Oracle® Fusion Middleware

Release Notes for Oracle Fusion Middleware Infrastructure

12*c* (12.2.1.3.0)
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Oracle Fusion Middleware Release Notes for Oracle Fusion Middleware Infrastructure, 12*c* (12.2.1.3.0)

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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.

- Audience
- Documentation Accessibility
- Related Documents
- Conventions

Audience

This document is intended for users of Oracle Fusion Middleware 12 *c*.

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 Fusion Middleware Documentation

  This contains all documentation for all Oracle Fusion Middleware 12*c* 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
Introduction

This chapter contains the information about the latest release. It has the links to the latest System Requirements and Certifications.

Topics

- Latest Release Information
- Purpose of this Document
- System Requirements and Specifications
- Certification Information
- Oracle Support
- Deprecated Features

Latest Release Information

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

http://docs.oracle.com/en/

Purpose of this Document

This document contains the release information for Oracle Fusion Middleware Infrastructure 12*c* Release (12.2.1.3.0).

System Requirements and Specifications

Oracle Fusion Middleware installation and configuration will not complete successfully unless users meet the hardware and software prerequisite requirements before installation. For more information, see System Requirements and Specifications.

Certification Information

To see versions of platforms and related software for which Oracle Fusion Middleware is certified and supported, go to Oracle Fusion Middleware Supported System Configurations

Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support at https://support.oracle.com.

Deprecated Features

The following feature is deprecated in 12*c* (12.2.1.3.0):

- The Fusion Middleware Lifecycle Management Tools is no longer available, and will be removed from the next release.

2
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

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

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.

> **✎ Note:**
>
> - The generic install jar file name and the quickstart jar file name has been modified to remove the word **generic** from the jar name. For example,
>   - **fmw_12.2.1.3.0_idm_generic.jar** to **fmw_12.2.1.3.0_idm.jar**
>   - **fmw_12.2.1.3.0_idmquickstart_generic.jar** to **fmw_12.2.1.3.0_idmquickstart.jar**
>   - **fmw_12.2.1.3.0_idmquickstart_generic2.jar** to **fmw_12.2.1.3.0_idmquickstart2.jar**
> - The Null Pointer Exceptions that are seen in the `.err logs` while installing the Forms and Reports (forms builder standalone mode) does not have any functional impact on the product.

Downloading and Applying Required Patches

After you install Oracle Fusion Middleware 12*c* (12.2.1.3.0), 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 the Oracle Fusion Middleware patch that was available at the time the release note was published.

Patch Set Exception (PSE) Bug	Patch Description
24737021	A mandatory patch that must be applied for the bug after you install Fusion Middleware 12c (12.2.1.3.0) for Oracle Database Client shared libraries, which has been updated at install time with a previous Bundle Patch.
	Select the version 12.1.0.2.170418 to download and apply this additional overlay patch.
	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.

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.

Issues Related to Product Configuration

This section contains the following topics:

- 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

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.

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.

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
- Switching to Authentication Against an LDAP Directory (WebCenter Sites)

