Oracle® Fusion Middleware

Release Notes for Oracle Fusion Middleware Infrastructure

12*c* (12.2.1.2)

E76881-04

June 2017

This document describes all known issues for this release of
Oracle HTTP Server.

ORACLE®

Oracle Fusion Middleware Release Notes for Oracle Fusion Middleware Infrastructure, 12*c* (12.2.1.2)

E76881-04

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Preface

Oracle Fusion Middleware Infrastructure release notes summarizes the release information related to the issues fixed, general issues and their workaround, deprecated and removed functionality, and more. This release of the product is in maintenance mode and will no longer have new features or content.

Audience

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Audience

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

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

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

Related Documents

For more information, see the following resources:

- Oracle HTTP Server 11*g* Documentation Library

  This contains all documentation for all Oracle HTTP Server 11*g* products.

- Oracle Technology Network

  This site contains additional documentation that is not included as part of the documentation libraries.

Conventions

The following text conventions are used in this document:

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

1

Install and Configure

This chapter describes issues that are related to Oracle Fusion Middleware product installation and configuration.

The following topics are covered in this chapter:

Issues Related to Product Installation

Issues Related to Product Configuration

Issues Related to Product Installation and Configuration Documentation

Documentation Errata

1.1 Issues Related to Product Installation

This section contains the following topics:

Checking for Available Software Patches

Downloading and Applying Required Patches

Applying a Mandatory Patch for Oracle Business Activity Monitoring

1.1.1 Checking for Available Software Patches

Before you install any Oracle Fusion Middleware product, it is good practice to review the product information available on My Oracle Support:

http://support.oracle.com/

When you register for My Oracle Support, you have easy access to important information about available patches and other important Oracle Fusion Middleware product information.

1.1.2 Downloading and Applying Required Patches

After you install Oracle Fusion Middleware 12*c* (12.2.1.2), there might be cases where additional patches are required to address specific known issues.

Patches for Oracle Fusion Middleware 12*c* are available from My Oracle Support:

http://support.oracle.com

The following table lists some of the specific Oracle Fusion Middleware patches that were available at the time these release notes were published.

Patch	Description
24737021	This is a mandatory patch that must be applied after you install Fusion Middleware 12*c* (12.2.1.2).
	See the README file for patching instructions.

To download a patch:

1. Log in to My Oracle Support.

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

3. In the Patch Search area, select **Patch Name or Number**.

4. Enter the patch number.

5. Click **Search**. The Patch Search Results page appears.

6. Download and install the patch.

1.1.3 Applying a Mandatory Patch for Oracle Business Activity Monitoring

Before you install Oracle Business Activity Monitoring (Oracle BAM) 12*c*, be sure to review the My Oracle Support Document ID 1682371.1, which is available from My Oracle Support.

This Support Note provides important information about a mandatory patch that must be applied to Oracle BAM 12*c* immediately after installation.

1.2 Issues Related to Product Configuration

This section contains the following topics:

Applications Will Not Start After WebLogic Server Is Upgraded

Warnings Appear in the Oracle Traffic Director Node Manager Log on Solaris on SPARC (64-bit)

A Partition with Japanese Name Cannot Be Created from Fusion Middleware Control

1.2.1 Applications Will Not Start After WebLogic Server Is Upgraded

After you apply the latest patches to Oracle WebLogic Server, the *ORACLE_HOME*/wlserver/server/lib/weblogic.policy file must be edited to include the following entry in order for Middleware services such as Discoverer, Access Manager, and Identity Manager to start:

```
grant codeBase "file:ORACLE_HOME/WLS/patch_jars/-" {
      permission java.lang.RuntimePermission "oracle.*","read";
};
```

Replace *ORACLE_HOME* with the location of your Oracle home directory.

Replace *WLS* with one of the following:

* `patch_wls1035` for WebLogic Server version 10.3.5

- `patch_wls1036` for WebLogic Server version 10.3.6

- `patch_wls1212` for Weblogic Server version 12.1.2

1.2.2 Warnings Appear in the Oracle Traffic Director Node Manager Log on Solaris on SPARC (64-bit)

After you install Oracle Traffic Director (OTD) on Solaris on SPARC (64–bit), you might see warning messages similar to the following examples in the Node Manager log when you start the OTD Node Manager:

```
WARNING: Key store file keystores.xml integrity check failed. Location:
/home/oracle/config/domains/OTDDomain/config/fmwconfig/
Jul 19, 2016 10:44:36 PM
oracle.security.jps.internal.keystore.file.FileKeyStoreManager openKeyStore

WARNING: Opening of file based keystore failed. Reason :
oracle.security.jps.service.keystore.KeyStoreServiceException: JPS-06502:
Failed to read keystore. Reason javax.xml.bind.UnmarshalException
```

The first warning is a security warning, and the second warning is because of file synchronization issues with the `keystores.xml` file. There is no workaround, as there is no impact on the OTD functionality. You can ignore these warnings.

1.2.3 A Partition with Japanese Name Cannot Be Created from Fusion Middleware Control

A partition with a Japanese name cannot be created by using Fusion Middleware Control.

As a workaround, you can either use Fusion Middleware Control to create a partition that uses an English name or use the WebLogic Server Administration Console to create a partition with a Japanese name.

1.3 Issues Related to Product Installation and Configuration Documentation

This section contains the following topics:

Registering Node Manager as a Windows Service

An Incorrect Step Appears on the Installation Complete Screen

An Error Message Appears When An Incorrect Version of JDK Is Used for Installation

An Incorrect Error Message Appears if the JDK Is Not Compatible with the Operating System

Warning Messages in make.log File

Simple Security Mode Does Not Function with OAM Server

Domain Creation Fails if the Correct Server Groups Are Not Selected While Configuring OSB and SOA

An Incorrect config.xml File Is Generated While Extending a SOA Cluster with OSB

The install<time-stamp>.out File Is Not Created in the MFT Installation Log Directory

An Error Message Appears in the oblog.log File After You Configure OHS WebGate

Configuring Oracle WebLogic Server to Access Oracle Internet Directory over SSL

1.3.1 Registering Node Manager as a Windows Service

To register Node Manager as a Windows Service serving either one of the following:

- A standalone OHS domain

- A domain with a collocated ODI agent

Do the following after you have created the domain:

1. Set the *JAVA_OPTIONS* environment variable so that it points to the proper Oracle home and Domain home directories.

   ```
   set JAVA_OPTIONS=-Dohs.product.home=ORACLE_HOME -
   Dweblogic.RootDirectory=DOMAIN_HOME
   ```

   For example:

   ```
   set JAVA_OPTIONS=-Dohs.product.home=C:\Oracle\product\OHS\OracleHome -
   Dweblogic.RootDirectory=C:\Oracle\config\domains\OHSDomain
   ```

2. Go to the Domain home directory and run the following command:

   ```
   installNodeMgrSvc.cmd
   ```

1.3.2 An Incorrect Step Appears on the Installation Complete Screen

When you complete a standalone OHS installation, the step *Start Node Manager and Domain Servers* is displayed as one of the next steps you should take after installation.

This information is incorrect, as there are no domain servers configured during the standalone installation.

1.3.3 An Error Message Appears When An Incorrect Version of JDK Is Used for Installation

When you attempt to install a Fusion Middleware product on a 64-bit system, using a JDK for a 32-bit system, an error message is displayed before the installation begins.

Refer to the *Oracle Fusion Middleware System Requirements and Specifications* document for your product, and download a suitable JDK from the following location, before you install the Fusion Middleware software:

http://www.oracle.com/technetwork/java/javase/downloads/
index.html

1.3.4 An Incorrect Error Message Appears if the JDK Is Not Compatible with the Operating System

If you run the installer jar file from a 32-bit JDK7 JVM on a 64-bit machine, the installer displays an incorrect message that the version of the JVM is correct and the version of the operating system on which the software is installed is incorrect.

Refer to the System Requirements and Specifications document for your product, and download a suitable JDK from the following location, before you install the Fusion Middleware software:

http://www.oracle.com/technetwork/java/javase/downloads/index.html

1.3.5 Warning Messages in make.log File

While installing Oracle Web Tier 12*c* on AIX operating systems, warning messages may appear in the *ORACLE_HOME*/install/make.log file.

These messages can be safely ignored.

1.3.6 Simple Security Mode Does Not Function with OAM Server

On the AIX Platform, Simple Security Mode does not function with OAM Server.

While registering new Webgate Agent for artifacts generation, select **Open** or **Cert Security Mode** in the OAM Server Console.

1.3.7 Domain Creation Fails if the Correct Server Groups Are Not Selected While Configuring OSB and SOA

If you configure an OSB and SOA cluster without selecting the correct server groups, then the domain creation fails with the following notice:

```
Preparing...
Extracting Domain Contents...
Creating Domain Security Information...
Starting OPSS Security Configuration Data Processing...
The OPSS Security Configuration Data Processing Completed...
Domain Creation Failed!
```

To avoid this error, select **OSB-MGD-SVRS-COMBINED** and **SOA-MGD-SVRS** server groups for all managed servers on the Managed Servers screen.

1.3.8 An Incorrect config.xml File Is Generated While Extending a SOA Cluster with OSB

While extending your SOA cluster domain with OSB, if you delete the existing Managed Server and create a new Managed Server, an incorrect config.xml file is generated. For example, if you delete the existing **soa_server1** and replaced it with **osb_server1** you get an incorrect config.xml file. Specifically, the following SAF tags are missing from config.xml:

```
<saf-agent>
    <name>ReliableWseeSAFAgent_auto_1</name>
    <target>osb_server1 (migratable)</target>
    <store>WseeFileStore_auto_1</store>
  </saf-agent>
```

```
<saf-agent>
  <name>ReliableWseeSAFAgent_auto_2</name>
  <target>ms2 (migratable)</target>
  <store>WseeFileStore_auto_2</store>
</saf-agent>
```

To avoid this issue, while extending your SOA cluster, create new Managed Servers for OSB.

1.3.9 The install<time-stamp>.out File Is Not Created in the MFT Installation Log Directory

In Managed File Transfer the, `install<timestamp>.out` file is not created in the log inventory.

This is not an error.

