE_INSTANCE/config"/>
    </environment>
  </process-type>
</ias-component>
```

```
<variable id="LD_LIBRARY_PATH" value="/TIMESTEN_HOME/lib" append="true"/>
</environment>
```

To add the location of the Oracle TimesTen JDBC driver to the class-path:

Set the java-classpath to include the path to the TimesTen JDBC Driver as follows, where *TIMESTEN_HOME* represents the directory where you installed the Oracle TimesTen software:

Example 31–6 Adding the Location of the Oracle TimesTen JDBC Driver to the class-path

```
<module-data>
  <category id="start-options">
    <data id="java-bin" value="$ORACLE_HOME/jdk/bin/java"/>
    <data id="java-options" value="-server -Xms512m -Xmx512m
-Dvde.soTimeoutBackend=0 -Doracle.security.jps.config=$ORACLE_
INSTANCE/config/JPS/jps-config-jse.xml"/>
    <data id="java-classpath" value="$ORACLE_HOME/ovd/jlib/vde.jar:$ORACLE_
HOME/jdbc/lib/ojdbc6.jar:/TIMESTEN_HOME/lib/ttjdbc6.jar"/>
  </category>
</module-data>
```

3. Reload the configuration to OPMN, and stop, then start Oracle Virtual Directory. For example:

To reload the configuration to OPMN, execute:

```
ORACLE_INSTANCE/bin/opmnctl reload
```

To stop Oracle Virtual Directory, execute:

```
ORACLE_INSTANCE/bin/opmnctl stopproc ias-component=NAME_OF_OVD_COMPONENT
```

To start Oracle Virtual Directory, execute:

```
ORACLE_INSTANCE/bin/opmnctl startproc ias-component=NAME_OF_OVD_COMPONENT
```

4. Create a Database Source Name (DSN) for Oracle TimesTen. Refer to the *Oracle TimesTen Operations Guide* on the Oracle Technology Network web site for more information.
5. Create the Database Adapter for Oracle TimesTen using Oracle Directory Services Manager. When you create the Database Adapter for Oracle TimesTen:

If the adapter is for an Oracle TimesTen client-only installation:

- a. Select the **Use Custom URL** option from the URL Type list on the Connection screen of the New Database Adapter Wizard.
- b. In the Database URL field, enter the following and replace *DSN* with the Database Source Name you created in step 4:

```
jdbc:timesten:client:dsn=DSN
```

- c. Continue creating the adapter by referring to the "Creating Database Adapters" section of the *Oracle Fusion Middleware Administrator's Guide for Oracle Virtual Directory*.

If the adapter is for an Oracle TimesTen client and server installation:

- a. Select the **Use Predefined Database** option from the URL Type list on the Connection screen of the New Database Adapter Wizard.

- b. Choose **Oracle - Times-Ten** from the Database Type list.
- c. Continue creating the adapter by referring to the "Creating Database Adapters" section of the *Oracle Fusion Middleware Administrator's Guide for Oracle Virtual Directory*.

Note: The **Enable Case Insensitive Search** option, as described in the "Configuring Database Adapter General Settings" section of the *Oracle Fusion Middleware Administrator's Guide for Oracle Virtual Directory*, can be used to improve Database Adapter performance during searches on case-insensitive LDAP attributes, such as uid, for Oracle TimesTen databases.

In addition to enabling the **Enable Case Insensitive Search** option, the linguistic indexes for the database columns used in the search must be created in the database. Refer to the *Oracle Database Globalization Support Guide* for information about Oracle TimesTen database linguistic indexes.

31.3.5 Corrections for Oracle Communications Universal User Profile Diameter Adapters Documentation

The following is a list of corrections for the information in Chapter 20, "Oracle Communications Universal User Profile," of the *Oracle Fusion Middleware Administrator's Guide for Oracle Virtual Directory*:

- In the "Enabling Support for Diameter Adapters" procedure, an additional step is required. After updating the java-classpath property for the Oracle Virtual Directory server entry in the opmn.xml file as described in step 2, you must then reload the opmn configuration by executing the following command:

```
$ORACLE_INSTANCE/bin/opmnctl reload
```

- In the "Creating and Configuring Diameter Adapters" procedure, step 3 currently states: "Go to the Plug-ins tab for the new Diameter adapter *and expand the Get entry*. Select DiameterAdapterPlugin and click the Edit button. The Edit Plug-in: DiameterAdapterPlugin dialog box appears."

The correct step 3 should state only "Go to the Plug-ins tab for the new Diameter adapter. Select DiameterAdapterPlugin and click the Edit button. The Edit Plug-in: DiameterAdapterPlugin dialog box appears."

31.3.6 Correction for Dump Transactions Plug-In's Log Level Documentation

In Chapter 4, "Understanding Oracle Virtual Directory Plug-Ins," of the *Oracle Fusion Middleware Administrator's Guide for Oracle Virtual Directory*, the default value for the Dump Transactions plug-in's log level parameter is incorrect. The document states the default log level is Debug, however, there is no default log level.

Also, the document does not list the supported values for the log level parameter, which are: SEVERE, WARNING, INFO, FINE, FINER, and FINEST.

31.3.7 Corrections for Integrating with Oracle's Enterprise User Security Documentation

The following is a list of corrections for the information in the "Integrating with Oracle's Enterprise User Security" section of Chapter 19, "Configuring Oracle Virtual

Directory for Integrated Directory Solutions," in the *Oracle Fusion Middleware Administrator's Guide for Oracle Virtual Directory*.

Note: If you attempted to integrate Enterprise User Security with Oracle Virtual Directory 11g Release 1 (11.1.1) before reading these Release Notes and have encountered issues with the configuration, try removing the LDAP Adapter for Enterprise User Security and then creating a new one by first using the information in these Release Notes and then referring to the *Oracle Fusion Middleware Administrator's Guide for Oracle Virtual Directory*.

- In the "Preparing Oracle Virtual Directory for the Enterprise User Security Integration" section, step 2 states: "If one does not already exist, create an LDAP listener *that is secured with SSL*."

The correct step 2 is: "If one does not already exist, create an LDAP listener *that is secured with SSL No Authentication Mode*."

- In the "User Identities in Microsoft Active Directory" section:
 - In step 2 of the "Configuring Active Directory for the Integration" procedure, the location of the extendAD file is not provided. The extendAD file is located in the \$ORACLE_HOME/ovd/eus/ directory.
 - In step 3a of the "Configuring Active Directory for the Integration" procedure, the location of the oidpwdcn.dll file is not provided. The oidpwdcn.dll file is located in the \$ORACLE_HOME/ovd/eus/ directory.
 - In the "Configuring Oracle Virtual Directory for the Integration" procedure, an additional step is required in step 5. You must deploy the EUS_ActiveDirectory mapping. The following step should be performed before the current step 5a:

Click the **Advanced** tab, click the EUS_ActiveDirectory entry under Mapping Templates, and then click the **Apply** to deploy the mapping.

- In steps 5b and 5c of the "Configuring Oracle Virtual Directory for the Integration" procedure, after you select the ObjectclassMapper plug-in (step 5b) and the ActiveDirectory Password plug-in (step 5c), you must click the **Edit** button to create the namespace for the plug-ins.
 - In step 8c of the "Configuring Oracle Virtual Directory for the Integration" procedure, you must click **Create Plugin**, *not* Create Mapping, to create the EUSMemberDNMapping plug-in.
- In the "User Identities in Microsoft Active Directory and Metadata in Oracle Internet Directory" procedure, step 15 states: "Create a mapping for the Active Directory user search base adapter" using the EUSActiveDirectory.py mapping.

Note that the EUSActiveDirectory.py mapping may already exist. Before performing step 15, check if the EUSActiveDirectory.py mapping is already deployed. If it is not, create it as documented then proceed to step 16.

- In the "User Identities in Sun Java System Directory Server" section:
 - An additional step is required in step 5 of the "Configuring Oracle Virtual Directory for the Integration" procedure. You must deploy the EUS_Sun mapping. The following step should be performed before the current step 5a:

Click the **Advanced** tab, click the EUS_Sun entry under Mapping Templates, and then click the **Apply** to deploy the mapping.

- The existing step 5c is incorrect. It currently states the following:

Click the **Create Mapping** button, then select **EUS_Sun.py**, then enter a unique mapping name, then click the **Create Namespace** button, then enter `cn=users, <YOUR DOMAIN NAME>` in the Namespace field, and then click the **OK** button.

The following is the correct step, where you do not include `cn=users` as part of the Namespace:

Click the **Create Mapping** button, then select **EUS_Sun.py**, then enter a unique mapping name, then click the **Create Namespace** button, then enter the name of your domain in the Namespace field, and then click the **OK** button.

- In the "User Identities in Novell eDirectory" section, an additional step is needed in step 7 of the "Configuring Oracle Virtual Directory for the Integration" procedure. You must deploy the EUS_EDir mapping. The following step should be performed before the current step 7a:

Click the **Advanced** tab, click the EUS_EDir entry under Mapping Templates, and then click the **Apply** to deploy the mapping.

31.3.8 Clarifications for Migrating Local Store Adapter Data Documentation

The following clarifications are needed for the information in the "Migrating Local Store Adapter Data" section in Chapter 2, "Understanding Oracle Virtual Directory Adapters," of the *Oracle Fusion Middleware Administrator's Guide for Oracle Virtual Directory*:

- Only the `compare` and `reconcile` operations of `oidcmprec` tool are supported for Local Store Adapter data migration.
- When synchronizing data between two Local Store Adapters, only one-way data migration is supported. That is, if you initially synchronize data in Local Store Adapter A (source) to Local Store Adapter B (destination), you should not synchronize data from Local Store Adapter B to Local Store Adapter A in the future.

Part IX

Oracle Portal, Forms, Reports and Discoverer

Part IX contains the following chapters:

- [Chapter 32, "Oracle Business Intelligence Discoverer"](#)
- [Chapter 33, "Oracle Forms"](#)
- [Chapter 34, "Oracle Portal"](#)
- [Chapter 35, "Oracle Reports"](#)

Oracle Business Intelligence Discoverer

This chapter describes issues associated with Oracle Business Intelligence Discoverer. It includes the following topics:

- [Section 32.1, "General Issues"](#)
- [Section 32.2, "Issues Specific to Oracle BI Discoverer Plus Relational"](#)
- [Section 32.3, "Issues Specific to Oracle BI Discoverer Plus OLAP"](#)
- [Section 32.4, "Issues Specific to Oracle BI Discoverer Portlet Provider"](#)
- [Section 32.5, "Issues Specific to Oracle BI Discoverer Viewer"](#)
- [Section 32.6, "Issues Specific to Oracle BI Discoverer EUL Command Line for Java"](#)
- [Section 32.7, "Issues Specific to Oracle BI Discoverer Administrator"](#)

32.1 General Issues

This section describes general issues that affect more than one Discoverer component. It includes the following topics:

- [Section 32.1.1, "Issues with Metadata Repository and Oracle Database 10g Release 1"](#)
- [Section 32.1.2, "Compatibility Issues with Required Support Files"](#)
- [Section 32.1.3, "Serif Font Issue in Worksheets"](#)
- [Section 32.1.4, "Additional Fonts Required for Non-ASCII Data When Exporting to PDF"](#)
- [Section 32.1.5, "Query Prediction Requires the Majority of the Query Time"](#)
- [Section 32.1.6, "Word Wrapping Behavior with Oracle BI Discoverer Plus and Oracle BI Discoverer Viewer"](#)
- [Section 32.1.7, "Applet Appears Behind Browser Window"](#)
- [Section 32.1.8, "Issues with Mac OS X Browser and Oracle BI Discoverer Plus"](#)
- [Section 32.1.9, "Issues with Turkish Regional Settings"](#)
- [Section 32.1.10, "Multibyte Characters Rendered as Square Boxes in Exported PDF and Other Formats"](#)
- [Section 32.1.11, "Java Plug-in Not Downloaded Automatically on Firefox"](#)
- [Section 32.1.12, "HTTP 404 Error While Accessing Discoverer on a Remote Machine"](#)

32.1.1 Issues with Metadata Repository and Oracle Database 10g Release 1

When using Oracle Database 10g Release 1 (10.1.x) for the Metadata Repository or after upgrading the Metadata Repository to Oracle Database 10g Release 1, you might see the following error on the Oracle BI Discoverer Plus Connection pages, the Oracle BI Discoverer Viewer Connection pages, and the Public Connection definition page in Fusion Middleware Control:

```
The connection list is currently unavailable.
ORA-06510: PL/SQL: unhandled user-defined exception
ORA-06512: at "ORASSO.WWSSO_API_PRIVATE," line 258
ORA-06510: PL/SQL: unhandled user-defined exception
ORA-06512: at "ORASSO.WWSSO_UTL" line 728
ORA-28231: no data passed to obfuscation toolkit
ORA-06512: at line 1 Unable to retrieve connection list
```

To resolve this issue, make the following changes in the Metadata Repository database:

1. Edit the `init%ORACLE_SID%.ora` file. This file exists either in the `db`s folder or the database folder. For example, in Windows, this file is located in the `DB_install_home/database/` folder.
2. Add the following line to this file:

```
event="10946 trace name context forever, level 36"
```
3. If an `spfile%ORACLE_SID%.ora` exists in either the `db`s folder or the database folder, rename the file to `spfile%ORACLE_SID%.bak`. Changes to `init%ORACLE_SID%.ora` are not loaded if the database server finds an `spfile`.
4. Log in as a `sysadmin`.
5. At the SQL prompt, shut down then start up the database server.
6. Restart the Oracle BI Discoverer server using the command `opmnctl restartall`.

32.1.2 Compatibility Issues with Required Support Files

The Oracle Database and other Oracle database client software (for example, SQL*Plus, the database export utility) use Oracle Required Support Files (RSF).

Oracle BI Discoverer also uses Oracle Required Support Files (RSF), specifically RSF version 11.1.0.7. This version of the Oracle Required Support Files is installed during Oracle BI Discoverer installation.

Note that the Required Support Files version 11.1.0.7 is incompatible with earlier versions of Oracle Database 10g. So if the machine on which you install Oracle BI Discoverer already has a version of Oracle Database 10g or database client software that is earlier than 11.1.0.7, there will be compatibility issues. For example, if you install Oracle BI Discoverer and attempt to run a version of SQL*Plus earlier than 11.1.0.7, then the following error is displayed:

```
ORA-12557 TNS: protocol adapter not loadable
```

To avoid the compatibility issues, upgrade Oracle Database 10g or database client software on the machine to the same version (11.1.0.7) as the version of the Required Support Files that were installed with Oracle BI Discoverer.

This issue does not exist for Oracle9i Database Server.

32.1.3 Serif Font Issue in Worksheets

You might notice unsightly font issues when using a non-English locale such as Czech. For example, when a worksheet uses a serif font, text in that worksheet might be displayed incorrectly on the screen and in printouts.

To work around this issue, update the file that maps the serif fonts. The name of this file differs depending on the locale in use. When you use Oracle BI Discoverer Plus Relational or Plus OLAP in English, the file is named `file.properties`. If you use Oracle BI Discoverer in a non-English locale, then the file name includes the code for the locale, such as `file.properties.cs` for Czech.

Update the mapping file with the following information:

```
serif.0=Times New Roman,EASTEUROPE_CHARSET
serif.1=WingDings,SYMBOL_CHARSET,NEED_CONVERTED
serif.2=Symbol,SYMBOL_CHARSET,NEED_CONVERTED
```

Consult the following Sun Web site for additional information about fonts:

<http://java.sun.com/j2se/1.3/docs/guide/intl/addingfonts.html>

32.1.4 Additional Fonts Required for Non-ASCII Data When Exporting to PDF

If you are running Oracle BI Discoverer Plus Relational or Plus OLAP on a Macintosh or Linux client machine, you must add the appropriate font files to your client machine to allow exported PDF files to display non-ASCII data correctly.

These font files include Albany fonts with names such as `ALBANWTJ.TTF` and `ALBANWTK.TTF`. The files are stored in the `/utilities/fonts` directory on the CD-ROM or DVD for the Oracle Application Server Metadata Repository Upgrade Assistant.

To install the additional required fonts:

1. Navigate to the `/utilities/fonts` directory on the CD-ROM or DVD for the OracleAS Metadata Repository Upgrade Assistant.
2. Copy the appropriate Albany TTF file from the `/utilities/fonts` directory to the plug-in directory in the `$jdk/jre/lib/fonts` directory on the Macintosh or Linux client machine.

32.1.5 Query Prediction Requires the Majority of the Query Time

When using Oracle BI Discoverer with a relational data source, you can predict the time that is required to retrieve information by setting the value of the `QPPEnable` preference to 1. However, in some circumstances, the majority of the time taken to retrieve information is consumed by the prediction activity itself.

To work around this issue, set the value of the `QPPObtainCostMethod` preference to 0 (use the `EXPLAIN PLAN` statement to predict query times) rather than to 1 (use dynamic views to predict query times).

For more information about setting preferences, see the *Oracle Fusion Middleware Configuration Guide for Oracle Business Intelligence Discoverer*.

32.1.6 Word Wrapping Behavior with Oracle BI Discoverer Plus and Oracle BI Discoverer Viewer

To use word wrap settings correctly, you must understand how they are designed for Oracle BI Discoverer:

- **Oracle BI Discoverer Plus:** Word wrap settings that you make in Oracle BI Discoverer Plus are saved in the worksheet and affect the display of worksheets in Oracle BI Discoverer Plus and when printing to PDF.
- **Oracle BI Discoverer Viewer:** Word wrap settings that you see in the **Print Settings** dialog work as follows:
 - The word wrap settings do not affect the display of worksheets in Oracle BI Discoverer Viewer.
 - **For relational data:**
 - * The word wrap settings do affect the printing of worksheets to PDF.
 - * If the **Always wrap text when size exceeds column width** box is checked, then the print settings in Oracle BI Discoverer Viewer do override the settings made in a worksheet in Oracle BI Discoverer Plus Relational for printing to PDF.
 - * If the **Always wrap text when size exceeds column width** box is not checked, then the print settings in Oracle BI Discoverer Viewer do not override the settings made in a worksheet in Oracle BI Discoverer Plus Relational for printing to PDF.
 - **For OLAP data:**
 - * The word wrap settings do not affect the printing of worksheets to PDF.
 - * Regardless of whether the **Always wrap text when size exceeds column width** check box is selected, the print settings in Oracle BI Discoverer Viewer never override the settings made in a worksheet in Oracle BI Discoverer Plus OLAP for printing to PDF.

32.1.7 Applet Appears Behind Browser Window

When you use Microsoft Internet Explorer, the Oracle BI Discoverer Plus Relational or Plus OLAP applet initialization and download dialog appears behind the browser window from which it was launched. After the applet is downloaded and initialized, it appears in front of the browser window from which it was launched.

To work around this issue:

- Use a browser other than Internet Explorer, such as Netscape Navigator or Mozilla Firefox.
- Use the Oracle BI Discoverer Plus URL parameter `_plus_popup=false`, which is documented in the *Oracle Fusion Middleware Configuration Guide for Oracle Business Intelligence Discoverer*.

32.1.8 Issues with Mac OS X Browser and Oracle BI Discoverer Plus

The following are issues that you might encounter when you use the Safari browser on Mac OS X with Oracle BI Discoverer Plus Relational or Plus OLAP:

- If you resize the browser window in the applet, then some parts of the content might be clipped. To work around this problem, always maximize the browser window for the applet when working with Mac OS X.
- Keyboard combinations (also known as mnemonics) do not work in Oracle BI Discoverer Plus Relational and Plus OLAP.

For example, you cannot press Alt+F to access the `File` menu.

- In the **Share Workbooks** dialog of Oracle BI Discoverer Plus Relational, the leading characters of the "**Shared:**" list are clipped. In other words, the left edge of the list is truncated. For example, if you shared a workbook with DISCODEV, then you will only see SCODEV in the list. The title for the list is also truncated such that you see only the vertical line of the "d" in "**Shared**" and the colon (that is, "l:").

The dialog continues to work as expected, but you might have difficulty reading the names in the "**Shared:**" list.

This issue has no workaround.

32.1.9 Issues with Turkish Regional Settings

Because of Sun JRE 1.4 bug 4688797, you might encounter issues when connecting to a database schema from a computer that has Turkish regional settings. You will encounter the issue when you attempt to connect to a database schema with a user name that contains certain letters, such as the letter 'I' or 'i', for example, in "bibdemo". See the Sun JRE bug for information on the letters that are affected.

To work around this issue, either do not use Turkish regional settings or use a user name that does not contain the affected letters.

32.1.10 Multibyte Characters Rendered as Square Boxes in Exported PDF and Other Formats

When you export a workbook to PDF and other formats, multibyte characters (for example, Korean, Japanese, and Chinese characters) appear as square boxes.

To work around this issue, copy the following Albany fonts from *ORACLE_HOME/jdk/jre/lib/fonts* to the *fonts* folder of your JDK (Oracle JRockit or Sun) within the *MW_HOME* directory. For example, if you are using HP-UX JDK, you must copy the fonts to *MW_HOME/jre/jdk160_11/lib/fonts*.

- AlbanWTJ.ttf
- AlbanWTK.ttf
- AlbanWTS.ttf
- AlbanWTT.ttf
- ALBANYWT.ttf

32.1.11 Java Plug-in Not Downloaded Automatically on Firefox

When you attempt to connect to Discoverer Plus by using the Mozilla Firefox browser on a machine that does not have Java 1.6 installed, the browser does not download the JRE 1.6 plug-in automatically. Instead, the browser displays the following message:

Additional plugins are required to display this page...

You must download the JRE 1.6 plug-in (by clicking the **Install Missing Plugin** link) and install it manually.

32.1.12 HTTP 404 Error While Accessing Discoverer on a Remote Machine

When you attempt to connect to Discoverer Plus, occasionally, the browser returns an HTTP 404 (File Not Found) error.

The page loads correctly when you refresh the browser a few times.

32.2 Issues Specific to Oracle BI Discoverer Plus Relational

This section describes issues that are specific to Oracle BI Discoverer Plus Relational. It includes the following topics:

- [Section 32.2.1, "Text Appearing Truncated or Clipped"](#)
- [Section 32.2.2, "Non-ASCII Characters Not Saved Correctly in Title or Text Area"](#)
- [Section 32.2.3, "Canceling Query Causes Discoverer to Hang"](#)
- [Section 32.2.4, "Nonaggregable Values Not Displayed for Scheduled Workbooks"](#)
- [Section 32.2.5, "Migrating Oracle BI Discoverer Plus Relational Worksheets from Oracle BI Discoverer Desktop"](#)

32.2.1 Text Appearing Truncated or Clipped

When you run Oracle BI Discoverer Plus Relational with Sun Java Plug-in 1.4.2_06, the Browser Look and Feel, and an Asian language (such as Korean or Chinese), you might notice that static text and text in buttons in the user interface appears truncated or clipped. To work around this issue, do one of the following:

- Change the Look and Feel to either Plastic or System.
- Use JInitiator 1.3.1.17 instead of the Sun Java Plug-in.
- Install Sun Java Plug-in version 1.4.2_10 or higher.

32.2.2 Non-ASCII Characters Not Saved Correctly in Title or Text Area

When you save a new workbook in Oracle BI Discoverer Plus, any text characters beyond the standard ASCII characters are not saved correctly when all the conditions that are described in the following list are met:

- You are logged in as an Oracle e-Business Suite user.
- The language for the computer is not English.
- Oracle BI Discoverer Plus is running against an Oracle e-Business Suite database that does not have that non-English language installed.

This issue has no workaround.

32.2.3 Canceling Query Causes Discoverer to Hang

If you cancel a query that is running in Oracle BI Discoverer Plus Relational, then you are prompted to either choose YES to undo the changes or NO to show a blank sheet. If you choose YES, then Oracle BI Discoverer Plus Relational hangs and you must close the window and restart.

To work around this issue, choose NO to show a blank worksheet. You can then refresh the sheet and continue working.

32.2.4 Nonaggregable Values Not Displayed for Scheduled Workbooks

Oracle BI Discoverer Plus Relational does not display nonaggregable values for scheduled workbooks. In other words, Oracle BI Discoverer Plus Relational processes scheduled workbooks as if you selected the **Show values that cannot be aggregated as: <Non-aggregable label>** option in the **Worksheet Properties dialog: Aggregation** tab.

Nonaggregable values include those based on the following SQL functions:

- A CASE SQL statement
- A DECODE SQL statement
- A PL/SQL function
- A DISTINCT SQL statement
- An analytic function

32.2.5 Migrating Oracle BI Discoverer Plus Relational Worksheets from Oracle BI Discoverer Desktop

If you use Oracle BI Discoverer Plus Relational to open a worksheet that was created using Oracle BI Discoverer Desktop Version 9.0.4 (or earlier), the size of the title area for that worksheet defaults to two lines in height. A title height of two lines might be a problem if a worksheet title requires more than or less than two lines. If you want to change the size of the title area, you must resize the title area manually and save the worksheet.

To resize the title area for a worksheet, open the worksheet and drag the bar at the bottom of the title area pane up or down.

32.3 Issues Specific to Oracle BI Discoverer Plus OLAP

This section describes issues that are specific to Oracle BI Discoverer Plus OLAP. It includes the following topics:

- [Section 32.3.1, "Issues with Applet Download"](#)
- [Section 32.3.2, "Disabled Netscape and Mozilla Browsers"](#)
- [Section 32.3.3, "Tabbing Fails to Synchronize Menus"](#)
- [Section 32.3.4, "Esc Key Fails to Close Certain Dialogs"](#)
- [Section 32.3.5, "Link Tool Works Incorrectly in Some Locales"](#)
- [Section 32.3.6, "Memory Issues when Exporting Extremely Large Graphs"](#)
- [Section 32.3.7, "Issue While Printing Worksheets with Large Data Values"](#)
- [Section 32.3.8, "Issues with Titles and Text Areas"](#)
- [Section 32.3.9, "Moved Worksheet Displays Blank in Multisheet Workbook"](#)
- [Section 32.3.10, "Errors with JAWS and Format Dialogs"](#)

32.3.1 Issues with Applet Download

There may be Oracle Business Intelligence Discoverer Plus applet download issues when caching has been enabled in the Sun Java Plug-In.

To avoid these issues, disable caching in the plug-in.

32.3.2 Disabled Netscape and Mozilla Browsers

When you are running Netscape 7.x or Mozilla browsers, the Netscape and Mozilla Mail clients and Web browser may become disabled when Oracle BI Discoverer Plus OLAP modal dialogs are displayed.

Dismissing the Oracle BI Discoverer Plus OLAP dialogs resumes normal operation for the Netscape and Mozilla tools.

32.3.3 Tabbing Fails to Synchronize Menus

When you use the **Tab** key to select items in a worksheet, the menus do not always synchronize to reflect the currently selected item.

This issue has no workaround.

32.3.4 Esc Key Fails to Close Certain Dialogs

The **Esc** key does not close the following dialogs: Totals, New Total, Parameter, and Manage Catalog.

Instead of using the **Esc** key, click the **Close** or **OK** button.

32.3.5 Link Tool Works Incorrectly in Some Locales

The **Link** tool, which enables users to drill out to external URLs from a crosstab cell, might not work correctly in all locales due to URL encoding issues.

This issue has no workaround.

32.3.6 Memory Issues when Exporting Extremely Large Graphs

Exporting extremely large graphs can cause memory issues, requiring a restart of the Oracle BI Discoverer Plus OLAP session.

This issue has no workaround.

32.3.7 Issue While Printing Worksheets with Large Data Values

When printing a worksheet that contains large numbers in the data cells, the string ##### may be printed instead of the actual numbers.

This issue has no workaround.

32.3.8 Issues with Titles and Text Areas

The following issues exist with titles and text areas:

- Nonempty titles and text areas are printed even if they are hidden in the worksheet.
This issue has no workaround.
- When you set the title or text area background to green and export the worksheet to an HTML file, the background is incorrectly set to red in the exported file.

This issue has no workaround.

32.3.9 Moved Worksheet Displays Blank in Multisheet Workbook

If you open a workbook that contains multiple sheets and move the visible sheet within the workbook, the newly active worksheet displays with an empty or blank sheet. If you try to refresh the sheet to solve this problem, the newly active sheet is not displayed and you see an error message about a `NullPointerException`.

To work around this issue, you can display the original sheet or any other sheet, then return to the sheet that displayed blank. Alternatively, if you open or display all sheets before starting the move operation, then you can see the target sheet right after the move operation.

32.3.10 Errors with JAWS and Format Dialogs

When you use JAWS, you will notice errors when you attempt to format graphs and crosstabs using the **Format** dialogs.

This issue has no workaround.

32.4 Issues Specific to Oracle BI Discoverer Portlet Provider

This section describes issues that are specific to Oracle BI Discoverer Portlet Provider. It includes the following topics:

- [Section 32.4.1, "Inability to Turn Off Display of Range Min and Max as Labels"](#)
- [Section 32.4.2, "Using Oracle BI Discoverer Portlet Provider with Oracle Single Sign-On and Secure Sockets Layer \(SSL\) Modes"](#)
- [Section 32.4.3, "Issues with Discoverer Portlets in WebCenter"](#)

32.4.1 Inability to Turn Off Display of Range Min and Max as Labels

In the **Display Options** of a gauge portlet, the **Minimum Value** and **Maximum Value** range labels are selected but are also disabled so that you cannot deselect the display of those values. The values for the minimum and the maximum appear at the ends of every gauge in the set except for those gauges where the value to be gauged is out of the range of the minimum and the maximum values. For those gauges where the value to be displayed exceeds the range of the minimum and the maximum values, the gauge will automatically adjust to accommodate the value.

This issue has no workaround.

32.4.2 Using Oracle BI Discoverer Portlet Provider with Oracle Single Sign-On and Secure Sockets Layer (SSL) Modes

If you configure Oracle BI Discoverer Portlet Provider to work with Oracle Single Sign-On and SSL, then UIX images might not display correctly in Oracle BI Discoverer. For example, on the Connect to OracleBI Discoverer page, the expand icon (that is, the blue + symbol) in the **Details** column of the Discoverer connections list might not display correctly.

To address this issue, you must add certain server startup properties.

1. Start Enterprise Manager Fusion Middleware Control. For more information, see "Managing and Configuring Discoverer" in *Oracle Fusion Middleware Configuration Guide for Oracle Business Intelligence Discoverer*.
2. Navigate to the WebLogic Server node (for example, **WLS_DISCO**) node, and click the WebLogic Server Administration Console link.
3. Select the **Server Start** tab on the **Configurations** page of the WebLogic Server Administration Console.
4. In the **Arguments** field, append the following lines, if they do not exist.
 - `-Doracle.discoverer.applications.protocol=https`
 - `-Doracle.discoverer.applications.port=port_no`

Set *port_no* to the HTTPS port number that you want to use (for example, 4443).
5. Restart the server.

32.4.3 Issues with Discoverer Portlets in WebCenter

The following issues exist for Discoverer portlets displayed in Oracle WebCenter.

- When a Worksheet portlet is displayed in Oracle WebCenter, the links to navigate to the next set of records does not work.
- When a List of Worksheets portlet is displayed in Oracle WebCenter, the Expand All Icons link does not work.

To work around these issues, set the `RenderPortletInIFrame` attribute of the portlet tag to `TRUE`. For more information, see "Setting Attribute Values for the Portlet Tag" in *Oracle Fusion Middleware Developer's Guide for Oracle WebCenter*.

32.5 Issues Specific to Oracle BI Discoverer Viewer

This section describes issues that are specific to Oracle BI Discoverer Viewer. It includes the following topics:

- [Section 32.5.1, "Drill Icons Cannot Be Hidden in Oracle BI Discoverer Viewer"](#)
- [Section 32.5.2, "Error Displaying Page for Multiple SSO Users"](#)
- [Section 32.5.3, "Inability to Disable the Display of Row Numbers"](#)
- [Section 32.5.4, "Issues with Oracle BI Discoverer Viewer Embedded in Frames"](#)
- [Section 32.5.5, "Issue Exporting to PDF Under Certain Circumstances"](#)
- [Section 32.5.6, "Issue When Changing Colors for Oracle BI Discoverer Viewer in Fusion Middleware Control on Mac OS X"](#)
- [Section 32.5.7, "Discoverer Catalog Items Not Visible From UNIX Servers"](#)
- [Section 32.5.8, "Known Bug with JAWS Prevents Drilling Using the Enter Key"](#)
- [Section 32.5.9, "JAWS Does Not Read Asterisks that Precede Fields"](#)
- [Section 32.5.10, "Oracle BI Discoverer Viewer Pages are not Cached by Oracle Web Cache"](#)

32.5.1 Drill Icons Cannot Be Hidden in Oracle BI Discoverer Viewer

The `pref.txt` file contains a setting called `ShowDrillIcon`, which is not functioning properly. If you set `ShowDrillIcon` to `False`, then drill icons are still displayed in Oracle BI Discoverer Viewer.

The issue has no workaround.

32.5.2 Error Displaying Page for Multiple SSO Users

When an Oracle Single Sign-On (SSO) user tries to view a worksheet from a List of Worksheets Portlet by using the same browser window that is already being used by an SSO user to view that worksheet, the second user sees the following error message: "The page cannot be displayed".

To work around this issue, start a new browser session and view the worksheet.

32.5.3 Inability to Disable the Display of Row Numbers

Oracle BI Discoverer Viewer no longer offers the ability to disable the display of row numbers in a tabular worksheet.

32.5.4 Issues with Oracle BI Discoverer Viewer Embedded in Frames

Users might see JavaScript errors such as "Access Denied" or other unexpected behavior when both of the following conditions are met:

- When Oracle BI Discoverer Viewer is embedded in an IFRAME tag.
- When the domain of the server that hosts the HTML page with the IFRAME tag is different from the domain of the Oracle BI Discoverer server that is running Oracle BI Discoverer Viewer.

Use one of the following workarounds for this issue:

- Run the Oracle BI Discoverer server and the server that hosts the HTML page with the IFRAME tag in the same domain.
- Alter the `Common2_2_20.js` file on the Oracle BI Discoverer server using the following steps:

1. Use Fusion Middleware Control to stop all services on the middle tier for Oracle Business Intelligence.

2. Make a backup copy of the `Common2_2_20.js` file from the following directory:

```
domain\servers\managed_
server\stage\discoverer\release\discoverer\discoverer.war\
cabo\jsLib
```

domain is the path of directory that contains the domain.

managed_server is the name of the managed server on which the Discoverer application is deployed.

release is the release number of Discoverer. For example, 11.1.1.1.0.

3. Edit the `Common2_2_20.js` file and replace all occurrences of "parent._pprSomeAction" with "window._pprSomeAction".
4. Use Fusion Middleware Control to start all services on the middle tier for Oracle Business Intelligence.
5. Clear the browser cache on the client machine so that the new `Common2_2_20.js` file will be used.

32.5.5 Issue Exporting to PDF Under Certain Circumstances

If you are using Oracle BI Discoverer Viewer with Microsoft Internet Explorer, you might encounter an error message when you try to export to PDF a worksheet that is named with non-ASCII characters, a space, and a number. The export fails and you will see a message similar to the following one:

No %PDF- in a file header

Use one of the following methods to work around this issue:

- Use a browser other than Internet Explorer, such as one from Netscape or Mozilla.
- Remove the space between the non-ASCII characters and the number, or remove the number altogether.
- Continue to use Internet Explorer and leave the space in the worksheet name, but follow these steps:
 1. Start the Adobe Reader.

2. From the **Edit** menu, choose **Preferences**, then click **Internet**.
3. Clear the **Display PDF in browser** box.

32.5.6 Issue When Changing Colors for Oracle BI Discoverer Viewer in Fusion Middleware Control on Mac OS X

You can use Fusion Middleware Control to change the look and feel of Oracle BI Discoverer Viewer. That page contains a color chooser, or palette. If you use Fusion Middleware Control on Mac OS X with the Safari browser, then the page does not correctly enter the color code when you select a color from the palette.

To work around this issue, you can either use the Firefox browser or you can enter a color code directly.

The color codes are standard HTML hexadecimal color codes. You can enter one of the 49 colors that are available in the color palette, or you can enter any valid HTML hexadecimal color code.

The following list provides examples of colors with their codes:

white #FFFFFF
grey #CCCCCC
black #000000
pink #FFCCCC
red #FF0000
light yellow #FFFFCC
yellow #FFFF00
light green #99FF99
dark green #00CC00
light blue #66FFFF
dark blue #3333FF
lavender #FF99FF
purple #CC33CC

32.5.7 Discoverer Catalog Items Not Visible From UNIX Servers

You might encounter issues when trying to see items in the Discoverer Catalog when using Oracle BI Discoverer Viewer with OLAP data on UNIX servers.

You can resolve this issue on the middle-tier machine where Oracle BI Discoverer runs by performing the following steps.

To check whether the time zone variable is set:

1. Open a shell prompt.
2. Type `echo $TZ` to display the time zone setting.

If no value is displayed, then the time zone has not been set.

To set the time zone variable:

1. Open a shell prompt.

Note: The UNIX user that sets the TZ variable must be the same UNIX user that installed Oracle Business Intelligence.

2. If you do not know which shell you are using, type `$echo $SHELL` to display the name of the current shell.

3. Set the time zone as appropriate.

For example, to set the time zone variable for US/Pacific time:

- For the Bourne, Bash, or Korn shell, type `export TZ=US/Pacific`
- For the C shell, type `setenv TZ US/Pacific`

Note: Consult the shell documentation for the appropriate values.

32.5.8 Known Bug with JAWS Prevents Drilling Using the Enter Key

Oracle BI Discoverer can be used in conjunction with assistive technologies such as the JAWS screen reader. However, a bug in JAWS prevents the drilling feature from working correctly in Oracle BI Discoverer Viewer when querying a relational data source.

Assume that you use the keyboard to navigate to the drill icon beside an item in the worksheet header. When you press the `Enter` key to drill on that header item, the **Drill** page should be displayed as described in the "Worksheet Display page: (Page level tools and controls)" topic in the Help system and the *Oracle Fusion Middleware User's Guide for Oracle Business Intelligence Discoverer Viewer*.

However, when JAWS is running, the **Drill** page is not displayed. Instead, the **Drill** popup menu is displayed. It is not possible to select items from this popup menu by using the keyboard, and JAWS does not read the items on the popup menu.

This issue has no workaround.

32.5.9 JAWS Does Not Read Asterisks that Precede Fields

In Oracle BI Discoverer Viewer, an asterisk that precedes a text field indicates that the user is required to enter a value into that text field. The JAWS screen reader does not read an asterisk that precedes a required text field and does not otherwise indicate that the field is required.

This issue has no workaround.

32.5.10 Oracle BI Discoverer Viewer Pages are not Cached by Oracle Web Cache

When using Oracle BI Discoverer with Oracle Web Cache, note the following:

- When Oracle Single Sign-On is enabled, Oracle Web Cache does not cache Oracle BI Discoverer Viewer pages, regardless of whether they are accessed using a public connection or a private connection.
- If an Oracle BI Discoverer Viewer page is accessed directly through a URL and the URL contains URL parameters that specify login details (for example, user name, database name), then Oracle Web Cache does not cache the page. For example, Oracle Web Cache does not cache worksheet "Sheet 1" in workbook "Workbook 2" that is displayed by using the following URL:

```
http://<host.domain>:<port>/discoverer/viewer?us=video5&db=db
1&eul=VIDEO5&wbk=Workbook+2&ws=Sheet+1
```

Note: In the example above, `us=` specifies the database user name, and `db=` specifies the database name.

However, Oracle Web Cache does cache worksheet "Sheet 1" in workbook "Workbook 2" if a user logs in manually to Oracle BI Discoverer Viewer by using the same login details, and navigates to the worksheet.

- You must increase the delays for Oracle BI Discoverer Viewer by at least 60 seconds for Oracle BI Discoverer Viewer to properly cache workbooks with Oracle Web Cache.

For more information, see "How to configure Discoverer Viewer to enable maximum caching" in the *Oracle Fusion Middleware Configuration Guide for Oracle Business Intelligence Discoverer*.

32.6 Issues Specific to Oracle BI Discoverer EUL Command Line for Java

This section describes issues that are specific to Oracle BI Discoverer EUL Command Line for Java. It includes the following topics:

- [Section 32.6.1, "Issue with Exported Non-ASCII Data"](#)
- [Section 32.6.2, "JVM Crashes When Connecting to EUL"](#)
- [Section 32.6.3, "Issue with the eulapi Utility"](#)

32.6.1 Issue with Exported Non-ASCII Data

When you export multibyte or Eastern European data (such as the names of items and business areas in Japanese or Russian characters) from Oracle BI Discoverer EUL Command Line for Java on a platform other than Windows, the exported data is corrupted.

To work around this issue, edit the `discwb.sh` file that is located in the `ORACLE_HOME/discoverer` directory before exporting. Change the character set value in the `NLS_LANG` variable to UTF8.

For example, if the original setting of the variable is:

```
NLS_LANG="GERMAN_GERMANY.WE8ISO8859P1"
```

Change the setting to:

```
NLS_LANG="GERMAN_GERMANY.UTF8"
```

32.6.2 JVM Crashes When Connecting to EUL

When you use the `java -jar eulbuilder.jar -connect` command to connect to an EUL, the JVM crashes if the `NLS_LANG` environment variable is not initialized.

This problem does not occur when you connect by using the `eulapi.sh` command.

To work around this issue, set the `NLS_LANG` environment variable to `AMERICAN_AMERICA.UTF8`.

32.6.3 Issue with the eulapi Utility

The `eulapi` command does not work on all platforms.

To work around this issue, open the `eulapi.sh` or `eulapi.bat` file and set appropriate value for the variable `ORACLE_HOME`. You must replace the string `$$Instance.oracle_home$$` with the actual `ORACLE_HOME` path.

32.7 Issues Specific to Oracle BI Discoverer Administrator

This section describes issues that are specific to Oracle BI Discoverer Administrator. It includes the following topic:

- [Section 32.7.1, "Issue with Installation of Video Stores Tutorial"](#)

32.7.1 Issue with Installation of Video Stores Tutorial

Before installing the video stores tutorial in Oracle Database 10g Enterprise Edition Release 2 (version 10.2.0.1 and higher), you must manually create the VIDEO5 user. If you attempt to install the video stores tutorial in Oracle Database 10g Enterprise Edition Release 2, then the installation will fail if the VIDEO5 user does not already exist. To work around this issue:

1. Create the VIDEO5 user manually by completing these steps:
 - a. Access Oracle Database 10g with SQL*Plus, Enterprise Manager, or any SQL command line tool.
 - b. Create the VIDEO5 user.
 - c. Grant CONNECT and RESOURCE privileges to the VIDEO5 user.

For more information about creating users and granting privileges, see the *Oracle Database SQL Reference* or your DBA

2. Connect to Discoverer Administrator as the EUL owner and install the tutorial. You must enter the VIDEO5 user password during installation.

For information about installing the video stores tutorial, see the *Oracle Fusion Middleware Administrator's Guide for Oracle Business Intelligence Discoverer*.

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

- [Section 33.1, "General Issues and Workarounds"](#)
- [Section 33.2, "Configuration Issues and Workarounds"](#)
- [Section 33.3, "Documentation Errata"](#)

33.1 General Issues and Workarounds

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

- [Section 33.1.1, "Backwards Compatibility with Earlier Releases"](#)
- [Section 33.1.2, "Linux/Unix Issues and Workarounds"](#)

33.1.1 Backwards Compatibility with Earlier Releases

For information about upgrading from Forms 6i, see the "Upgrading to Oracle Forms Services 11g" chapter in *Oracle Fusion Middleware Forms Services Deployment Guide*. For information about changed or obsolete features, see the *Oracle Forms Upgrading Oracle Forms 6i to Oracle Forms 11g Guide*.

For upgrading from Oracle Forms 10g and prior releases, you can use the Upgrade Assistant. For more information, see the *Oracle Fusion Middleware Upgrade Planning Guide* and *Oracle Fusion Middleware Upgrade Guide for Oracle Portal, Forms, Reports, and Discoverer*.

Additional information about backwards compatibility is included in My Oracle Support Note 113987.1 at: <http://myoraclesupport.oracle.com>

Regardless from which version of Oracle Forms you are upgrading, you will need to recompile your applications and restart Oracle Forms.

33.1.2 Linux/Unix Issues and Workarounds

This section describes issues related to Oracle Forms and Linux/Unix. It includes the following topics:

- [Section 33.1.2.1, "LD_PRELOAD Setting Required for Signal Chaining Facility"](#)
- [Section 33.1.2.2, "Check the Reports Engine Logs for FRM-41214"](#)
- [Section 33.1.2.3, "Changing User Permissions"](#)

33.1.2.1 LD_PRELOAD Setting Required for Signal Chaining Facility

The `LD_PRELOAD` setting in `default.env` is required for the working of signal chaining facility in JVM version 1.5 and later. If you are creating or using other environment files, the setting in the environment file for `LD_LIBRARY_PATH` and `LD_PRELOAD` must be the same as in `default.env`.

33.1.2.2 Check the Reports Engine Logs for FRM-41214

If you encounter the Forms error FRM-41214:Unable to run report when trying to run Reports from a Forms session, check the Reports engine logs for more details on the error.

33.1.2.3 Changing User Permissions

The 11g installation sets the permissions of the files so that only the user who installed 11g can run the executables. Refer to the document *Setting Developer Tools Permissions on Unix* at <http://www.oracle.com/technology/products/forms> for instructions on changing permissions for other users to allow execution of the Forms development tools.

33.2 Configuration Issues and Workarounds

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

- [Section 33.2.1, "Non-Internet Explorer Browser Proxy Settings when Using One-Button-Run"](#)
- [Section 33.2.2, "WebUtil Client Files Allow Configuration of Destination Directory"](#)
- [Section 33.2.3, "webutil.properties Files Renamed for Different Libraries"](#)
- [Section 33.2.4, "Forms does not Work with JDK 1.6.0_12 on Client with WinRunner"](#)
- [Section 33.2.5, "JavaScript Communication Does not Work in IE7 for Framed HTML File"](#)
- [Section 33.2.6, "Association using OID's SSL Port from Enterprise Manager is not Supported"](#)
- [Section 33.2.7, "Forms Java EE Application Diagnostic Log Files not Generated on Remote Host"](#)

33.2.1 Non-Internet Explorer Browser Proxy Settings when Using One-Button-Run

If you encounter a FORBIDDEN error when using One-Button-Run with any of the supported browsers other than Internet Explorer, verify if 127.0.0.1 (localhost) is in the proxy settings for your browser. If 127.0.0.1 is not in the exceptions list, then add it. This ensures that the browser will bypass the proxy server.

33.2.2 WebUtil Client Files Allow Configuration of Destination Directory

WebUtil downloads `install.syslib` libraries into the `bin` directory of the JRE or JVM on Windows and into the `lib` directory of JRE on Linux. This location can be specified in the parameter `install.syslib.location.client.<OS> = <Path on client machine>` (where `<Path on client machine>` represents the path to the location where libraries used on the client by WebUtil are stored and is either absolute or relative to client user home) in `webutil.cfg`.

33.2.3 webutil.properties Files Renamed for Different Libraries

When `install.syslib` libraries are downloaded, WebUtil creates the `webutil.properties` file which is located in the client user home. Different `webutil.properties` files are maintained on client side to allow different servers to download and manage their libraries on client. The files are named `webutil.<HOST>.<CONFIG>.properties` on the client, where `HOST` is the server computer name and `CONFIG` is the name of configuration section in `formsweb.cfg`.

33.2.4 Forms does not Work with JDK 1.6.0_12 on Client with WinRunner

Forms does not run when using JDK 1.6.0_12 as the client on a computer that also has WinRunner installed.

As a workaround, rename the two environment variables `_JAVA_OPTIONS` and `JAVA_TOOLS_OPTIONS`. For example, rename them to `test_JAVA_OPTIONS` and `test_JAVA_TOOLS_OPTIONS`. This will disable WinRunner but allows Forms to run.

33.2.5 JavaScript Communication Does not Work in IE7 for Framed HTML File

JavaScript communication does not work in framed HTML file that is opened in Internet Explorer 7 with `file://` protocol.

As a workaround, use the IP address instead of the machine name in the URL for the frame. For example in `testform.htm`, change:

```
<frame noresize="noresize"
src="http://testform.us.oracle.com:8888/forms/java/js2frm1.html" name="fr2"
frameborder="0">
  <frame noresize="noresize"
src="http://testform.us.oracle.com:8888/forms/frmservlet?play=&record=forms&
form=js2frm1&userid=scott/tiger@adt10220" name="fr1" frameborder="0">
```

to

```
<frame noresize="noresize"
src="http://10.229.147.186:8888/forms/java/js2frm1.html" name="fr2"
frameborder="0">
  <frame noresize="noresize"
src="http://10.229.147.186:8888/forms/frmservlet?play=&record=forms&form=js2fr
m1&userid=scott/tiger@adt10220" name="fr1" frameborder="0">
```

33.2.6 Association using OID's SSL Port from Enterprise Manager is not Supported

When associating a Forms Java EE application deployment with Oracle Internet Directory (OID) from Oracle Enterprise Manager, association is supported using only Oracle Internet Directory's non-SSL Port. Association using Oracle Internet Directory SSL port is not supported.

33.2.7 Forms Java EE Application Diagnostic Log Files not Generated on Remote Host

When Forms is configured using expand cluster or extend domain on a remote host, then Forms Java EE application diagnostic log files may not be generated.

As a workaround, manually add the Forms Java EE application ODL handler entries to the ODL configuration file (for the remote managed server) on the Administration Server host. The ODL configuration file `logging.xml` is located in the directory `$DOMAIN_HOME/config/fmwconfig/servers/<MANAGED_SERVER>/` on the

Administration Server host, where <MANAGED_SERVER> is the name of the remote Forms managed server (prefixed by WLS_FORMS).

1. Add the following entry under the parent <Log-Handlers> parent element.

```
<log_handler name='forms-handler'
class='oracle.core.ojdl.logging.ODLHandlerFactory'>
  <property name='path'
value='${domain.home}/servers/${weblogic.Name}/logs/formsapp-diagnostic.log' />
  <property name='maxFileSize' value='10485760' />
  <property name='maxLogSize' value='104857600' />
  <property name='useSourceClassAndMethod' value='true' />
</log_handler>
```

2. Add the following entry under the <Loggers> parent element.

```
<logger name='oracle.forms.servlet' level='NOTIFICATION:1'
useParentHandlers='false'>
  <handler name='forms-handler' />
```

3. Restart the managed server on the remote host.

33.3 Documentation Errata

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

- [Section 33.3.1, "Jar Files Require Signing"](#)
- [Section 33.3.2, "Run ssoreg.sh Script for Associating OID Host"](#)
- [Section 33.3.3, "Register Oracle HTTP Server with Oracle SSO"](#)
- [Section 33.3.4, "Include Directive WLEXcludePathOrMimeType for aliasMatch in forms.conf"](#)
- [Section 33.3.5, "Location of WebUtil Scripts"](#)
- [Section 33.3.6, "MaxEventWait not a PL/SQL property"](#)

33.3.1 Jar Files Require Signing

In the *Oracle Fusion Middleware Forms Services Deployment Guide*, in Chapter 7, the example in section 7.2.3 does not mention that the jar files need to be signed. After step 4, perform the following task: Sign the jar file. You can use `sign_webutil.sh` (`sign_webutil.bat` in Windows) that is available in `$ORACLE_INSTANCE\bin` to sign the jar file.

Continue with step 5 as given in the guide.

33.3.2 Run ssoreg.sh Script for Associating OID Host

In section 9.7 of the *Oracle Fusion Middleware Forms Services Deployment Guide*, the procedure to re-associate an OID Host with a Forms application describes the tasks of generating and copying the `osso.conf` file. The same tasks must be performed when associating OID Host with a Forms application for the first time.

33.3.3 Register Oracle HTTP Server with Oracle SSO

In section 9.7 of the *Oracle Fusion Middleware Forms Services Deployment Guide*, the procedure does not mention how to register Oracle HTTP Server with Oracle SSO. These steps are required if you chose to install and configure Forms in non-SSO mode and later need to enable SSO. Perform the following steps to register the module `mod_osso` in the WebTier OHS with the SSO Server as a partner application.

1. Generate and copy the `osso.conf` file as mentioned in steps 3, and 4 of section "To re-associate an OID Host with a Forms Application".
2. Create a `mod_osso.conf` file under `$ORACLE_INSTANCE/config/OHS/<OHS_INSTANCE>/moduleconf` directory. The contents of the file should look similar to this:

```
LoadModule osso_module ${ORACLE_HOME}/ohs/modules/mod_osso.so
<IfModule mod_osso.c>
OssoIpCheck off
OssoSecureCookies off
OssoIdleTimeout off
OssoConfigFile osso.conf
#
# Insert Protected Resources: (see Notes below for
# how to protect resources)
#
# _____
#
# Notes
#
# _____
#
# 1. Here's what you need to add to protect a resource,
#    e.g. <ApacheServerRoot>/htdocs/private:
#
<Location /private>
require valid-user
AuthType Osso
</Location>

</IfModule>

#
# If you would like to have short hostnames redirected to
# fully qualified hostnames to allow clients that need
# authentication via mod_osso to be able to enter short
# hostnames into their browsers uncomment out the following
# lines
#
#PerlModule Apache::ShortHostnameRedirect
#PerlHeaderParserHandler Apache::ShortHostnameRedirect
```

3. Add the following lines to the beginning of `forms.conf` file.