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
   ```

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.

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

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

> **Note:**
>
> From 12*c* (12.2.1.3.0), you can install and use the new version of JDK after installing and configuring an Oracle Fusion Middleware product. See, Updating the JDK After Installing and Configuring an Oracle Fusion Middleware Product

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.

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.

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.

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.

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.

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.

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 *Enterprise Deployment Guide for Oracle SOA Suite.*

Switching to Authentication Against an LDAP Directory (WebCenter Sites)

Use this procedure to switch WebCenter Sites to authentication against an external LDAP directory.

This procedure replaces Switching to Authentication Against an LDAP Directory in *Installing and Configuring Oracle WebCenter Sites*.

To switch WebCenter Sites to authentication against an external LDAP directory:

1. If the LDAP server is case-sensitive (Optional) set or change the value Modify the `ldap.caseAware` property value to `true` .

   The default value of `ldap.caseAware` is `false`. Login fails if you are using a case-sensitive LDAP server and this property is set to `false`. To modify the `ldap.caseAware` value to `True`:

   a. Log in to the WebCenter Sites Admin interface and navigate to `Admin tree` tab>`System Tools`>`Property Management` option.

   b. Search for `ldap` and change its value from `False` to `True`.

   c. Restart the Managed Server.

   > **✎ Note:**
   >
   > If the user data in LDAP is separated by a comma, data is not retrieved during Sites and LDAP integration. For example: `test,user`. To retrieve the data, you must change the `dir.ini` file syntax. The file is located in the `..sites/install` directory from `"syntax.escape=\\` to `syntax.escape=\#"`.

2. Access the LDAP Configurator at `http://`*`sites-host`*`:`*`sites-port`*`/`*`sites-context`*`/ldapconfig`, follow the instructions on the screen, and enter the values for your environment.

3. Restart the WebCenter Sites Managed Server and go to the same LDAP Configurator URL.

Nothing is written to your LDAP Server. An `LDIF` file is created in the `DOMAIN_HOME`/wcsites/wcsites/config/ldap folder. This is the default install location of the WebCenter Sites application. Oracle recommends that you make all customizations and path modifications after a successful LDAP integration. The `peopleparent`, `groupparent`, `username`, and other fields are not prepopulated, as in the previous release.

4. (Optional) Modify the `LDIF` file located in `DOMAIN_HOME`/wcsites/wcsites/config/ with values appropriate for your environment.

    Because the fields are not prepopulated, follow this example for `ORACLEDIR`:

    ```
    ldap server type -- ORACLEDIR
    ldap DSN -- dc=oracle,dc=com
    ldap host -- localhost
    ldap port -- 389
    ldap username -- cn=orcladmin
    ldap password -- password
    ldap peopleParent -- cn=Users,dc=oracle,dc=com
    ldap groupparent -- cn=Groups,dc=oracle,dc=com
    ```

    If Oracle Virtual Directory is your LDAP authentication provider, WebCenter Sites generates an `LDIF` file. You can import the file to your Oracle Internet Directory server and then create an adapter in Oracle Virtual Directory to connect to the Oracle Internet Directory server. You cannot import an LDIF file directly to an Oracle Virtual Directory LDAP server because it does not have storage of its own.

5. Import the `LDIF` file into the external LDAP authentication provider.

6. Restart the Managed Server running this WebCenter Sites instance.

Documentation Errata

There are no known issues at this time.

3

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

Issues Related to Product Upgrade

This section contains the following topics:

- SOA Upgrade from 12.2.1.x to 12.2.1.3.0 Fails with Reconfiguration-related Healthcare-UI
  If the SOA Suite domain reconfiguration fails due to Healthcare-UI validation, then delete the HealthCare-UI from the WebLogic Server deployment page.
- Error Detecting MDS Schema in IPM-only Domain
- 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
- Business Process Composer Appears to Freeze After Migration
- EDN-JMS Backlogged Events Do Not Migrate During Upgrade

SOA Upgrade from 12.2.1.x to 12.2.1.3.0 Fails with Reconfiguration-related Healthcare-UI

If the SOA Suite domain reconfiguration fails due to Healthcare-UI validation, then delete the HealthCare-UI from the WebLogic Server deployment page.

Before deleting the HealthCare-UI, make sure that HealthCare-UI is not in active state. If HealthCare-UI is not in active state and the reconfiguration continues to fail at Healthcare-UI validation, then contact oracle support.

Error Detecting MDS Schema in IPM-only Domain

If the application extension framework (AXF) is configured along with Oracle Imaging and Process Management (Oracle I/PM), then the MDS datasource gets created in the domain. If AXF is not configured, then the MDS datasource will not be created in 11g domain.

Therefore, when domain assisted schema upgrade is used in UA, MDS schema will not be detected. You can continue the upgrade without the MDS datasource.

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.

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.
```

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`

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.

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.

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.

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.

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*.

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.

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**.

Issues Related to Product Patching

This section contains the following topic:

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

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.*

4

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
- Deprecated and Desupported Features
- Documentation Errata for Administering Oracle Fusion Middleware

General Issues and Workarounds

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

- MDS purgeMetadata Command Can Take a Long Time
- Node Manager May Return An Error About ADR
- SSL Certificate Chain Is Required on Certain Browsers

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.

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.

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.

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

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.

Deprecated and Desupported Features

The following administrative feature is desupported beginning in 12*c* (12.2.1.3):

- Moving from test to production.