1.3.10 An Error Message Appears in the oblog.log File After You Configure OHS WebGate

After you configure OHS WebGate and restart the servers, the following error message is displayed in `oblog.log` file in the `Domain_Home`/server/ohs1/logs/`oblog.log` directory:

```
2014/06/10@05:56:29.81679      14314   27     INIT    ERROR
0x000003B6      ../oblistrwutil.cpp:225 "Could not read file"
filename^/scratch/aime/1213FMW/ASCORE/RC4BColocated/MW_HOME/webgate/ohs/config
/oblog_config.xml
    2014/06/10@05:56:43.14915      14313   9      INIT    ERROR
0x000003B6      ../oblistrwutil.cpp:225 "Could not read file"
filename^/scratch/aime/1213FMW/ASCORE/RC4BColocated/MW_HOME/webgate/ohs/config
/oblog_config.xml
```

To work around this issue, do the following:

1. Run:

    ```
    cp Oracle_Home/webgate/ohs/config/oblog_config_wg.xml $ Oracle_Home/webgate/ohs/
    config/oblog_config.xml
    ```

2. Restart all the servers.

1.3.11 Configuring Oracle WebLogic Server to Access Oracle Internet Directory over SSL

If you want to configure Oracle WebLogic Server to access Oracle Internet Directory (OID) over SSL, then you need to obtain and add an OID server certificate to the WebLogic domain. The OID certificate is necessary for a successful SSL handshake and to successfully set up a connection from Oracle WebLogic Server to Oracle Internet Directory.

For information on obtaining the required certificate and adding it to the WebLogic Server store, see Enabling SSL Communication Between the Middle Tier and the Hardware Load Balancer in *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle SOA Suite.*

1.4 Documentation Errata

There are no known issues at this time.

2

Patching and Upgrade

This chapter describes issues related to the Infrastructure upgrade.

The following topics are covered in this chapter:

- Issues Related to Product Upgrade
- Issues Related to Product Patching

2.1 Issues Related to Product Upgrade

This section contains the following topics:

- Upgrade Assistant Fails to Load All Schemas Used by a Domain for Audit Schema Users
- BPM Composites Not Compiled After Upgrade
- Upgrade Assistant Cannot Read a Domain with Multi-Data Sources Defined
- Standard Workspace Dashboards Missing Participant Information After Upgrade
- SAXParseException May Occur During Reconfiguration
- Oracle SOA Suite 12c Does Not Support Non-Oracle Databases and Third-Party Application Servers
- MissingResourceException May Occur During Reconfiguration
- Analytics Data for 11g (11.1.1.7) Composites Created Without Roles Are Not Migrated to 12c
- MDS Schema Data Not Populated During Configuration After Upgrade
- Notification Queue Cannot Be Selected After Upgrade
- Business Process Composer Appears to Freeze After Migration
- Oracle HTTP Server Upgrade Overwrites Node Manager Configuration
- EDN-JMS Backlogged Events Do Not Migrate During Upgrade

2.1.1 Upgrade Assistant Fails to Load All Schemas Used by a Domain for Audit Schema Users

When upgrading from 11g (11.1.1.7 or 11.1.1.9) to 12.2.1, the Upgrade Assistant fails to load schemas associated with the domain when **All schemas used by a Domain** is selected.

The following exception is logged:

```
Exception
-------------
UPGAST- 00214 - Unable to connect to database as schema user <prefix>_IAU.
 Listener refused the connection with the following error :
 .
 ORA-12504, TNS : Listener was not given the SID in CONNECT_DATA
 .
 Cause : The database connection failed for the specified reason.
 Action : Correct the problem using information provided in the log file; then
 retry the operation. In particular if the indicated reason is "Login has
 timed out" verify that the host and port are correct and make sure the
 database is up and is configured for network access.
```

To work around this issue:

Restart the Upgrade Assistant, enter the 11g domain location, select **Individually Selected Schemas**, and select the correct **_IAU**. **_SOAINFRA**, and **_OPSS** schemas.

Selecting the SOA and OPSS schemas will ensure that Audit Services, User Messaging Service and MDS schemas are selected automatically.

2.1.2 BPM Composites Not Compiled After Upgrade

When upgrading from 11.1.1.9 to 12.2.1, Oracle Business Process Management (BPM) composites are not compiled post upgrade.

To compile the BPM composites after the upgrade, restart the Oracle SOA Server.

The following example shows the error that is received:

```
[soa_server1] [ERROR] []
Exception while loading process
[[
ORABPEL-01005

Failed to compile bpel generated classes.
failure to compile the generated BPEL classes for BPEL process
The class path setting is incorrect.
Ensure that the class path is set correctly. If this happens on the server
side, verify that the custom classes or jars which this BPEL process is
depending on are deployed correctly. Also verify that the run time is using
the same release/version.
```

2.1.3 Upgrade Assistant Cannot Read a Domain with Multi-Data Sources Defined

If you receive the following error from the Upgrade Assistant, then you must edit the `ua.bat` script:

```
 ConnectionHelper: CIE config framework not located/initialized.
```

Specifically, to workaround this error you must edit the `oracle_common/ upgrade/bin/ua` [`ua.bat`] script and change the following jar file names:

`cieCfg_wls_external_lib.jar` must be changed to `cieCfg_wls_lib.jar`

`cieCfg_cam_external_lib.jar` must be changed to `cieCfg_cam_lib.jar`

2.1.4 Standard Workspace Dashboards Missing Participant Information After Upgrade

After an upgrade to 12c, the Performance Per Participant graph that is displayed on standard Workspace dashboards will only be available for new 12*c* instances and will

not be available for in-flight, hybrid, or completed (closed) 11*g* instances. However, custom 12*c* Workspace dashboards will continue to display the participant information.

2.1.5 SAXParseException May Occur During Reconfiguration

The following exception appears in the `reconfig.log` file after invoking the Reconfiguration Wizard with `-log_priority=ALL`:

```
[org.xml.sax.SAXParseException; lineNumber: 3; columnNumber: 77; cvc-elt.1:
Cannot find the declaration of element 'stringSubsInfo'.]
```

You can ignore this exception.

2.1.6 Oracle SOA Suite 12*c* Does Not Support Non-Oracle Databases and Third-Party Application Servers

Instances that were created using a non-Oracle database cannot be migrated to Oracle Fusion Middleware 12*c*.

To migrate the closed instances from Oracle Fusion Middleware 11*g* to Oracle Fusion Middleware 12*c*, you must create a new 12*c* SOA domain using a supported Oracle database. Active 11*g* instances must be completed using the existing 11*g* server.

2.1.7 MissingResourceException May Occur During Reconfiguration

The following exception appears in the `reconfig.log` file after invoking the Reconfiguration Wizard with `-log_priority=ALL`:

```
java.util.MissingResourceException: No bundle found for base name
config-template
```

You can ignore this exception.

2.1.8 Analytics Data for 11*g* (11.1.1.7) Composites Created Without Roles Are Not Migrated to 12*c*

Analytics data for 11*g* (11.1.1.7) composites without any roles defined in them will not be migrated to 12*c*.

2.1.9 MDS Schema Data Not Populated During Configuration After Upgrade

When you run the Configuration Wizard after upgrading your Oracle Fusion Middleware products from Release 11*g* (11.1.1.6) to Release 12*c*, the MDS schema data might not be populated in the schema table on the JDBC Component Schema screen.

You must manually enter MDS schema data into the schema table on the JDBC Component Schema screen before continuing.

2.1.10 Notification Queue Cannot Be Selected After Upgrade

After you upgrade Oracle SOA Suite from Release 11*g* (11.1.1.6) MLR to Release 12*c*, you should be able to select a Notification Queue from the Oracle SOA Suite for Healthcare Integration Runtime Settings.

However, Oracle SOA Suite for Healthcare Integration does not display the **JMS Send to Internal** channels in the **Notification Queue** drop-down list after you upgrade.

To work around this issue, change or update other Oracle SOA Suite for Healthcare Integration runtime settings and save the changes. Then, Oracle SOA Suite for Healthcare Integration should display the **JMS Send to Internal** channels in the **Notification Queue** list.

2.1.11 Business Process Composer Appears to Freeze After Migration

When you log into Oracle Business Process Composer after upgrading your environment from Release 11*g* (11.1.1.7) to Release 12*c*, process migration is launched. After migration finishes, a default space is created and projects are migrated. However, the composer appears to freeze.

As a workaround, log out of the composer, close the browser, and clear the browser cache. You can then log in again to continue working in the composer.

2.1.12 Oracle HTTP Server Upgrade Overwrites Node Manager Configuration

While upgrading your Oracle HTTP Server from Release 11*g* (11.1.1.7) to 12*c* when you have a Managed Server being upgraded in the same domain as your HTTP Server and when you have a customized port value for the Node Manager, the Reconfiguration Wizard upgrades the Node Manager and the Managed Server successfully. However, when you run the Upgrade Assistant to upgrade the component configurations, the Upgrade Assistant overwrites the customized Node Manager configuration with the default values for the Node Manager host and port. As a result, a new machine entry is created in the WebLogic Server Administration Console. And, the Managed Server is assigned to this new, non-working machine set by the Reconfiguration Wizard.

After running Upgrade Assistant, if `config.xml` has any Oracle HTTP Server instances referring to the duplicate Node Manager, then follow the steps below to correct these instances:

1. Modify the `nodemanager.properties` file to set the Listen Port to the appropriate value.

    This value should contain the same port value used in the previous version and should match the value in `config.xml` for the Node Manager instance.

2. Restart the Node Manager.

3. Modify the configuration via the WebLogic Administration Server to remove the duplicate NodeManagerMBean and MachineMBean.

4. Alter any references to the deleted MachineMBean to point to the valid MachineMBean.

5. Restart the WebLogic Administration Server.

2.1.13 EDN-JMS Backlogged Events Do Not Migrate During Upgrade

Backlogged events in the EDN-JMS queue do not migrate when you upgrade from Oracle Fusion Middleware 11*g* to Oracle Fusion Middleware 12*c*.

Before you upgrade, check if there are any backlogged events in the JMS queue. After you finish upgrading, verify that these backlogged events are not in the queue.

You can verify if there are any backlogged events in the JMS queue via the Oracle WebLogic Server Administration Console:

1. From the **Domain Structure**, select **soainfra**, then **Services**, **Messaging**, **JMS Modules**, **SOAJMSModule**, and **EDNQueue**.

2. Select **Monitoring** tab.

3. Select **SOAJMSModule** and **EDNQueue**, and then click **Show Messages**.

2.2 Issues Related to Product Patching

This section contains the following topic:

OPatch Does Not Restore Regenerated Libraries Even After User Quits the Patching Process

2.2.1 OPatch Does Not Restore Regenerated Libraries Even After User Quits the Patching Process

If the OPatch postscript fails and users choose not to proceed with the patching process and quit, OPatch does not restore regenerated libraries correctly.

Check the OPatch log to determine whether or not library regeneration has occurred. If the library regeneration has occurred, apply the patch again. If the OPatch postscript fails again, choose y to proceed with the patching process. OPatch will not roll back the patch automatically this time; the user needs to roll back OPatch manually to restore the pre-patch environment.