```
<IfModule !mod_osso.c>
LoadModule osso_module ${ORACLE_HOME}/ohs/modules/mod_osso.so
</IfModule>
<IfModule mod_osso.c>
OssoHTTPOnly off
</IfModule>
```

4. Associate the OID Host in Enterprise Manager as given in section 9.7 of the Guide.
5. Restart the Oracle WebLogic Managed Server and the front-end OHS for the changes to take effect.

33.3.4 Include Directive `WLExcludePathOrMimeType` for `aliasMatch` in `forms.conf`

In section C.5 of the *Oracle Fusion Middleware Forms Services Deployment Guide*, the following note must be added:

When including any user-defined `aliasMatch` with the prefix `/forms/` in `forms.conf`, add the directive `WLExcludePathOrMimeType`. For example, in Linux, when defining the `aliasMatch` for `/forms/usericons` in `forms.conf`, the directive `WLExcludePathOrMimeType` is defined as following:

```
AliasMatch /forms/usericons/(.*) "/home/userx/myicons/$1"  
WLExcludePathOrMimeType /forms/usericons/
```

33.3.5 Location of WebUtil Scripts

In the section "Additional WebUtil Installation Steps" of the Forms Builder Online Help, the following corrections must be made:

- The scripts `sign_webutil.bat` (on Windows) or `sign_webutil.sh` (on Linux) are available in the `$ORACLE_INSTANCE/bin` directory.

- Step 5 is described as:

5. Check that `CLASSPATH=/ORACLE_INSTANCE/config/FormsComponent/forms/jdk/bin` is in the path. If it is not, add it.

However, this step is incorrect (the variable used in prior releases was `PATH`, not `CLASSPATH`) and is not required. To use these scripts, you do not need to add the `jdk/bin` directory to the `PATH` or `CLASSPATH` variable.

33.3.6 `MaxEventWait` not a PL/SQL property

Forms Builder Online Help describes `MaxEventWait` as a PL/SQL property used for `SET_APPLICATION_PROPERTY` and `GET_APPLICATION_PROPERTY`. However, `MaxEventWait` is not a PL/SQL property but an applet parameter. The property must be removed from the description of `SET_APPLICATION_PROPERTY` and `GET_APPLICATION_PROPERTY`.

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

- [Section 34.1, "Before You Begin"](#)
- [Section 34.2, "General Issues and Workarounds"](#)
- [Section 34.3, "Upgrade Issues and Workarounds"](#)
- [Section 34.4, "Interoperability Issues and Workarounds"](#)
- [Section 34.5, "User Interface Issue and Workaround"](#)
- [Section 34.6, "Export and Import Issues and Workarounds"](#)
- [Section 34.7, "Portlet and Provider Issues and Workarounds"](#)
- [Section 34.8, "PDK Issue and Workaround"](#)
- [Section 34.9, "Globalization Support Issues and Workarounds"](#)
- [Section 34.10, "Documentation Errata"](#)

34.1 Before You Begin

In addition to the known problems and workarounds described in this document, Oracle recommends that you read the Metalink note 834615.1 - *Oracle Fusion Middleware 11g Portal (11.1.1) Support Status and Alerts*. This article contains known issues that were discovered after the release of Oracle Portal 11g Release 1 (11.1.1).

34.2 General Issues and Workarounds

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

- [Section 34.2.1, "Oracle Portal 11g Release 1 \(11.1.1\) with Oracle Application Server Wireless"](#)
- [Section 34.2.2, "Relevance of Instant Portal Documentation"](#)
- [Section 34.2.3, "Editing a Database Link Requires Password"](#)
- [Section 34.2.4, "Moving Content When Approval Is Enabled Does Not Require Approval"](#)
- [Section 34.2.5, "Firefox and Safari Browsers Do Not Display Tooltips on Oracle Portal Screens"](#)
- [Section 34.2.6, "Non-ASCII URLs Cannot be Decoded in Some Scenarios"](#)

- [Section 34.2.7, "Manual Changes to Oracle Portal Default Schema Objects"](#)
- [Section 34.2.8, "Creating Readable URLs"](#)
- [Section 34.2.9, "Encrypting a Password in MOD_ORADAV.CONF"](#)
- [Section 34.2.10, "Migrating an External Application"](#)
- [Section 34.2.11, "Availability of JPDK Samples"](#)
- [Section 34.2.12, "Portal Throws Discoverer Provider is Busy Error Message"](#)
- [Section 34.2.13, "Error when creating RCU portal schema"](#)
- [Section 34.2.14, "Internal Error when Using Portal Search With Oracle Text Enabled to Search for Pages"](#)
- [Section 34.2.15, "IPv6 Support in Oracle Portal 11g Release 1 \(11.1.1\)"](#)

34.2.1 Oracle Portal 11g Release 1 (11.1.1) with Oracle Application Server Wireless

Integrating Oracle Application Server Wireless 10g with Oracle Portal 11g Release 1 (11.1.1) requires you to complete a set of manual steps, as described in the Metalink note 837837.1 (*Oracle Portal 11g Release 1 (11.1.1) with Oracle Application Server Wireless*). In addition, see the following Metalink notes for information about deprecated features in 10g:

- [Deprecated Features in Oracle Application Server 10g Release 2 \(10.1.2\)](#)
- [Deprecated Features in Oracle Application Server 10g Release 3 \(10.1.3\)](#)

34.2.2 Relevance of Instant Portal Documentation

Note that the information presented in Chapter 5, titled "Understanding Oracle Instant Portal," in the *Oracle Fusion Middleware User's Guide for Oracle Portal* applies to users upgrading their existing Instant Portals to Oracle Portal 11g Release 1 (11.1.1). For information about deprecated features in 10g, see the [Deprecated Features in Oracle Application Server 10g Release 2 \(10.1.2\)](#) Metalink note.

34.2.3 Editing a Database Link Requires Password

If the database where the portal schema is installed is version 10.2 or later, then users must re-enter the remote user's password when they rename or edit a database link from the Portal Navigator's Database Objects tab. This is applicable only for those database links that are created with the **Specific User** option.

34.2.4 Moving Content When Approval Is Enabled Does Not Require Approval

Moving content between pages or between regions of the same page does not trigger approvals. For example, when a target page is configured with an approval process and a contributor moves content from a source page to the target page, the moved content does not trigger the approval process on the target page, even when approval is required for all users.

34.2.5 Firefox and Safari Browsers Do Not Display Tooltips on Oracle Portal Screens

Firefox and Safari browsers do not support the display of tooltip text, which is set using the ALT attribute for image descriptions.

As a workaround, you can download and install browser-specific add-ons, such as Popup ALT Attribute for Firefox (see <https://addons.mozilla.org/en-US/firefox/addon/1933>).

34.2.6 Non-ASCII URLs Cannot be Decoded in Some Scenarios

If the JVM default character encoding is set to ISO8859-1, the Portal repository database character set must match with the JVM default character encoding. If this condition is not satisfied, non-ASCII URLs may become inaccessible.

34.2.7 Manual Changes to Oracle Portal Default Schema Objects

Any manual changes to Oracle Portal default objects, such as tables, views, packages, or indexes are not supported. Such changes may render Oracle Portal unusable. Note that the internal structure of Portal objects can change between versions.

For more information, see the 403179.1 Metalink note.

34.2.8 Creating Readable URLs

If you are using Secure Enterprise Search (SES), then by default, the search result of your Portal displays durable URL format for an item or a page. To display your URL as a readable format, perform the following steps:

1. Run `sbrsrxml.sql`, located at `ORACLE_HOME\upgrade\portal\admin\plsql\wws` in Windows and `ORACLE_HOME/upgrade/portal/admin/plsql/wws`, in UNIX, using your Portal schema password.
2. Enter the value 0, for example `@wws\sbrsrxml.sql 0` in Windows.

After you run a full SES crawl, your URL is displayed in a readable format. And if you want your URL to display the durable URL format, then run `sbrsrxml.sql` and enter the value 1.

34.2.9 Encrypting a Password in MOD_ORADAV.CONF

This section describes how to encrypt a password in the `mod_oradav.conf` file. Perform the following tasks:

Editing the DAV Password

To edit the password in the `mod_oradav.conf` file, do the following:

1. Open your `mod_oradav.conf` file, located at `INSTANCE_HOME/config/OHS/ohs1/moduleconf` (UNIX).
2. Locate the DAV entry for which you wish to change the password. In a default portal instance, you can find the DAV configuration entry in the following directive:


```
<Location /dav_portal/portal>
```
3. In the DAV entry, remove the directive `ORACRYPTPASSWORD` (For example, `DAVParam ORACRYPTPASSWORD BS50NfrosVZOjfgc9hUQ9wcbFFxLSYT/BA==`), and replace with the clear text password using the following syntax:


```
DAVParam ORAPASSWORD <your_password_here>
```

For example:

If you want to have a password of `passwd123`, add a line as follows: `DAVParam ORAPASSWORD passwd123`.

4. Save the file.

Obfuscate the Password

After editing the DAV password, it is recommended that the DAV password be obfuscated by running the `oradavTool.pl` script located at `ORACLE_HOME/bin` in UNIX and `ORACLE_HOME\bin` in Windows. To do so, perform the following steps:

1. If necessary, change the user to the Oracle software owner user, typically `oracle`, using the following command:

```
su - oracle
```

2. Set the `ORACLE_HOME` environment variable to specify the path to the Oracle home directory for the current release, and set the `PATH` environment variable to include the directory containing the Perl executable and the location of the `oradavTool.pl` script (Located at `ORACLE_HOME/ohs/bin` in UNIX and `ORACLE_HOME\ohs\bin` in Windows).

Bourne, Bash, or Korn shell:

```
$ ORACLE_HOME=new_ORACLE_HOME_path;export ORACLE_HOME
PATH=$ORACLE_HOME/bin:$ORACLE_HOME/perl/bin:$PATH;export PATH
```

C or tcsh shell:

```
% setenv ORACLE_HOME new_ORACLE_HOME_PATH
% setenv PATH ORACLE_HOME/bin:$ORACLE_HOME/perl/bin:PATH
```

On Microsoft Windows, set the `PATH` and `PERL5LIB` environment variable:

```
set PATH=ORACLE_HOME\bin;%ORACLE_HOME%\perl\bin;%PATH%
set PERL5LIB=ORACLE_HOME\perl\lib
```

3. On UNIX platforms, set the shared library path environment variable

Include the `ORACLE_HOME/lib` or `lib32` directory in your shared library path. [Table 34–1](#) shows the appropriate directory and environment variable for each platform.

Table 34–1 Shared Library Path Environment Variable

Platform	Environment Variable	Include Directory
AIX Based Systems	<code>LIBPATH</code>	<code>ORACLE_HOME/lib</code>
HP-UX PA-RISC	<code>SHLIB_PATH</code>	<code>ORACLE_HOME/lib</code>
Solaris Operating System	<code>LD_LIBRARY_PATH</code>	<code>ORACLE_HOME/lib32</code>
Other UNIX platforms, including Linux and HP Tru64 UNIX	<code>LD_LIBRARY_PATH</code>	<code>ORACLE_HOME/lib</code>

For example, on HP-UX PA-RISC systems, set the `SHLIB_PATH` environment to include the `ORACLE_HOME/lib` directory:

```
$$SHLIB_PATH=$ORACLE_HOME/lib:$SHLIB_PATH;export SHLIB_PATH
```

4. Change directory to the `ORACLE_HOME/bin` (UNIX) directory, as this is the location of the `oradavTool.pl` script.

5. Invoke the following Perl script to encrypt the `mod_oradav.conf` password:

```
perl oradavTool.pl -f mod_oradav.conf filename
```

Where `mod_oradav.conf filename` is the filename for `mod_oradav.conf`, which includes the full path to the `mod_oradav.conf` file.

For example, in UNIX:

```
perl oradavTool.pl -f /u01/app/oracle/as11gr1/ORACLE_INSTANCE/config/OHS/<ohs_name>/moduleconf/mod_oradav.conf
```

6. The directive `ORAPASSWORD` is updated with the new directive `ORACRYPTPASSWORD`, and your password is obfuscated.
7. Restart your Oracle HTTP Server.

34.2.10 Migrating an External Application

When migrating an external application during the cloning process, you must run the `ssomig` utility after the import is completed as follows:

1. Open the `tnsnames.ora` file, and enter connect string entries to the sso database in `tnsnames.ora` file.
2. Set the `TNS_ADMIN` environment variable to the `tnsnames.ora` file location.
3. Run the `ssomig` utility (Located at `INFRA_HOME/sso/bin`):

```
$INFRA_HOME/sso/bin/ssomig -import -overwrite -s orasso -p <<ORASSO_SCHEMA_PASSWORD>> -c <<TNS_ALIAS>> -d ssomig.dmp -log_d <<ABSOLUTE_PATH_FOR_MREXPDIR>> -discoforce
```

34.2.11 Availability of JPDK Samples

In Oracle Portal 11g Release 1 (11.1.1), JPDK samples are not available, by default. The `jpdk.ear` file and can be deployed, by performing the following:

1. Log on to the Oracle WebLogic Server Administration Console.
2. If you have not already done so, in the Change Center of the Administration Console, click **Lock & Edit**.
3. In the Domain Structure tree, select **Deployments**.
The **Summary of Deployments** page is displayed.
4. Click **Install**.
5. Select `jpdk.ear` from your directory (Located at `ORACLE_HOME/archives/applications`), and click **Next**.
6. Select **Install this deployment as an application**, and click **Next**.
7. Check the target from the **Install Application Assistant** page, and click **Next**.
8. In the **Name** field, enter a name for the deployment.
9. Click **Finish**.
10. Click **Activate Changes**.
11. From the **Summary of Deployments** page, select the application and click **Start**.

34.2.12 Portal Throws Discoverer Provider is Busy Error Message

Portal throws an error message The Discoverer Provider is busy, please try again later. This occurs when you perform the following steps:

1. Click **Edit Portlet** defaults
2. Click **Update for Database** section
3. Change selection for **User not logged** sub-section
4. Click **Next** to fetch worksheet list

Workaround

To workaround this issue perform the following steps:

1. Add stall timeout to \$DOMAIN_HOME/servers/WLS_PORTAL/stage/portal/portal/configuration/appConfig.xml
For example: <stall>200</stall>
2. Restart WebLogic Server Portal

34.2.13 Error when creating RCU portal schema

If RCU portal schema creation fails with the error message ORA-24246: empty access control list (ACL) not allowed, do the following:

1. Connect to the database as a SYS user.
2. At the SQL prompt, run the following command:

```
BEGIN
  DBMS_NETWORK_ACL_ADMIN.drop_acl (
    acl          => '/sys/acls/portal-permissions.xml');
  COMMIT;
END;
/
```

34.2.14 Internal Error when Using Portal Search With Oracle Text Enabled to Search for Pages

If you have Oracle Text enabled, the following internal server error may occur when you are searching for Pages:

```
Internal error (WWC-00006)
An unexpected error has occurred (WWS-32100)
Unknown Exception (WWC-45131)
User-Defined Exception (WWV-11230)
Unexpected error - ORA-00600: internal error code, arguments:
[qkeIsExprReferenced1], [], [], [], [], [], [], [] (WWC-35000)
```

If this error occurs, you must download and install database updates from <http://updates.oracle.com/download/7041059.html>.

34.2.15 IPv6 Support in Oracle Portal 11g Release 1 (11.1.1)

Oracle Portal 11g Release 1 (11.1.1) is not directly supported on Internet Protocol Version 6 (IPv6). The supported configuration comprises the following:

- An IPv4/IPv6 reverse proxy setup on an IPv4/IPv6 dual stack machine.

- The Portal mid-tier and the backend database on IPv4 machines, and clients accessing the Portal server through the proxy.

34.3 Upgrade Issues and Workarounds

This section describes the upgrade issues and workarounds. It discusses the following topics:

- [Section 34.3.1, "Relative Hypertext Links to Images and Documents May Break After Upgrade"](#)
- [Section 34.3.2, "Resetting FILE_ACCESS_ROLE if Set Before Installing or Upgrading to Oracle Portal 11g Release 1 \(11.1.1\)"](#)
- [Section 34.3.3, "Upgrading from Oracle Portal 10g to Oracle Portal 11g Release 1 \(11.1.1\)"](#)
- [Section 34.3.4, "Upgrading Sample WSRP Providers During a Portal Midtier Upgrade"](#)
- [Section 34.3.5, "Upgrading Portal 10g SSL Environment to Oracle Portal 11g Release 1 \(11.1.1\)"](#)

34.3.1 Relative Hypertext Links to Images and Documents May Break After Upgrade

When upgrading to Oracle Portal 11g Release 1 (11.1.1), relative hypertext links to images and documents may be broken. This can occur when the relative hypertext link uses a different case than the file name. For example, if a pre-upgrade image was uploaded to your portal with the name `PROCESS1.GIF`, and a hypertext link is referring to `process1.gif`, after the upgrade, the relative hypertext link to the image will be broken. You are most likely to encounter this in HTML templates or in documents that refer to images or other documents.

To address this issue, edit image and document names, making their case agree with the case used for the file names.

34.3.2 Resetting FILE_ACCESS_ROLE if Set Before Installing or Upgrading to Oracle Portal 11g Release 1 (11.1.1)

If you have set the `FILE_ACCESS_ROLE` system parameter in the database before installing or upgrading to Oracle Portal 11g Release 1 (11.1.1), you may want to reset it after the installation or upgrade.

The `FILE_ACCESS_ROLE` system parameter is used to specify the name of a database role that is authorized to create an index using the FILE or URL datastores. If the parameter is set, any user attempting to create an index using FILE or URL datastores must have this role otherwise the index cannot be created.

In database versions earlier than Oracle Database 11g Release 2, if the `FILE_ACCESS_ROLE` parameter was not set, users did not need to have a specific role to create indexes using the FILE or URL datastores. From Oracle Database 11g Release 2 onwards, if the `FILE_ACCESS_ROLE` parameter is not set, the URL and File datastore are disabled and indexes using the FILE or URL datastores cannot be created. For more information, see the Oracle Text documentation at <http://www.oracle.com/technology/products/text/index.html>.

When installing or upgrading to Oracle Portal 11g Release 1 (11.1.1), into a database that is Oracle Database 11g or higher, the following events occur:

- The "PORTAL_SEARCH_FILE_ACCESS_ROLE" role is created.
- The "PORTAL_SEARCH_FILE_ACCESS_ROLE" role is granted to the portal schema.
- The FILE_ACCESS_ROLE system parameter set to "PORTAL_SEARCH_FILE_ACCESS_ROLE" regardless of whether the preference was originally set

If the FILE_ACCESS_ROLE system parameter was set before installing or upgrading to Oracle Portal 11g Release 1 (11.1.1) from a previous version, you may want to set it back to the original role. If you reset it to another role, you must grant that role to the Oracle Portal schema for Oracle Portal Search to function correctly.

34.3.3 Upgrading from Oracle Portal 10g to Oracle Portal 11g Release 1 (11.1.1)

- After you upgrade from Portal 10g Release 2 (10.1.4) to Portal 11g Release 1 (11.1.1), translations of some components or portlets will be missing, for example survey builder, User Surveys, and so on. To fix this issue, you must refresh the database provider, by login to the Oracle Portal, then go to **Navigator, Providers, Registered Providers** and then select your database provider, and then click **Refresh**. After refreshing you should be able to see the translations.
- After you upgrade from Portal 10g release to Portal 11g Release 1 (11.1.1), you will not able to refresh the tools producers (omni, webclip, or sample) that were registered from the previous release. To fix this problem, log in to Oracle Portal, then go to **Administer**. Click **Portlets** tab, and enter the name of your registered producer (Registered from the previous release) in the Remote Providers section. Click **Refresh**.

34.3.4 Upgrading Sample WSRP Providers During a Portal Midtier Upgrade

The Sample WSRP provider does not upgrade automatically during a Portal midtier and any instances of portlets on pages from that producer will give an error post upgrade. To upgrade the SampleWSRP Web Provider, do the following:

1. Deploy the `wsrp-samples.ear` file to the new Portal managed server (WLS_PORTAL) instance using the Oracle WebLogic Server Administration Console.
2. Make the preference store that the old producer used available to the new instance. You can do this, by making the new producer use the same preference store (in scenario, where the data base preference store is used), or by migrating the preference store using the preference store migration utility.
3. Update the registration details in portal to point to the new location of the producer, by using the Edit Registration page within Portal.

34.3.5 Upgrading Portal 10g SSL Environment to Oracle Portal 11g Release 1 (11.1.1)

When you upgrade SSL environment from Oracle Portal 10g to Oracle Portal 11g Release 1 (11.1.1), you will not able to login to Oracle Portal, when you have SSO and Portal Midtier on the same hostname. Internet Explorer has a problem redirecting back and forth on the same hostname between two different ports under SSL mode. As a workaround, you can use Mozilla Firefox.

34.4 Interoperability Issues and Workarounds

This section describes the interoperability issues and workarounds. It discusses the following topics:

- [Section 34.4.1, "Interoperability Between Oracle Portal 11g Release 1 \(11.1.1\) with Secured Enterprise Search \(SES\) 10.1.8.3"](#)
- [Section 34.4.2, "Interoperability Between Oracle Portal 11g Release 1 \(11.1.1\) with Secured Enterprise Search \(SES\) 10.1.8.4"](#)
- [Section 34.4.3, "Creating Webproviders in the Oracle Portal 11g Release 1 \(11.1.1\) Midtier Interoperability with Oracle Portal Repository 10g Release"](#)

34.4.1 Interoperability Between Oracle Portal 11g Release 1 (11.1.1) with Secured Enterprise Search (SES) 10.1.8.3

For this interoperability scenario to work, you must download and install updates from <http://updates.oracle.com/download/7685124.html> and see 816929.1 from <http://metalink.oracle.com>.

34.4.2 Interoperability Between Oracle Portal 11g Release 1 (11.1.1) with Secured Enterprise Search (SES) 10.1.8.4

For this interoperability scenario to work, you must download and install updates from <http://updates.oracle.com/download/7971335.html>.

34.4.3 Creating Webproviders in the Oracle Portal 11g Release 1 (11.1.1) Midtier Interoperability with Oracle Portal Repository 10g Release

In Portal 11g 1 (11.1.1), you cannot create webproviders when you are using 11g midtier with 10g portal repository.

34.5 User Interface Issue and Workaround

This section describes issue and workaround related to the Oracle Portal user interface. It includes the following topic:

Cannot Set Privileges Using List View on Pages Inheriting Privileges from Parent or Template

If you use the List View to set access privileges for one or more pages, then privileges will *not* be set on pages inheriting privileges from a parent page or template. As a workaround, change the privileges for such pages individually, that is, using the Access tab for the subpage.

34.6 Export and Import Issues and Workarounds

This section describes issues and workarounds related to export and import in Oracle Portal. This section includes the following topics:

- [Section 34.6.1, "Export and Import Does Not Support Reports Server Components"](#)
- [Section 34.6.2, "Saving the Transport Set"](#)
- [Section 34.6.3, "Error when importing a page group"](#)

34.6.1 Export and Import Does Not Support Reports Server Components

If you include Reports Server Components within a transport set, then they are deleted on export and import. In addition, do not configure the Oracle Reports item type in any page groups intended for export and import. If you do, then the following error is displayed when you try to configure item types in the imported page group (by clicking the Content Type and Classifications **Edit** link on the Configure tab for the page group):

```
Internal error (WWC-00006)
Unexpected error - User-Defined Exception (WWC-35000)
Unexpected error - ORA-01403: no data found (WWC-35000)
```

34.6.2 Saving the Transport Set

After you complete the transport set transfer, click **Display Manifest** to display the transport set manifest. Ensure that you save the transport set before performing the precheck of the transferred data. This step takes the manifest changes.

34.6.3 Error when importing a page group

Importing a page group may fail with the following error message:

```
[Error: (WWU-80338)] context = Schema Validation user =
ORCLADMIN There were some inconsistencies found and hence import process is
aborted.Check the debug log for further details.Fix those inconsistencies, by
running schema validation in cleanup mode to proceed
```

This problem might occur after deleting a page group containing shared portlets. You must run SVU in cleanup mode to ensure a smooth export or import process.

34.7 Portlet and Provider Issues and Workarounds

This section describes issues and workarounds related to OmniPortlet, Web Clipping, Simple Parameter Form, Page portlet, and WSRP providers. This section includes the following topics:

- [Section 34.7.1, "Registering WSRP Producers in Enterprise Configurations"](#)
- [Section 34.7.2, "Setting up the WSRP and JPKD Application in Oracle Portal"](#)
- [Section 34.7.3, "Issue When Accessing Page Portlet Using Federated Portal Adapter"](#)
- [Section 34.7.4, "Error in JPS Portlet After Redeployment"](#)
- [Section 34.7.5, "SSL Support for Oracle Portal Integration Solutions \(Microsoft Exchange\)"](#)

34.7.1 Registering WSRP Producers in Enterprise Configurations

When you register a WSRP producer in an Enterprise configuration, you must create a Web Services Definition Language (WSDL) document manually, then register the WSRP producer using that WSDL. This is because the dynamically generated WSDL creates URLs using the HTTPS protocol and the HTTPS port while WSRP producers use HTTP.

Note: A *producer* for WSRP portlets is analogous to a *provider* for PDK-Java portlets.

To create a WSDL document manually, perform the following tasks:

1. View the dynamically generated WSDL through your browser (preferably Internet Explorer).

To view the WSDL for our WSRP samples, go to:

`http://host:external http port/portletapp/portlets?WSDL`

2. Save the file from the browser to any externally available location.

For our WSRP Samples, save the file from the browser into the following directory:

`ORACLE_HOME/j2ee/home/applications/portletapp/wsrp-samples`

Save the file as `wsrpsamples.wsdl`.

3. Edit the file, replacing `https` with `http` and correcting the ports to be the external `http` ports.
4. View the file through a browser.

For example, for our WSRP Samples use the following URL:

`http://host:external http port/portletapp/wsrpsamples.wsdl`

5. Use the URL to your `*.wsdl` file (such as the URL under Step 4) when you register the WSRP producer.

For more information about Enterprise configurations, see the *Oracle Fusion Middleware Enterprise Deployment Guide for Java EE*.

34.7.2 Setting up the WSRP and JPDK Application in Oracle Portal

This section describes steps to manually configure the WSRP and JPDK application and deploying them on the Oracle WebLogic Server. This section includes:

- [Deploying the WSRP](#)
- [Deploying the JPDK](#)

34.7.2.1 Deploying the WSRP

To deploy the EAR file, download the **wsrp-samples.ear** file, from <http://www.oracle.com/technology/products/ias/portal/pdk.html> and do the following:

1. Click **Lock & Edit**.
2. In the Domain Structure tree, select **Deployments**.
The **Summary of Deployments** page is displayed.
3. Click **Install**.
4. Select **wsp-samples.ear** from your directory, click **Next**.
5. Select **Install this deployment as an application**, and click **Next**.
6. Check **WLS_PORTAL** from the Servers section, and click **Next**.

7. Enter a name for the deployment, and click **Finish**.
8. Click **Activate Changes**.
9. From the **Summary of Deployments** page, select the application, click **Start** and then select **Servicing all requests**.

For more information, see *Creating Java Portlets in the Oracle Fusion Middleware Developer's Guide for Oracle Portal*.

34.7.2.2 Deploying the JPDK

To deploy the JPDK, download the `jpdk.ear` from <http://www.oracle.com/technology/products/ias/portal/pdk.html> and do the following:

1. Click **Lock & Edit**.
2. In the Domain Structure tree, select **Deployments**.
The **Summary of Deployments** page is displayed.
3. Click **Install**.
4. Select `jpdk.ear` from your directory, and click **Next**.
5. Select **Install this deployment as an application**, and click **Next**.
6. Check `WLS_PORTAL` from the Servers section, and click **Next**.
7. In the **Name** field, enter a name for the deployment.
8. Click **Finish**.
9. Click **Activate Changes**.
10. From the **Summary of Deployments** page, select the application, click **Start** and then select **Servicing all requests**.

For more information, see *Creating Java Portlets in the Oracle Fusion Middleware Developer's Guide for Oracle Portal*.

34.7.3 Issue When Accessing Page Portlet Using Federated Portal Adapter

The Federated Portal Adapter enables you to display remote portal pages in your portal. However, if both portal instances do not share the same Oracle Single Sign-On server, then you cannot display a remote portal page as a page portlet, even if the remote page is public. A message is displayed instead of the page portlet, as shown in the following example:

```
Portlet 257,75057 responded with content-type text/plain when the client was  
requesting content-type text/html
```

As a workaround, configure both portal instances to use the same Oracle Single Sign-On server.

34.7.4 Error in JPS Portlet After Redeployment

When you redeploy your portlets to the portlet container, all existing sessions between the producer and all of its consumers are lost. If a consumer tries to reuse an existing producer session, then it may receive an error message the first time it tries to contact the producer after redeployment, as shown in the following example:

```
Error: Could not get markup. The cookie or session is invalid or there is a  
runtime exception.
```

To reestablish the producer's session, refresh the portal page. You will not see this error message if you are reaccessing the portlet from a new browser session because it automatically establishes a new producer session.

34.7.5 SSL Support for Oracle Portal Integration Solutions (Microsoft Exchange)

SSL support is not available for Oracle Portal Integration Solutions (Microsoft Exchange). This is a known limitation.

34.8 PDK Issue and Workaround

Oracle Portal Developer Kit (PDK) version 10.1.2 is included with the Portal and Wireless installation. Release notes for the PDK-Java and PDK-PL/SQL can be found at the following middle-tier *ORACLE_HOME* locations:

- **PDK-Java:** *ORACLE_HOME/portal/pdkjava/v2/pdkjava.v2.releasenotes.html*
- **PDK-PL/SQL:** *ORACLE_HOME/portal/pdkjava/v2/pdkplsql.release.notes.html*

Latest Version of Oracle PDK

New versions of the Oracle PDK are released periodically providing new features, new APIs, and additional documentation. To take advantage of all the latest features, download the latest PDK from the PDK downloads page on the Oracle Technology Network (OTN) at

<http://www.oracle.com/technology/products/ias/portal/pdk.html>.

Release notes for the latest Oracle PDK version are available on Oracle Portal on OTN and also in these PDK download locations:

- *pdk\plsql\pdkplsql.release.notes.html*
- *pdk\jpd\pdkjava.v2.release.notes.html*

34.9 Globalization Support Issues and Workarounds

This section describes issues and workarounds related to Globalization Support in Oracle Portal. It includes the following topics:

- [Section 34.9.1, "Text Entry Always Right to Left in BiDi Languages"](#)
- [Section 34.9.2, "Non-ASCII Character Limitations in Oracle Portal"](#)
- [Section 34.9.3, "Multibyte Characters in Log Files"](#)

34.9.1 Text Entry Always Right to Left in BiDi Languages

The direction of all text areas and fields is right to left (RTL). However, you may want some text areas to work left to right (LTR). Internet Explorer users can change this by pressing the left hand side Ctrl and Shift keys.

34.9.2 Non-ASCII Character Limitations in Oracle Portal

When you copy and paste an item URL containing non-ASCII characters from one browser Location or Address field into another, you may not be able to access the item if your login credentials have not been authenticated through OracleAS Single Sign-On.

As a workaround, log in to the portal before you access the item and copy the item URL.

34.9.3 Multibyte Characters in Log Files

In some scenarios, multibyte characters in log files may get corrupted.

For example, when the WLS_PORTAL managed server is started from the Oracle WebLogic Server Administration Console, multibyte characters, such as username, password, and `is_starting`, may get corrupted.

Workarounds:

- Change `-Dfile.encoding=iso-8859-1` to `-Dfile.encoding=utf8` in the WLS_PORTAL start-up parameter through the Oracle WebLogic Server Administration Console.
- Change `-Dfile.encoding=iso-8859-1` to `-Dfile.encoding=utf8` in the `setDomainEnv.sh` file (Located at `MIDDLEWARE_HOME/user_projects/domains/DomainName/bin`).

For more information, see the 403179.1 Metalink note.

34.10 Documentation Errata

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

- [Section 34.10.1, "Retrieving Object Privileges"](#)
- [Section 34.10.2, "Configuring Virtual Hosts"](#)
- [Section 34.10.4, "Re-Registering the Oracle HTTP Server Partner Application"](#)
- [Section 34.10.5, "Configuring End-to-End SSL for an Upgraded Oracle Portal Environment"](#)
- [Section 34.10.6, "Upgrading the Portal Schema in a Customer Database"](#)
- [Section 34.10.7, "End to End SSL for Oracle Portal"](#)
- [Section 34.10.8, "Configuring and Registering Web Providers, Provider Groups, and WSRP Producers Exposed Over SSL"](#)
- [Section 34.10.9, "SSL to Oracle Web Cache"](#)

34.10.1 Retrieving Object Privileges

Section "15.1 Retrieving Object Privileges" in the *Oracle Fusion Middleware Developer's Guide for Oracle Portal* has an inaccurate example for Example 15-1 Retrieving the List of Privileges for a Page (`grantee_list` API). The example should read as follows:

```
declare
  l_grantees          wwsec_api.grantee_array;
  l_object_type_name  varchar2(5)   := wwsec_api.PAGE_OBJ;
  l_name              varchar2(60)  := '33/17623';
```

```

begin
  -- Call the function.
  l_grantees := wwsec_api.grantee_list(
    p_object_type_name => l_object_type_name,
    p_name              => l_name
  );
  -- Output the results
  if l_grantees is not null then
    if l_grantees.count > 0 then
      for i in l_grantees.first..l_grantees.last loop
        if l_grantees.exists(i) then
          dbms_output.put_line('GRANTEE_TYPE ' || to_char(i) || '=
'|l_grantees(i).GRANTEE_TYPE);
          dbms_output.put_line('GRANTEE_ID ' || to_char(i) || '=
'|l_grantees(i).GRANTEE_ID);
          dbms_output.put_line('GRANTEE_NAME ' || to_char(i) || '=
'|l_grantees(i).GRANTEE_NAME);
          dbms_output.put_line('PRIVILEGE ' || to_char(i) || '=
'|l_grantees(i).PRIVILEGE);
        end if;
      end loop;
    end if;
  end if;
exception
  ...
end;
/

```

34.10.2 Configuring Virtual Hosts

Section "6.4 Configuring Virtual Hosts" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*, has a missing step. This step should come after the section "6.4.2 Configure Oracle Web Cache" as follows:

Register Oracle Portal with OracleAS Single Sign-On

To register Oracle Portal with OracleAS Single Sign-On, do the following:

1. Run `ssoreg` to register the virtual host, `www.abc.com`, for which `mod_osso` facilitates single sign-on. The specific application URLs to be defined as partner applications within this site are defined in the file `osso.conf`. `ssoreg` is located on the middle tier in `ORACLE_HOME/sso/bin` for UNIX and `ORACLE_HOME\sso\bin` for Windows).

The following example shows the usage of `ssoreg`:

```

ORACLE_HOME/sso/bin/ssoreg.sh
-site_name www.abc.com:8090
-config_mod_osso TRUE
-mod_osso_url http://www.abc.com:8090
-remote_mdtier
-config_file ORACLE_HOME/Apache/Apache/conf/osso/osso_xyz.conf

```

2. Copy the `osso.conf` file to the `INSTANCE_HOME/config/OHS/ohs1` directory.
3. Open the `httpd.conf` file (located at `INSTANCE_HOME/config/OHS/ohs1`) using a text editor and add the following `osso.conf` parameters:

```

<VirtualHost *:8888>
  ServerName www.xyz.com:8090

```

```
ServerAdmin you@your.address
RewriteEngine On
RewriteOptions inherit
OssoIpCheck off    OssoSecureCookies of    OssoIdleTimeout off
OssoConfigFile osso_xyz.conf
OssoIpCheck off
</VirtualHost>
```

4. Restart the Oracle HTTP Server.

See Also: 824225.1 from <http://metalink.oracle.com> for information on using separate sites in the Web Cache site definitions and using separate site to server mapping.

34.10.3 Configuring Loopback to the Internal Server

In the section "Configuring Loopback to the Internal Server" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*, ensure that you add an entry for the proxy machine in the in the local host file on the database machine. This step is required for the database machine to resolve the address of the proxy machine on the network.

34.10.4 Re-Registering the Oracle HTTP Server Partner Application

In the section "Re-Registering the Oracle HTTP Server Partner Application" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal* has an inaccurate example. The example should read as follows:

```
ORACLE_HOME/sso/bin/ssoreg.sh
-site_name www.abc.com
-config_mod_osso TRUE
-mod_osso_url https://www.abc.com:4443
-update_mode Modify
-remote_midtier
-config_file INSTANCE_HOME/config/OHS/ohs1/osso.conf
-admin_info cn=orcladmin
```

34.10.5 Configuring End-to-End SSL for an Upgraded Oracle Portal Environment

Section "4.1.3 Configuring End-to-End SSL" in the *Oracle Fusion Middleware Upgrade Guide for Oracle Portal, Forms, Reports, and Discoverer*, has some missing steps. You must perform these steps after you have completed step 4. The additional steps are as follows:

1. Import the Web Cache SSL certificate into the Portal Database Wallet's trust store.
2. If you don't have a database wallet, you could create one using Oracle wallet manager or `orapki` utility in the installation where the database resides. Once you have the wallet, import the SSL certificate of web cache into the database wallet.
3. This wallet location has to be registered into the Portal preference store using the `secwc.sql` script, located at `ORACLE_HOME/portal/admin/plsql/wwc`.

Example 34-1 Registering the Wallet

```
cd $ORACLE_HOME/portal/admin/plsql/wwc
sqlplus <portal_schema/<portal_pwd>@connectstring sql> @secwc.sql <wallet_
location> <wallet_pwd>
```



```
sql> @secwc.sql 'file:/u01/app/oracle/product/1021_prodee/dbwallet' 'welcome1'
```

34.10.6 Upgrading the Portal Schema in a Customer Database

This section details the steps for upgrading a portal schema residing in a customer database configuration outside the OracleAS Metadata Repository.

Note: If the OracleAS Portal instance was originally installed in release 3.0.9 or earlier, or if it was installed using the `ptlasst` utility, then the portal schema resides in a customer database configuration outside the OracleAS Metadata Repository and needs to be upgraded using the steps in this section.

To upgrade the portal schema residing in a customer database, you must use the `upgrade.bat` (Windows) or `upgrade` (UNIX) script. Perform the following steps to upgrade the portal schema residing in a customer database:

1. Set the `ORACLE_HOME` environment variable to the Oracle home of the midtier.
2. Add the Transparent Network Services (TNS) entry of the database containing portal schema to `Instance_Home\config` in Windows and `Instance_Home/config` in UNIX.
3. Set the `TNS_ADMIN` environment variable to the following location: `INSTANCE_Home/config` (UNIX).
4. Ensure that you are able to connect to database using portal schema.
5. Verify if you can connect to the portal schema in the database Oracle home by specifying the schema password and the TNS name using SQL*Plus.

For example in UNIX:

```
sqlplus portal/portal@orcl
```

6. Change the directory to `ORACLE_HOME/upgrade/portal/admin/plsql` (UNIX).
7. Stop all Oracle Fusion middleware services in the middle-tier Oracle homes that are associated with the portal schema being upgraded. For this, stop the `WLS_PORTAL` through the Oracle WebLogic Server Administration Console and run `INSTANCE_HOME/bin/opmnctl stopall` (UNIX).
8. Verify that the Oracle Internet Directory associated with the portal schema is up and running.
9. Run the upgrade script in precheck mode until there are no errors found.

On UNIX, run the script as follows:

```
ORACLE_HOME/upgrade/portal/admin/plsql/upgrade -precheck
```

When `-precheck` is specified, only the pre-upgrade checks are done and the upgrade exits after that. In this mode, the upgrade is not immediately terminated if a precheck fails. Instead, the errors for all prechecks are consolidated in the `upgrade.log` file. This file is generated in the `ORACLE_HOME/upgrade/portal/admin/plsql` (UNIX) directory. Look at the end of the log file to see a list of checks that failed. Run the upgrade in this mode until none

of the prechecks fails. In this mode, the schema is not altered, so restoring from your backup is not necessary between runs.

Look up any errors found in the precheck log file. Contact Oracle Support Services for any errors that are not documented or that cannot be resolved by following documented actions.

10. After resolving all warnings and errors from the `precheck.log` file, run the upgrade script without any parameters.

On UNIX, run the script as follows:

```
ORACLE_HOME/upgrade/portal/admin/plsql/upgrade
```

The script prompts you for information about the system setup. Your answers are echoed for verification at the end of the script. However, if you discover that you have entered incorrect information before the end of the script, then you can exit before any changes are made by answering `n` to the last script inquiry.

The following are the questions from the script. Default answers to the questions are given in brackets.

- Have you backed up your database (y|n)? [y]:
If you have not backed up the database, then answer `n`, back up the database, and restart the script. If you have backed up the database, then answer `y`.
 - Enter the name of the schema you would like to upgrade [portal]:
If the schema name is different from the default OracleAS Infrastructure 10g installation schema name of `portal`, then enter the schema name.
 - Enter the password of the schema you would like to upgrade [portal]:
If the password is not the same as the schema name, then enter the portal schema password.
 - Enter the password for the SYS user of your database [change_on_install]:
If the password is not `change_on_install`, then enter the database SYS password.
 - Enter the TNS connect string to connect to the database [orcl]:
Provide the TNS connect string. This can be found in the `INSTANCE_HOME/config/tnsnames.ora` file (UNIX).
11. When the script is complete, examine the upgrade log files in the current directory to make sure there are no errors reported at the end.
 12. Now start the midtiers associated with this repository. Check that portal is accessible.

34.10.7 End to End SSL for Oracle Portal

Section "7.3.2.1.4 End to End SSL for Oracle Portal" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*, has some inaccurate information in the following subsections:

- [Securing Oracle Web Cache](#)

- [Specifying Oracle Portal Published Address and Protocol](#)
- [Configure HTTP Server](#)

34.10.7.1 Securing Oracle Web Cache

Securing Oracle Web Cache in section "7.3.2.1.4 End to End SSL for Oracle Portal" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal* has some inaccurate information in the following subsections:

- [Configuring Oracle Web Cache SSL Port](#)
- [Adding the SSL Origin Server](#)
- [Enable Session Binding](#)

Configuring Oracle Web Cache SSL Port

By default SSL is configured for Oracle Web Cache. The steps in this subsection is optional and if you do not have an out-of-the-box SSL configuration for webcache SSL port then you must perform the steps explained in section "Configuring Oracle Web Cache SSL Port" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*. In the "Configuring Oracle Web Cache SSL Port" subsection, do the following:

1. Replace step 1 as follows:
 Login to the Web Cache Administration Console
 (<http://<wc-host>:<WebcacheAdminport>>), with the required credentials.
2. In step 3, replace the Port number **4444** with **8094**.

Adding the SSL Origin Server

The subsection *Adding the SSL Origin Server*, is an optional step and it is required, if you do not have an out-of-the-box SSL configuration for webcache SSL port.

Enable Session Binding

The subsection *Enable Session Binding*, has an inaccurate step. Replace step 4 with the following:

In the **Edit Session Binding** dialog box, select **Cookie based session binding with any Set-Cookie** and click **Submit**.

34.10.7.2 Specifying Oracle Portal Published Address and Protocol

You do not need to perform the steps mentioned in section *Specifying Oracle Portal Published Address and Protocol*.

34.10.7.3 Configure HTTP Server

In the section *Configure HTTP Server*, add the following details for the virtual host shown in bold in the `ssl.conf` file located at `INSTANCE_HOME/config/OHS/ohs1` (UNIX):

```
<VirtualHost *:8890>
UseCanonicalName On
ServerName https://dadvmn0041.us.abc.com:8094
<IfModule ssl_module>
  SSLEngine on
  SSLVerifyClient None
  SSLCipherSuite
  SSL_RSA_WITH_RC4_128_MD5,SSL_RSA_WITH_RC4_128_SHA,SSL_RSA_WITH_3DES_EDE_CBC_SH
  A,SSL_RSA_WITH_DES_CBC_SHA,TLS_RSA_WITH_AES_128_CBC_SHA,TLS_RSA_WITH_AES_256_C BC_
```

```
SHA
SSLCRLCheck Off
SSLWallet
@ "${ORACLE_INSTANCE}/config/${COMPONENT_TYPE}/${COMPONENT_
NAME}/keystores/default"
```

Note: By default `ssl.conf` includes a seeded wallet, if you are using a custom wallet then you need to update the `SSLWallet` directory path.

34.10.8 Configuring and Registering Web Providers, Provider Groups, and WSRP Producers Exposed Over SSL

Configuring and Registering WSRP Producers Exposed Over SSL, in section "7.3.2.1.7 Configuring and Registering Web Providers, Provider Groups, and WSRP Producers Exposed Over SSL" of the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal* has incorrect information for point **a** in step **4**. This should be as follows:

For registering SSL enabled providers with Oracle Portal Repository, you must import the client certificate as a trusted certificate into the configured keystore for Oracle Portal.

Note: You can obtain the configured Keystore by log in to Oracle Portal, then go to **Administer** tab. Click **Global Settings**, and from the Global Settings page, click **Keystore** tab. If the keystore is not configured, then Oracle Portal picks up the default keystore configured for the database (Located at `PORTAL_DB_ORACLE_HOME/javavm/lib/security/cacerts` in UNIX, and `PORTAL_DB_ORACLE_HOME\javavm\lib\security\cacerts` in Windows).

For out-of-the-box seeded providers like Omniportlet, WebClipping, JPDK do the following:

- If the seeded providers are registered to Oracle Portal using Oracle Portal Web Cache SSL port (Configured for SSL only for Oracle Web Cache), then you have to import Oracle Portal Web Cache SSL certificate as a trusted certificate into the configured trust keystore where the `J2EE war/ear` file is deployed (**WLS_PORTAL**).
- If the seeded providers are registered to Oracle Portal using Oracle Portal Web Cache SSL port (Configured for end-to-end SSL), then you must perform the following:
 - Import Portal Web Cache SSL certificate, as a trusted certificate into the configured trust keystore(s) where the `J2EE war/ear` file is deployed (**WLS_PORTAL**).
 - Open `portal.conf` file (located at `INSTANCE_HOME/config/OHS/ohs1/moduleconf` in UNIX and `INSTANCE_HOME\config\OHS\ohs1\moduleconf` in Windows) and turn on the `WLProxySSL` parameter in the seeded providers redirection definition. The example below shows the updated `portal.conf` file for the seeded providers.

Portal Tools

<Location /portalTools>

```

        SetHandler weblogic-handler
        WebLogicHost stanj18.us.abc.com
        WebLogicPort 9001
        WLProxySSL ON
    </Location>

```

WSRP Tools

```

<Location /wsrp-tools>
    SetHandler weblogic-handler
    WebLogicHost stanj18.us.abc.com
    WebLogicPort 9001
    WLProxySSL ON
</Location>

```

Rich Text Portlet

```

<Location /richtextportlet>
    SetHandler weblogic-handler
    WebLogicHost stanj18.us.abc.com
    WebLogicPort 9001
    WLProxySSL ON
</Location>

```

JPKK

```

<Location /jpkk>
    SetHandler weblogic-handler
    WebLogicHost stanj18.us.abc.com
    WebLogicPort 9001
    WLProxySSL ON
</Location>

```

34.10.9 SSL to Oracle Web Cache

Configuring the Parallel Page Engine, in section "7.3.2.1.3 SSL to Oracle Web Cache" of the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*, has a missing step. After you have completed Step 3, in the Configuring the Parallel Page Engine section, You need to configure the HTTP settings in the Oracle WebLogic Server Administration Console as follows:

1. Log in to Oracle WebLogic Server Administration Console.
2. If you have not already done so, in the Change Center of the Administration Console, click **Lock & Edit**.
3. In the left pane of the Console, expand **Environment** and select **Clusters**.
4. Select the cluster server and, then the **HTTP** tab.
5. In the HTTP page enter the following information:
 - Frontend HTTP Port: Enter your Web Cache HTTP port, for example 8090.
 - Frontend HTTPS Port: Enter your Web Cache SSL port, for example 8094.
6. Click **Save**.
7. Click **Activate Changes**.
8. Restart your managed server.

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

- [Section 35.1, "General Issues and Workarounds"](#)
- [Section 35.2, "Interoperability Issues and Workarounds"](#)
- [Section 35.3, "Documentation Errata"](#)

35.1 General Issues and Workarounds

This section describes the general issues and their workarounds.

35.1.1 Associating SSL Port of OID Using Enterprise Manager

While installing Oracle Reports 11g Release 1 (11.1.1), you can specify whether an OID port is SSL-enabled. However, in the Reports-OID Reassociation page in Enterprise Manager, you cannot view, associate, deassociate, or reassociate OID that was configured during the installation to use the SSL port.

35.1.2 Configuration Changes Made Using Enterprise Manager to a Mail Server That Is Not Secure

After you make any changes from Enterprise Manager Reports server basic and advanced configuration pages, the mail server configuration element entry is impacted. The commented child elements of mail server configuration elements are removed from the `rwbuilder.conf` and `rwserver.conf` configuration files. As a result, running a job to a mail destination fails. This problem occurs only when you use a mail server that is not secure. For example, the following error message may appear on the browser when the job is submitted through `rwervlet`:

```
COULD NOT CONNECT TO SMTP HOST: LOCALHOST, PORT: 25: SENDING  
MAIL
```

To work around this problem, add an entry for the child element of the mail server in the `rwbuilder.conf` and `rwserver.conf` configuration files manually and comment out the entry, as shown in the following example:

```
<pluginParam name="mailServer" value="aaa.bbb.com">  
  <!--property name="enableSSL" value="yes"/-->  
</pluginParam>
```

35.2 Interoperability Issues and Workarounds

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

- [Section 35.2.1, "Interoperability between Reports 11g Server and Reports 10.1.2.3 Client"](#)

35.2.1 Interoperability between Reports 11g Server and Reports 10.1.2.3 Client

This interoperability scenario requires the patch 7597820 to be installed. You can download this patch from <http://updates.oracle.com/download/7597820.html>. This patch is required to address the CORBA IDL changes between the two releases for the Job Status information. If you want to use `rwervlet` of Reports 10g Release 2 (10.1.2.3) with the Reports 11g Release 1 (11.1.1) Server, ensure that you install this patch on 10.1.2.3 installation. You can download this patch from <http://metalink.oracle.com>.

35.3 Documentation Errata

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

- [Section 35.3.1, "Default value of XML PROLOG VALUE for multibyte reports"](#)
- [Section 35.3.2, "Granting Access to RWbuilder"](#)

35.3.1 Default value of XML PROLOG VALUE for multibyte reports

The default value of the report object property XML PROLOG VALUE for multibyte reports is not correct in the online Help for Reports. The default value is documented as `<?xml version="1.0"?>`. However, the default value is `<?xml version="1.0" encoding="&Encoding"?>`.

35.3.2 Granting Access to RWbuilder

Section "Granting Access to RWbuilder" in the *Oracle Fusion Middleware Publishing Reports to the Web with Oracle Reports Services* has some missing steps. In addition to the `chmod` commands documented in the section, you must run the following commands on the command line:

- `chmod 750 $ORACLE_HOME/bin/rwbuilder`
- `chmod 750 $ORACLE_HOME/modules/oracle.dms_11.1.1/*.jar`
- `chmod 750 $ORACLE_HOME/modules/oracle.odl_11.1.1/*.jar`
- `chmod 750 $ORACLE_INSTANCE/config/reports`
- `chmod 750 $ORACLE_INSTANCE/config/reports/bin`
- `chmod 750 $ORACLE_INSTANCE/config/reports/bin/rwbuilder.sh`
- `chmod 750 $ORACLE_INSTANCE/reports`
- `chmod 750 $ORACLE_INSTANCE/reports/reports_install.properties`