For information on how to roll back a patch, see Using OPatch to Patch Oracle Fusion Middleware in *Patching with OPatch.*

3

Oracle Fusion Middleware Administration

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

- General Issues and Workarounds
- Configuration Issues and Workarounds
- Documentation Errata for Oracle Fusion Middleware Administering Oracle Fusion Middleware

3.1 General Issues and Workarounds

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

- Problems Using Oracle Database 12.2 with This Release
- Limitations in Moving from Test to Production
- MDS purgeMetadata Command Can Take a Long Time
- Node Manager May Return An Error About ADR
- SSL Certificate Chain Is Required on Certain Browsers

3.1.1 Problems Using Oracle Database 12.2 with This Release

When you use Oracle Database 12.2 or higher, you may run into the following issues:

- When you create a Metadata Services (MDS) database schema using Repository Creation Utility (RCU) or upgrade the MDS database schema using Upgrade Assistant against Oracle Database 12.2, the operation may fail.

  You may receive the error ORA-28104: input value for statement_types is not valid. This is because, as part of a security fix beginning with Oracle Database 12.2, for the DBMS_RLS.ADD_POLICY procedure, statement types of INSERT and UPDATE_CHECK with a value of FALSE (the default value) are no longer allowed. The security fix results in an ORA-28104 error while registering Virtual Private Database policies.

  This error is returned to avoid giving the impression that Virtual Private Database policies are enforced for INSERT statements, which is not the case.

  To work around this error, configure the system with "_allow_inserts_with_UPDATE_CHECK" set to True, by executing the following SQL command:

  ```
  ALTER SYSTEM SET "_allow_insert_with_update_check"=TRUE scope=spfile
  ```

Then, restart the database and re-run RCU or the Upgrade Assistant to create or upgrade the MDS database schema.

- When you use Oracle Fusion Middleware with Oracle Database 12.2 or higher, you may encounter the following error:

```
ORA-00932: inconsistent datatypes: expected SYS.AQ$_JMS_MESSAGE got SYS.AQ
$_JMS_MESSAGE
```

The error occurs because, during enqueue and dequeue of AQ$_JMS_MESSAGE type, the version number sent to the database server may be inconsistent. This happens when TOID (the type's unique identifier) for AQ$_JMS_MESSAGE type in type$ is a user-defined TOID and not a fixed SYSTEM defined TOID.

To work around this error, install the following patch, which replaces the ojdbc6.jar file used by Oracle Fusion Middleware:

https://updates.oracle.com/download/21663638.html

- For Oracle BI Enterprise Edition, you must use ODBC DataDirect drivers to establish connections to ODBC data sources.

ODBC DataDirect drivers are also used by the Oracle Platform Security Services (OPSS) security store implementation to access credentials.

In Oracle BI Enterprise Edition, DataDirect ODBC framework version 8.0.2 and Oracle Wire Protocol version 7.1.6 are configured for data source name (DSN) and DNS-less connectivity without additional configuration.

The certified Oracle Database versions include:

- 12.2.1.2 or higher

- 11.2.0.4 or higher

To support Oracle BI Enterprise Edition 12.2.1.2.0, you must configure the 12.2.0.1 version of Oracle Database to allow older client versions to connect. Set the minimum authentication protocol allowed when connecting to Oracle Database instances to version 11 by adding the following setting to your Oracle Database server `sqlnet.ora` file:

```
SQLNET.ALLOWED_LOGON_VERSION_SERVER=11
```

You can find additional information about the DataDirect drivers in the Progress DataDirect documentation located in the following Oracle BI Enterprise Edition 12c installation directories:

- `oracle_home\bi\common\ODBC\Merant\7.1.6\help`

- `oracle_home\bi\common\ODBC\Merant\8.0.2\help`

3.1.2 Limitations in Moving from Test to Production

Note the following limitations in moving from test to production:

- On Windows, with Oracle Data Integrator in your source environment, before you run the pasteConfig script, you must set HOSTNAME as a system variable

- If you are using Oracle Data Integrator on Windows, after you run the pasteConfig script, update the config.properties file with the following:

```
odi.shared.config.dir.path=%DOMAIN_HOME%/config/oracledi
```

- When you are moving Oracle Platform Security Services and the data is moving from LDAP to LDAP, the source and target LDAP domain component hierarchy must be same. If it is not, the Oracle Platform Security Services data movement will fail. For example, if the source is hierarchy is configured as `dc=us,dc=com`, the target LDAP must have the same domain component hierarchy.

- On Windows, Node Manager and any configured system components must be shut down before you run the copyConfig script.

- The movement scripts do not support environments where multitenancy is enabled.

- On Windows, the pasteConfig operation fails if the SSL-only mode is enabled in configurations that include both WebCenter Content and Capture. This is not an issue on Linux.

  To work around this issue, before executing the movement scripts, enable non-SSL ports in addition to SSL ports. Then, run the copyBinary, paste Binary, copyConfig and pasteConfig scripts. After the scripts complete successfully, disable non-SSL ports on the target environment so that you have an SSL-only environment.

- When you execute pasteConfig and the archive contains Oracle Platform Security Services, the script may return the following errors:

```
oracle.security.audit.util.StrictValidationEventHandler handleEvent
WARNING: Failed to validate the xml content. Reason: cvc-complex-type.2.4.b:
The content of element '' is not complete. One of
'{"http://xmlns.oracle.com/ias/audit/audit-2.0.xsd":source}' is expected..
Apr 24, 2013 6:28:29 AM
oracle.security.audit.util.StrictValidationEventHandler handleEvent
WARNING: Failed to validate the xml content. Reason: cvc-complex-type.2.4.b:
The content of element '' is not complete. One of
'{"http://xmlns.oracle.com/ias/audit/audit-2.0.xsd":source}' is expected..
```

  You can ignore these errors.

- In an environment with Oracle SOA Suite, Oracle B2B, or Oracle Business Process Management, you may receive the one of the following sets of errors when the Oracle WebLogic Server Administration port is enabled:

```
SEVERE : [PLUGIN][SOA] - ERROR - Apr 19, 2016 2:03:24 AM - CLONE-53003  Error
in examining B2B.
SEVERE : [PLUGIN][SOA] - CAUSE - Apr 19, 2016 2:03:24 AM - CLONE-53003  B2B
examination failed.
SEVERE : [PLUGIN][SOA] - ACTION - Apr 19, 2016 2:03:24 AM - CLONE-53003
Make  sure that all the specified values are correct and domain configuration
isvalid. Check managed server logs and clone logs for more details.
oracle.as.t2p.sdk.model.exception.FMWT2PCopyConfigException: Apr 19, 2016
2:03:24 AM - CLONE-53003  Error in examining B2B.User 'principals=[weblogic,
Administrators]' has administration role. All tasks by administrators must go
through an Administration Port.

SEVERE : [PLUGIN][SOA] - ERROR - Apr 25, 2016 4:38:13 AM - CLONE-53004  Error  in
 examining Human WorkFlow.  SEVERE : [PLUGIN][SOA] - CAUSE - Apr 25, 2016 4:38:13
 AM - CLONE-53004  Human  WorkFlow examination failed.  SEVERE : [PLUGIN][SOA] -
ACTION - Apr 25, 2016 4:38:13 AM - CLONE-53004  Make  sure that all the specified
values are correct and domain configuration is  valid. Check managed server logs
and clone logs for more details.
oracle.as.t2p.sdk.model.exception.FMWT2PCopyConfigException: Apr 25, 2016
4:38:13 AM - CLONE-53004  Error in examining Human WorkFlow.
```

```
Apr 25, 2016  4:38:13 AM - CLONE-53004  Error in examining Human
WorkFlow.oracle.bpel.services.workflow.client.WorkflowServiceClientException:
javax.naming.AuthenticationException: User 'principals=[weblogic,
Administrators]' has administration role. All tasks by administrators must go
through an Administration Port.
[Root exception is java.lang.SecurityException: User 'principals=[weblogic,
Administrators]' has administration role. All tasks by administrators must go
through an  Administration Port.]
```

To workaround this issue, disable the Oracle WebLogic Server Administration port using the Administration Console.

- When your environment includes Oracle Business Activity Monitoring, the bamcommand.log.0 log file may contain the following benign error message after you execute the pasteConfig script:

```
oracle.beam.impexp.commandline.util.ImportExportClient.main: Exception
occurred in method
Import/Export(-dbusername,DEFAULT,-dburl,DEFAULT,-dbdriver,DEFAULT,-cmd,import,
-file,/scratch/aime/t2pprodsoa/soa/bam/bin/BAMT2PEMSArtifacts.zip,-mode,append)
Exception: java.io.FileNotFoundException:
/scratch/oracle/t2pprodsoa/soa/bam/bin/BAMT2PEMSArtifacts.zip (No such file or
directory)
```

You can ignore this message.

- When your environment includes Oracle Business Activity Monitoring, the log file may contain the following benign error message after you execute the copyConfig or pasteConfig scripts:

```
<Apr 29, 2014 1:04:39 AM MDT> <Warning> <JNDI> <BEA-050001>
<WLContext.close() was called in a different thread than the one in which it
was created.>
```

You can ignore this message.

- When you move any environment which contains a Web Tier component, such as Oracle HTTP Server, the copyBinary script may return the following message:

```
Warning Message  :1
  Nov 20, 2014 10:47:57 - WARNING - CLONE-20266   Unable to archive a file.
  Nov 20, 2014 10:47:57 - CAUSE - CLONE-20266   The file
"/scratch/oracle/webtier6400/network/log/cgisock.9465" did not have
sufficient permission to access.
  Nov 20, 2014 10:47:57 - ACTION - CLONE-20266   Correct the permission of
above file and run copyBinary again.
```

You can safely ignore this message.

3.1.3 MDS purgeMetadata Command Can Take a Long Time

When autopurge is not enabled or manual purge is not frequently executed, the MDS database repository may have a lot of older (non-tip) versions accumulated. In this situation, the next purge operation may take a very long time (possibly hours). You may need to terminate the purge operation to avoid affecting the system performance. Currently, it is not possible to terminate the purge operation using Oracle Fusion Middleware tools. Instead, you must terminate the operation at the database level.

To terminate the purge operation, contact the DBA. The DBA can identify the database session where the purgeMetadata operation is executing and kill the session to stop the purge. Note that MDS purges 300 documents in each iteration, commits the

change, and repeats until all purgeable documents are processed. As a result, killing the database session does not affect already committed purge iterations.

3.1.4 Node Manager May Return An Error About ADR

In some circumstances, when you start a Managed Server from the Administration Console, an error similar to the following is logged on the Node Manager console. It indicates an issue while initializing Automatic Diagnostic Repository (ADR).

```
SEVERE: failure initializing ADR oracle.dfw.common.DiagnosticsException: failure
loading adrci binary from the system path: null
Cause: DFW-40112: There was an error executing adrci commands; the following errors
have been found "null"
```

You can ignore this error because Node Manager does not use ADR.

3.1.5 SSL Certificate Chain Is Required on Certain Browsers

When you configure SSL for Oracle HTTP Server, you may need to import the entire certificate chain (rootCA, Intermediate CA's and so on).

Certain browsers, for example Internet Explorer, require that the entire certificate chain be imported to the browsers for the SSL handshake to work. If your certificate was issued by an intermediate CA, you will need to ensure that the complete chain of certificates is available on the browser or the handshake will fail. If an intermediate certificate in the chain expires, it must be renewed along with all the certificates (such as OHS server) in the chain.

3.2 Configuration Issues and Workarounds

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

Fusion Middleware Control Incorrectly Refers to Shared Service Tables

3.2.1 Fusion Middleware Control Incorrectly Refers to Shared Service Tables

The Service table page of Fusion Middleware Control contains a mention of shared service tables. Shared service tables are not supported.

3.3 Documentation Errata for *Oracle Fusion Middleware Administering Oracle Fusion Middleware*

There are no documentation errata at this time.

4

High Availability

This chapter describes the issues related to Oracle Fusion Middleware high availability.

The following topics are covered in this chapter:

- Issues Related to Automatic Service Migration
- Issues Pertaining to Oracle BAM
- DELETED for PS3– Issues Pertaining to Cross Component Wiring

4.1 Issues Related to Automatic Service Migration

This section contains the following topic:

- Oracle User Messaging Service 12c (12.1.3) Does Not Support Automatic Service Migration

4.1.1 Oracle User Messaging Service 12*c* (12.1.3) Does Not Support Automatic Service Migration

In enterprise deployments that take advantage of high availability, Oracle recommends that you configure Oracle BAM to use Automatic Service Migration, which migrates specific services to a different Managed Server in the cluster when a server fails.

However, in some scenarios where Oracle BAM is producing constant and intensive User Messaging Service (UMS) messages, a Managed Server failure might leave some alert messages stuck in the UMS queues. This is because UMS 12*c* (12.1.3) does not currently support Automatic Service Migration.

To workaround this issue, you can recover messages in the UMS queues by restarting the failed Oracle BAM Managed Server. To resume the appropriate capacity and load sustainability after a BAM server failure, you must do two things:

- Restart the failed Managed Server.

- Fail back the migrated services to the original Managed Server.

For more information, see Failing Back Oracle BAM Services After Automatic Service Migration Occurs in *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle SOA Suite*.

If a BAM server restart is not compatible with your system's recovery time objectives (RTO), then you can configure UMS with Advanced Queuing (AQ) JMS instead of the default JMS provider. For more information, see Appendix B, Configuring User Messaging Service with AQ JMS, in *Oracle Fusion Middleware Administering Oracle User Messaging Service*.

4.2 Issues Pertaining to Oracle BAM

This section contains the following topic:

Configuring Oracle BAM After Scale Up

4.2.1 Configuring Oracle BAM After Scale Up

Oracle BAM requires additional configuration steps after you configure the domain. See the topic Configuring BAM for High Availability in the 12.1.3 version of the *Oracle Fusion Middleware High Availability Guide*.

4.3 DELETED for PS3– Issues Pertaining to Cross Component Wiring

This topic includes the following issue:

DELETED for PS3:SOA Managed Servers Not Updated (Cross Component Wiring)

When you add or remove Managed Servers to a cluster and ESS and WSMPM provide services to SOA and publish their services to the service table, SOA Managed Servers do *not* receive these updates in a cross component wiring setup unless you force a bind.

DELETED for PS3: 503 HTTP Error for POST Requests During Scale Down or Failover

Oracle Service Bus and SOA use web service invocations that in turn use the HTTP request method POST.

4.3.1 DELETED for PS3:SOA Managed Servers Not Updated (Cross Component Wiring)

When you add or remove Managed Servers to a cluster and ESS and WSMPM provide services to SOA and publish their services to the service table, SOA Managed Servers do *not* receive these updates in a cross component wiring setup unless you force a bind.

To workaround this issue, you must force your cross component wiring setup to get the complete list of cluster members.

To use the cluster_name syntax with WSMPM:

1. Log into Fusion Middleware Control.

2. Select **Cross Component Wiring-Service Tables** from the WebLogic Domain drop down menu.

3. Select the *OWSM Policy Manager url:oracle:fmw.owsm-pm:t3* row then click **Edit**.

4. Update the `t3` and `t3s` values with the cluster name syntax `t3://`*clustername*, for example, `t3://WSM-PM_Cluster`. Click **OK**.

5. Select **Cross Component Wiring — Components** from the WebLogic Domain drop down menu.

6. Select**OWSM Agent**.

7. In Client configurations, select the row *owsm-pm-connection-t3* and click **Bind**.

8. Click **OK**.

4.3.2 DELETED for PS3: 503 HTTP Error for POST Requests During Scale Down or Failover

Oracle Service Bus and SOA use web service invocations that in turn use the HTTP request method POST.

If a POST request is sent to a WebLogic server that is shutting down (for example, during scale down or failover) and the WebLogic server can't complete the request, the load balancer (Oracle HTTP Server or Oracle Traffic Director) returns the error `HTTP Error 503 — Service Unavailable` to the invoker. This error message is expected because POST requests don't cache nor idempotent.

5

Platform Security Services

This chapter describes issues associated with Oracle Platform Security Services and Library Oracle Virtual Directory. It includes the following topics:

5.1 Configuration Issues and Workarounds

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

5.1.1 libovdconfig.bat script Does Not Support a Space in File Path

On the Microsoft Windows platform, the `libovdconfig.bat` script does not work if the path to your Java installation in the `-jreLoc` option includes a space character. For example, `C:\Program Files\Java\jdk1.7.0_21`.

The workaround is to provide the path to your Java installation in DOS 8.3 format.

For example:

```
-jreloc C:\Progra~1\Java\jdk1.7.0_21
```

5.1.2 Users with Same Name in Multiple Identity Stores

If a user name is present in more than one LDAP repository and the `virtualize` property is set to use LibOVD, then the data in only one of those repositories is returned when you query that user name with the User and Role API.

5.1.3 JNDI Connection Exception and JDK Version

JNDI Connections throw the `javax.naming.NamingException: LDAP response read timed out, timeout used:-1ms` exception.

This issue is found in domains configured to use an Oracle Identity Directory security store, or when using the User Role API or IGF/IDS against an LDAP identity store on any of the following JDK versions: Java SE 6u85, 7u72, or 8u20.

Workaround

Update the JDK to a version supported in this release. For certified JDK versions, see Oracle Fusion Middleware 12c Certifications at http://www.oracle.com/technetwork/middleware/ias/downloads/fusion-certification-100350.html.

5.1.4 Limitation on the Maximum Length of Policy Artifact Names and Stripe Names

Due to the limitation on the maximum column length of index in MS SQL Server, when using MS SQL Server as the OPSS security store, the OPSS policy artifact names and OPSS application policy stripe names cannot exceed 147 characters and 226 characters, respectively.

Currently, there is no workaround for this issue.

5.1.5 Limit USE Privilege to OPSS and IAU Schemas in Oracle EBR Environment

In Oracle Edition-based redefinition (EBR) environment, after creating an edition, OPSS recommends that you explicitly grant the USE privilege on the edition to OPSS schemas and Audit schemas, rather than granting the USE privilege on the edition to PUBLIC. For information about EBR, see Using Edition-Based Redefinition in *Oracle Database Development Guide*.

To grant the USE privilege on the edition to OPSS and AUDIT schemas, use the SQL statement GRANT USE ON EDITION in the following manner:

```
GRANT USE ON EDITION edition_name TO OPSS_SCHEMA;
GRANT USE ON EDITION edition_name TO IAU_SCHEMA;
GRANT USE ON EDITION edition_name TO IAU_APPEND_SCHEMA;
GRANT USE ON EDITION edition_name TO IAU_VIEWER_SCHEMA;
"""
```

For information about the GRANT statement, see Oracle Database SQL Language Reference.

5.2 WSLT Security Commands Issues

The following sections describe issues with security WLST commands:

listAppRoles Command Outputs Wrong Characters

listResources Command Throws Exception

5.2.1 listAppRoles Command Outputs Wrong Characters

On Linux and Windows platforms, when the locale is set to non-UTF8 locales, such as the fr_FR_iso88591 locale, the listAppRoles command may output the character '?' instead of the expected character.

5.2.2 listResources Command Throws Exception

The listResources command throws an exception if the optional type argument is not specified. The workaround is to specify a value for this argument.

5.3 Oracle Fusion Middleware Audit Framework

The following sections describe issues with the Oracle Fusion Middleware Audit Framework:

Configuring Auditing for Oracle Access Manager

Audit Reports do not Display Translated Text in Certain Locales

Audit Reports Always Display in English

Property maxDirSize not used in Audit Service

5.3.1 Configuring Auditing for Oracle Access Manager

Although Access Manager appears as a component in Fusion Middleware Control, you cannot configure auditing for Access Manager using Fusion Middleware Control.

5.3.2 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. Business Intelligence Publisher can start in different locales and, at start-up, you can specify the language of choice by setting the preferred locale in Preferences.

If you started Oracle Business Intelligence Publisher on any of the locales:

- zh_CN (simplified chinese)

- zh_TW (traditional chinese)

- pt_BR (portuguese brazilian)

then the entire report including labels, headers, titles shows in English.

This issue will be fixed in a future release of Business Intelligence Publisher.

5.3.3 Audit Reports Always Display in English

The standard audit reports packaged with Business Intelligence Publisher support a number of languages, but report titles and descriptions are displayed in English even when they have been translated.

This issue will be fixed in a future release of Business Intelligence Publisher.

5.3.4 Property maxDirSize not used in Audit Service

The configuration property `maxDirSize` has been deprecated in Release 12*c*. It is no longer used in the OPSS audit service.

5.4 Documentation Errata

There are no documentation errata.

6

Oracle User Messaging Service

This chapter describes issues associated with Oracle User Messaging Service (UMS). It includes the following topics:

Deprecation Notice

General Issues and Workarounds

Configuration Issues and Workarounds

6.1 Deprecation Notice

Oracle User Messaging Service is deprecated in Release 12.2.1.

6.2 General Issues and Workarounds

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

Extension Driver has Different Target Types for 11g and 12c

Node Manager Fails to Start After Configuring Oracle User Messaging Service and Oracle HTTP Server

Messages Metrics Rendered as Unavailable in the Performance Page for User Messaging Server

User Messaging Service URLs Unavailable After Restart

User Messaging Service Upgrade from 11g to 12c may Fail

Duplicate Messages Rendered in Twitter Driver

Exceptions Occur while Registering Multiple Drivers and Access Points

User Messaging Service schema does not have connect button in the Upgrade Assistant

Message resend from EM Message Status page failed

WLST command manageUserCommunicationPrefs has changed

Invalid Objects from ORASDPM Schema Appear on BPM Upgrade

6.2.1 Extension Driver has Different Target Types for 11g and 12c

In Oracle Enterprise Manager Fusion Middleware Control 12c, the User Messaging Service Extension driver will be displayed under the User Messaging Service folder, instead of the Application Deployments folder in the left navigation pane. The driver

performance data is also available for the extension driver. This is an expected behavior.

6.2.2 Node Manager Fails to Start After Configuring Oracle User Messaging Service and Oracle HTTP Server

In a cluster environment, the node manager may fail to start if you have configured Oracle User Messaging Service (UMS) and Oracle HTTP Server in a domain with Oracle Real Application Clusters (RAC) multi data sources.

Workaround

In a clustered environment with RAC setup, you may have to increase the maximum number of connections allowed on the database server. Set this value to the sum of maximum number of connections per data source for each WebLogic Server. For example, when Oracle RAC is used with three nodes, that is two WebLogic Servers with three Oracle RAC data sources, set the maximum number of connections to 600 (2 x 3 x 100).

6.2.3 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. The UMS server home page may also display the message counts (in Statistics section) as **Unavailable**.

6.2.4 User Messaging Service URLs Unavailable After Restart

Upon restarting the User Messaging Service 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 User Messaging Service 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 User Messaging Service server again (two or more restarts may be required).

- If multiple User Messaging Service server restarts are not sufficient, then restart the entire Oracle WebLogic Server instance.

6.2.5 User Messaging Service Upgrade from 11g to 12c may Fail

In some scenarios, while upgrading UMS from 11*g* to 12*c*, the upgrade may fail with the following error:

```
[2014-04-10T20:38:14.915-07:00] [UCSUMS] [ERROR] []
[upgrade.UCSUMS.UCSUMS_CONFIGURATION_PLUGIN] [tid: 70] [ecid:
435559f9-7615-48f8-8e80-950a7f10e152-00000001,0] [[com.jcraft.jsch.JSchException:
verify: false
```

The `com.jcraft.jsch.JSchException: verify: false` exception is intermittent. As a workaround, try to upgrade again.

6.2.6 Duplicate Messages Rendered in Twitter Driver

Each time the Twitter driver is restarted, the last 20 tweets are fetched for the configured user. This means, that the first receive attempt after restarting the application might return some messages that have already been seen previously. As a workaround, if you want to handle every tweet only once, you can use the header containing the Twitter Id.

6.2.7 Exceptions Occur while Registering Multiple Drivers and Access Points

Issue and Workaround

Access Points are registered in a new transaction meaning that if the client application registers Access Points in a transaction that is roll-backed, the Access Points are still stored. If the Access Points must be removed, deregister the Application as described in 5.1.2 Deregistering Messaging Client Applications at `https://docs.oracle.com/middleware/1213/ums/administer/ns_monitor.htm#UMSAG37181`.

6.2.8 User Messaging Service schema does not have connect button in the Upgrade Assistant

While upgrading the UMS schema using Oracle Fusion Middleware Upgrade Assistant, if the *Individually Selected Schemas* option is chosen, the connect button that is used to obtain connection to the database, and the drop-down list that is used to populate the available UMS schema names will not be present. The workaround is to manually enter the value for schema name.

6.2.9 Message resend from EM Message Status page failed

Resend for deployment with unclustered managed servers

Resend for deployment with multiple clusters

6.2.9.1 Resend for deployment with unclustered managed servers

In a domain with UMS deployed in multiple unclustered managed servers, the Message Status page in EM for one UMS server can display messages sent through another server in the domain. Resending a message that was originally sent from another server will result in a resend failure. A resend operation must be attempted from the same server through which the message was originally intended to be sent. To resend the message through another server, navigate to the Message Status page of the right UMS server target in the domain and resend.

For example, in a domain with two managed servers (a_ums_server and b_ums_server), perform the following steps for a proper resend:

1. Select target "usermessagingserver (a_ums_server)" from the left navigation tree, and click on the **Message Status** menu item.

   The page displays all messages in the message status table, based on the default search criteria.

2. Click on a message in the table, and view the Message Details of the message to determine the UMS server used for the original send of the message.

For instance, if the value of the Engine parameter for the selected message is "/ unclustered_base_domain/base_domain/b_ums_server/usermessagingserver", the current target server (a_ums_server) does not match the server in the Engine parameter (b_ums_server). Clicking on **Resend** button for this selected message will result in the following error: *Invalid server selected for resend message operation*.

3. To resend this message, navigate to the "usermessagingserver(b_ums_server)" in the left navigation tree, click on the message, verify that the target name and server name in the Engine details match, and click on **Resend**.

6.2.9.2 Resend for deployment with multiple clusters

In a domain with UMS deployed in multiple clusters, the Message Status page in EM for one UMS server (belonging to a cluster) can display messages sent through another server in the domain. Resending a message that was originally sent from another server (belonging to a different cluster) will result in a resend failure. A resend operation must be attempted from the same cluster through which the message was originally intended to be sent. To resend the message through another cluster, navigate to the Message Status page of the right UMS server target (one of the UMS servers in the right cluster) in the domain and resend.

For example, in a domain with two clusters (a_ums_cluster and b_ums_cluster) with each cluster containing two managed servers (a_ums_cluster with a_ums_server1 and a_ums_server2, b_ums_cluster with b_ums_server1 and b_ums_server2), perform the following steps for a proper resend:

1. Select target "usermessagingserver (a_ums_server1)" from the left navigation tree, and click on the **Message Status** menu item.

   The page displays all messages in the message status table, based on the default search criteria.

2. Click on a message in the table, and view the Message Details section of the message to determine the UMS server used for the original send of the message.

   As seen in the sample, the value of the Engine parameter for the selected message is "/cluster_base_domain/base_domain/b_ums_server1/usermessagingserver".

   Since the target server (a_ums_server1) and the server in the Engine parameter (b_ums_server1) do not belong to the same cluster, clicking on **Resend** button for this selected message will result in the following error: *Invalid server selected for resend message operation*.

3. To resend this message, navigate to the "usermessagingserver (b_ums_server1)" in the left navigation tree, click on the message, verify that the target name and server name in the Engine details match (or are in the same cluster), and click on **Resend**.

6.2.10 WLST command manageUserCommunicationPrefs has changed

The function of WebLogic Scripting Tool (WLST) command `manageUserCommunicationPrefs` has changed. The WLST command no longer connects to the managed server during command execution. Instead, the WLST command now reuses the MBeanServer connection to connect to the managed server. Due to this, the connecting URL, username, and password are deleted from all variants of the `manageUserCommunicationPrefs` command.

6.2.11 Invalid Objects from ORASDPM Schema Appear on BPM Upgrade

When upgrading Business Process Management (BPM) projects from Oracle 11g to 12c, invalid objects from Oracle Service Delivery Platform Messaging (ORASDPM) schema appear in the database.

Workaround: There is no workaround as the invalid objects do not cause any loss of functionality.

6.3 Configuration Issues and Workarounds

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

Use Correct SSL Trust Store When Configuring Drivers

WebLogic Administrator cannot update UMS configuration in Enterprise Manager

6.3.1 Use Correct SSL Trust Store When Configuring Drivers

Before configuring any User Messaging Service Driver (such as the Email Driver), to connect to a remote gateway using SSL, ensure that the SSL Trust Store is properly configured as described in Configure keystores in *Oracle Fusion Middleware Oracle WebLogic Server Administration Console Online Help*.

Ensure that the value of the JVM system property (`javax.net.ssl.trustStore`), if set in `$DOMAIN_HOME/bin/setDomainEnv.sh` (or Windows equivalent file), points to the correct trust store that you want to use.The Java Standard Trust Store is located at:

`$JAVA_HOME/jre/lib/security/cacerts` or `$BEA_JAVA_HOME/jre/lib/security/cacerts`

With the default out-of-the-box configuration of SSL trust store, that is with the Java Standard Trust Store, the UMS driver will be able to connect to the Oracle Beehive Email Server over SSL. Note that in some installations, for example, when you have SOA installed, the Java Standard Trust Store is replaced by a Demo Trust Store. In such situations, the Trust Store may not contain the valid root certificate needed by Oracle Beehive Email Server. To resolve this issue, follow the instructions for using the correct SSL trust store. Replacing the `DemoTrust` keystore in the `setDomainEnv.sh` file (or Windows equivalent file) with the Java Standard SSL trust store will enable UMS email driver to connect successfully over SSL to the Oracle Beehive Email Server.

6.3.2 WebLogic Administrator cannot update UMS configuration in Enterprise Manager

The WebLogic administrator does not have the permission to edit the User Messaging Service (UMS) configuration in the Enterprise Manager for multi-tenancy. Therefore, the add, edit, and delete buttons for the driver configuration page as well as the user preference configuration page are disabled for the WebLogic administrator.

> **Note:** To edit the UMS configuration, you need to log in as a partition administrator.

7

Web Services

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

It includes the following topics:

> **Note:**
>
> To resolve WebLogic Web Services issues, see Web Services and XML Issues and Workaroundsin the *Oracle Fusion Middleware Release Notes for Oracle WebLogic Server*.

Upgrade Fails When OWSM Data Source Is Configured as a Multi Data Source

Using a Repository Backed by a Hardened Oracle Database

Using Multibyte User Credentials with the wss_http_token_* Policy

Performing a Bulk Upload of Policies

Removing Post-Deployment Customizations

Reviewing Localization Limitations

Fusion Middleware Control Does Not List Policies When Two Servers Are SSL Enabled (Two-way SSL)

Web Service Test Page Cannot Test Input Arguments Bound to SOAP Headers

Possible Limitation When Using Custom Exactly-one Policies

Security Policies Do Not Work on Subscriber Mediator Component

Policy Table Might Not Show Attached Policies for Some Locales

Restart Applications to Get an Accurate Policy Usage Count

Performance Improvements In Web Services Policy Pages

Bulk Attachment of Policies Is not Supported In the Current Release

Fusion Middleware Control Returns You to the OWSM Policies Page After You Edit a Client Policy

Domain Configuration Is Not Supported in Classpath Mode

Avoiding XML Encryption Attacks

OWSM Introspection Plug-in Fails When a Proxy Is Configured Incorrectly

Cross-Domain Policy Manager Configuration Is Not Supported In this Release

7.1 Upgrade Fails When OWSM Data Source Is Configured as a Multi Data Source

When you attempt to upgrade Oracle Weblogic and Oracle SOA Suite from 11g to 12c
Release 12.13 and later, if the 11g instance uses a mds-owsm datasource that is
configured to be a multi data source, the Upgrade Assistant fails with the following
error:

```
WSM] [INCIDENT_ERROR] [] [upgrade.WSM.WSMPLUGIN] [tid: 63] [ecid: 235be93f-e646-47fb-
b960-34947fed8f86-00000001,0] [[
oracle.ias.update.exception.UpgradeException: WSMERROR-00015: Failed to read the
Oracle WSM datasource connection details.
at
oracle.wsm.lifecycle.upgrade.impl.WSMUpgradePlugin.initializePluginData(WSMUpgradePlu
gin.java:227)
at oracle.wsm.lifecycle.upgrade.impl.WSMUpgradePlugin.upgrade(WSMUpgradePlugin.java:
263)
at oracle.ias.update.plugin.Plugin.upgrade(Plugin.java:576)
at oracle.ias.update.plan.PlanStep.upgrade(PlanStep.java:377)
at oracle.ias.update.UpgradeDriver.doUpgrades(UpgradeDriver.java:947)
at oracle.ias.update.gui.UAUpgradeThread.run(UAUpgradeThread.java:41)
```

> **Note:**
>
> This error occurs even after you apply patch 19865550 to prevent a message warning you of an unsupported multi data source.

To work around this issue, perform the following steps:

1. Modify the mds-owsm data source, changing it from a multi data source to a generic data source.

2. Run the Upgrade Assistant.

3. Once the upgrade completes successfully, if necessary, modify the data source back to its original configuration.

7.2 Using a Repository Backed by a Hardened Oracle Database

Oracle Web Services Manager uses an MDS repository to store metadata such as policies, assertion templates, and policy usage data.

Oracle Web Services Manager 12c (12.2.1) is certified to work with a repository backed by a hardened Oracle Database.

See Managing the OWSM Repository in *Oracle Fusion Middleware Securing Web Services and Managing Policies with Oracle Web Services Manager*

7.3 Using Multibyte User Credentials with the 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 Securing Web Services and Managing Policies with Oracle Web Services Manager*.

7.4 Performing a Bulk Upload of Policies

When you perform 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 Administering Web Services*.

7.5 Removing Post-Deployment Customizations

When the `connections.xml` file is changed after deployment by using the `AdfConnection` MBean, the complete connection is saved as a customization. This means that changes to the connection in a redeployed application are overwritten by the customization.

When you use Fusion Middleware Control to make changes to an application's `connections.xml` file after deployment, a new `connections.xml` file is created as a customization and stored in the MDS repository. This customization persists for the

life of the application. Therefore, if you redeploy the application, the customized `connections.xml` file continues to be applied as a customization on the application.

To allow the redeployed application's `connections.xml` file to be applied without the prior customization (from Fusion Middleware Control), you must explicitly remove the `connections.xml` customizations from the MDS repository.

For example, if you deploy an application with a Web services data control, then use Fusion Middleware Control to attach the `username_token_client_policy`, and subsequently detach the policy. Then, you return to JDeveloper to edit the application and attach the `http_token_client_policy`, and redeploy the application. When you view the application using Fusion Middleware Control, you see that it is not using the `http_token_client_policy` that you attached. That is because it is using the customized connections.xml file that you previously created using Fusion Middleware Control.

If you remove the connections.xml customizations from the MDS repository, the application will use the its own `connections.xml` file.

7.6 Reviewing Localization Limitations

The following information is supported in **English only** in this release of Oracle Enterprise Manager:

- All fields in the policy and assertion template except the `orawsp:displayName` field.

- If using the `?orawsdl` browser address, the `orawsp:description` field.

7.7 Fusion Middleware Control Does Not List Policies When Two Servers Are SSL Enabled (Two-way SSL)

When a Managed Server is Two-way enabled SSL (for example, a SOA server hosting OWSM Policy Manager over Two-way SSL) and the Administration Server hosting Fusion Middleware Control is correctly configured to access the Two-way SSL-enabled Managed Server, Fusion Middleware Control still does not list the OWSM policies.

7.8 Web Service Test Page Cannot Test Input Arguments Bound to SOAP Headers

For Web services that have any input arguments bound to SOAP headers, the Test Web Service page in the Fusion Middleware Control console cannot show the message. Therefore, such operations cannot be tested with the **Test Web Service** page.

For example, if the input for a multi-part WSDL is viewed through Fusion Middleware Control, and one input argument is bound to a SOAP header, the composite instance fails with the following exception because the other part of the message was missing in the input:

```
ORAMED-01203:[No Part]No part exist with name "request1" in source message
```

To resolve such an issue, select XML View for Input Arguments and edit the payload to pass input for both parts of the WSDL.

7.9 Possible Limitation When Using Custom Exactly-one Policies

In some cases, there can be a limitation when using custom Exactly-one policies. For a set of assertions within the exactly-one policy, if a request message satisfies the first assertion, then the first assertion gets executed and a response is sent accordingly. However, this may not be the desired behavior in some cases because the request may be intended for the subsequent assertions.

For example, you may have a client policy that has `Timestamp=ON` and a service exactly-one policy that has a `wss11 username token` with message protection assertions: the first has `Timestamp=OFF`; the second has `Timestamp=ON`. Therefore, the first assertion in the service exactly-one policy is not expecting the Timestamp in the request, yet the second assertion does expect it. In this case, the first assertion gets executed and the response is sent with no Timestamp. However, the client-side processing then fails because it expects the Timestamp that was sent in the request.

This limitation can exist with any cases where a client policy expects a greater number of elements to be signed and a service policy does not.

7.10 Security Policies Do Not Work on Subscriber Mediator Component

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

7.11 Policy Table Might Not Show Attached Policies for Some Locales

The Directly Attached Polices table may not display the attached policies for the following locales: `zh-cn`, `zh-tw`, `ja`, `pt-br`, `es`, `fr`, `ko`.

This issue may occur when you attach a policy to the Web service endpoint in the Web service application in Fusion Middleware Control.

As a workaround, enlarge the columns.

7.12 Restart Applications to Get an Accurate Policy Usage Count

If a policy that is being referred to by a Web Service is deleted and then reimported, then its usage count is not correct and applications must be restarted to obtain an accurate usage count.

7.13 Performance Improvements In Web Services Policy Pages

Performance improvements have been made to the Web Services Policy pages in Fusion Middleware Control by removing the unnecessary role query.

7.14 Bulk Attachment of Policies Is not Supported In the Current Release

Attaching one or more policies to one or more Web services by using the bulk attachment feature is not supported in the current release. Use the Policy Set feature instead. For more information on Policy Sets, see Attaching Policies Globally Using Policy Sets Using WLST and Schema Reference for Policy Sets in *Securing Web Services and Managing Policies with Oracle Web Services Manager*.

7.15 Fusion Middleware Control Returns You to the OWSM Policies Page After You Edit a Client Policy

When you generate client policies in Enterprise Manager, the Generate Client Policies page appears and the generated policies are shown as not saved. After you save the policies, and then edit one of them, you are returned to the OWSM Policies page. This is an error in Enterprise Manager. You should be returned to the Generate Client Policies page.

To edit additional policies, use the search feature in the OWSM Policies page to locate the client policy that you wish to edit.

For more information, see Generating Client Policies from a WSDL in *Oracle Fusion Middleware Securing Web Services and Managing Policies with Oracle Web Services Manager*.

7.16 Domain Configuration Is Not Supported in Classpath Mode

If the Policy Manager URL is configured as a classpath, then domain-level configuration is not supported. All domain-level configuration information is stored in the OWSM repository, and not in the JAR file that is included in the classpath. For information about configuring the Policy Manager URL, see the following sections in *Oracle Fusion Middleware Securing Web Services and Managing Policies with Oracle Web Services Manager*:

- Configuring the Policy Manager Connection Using Fusion Middleware Control

- Configuring the Policy Manager Connection Using WLST

If you wish to manage domain-level configuration, configure the Policy Manager URL to specify a remote domain or use `auto` mode. After you have configured the new Policy Manager URL mode, you must restart the server for it to take effect.

7.17 Avoiding XML Encryption Attacks

In past releases, OWSM sent different fault codes (for example, `FailedAuthentication`, `InvalidSecurityToken`, and `FailedCheck`) for different error cases In the current release, this default behavior has been changed. OWSM now sends the `InvalidSecurity` fault code for all error cases. This has been done to avoid XML encryption attacks. An encryption attack is possible if the service sends different fault codes for different types of errors (for example, `FailedAuthentication`, `InvalidSecurityToken`, `FailedCheck`, and so on).This default behavior can be changed by setting the domain-wide agent property `use.unified.fault.code` to `false`. However, this is not recommended, because it might allow XML encryption attacks. The default value for this property, `"true"`, will cause OWSM to send the `InvalidSecurity` fault code for all error cases. For more information on the `use.unified.fault.code` property, see "Configuring Security Policy Enforcement Using WLST" in *Oracle Fusion Middleware Securing Web Services and Managing Policies with Oracle Web Services Manager*.

7.18 OWSM Introspection Plug-in Fails When a Proxy Is Configured Incorrectly

OWSM provides an introspection plug-in for Oracle Virtual Assembly Builder. This plug-in is a tool for virtualizing installed Oracle components, modifying those components, and then deploying them into an Oracle VM environment. For more information, see "OWSM Introspection Plug-in for Oracle Virtual Assembly Builder" in *Oracle Fusion Middleware Securing Web Services and Managing Policies with Oracle Web Services Manager*.

The OWSM introspection plug-in executes when you introspect a WebLogic domain using the `abctl introspectWLS12` command or Oracle Virtual Assembly Builder Studio (`abstudio.sh`). This introspection may fail in the following conditions:

- When the Administration Server listen address is configured to listen on a particular address that is different than `localhost`.

  Workaround:

  Clear the Administration Server listen address in the Administration Console to enable the local address to be in effect, as described in Configure listen address in *Oracle Fusion Middleware Oracle WebLogic Server Administration Console Online Help*.

  Then, set the Administration Server listen address to `localhost`.

- When proxy setting is performed during introspection. This introspection may fail when a proxy server is required in your networking environment and no proxy configuration is available to the tool being used to perform the introspection (for example, `abctl` or `abstudio.sh`).

  Workaround:

  If you are introspecting using `abstudio.sh`, you must bypass the proxy setting for `localhost`. To configuring the proxy, see Oracle Virtual Assembly Builder Release Notes.

  If you are introspecting with `abctl`, use the standard proxy configuration properties for Java applications. Before you issue the `abctl` command, set the properties in your environment by using the `SYSPROPS` environment variable to bypass the proxy setting for `localhost`. For example, use one of the following commands, based on your shell:

  csh: `setenv SYSPROPS '-Dhttp.proxyHost=`*myProxyHost* `-Dhttp.proxyPort=`*NN* `-Dhttp.nonProxyHosts=localhost|`*n.n.n.n*

  sh/bash/ksh: `export SYSPROPS '-Dhttp.proxyHost=`*myProxyHost* `-Dhttp.proxyPort=`*NN* `-Dhttp.nonProxyHosts=localhost|`*n.n.n.n*

  > **Note:**
  >
  > The actual proxy settings depends on your environment.

7.19 Cross-Domain Policy Manager Configuration Is Not Supported In this Release

In this release, configuration to a Policy Manager in a remote domain is not supported.

7.20 USERNAME_ID_PROPAGATION Policies Deprecated

The following `USERNAME_ID_PROPAGATION` policies are deprecated in Release 12*c* (12.2.1):

```
wss10_username_id_propagation_with_msg_protection_client_policy
wss10_username_id_propagation_with_msg_protection_service_policy
```

For details about these policies, see "Oracle Web Services Manager Predefined Policies" in *Oracle Fusion Middleware Securing Web Services and Managing Policies with Oracle Web Services Manager*.

7.21 Deprecated Commands for Oracle Infrastructure Web Services

Table 7-1 lists the WLST commands for Oracle Infrastructure Web Services (or clients) that were available in Oracle Fusion Middleware 11*g* release and which have been deprecated in 12c (12.1.2). In addition, the table lists the new WLST command equivalent and provides an example of how you can update your code to use the new command.

For more information about the WLST commands, see Web Services Custom WLST Commands in *Oracle Fusion Middleware WLST Command Reference for Infrastructure Components*.

Table 7-1   Deprecated Commands for Oracle Infrastructure Web Services

Deprecated Command (11g)	Recommended Command (12*c*)	Updating Your Code
`abortRespositorySession`	`abortWSMSession`	11*g* Release (for Repository operations): `wls:/jrfServer_domain/ serverConfig> ` **`abortRepositorySession()`** 12*c* Release (for both Repository and PolicySubject operations): `wls:/jrfServer_domain/ serverConfig> ` **`abortWSMSession()`**
`attachPolicySet`	`setWSMPolicySetScope`	11*g* Release: `wls:/jrfServer_domain/ serverConfig> ` **`attachPolicySet ('Domain("base_domain")')`** 12*c* Release: `wls:/jrfServer_domain/ serverConfig> ` **`setWSMPolicySetScope ('Domain("base_domain")')`**

Table 7-1   (Cont.) Deprecated Commands for Oracle Infrastructure Web Services

Deprecated Command (11g)	Recommended Command (12c)	Updating Your Code

`attachPolicySetPolicy`	`attachWSMPolicy`
	`attachWSMPolicies`
		11*g* Release (for both Repository and PolicySubject operation on policy set):
		
		`wls:/jrfServer_domain/`
		`serverConfig>`
		`attachPolicySetPolicy ('oracle/`
		`wss_username_token_service_policy')`
		
		12*c* Release:
		
		`wls:/jrfServer_domain/`
		`serverConfig>`
		`attachWSMPolicy('oracle/`
		`wss_username_token_service_policy')`
		
		`wls:/wls-domain/`
		`serverConfig>`**`attachWSMPolicies(["or`**
		`acle/`
		`wss_username_token_client_policy","`
		`oracle/log_policy"])`

`beginRespositorySession`	`beginWSMSession`	11*g* Release (for Repository operations):
		
		`wls:/jrfServer_domain/`
		`serverConfig>`
		`beginRepositorySession()`
		
		12*c* Release (for both Repository and PolicySubject operations):
		
		`wls:/jrfServer_domain/`
		`serverConfig>` **`beginWSMSession()`**

`clonePolicySet`	`cloneWSMPolicySet`	11*g* Release: `wls:/jrfServer_domain/` `serverConfig>` **`clonePolicySet`** **`('myNewPolicySet', 'myPolicySet')`** 12*c* Release: `wls:/jrfServer_domain/` `serverConfig>` **`cloneWSMPolicySet`** **`('myNewPolicySet', 'myPolicySet')`**

Table 7-1 (Cont.) Deprecated Commands for Oracle Infrastructure Web Services

Deprecated Command (11g)	Recommended Command (12*c*)	Updating Your Code
`commitRespositorySession`	`commitWSMSession`	11*g* Release (for Repository operations): `wls:/jrfServer_domain/ serverConfig> `**`commitRepositorySession()`** 12*c* Release (for both Repository and PolicySubject operations): `wls:/jrfServer_domain/ serverConfig> `**`commitWSMSession()`**
`createPolicySet`	`createWSMPolicySet`	11*g* Release: `wls:/jrfServer_domain/ serverConfig> `**`createPolicySet('myPolicySet', 'ws-service', 'Domain("base_domain")')`** 12*c* Release: `wls:/jrfServer_domain/ serverConfig> `**`createWSMPolicySet ('myPolicySet', 'ws-service', 'Domain("base_domain")')`**
`deletePolicySet`	`deleteWSMPolicySet`	11*g* Release: `wls:/jrfServer_domain/ serverConfig> `**`deletePolicySet('myPolicySet')`** 12*c* Release: `wls:/jrfServer_domain/ serverConfig> `**`deleteWSMPolicySet ('myPolicySet')`**
`describeRespositorySessio n`	`describeWSMSession`	11*g* Release (for Repository operations): `wls:/jrfServer_domain/ serverConfig> `**`describeRepositorySession()`** 11*g* Release (for PolicySubject operations): N/A 12*c* Release (for both Repository and PolicySubject operations): `wls:/jrfServer_domain/ serverConfig> `**`describeWSMSession()`**

Table 7-1   (Cont.) Deprecated Commands for Oracle Infrastructure Web Services

Deprecated Command (11g)	Recommended Command (12c)	Updating Your Code
detachPolicySet	detachWSMPolicy detachWSMPolicies	11*g* Release (for both Repository and PolicySubject operation on policy set): wls:/jrfServer_domain/ serverConfig> **detachPolicySet ('oracle/ wss_username_token_service_policy')** 12*c* Release: wls:/jrfServer_domain/ serverConfig> **detachWSMPolicy('oracle/ wss_username_token_service_policy')** wls:/wls-domain/ serverConfig>**detachWSMPolicies(["or acle/log_policy","oracle/ wss_username_token_client_policy"])**
displayPolicySet	displayWSMPolicySet	11*g* Release: wls:/jrfServer_domain/ serverConfig> **displayPolicySet('myPolicySet')** 12*c* Release: wls:/jrfServer_domain/ serverConfig> **displayWSMPolicySet ('myPolicySet')**
enablePolicySet	enableWSMPolicySet	11*g* Release: wls:/jrfServer_domain/ serverConfig> **enablePolicySet(true)** 12*c* Release: wls:/jrfServer_domain/ serverConfig> **enableWSMPolicySet(true)**

Table 7-1   (Cont.) Deprecated Commands for Oracle Infrastructure Web Services

Deprecated Command (11g)	Recommended Command (12c)	Updating Your Code
`enablePolicySetPolicy`	`enableWSMPolicy` `enableWSMPolicies`	11*g* Release: `wls:/wls-domain/` `serverConfig>`**`enablePolicySetPolicy(`** **`'/oracle/log_policy',false)`** 12*c* Release: `wls:/wls-domain/` `serverConfig>`**`enableWSMPolicy('/`** **`oracle/log_policy',false)`** `wls:/wls-domain/` `serverConfig>`**`enableWSMPolicies(["or`** **`acle/log_policy", "oracle/`** **`wss_username_token_client_policy"],`** **`true )`**
`exportRepository`	`exportWSMRepository`	11*g* Release: `wls:/jrfServer_domain/` `serverConfig>` **`exportRepository`** **`("/tmp/repo.zip")`** 12*c* Release: `wls:/jrfServer_domain/` `serverConfig>` **`exportWSMRepository`** **`("/tmp/repo.zip")`**
`importRepository`	`importWSMArchive`	11*g* Release (for repository documents): `wls:/jrfServer_domain/` `serverConfig>` **`importRepository`** **`("/tmp/repo.zip")`** 12*c* Release (for repository documents): `wls:/jrfServer_domain/` `serverConfig>` **`importWSMArchive`** **`("/tmp/repo.zip")`**

Table 7-1   (Cont.) Deprecated Commands for Oracle Infrastructure Web Services

Deprecated Command (11g)	Recommended Command (12*c*)	Updating Your Code
`listPolicySets`	`listWSMPolicySets`	11*g* Release: `wls:/wls-domain/` `serverConfig>`**`listPolicySets('sca-`** **`reference')`** 12*c* Release: `wls:/wls-domain/` `serverConfig>`**`listWSMPolicySets('sca`** **`-reference')`**

`migrateAttachments`	`migrateWSMAttachments`	11*g* Release:
		
		`wls:/jrfServer_domain/`
		`serverConfig>` **`migrateAttachments()`**
		
		12*c* Release:
		
		`wls:/jrfServer_domain/`
		`serverConfig>`
		`migrateWSMAttachments()`

`modifyPolicySet`	`selectWSMPolicySet`	11*g* Release:
		
		`wls:/jrfServer_domain/`
		`serverConfig>`
		`modifyPolicySet('myPolicySet')`
		
		12*c* Release:
		
		`wls:/jrfServer_domain/`
		`serverConfig>` **`selectWSMPolicySet`**
		`('myPolicySet')`

`resetWSMPolicyRepository`	`restWSMRepository`	11*g* Release:
		
		`wls:/jrfServer_domain/`
		`serverConfig>`
		`resetWSMPolicyRepository()`
		
		12*c* Release:
		
		`wls:/jrfServer_domain/`
		`serverConfig>` **`resetWSMRepository()`**

Table 7-1   (Cont.) Deprecated Commands for Oracle Infrastructure Web Services

Deprecated Command (11g)	Recommended Command (12*c*)	Updating Your Code
`setConfiguration`	`setWSMConfiguration`	11g Release `wls:/jrfServer_domain/ serverConfig>` **`setConfiguration('/WLS/myDomain')`** 12*c* Release `wls:/jrfServer_domain/ serverConfig>` **`displayWSMConfiguration('WLS/ base_domain')`**
`setPolicySetConstraint`	`setWSMPolicySetConstraint`	11*g* Release: `wls:/jrfServer_domain/ serverConfig>` **`setPolicySetConstraint ('HTTPHeader("VIRTUAL_HOST_TYPE","e xternal")')`** 12*c* Release: `wls:/jrfServer_domain/ serverConfig>` **`setWSMPolicySetConstraint ('HTTPHeader("VIRTUAL_HOST_TYPE","e xternal")')`**
`setPolicySetDescription`	`setWSMPolicySetDescriptio n`	11*g* Release: `wls:/jrfServer_domain/ serverConfig>` **`setPolicySetDescription ('Global policy set for web service endpoint.')`** 12*c* Release: `wls:/jrfServer_domain/ serverConfig>` **`setWSMPolicySetDescription ('Global policy set for web service endpoint.')`**

Table 7-1   (Cont.) Deprecated Commands for Oracle Infrastructure Web Services

Deprecated Command (11g)	Recommended Command (12c)	Updating Your Code

`setWebServicePolicyOverride`	`setWSMPolicyOverride`	11*g* Release:
		
		`wls:/jrfServer_domain/`
		`serverConfig>`
		`setWebServicePolicyOverride ('/`
		`base_domain/server1/`
		`HelloWorld#1_0','j2wbasicPolicy',`
		`'web', '{http://`
		`namespace/}WssUsernameService','JRF`
		`WssUsernamePort', 'oracle/`
		`wss_username_token_service_policy',`
		`'reference.priority', '10')`
		
		12*c* Release:
		
		`wls:/jrfServer_domain/`
		`serverConfig>` **`setWSMPolicyOverride`**
		`('oracle/`
		`wss_username_token_service_policy',`
		`'reference.priority', '10')`

`setPolicySetPolicyOverride`	`setWSMPolicyOverride`	11*g* Release (for both Repository and PolicySubject operation on policy set):
		
		`wls:/jrfServer_domain/`
		`serverConfig>`
		`setPolicySetPolicyOverride`
		`('oracle/`
		`wss_username_token_service_policy',`
		`'reference.priority', '10')`
		
		12*c* Release:
		
		`wls:/jrfServer_domain/`
		`serverConfig>` **`setWSMPolicyOverride`**
		`('oracle/`
		`wss_username_token_service_policy',`
		`'reference.priority', '10')`

`upgradeWSMPolicyRepository`	`upgradeWSMRepository`	11*g* Release:
		
		`wls:/jrfServer_domain/`
		`serverConfig>`
		`upgradeWSMPolicyRepository()`
		
		12*c* Release:
		
		`wls:/jrfServer_domain/`
		`serverConfig>`
		`upgradeWSMRepository()`

Table 7-1   (Cont.) Deprecated Commands for Oracle Infrastructure Web Services

Deprecated Command (11g)	Recommended Command (12c)	Updating Your Code
`validatePolicySet`	`validateWSMPolicySet`	11*g* Release: `wls:/jrfServer_domain/` `serverConfig>` **`validatePolicySet`** **`('myPolicySet')`** 12*c* Release: `wls:/jrfServer_domain/` `serverConfig>` **`validateWSMPolicySet`** **`('myPolicySet')`**

7.22 A Test Web Service Page Does Not Generate the Correct Date or Date Time Patterns When Importing a Locally Saved Payload

In Fusion Middleware Control, when you test a SOAP web service on the Test Web Service page, the **Import Payload** option does not generate the correct date/date time type patterns when importing a payload XML file, as follows:

- Tree View – The date time value is always formatted to a US pattern, such as `Tue Dec 30 00:00:00 PST 2014`, when the correct pattern should be `YYYY-MM-ddTHH:mm:ss` or `YYYY-MM-dd`.

- XML View – The server time zone is always incorrectly appended to the date, such as `2014-12-30-08:00`, which is not part of the imported value.

Workaround:

Clear the imported date and date time values, and then manually enter the correct values before you submit the payload.

7.23 A Test Web Service Page Does Not Save Loaded Payloads in the Correct Format

In Fusion Middleware Control, when you test a SOAP web service on the Test Web Service page, the **Save Payload** option incorrectly saves the loaded payload in Server Locale format (ISO-8859-1) instead of in UTF-8 format.

7.24 Using the Automatic Policy Configuration for STS May Not Result in a Compatible Policy for a Web Service Client

Using the automatic policy configuration for STS (Security Token Service) in OWSM may not result in a compatible policy.

Workaround:

Manually configure the STS config policy from a web service client, as described in "Manually Configuring the STS Config Policy From the Web Service Client: Main Steps" in *Securing Web Services and Managing Policies with Oracle Web Services Manager*.

7.25 Incompatible Policies Are Listed for Web Services and Clients Using SOAP Over JMS Transport

In Fusion Middleware Control, when you attach OWSM policies to web services and clients that use SOAP over JMS transport, the list of available policies includes policies that are not compatible.

See, "Which OWSM Policies Are Supported for Web Services and Clients That Use SOAP Over JMS Transport" in *Oracle Fusion Middleware Securing Web Services and Managing Policies with Oracle Web Services Manager*.

7.26 NoSuchObjectException When the Server Hosting WSM-PM is Shut Down

When the server on which the wsm-pm application is running in a WebLogic domain is shut down before servers on other domains are shut down, you will see an exception as follows:

```
<Error> <oracle.wsm.resources.policymanager>
<WSM-02313> <The documents used by a policy subject cannot be recorded due to
underlying error "Exception during invoke."
java.rmi.NoSuchObjectException: Exception during invoke.
```

This error occurs when agents on other domains try to continue to talk to wsm-pm and are unable to do so.

This is expected behavior when wsm-pm is not available due to shutdown of the WebLogic server where it is deployed. No user action is needed.

7.27 NullPointerException After Stopping the WebCenter Portal Managed Server

After you stop the WebCenter Portal Managed Server, the following error message may appear:

```
Failed while destroying filter: OWSM Security Filter.
java.lang.NullPointerException
```

There is no impact to functionality, and no user action is needed.

7.28 ConnectException when the Server Hosting WSM-PM is Down

When the server on which the wsm-pm application is running in a WebLogic domain is shut down before servers on other domains are shut down, you see an exception as follows:

```
java.rmi.ConnectException
```

This error occurs if the wsm-pm application is unreachable.

This is expected behavior when wsm-pm is not available due to shutdown of the WebLogic server where it is deployed. No user action is needed.

7.29 The Repository Write Timestamp Cannot Be Retrieved When the Server Hosting WSM-PM Is Shut Down

When you shut down the server on which the wsm-pm application is deployed before you shut down the Administration Server, you see the following exception:

```
The repository write timestamp cannot be retrieved due to underlying error
```

This is expected behavior. No user action is needed.

7.30 Harmless Warning Message When You Create Policy Sets

When you create policy sets for resource type of `SOAP Web Service` or `SOAP Web Service Client`" with non-security policy references attached, you will see a warning message:

```
"Non-Security policies do not apply to Java EE Web Services."
```

This warning message can be ignored.

7.31 About Difference between Installed and Upgraded Configuration Files

The following domain configuration files appear different in a new 12.2.1 install compared to an upgraded WebCenter Portal:

```
config/fmwconfig/audit-store.xml
config/fmwconfig/jps-config.xml
config/fmwconfig/jps-config-jse.xml
```

This occurs because, during upgrade, the configuration is moved to `wsm-config.xml` but not removed from the original files including `jps-config.xml`. There is no impact to functionality and the variation can be safely ignored.

7.32 Oracle Infrastructure Web Service Applications Built in 11g Containing WebServiceRef Annotation Fails

Oracle Infrastructure Web Services do not support the `WebServiceRef` annotation. In Release 11*g*, generated example code included this annotation. If you included this generated example code in your applications, they built and ran successfully because the annotation was ignored. In the CDI implementation in Java EE 7 in 12*c* (12.2.1), all annotations are processed. As a result, any applications built in Release 11*g* that contain these generated example classes (`[Service]PortClient.java`) fails.

Note that Oracle Infrastructure Web Service applications built in 12*c* do not contain this annotation and do not exhibit this problem.

Workaround

Use one of the following solutions:

• Remove the `WebServiceRef` annotation from the generated source code in the application or library.

In the 11*g* Oracle Infrastructure Web Service WSA generated example client classes, the class name is always `<Port Name>Client.java`. You can remove the annotation by:

– Searching within your source code to find terms such as "*Client.java", or

– Writing a helper class to search the JAR/WAR/EAR code. For example:

```
private final static Class DefaultAnnotationTypeClass =
 javax.xml.ws.WebServiceRef.class;
     private void findAnnotation(Class targetClass, Class
annotationTypeClass)
 throws Exception {
         if (targetClass == null || annotationTypeClass == null) {
             return;
         }
         if (targetClass.getAnnotation(annotationTypeClass) != null) {
            throw new Exception("Found " + annotationTypeClass + " in class
"
 + targetClass.getName());
         }
         for (Field field : targetClass.getDeclaredFields()) {
             if (field != null && field.getAnnotation(annotationTypeClass) !
=
 null) {
                 throw new Exception("Found " + annotationTypeClass + " in
class " + targetClass.getName());
             }
         }
     }
     ...
     findAnnotation( userPortClientClass , DefaultAnnotationTypeClass );
 .
```

• For each WAR /JAR file, providing a `beans.xml` that disables CDI annotation scanning for the application. The necessary `beans.xml` snippet to turn off CDI annotation scanning is as follows:

```
<beans xmlns="http://xmlns.jcp.org/xml/ns/javaee"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee
       http://xmlns.jcp.org/xml/ns/javaee/beans_1_1.xsd"
       bean-discovery-mode="none">
</beans>
```

7.33 WADL for OPSS and OWSM REST API Is Not Generated from the Browser

WADL for OPSS REST APIs and OWSM REST APIs is not generated from the browser because of the loading of the XSL stylesheet.

Workaround

Instead of generating WADL from the browser by visiting URLs such as the following, use the Mozilla REST client to visit these URLs:

```
http://myhost.mydomain.com:7001/idaas/platform/admin/v1/application.wadl
http://myhost.mydomain.com:7001/idaas/webservice/admin/v1/application.wadl
```

The response will give the XML contents of WADL.

7.34 Disable XML External Entity Expansion (XXE) When Using MDDS API

If you are using the MDDS API, disable XXE in the WSDL by setting the `oracle.j2ee.ws.mdds.preventXXE` option to `Boolean.TRUE` as shown in the following example:

```
modelFactory.setOption("oracle.j2ee.ws.mdds.preventXXE", Boolean.TRUE);
```