  The scripts and procedures used to move your environment from a test to a production environment is no longer supported. However, if you want to change the network configuration, such as host name, network domain name, or IP address, you can use the chghost utitlity, as described in About Changing the Network Configuration in *Administering Oracle Fusion Middleware*.

Documentation Errata for *Administering Oracle Fusion Middleware*

The following lists the documentation errata for administration issues:

- Using WLST with the Lifecycle Managment Tools

Using WLST with the Lifecycle Managment Tools

Issue

In an SSL-only domain, to connect to a server using WLST, you must set some properties for the start, stop, and discovery actions to succeed.

```
[ -Dweblogic.security.SSL.ignoreHostnameVerification=true
-Dweblogic.security.TrustKeyStore=DemoTrust ]     [ -
Dweblogic.security.JavaStandardTrustKeyStorePassPhrase=password]     [ -
Dweblogic.security.CustomTrustKeyStoreFileName=filename
-Dweblogic.security.TrustKeystoreType=jks     [ -
Dweblogic.security.CustomTrustKeyStorePassPhrase=password]]     [ -
Dweblogic.security.SSL.hostnameVerifier=classname]
```

For more information about setting the properties, see Using the WebLogic Scripting Tool in *Understanding the WebLogic Scripting Tool*.

For more information about the start, stop, and discovery actions, see Additional Information About Standard Actions in *Configuring Oracle Fusion Middleware Using Lifecycle Management Tools*.

5

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
- Incorrect Migration Policy In UMSJMSJDBCSTORE_AUTO_2 After OSB Extension

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

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 *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 *Administering Oracle User Messaging Service*.

Issues Pertaining to Oracle BAM

This section contains the following topic:

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*.

BAM JNDI Foreign Providers Are Not Created When You Add BAM to a Domain With Dynamic SOA Cluster

When adding BAM to the domain, some foreign JNDI providers are created. One of them, the **BAMForeignJndiProvider** is configured pointing to the SOA Cluster.

When the SOA Cluster is dynamic, that JNDI provider is not properly populated and the foreign JNDI providers are not created during the configuration wizard.

After extending the domain to add BAM, two Foreign JNDI Providers must be created in the domain: **BAMForeignJNDIProvider** and **BPMForeignJNDIProvider**.

1. Create the **BAMForeignJNDIProvider**.

    a. Login to weblogic console. Navigate to **domain** > **Environment** > **Services** > **Foreign JNDI Providers**.

    b. Click **New**.

    c. Change the name to **BAMForeignJNDIProvider** and click **next**.

    d. Select SOA Cluster as the target. Click **Finish**. A Foreign JNDI Provider **BAMForeignJNDIProvider** will be created.

    e. Click **BAMForeignJNDIProvider** link. Under General tab, enter the following properties:

    > Initial Context Factory : weblogic.jndi.WLInitialContextFactory

    Provider URL : URL for the BAM Servers example, t3://host1:9001,host2:9001

    f. Click **Save**.

    g. Click the **Links** tab. Create two links for each of the BAM persistence and configuration services as mentioned in the table below:

    h. Restart the SOA Server (This is required, otherwise, the foreign jndi doesnt work and you will run in to a stackoverflow error).

Service	Local JNDI Name	Remote JNDI name
BAM Persistence service	OracleBeam#oracle.beam.common.client.service.persistence.BeamPersistence	OracleBeam#oracle.beam.common.client.service.persistence.BeamPersistence
BAM Config Service	ConfigSession#oracle.beam.config.common.ConfigSession	ConfigSession#oracle.beam.config.common.ConfigSession

2. Create the **BPMForeignJNDIProvider**.

a. Login to the weblogic console. Click **Foreign JNDI providers** link in home page.

b. Click **New**. Change the name to **BPMForeignJNDIProvider** and click **next**.

c. Select BAM cluster as the target. Click **Finish**. A Foreign JNDI Provider **BPMForeignJNDIProvider** is created.

d. Click **BPMForeignJNDIProvider** link. Under General tab, enter the following properties:

> Initial Context Factor: weblogic.jndi.WLInitialContextFactory

> Provider URL: URL for the BPM Servers e.g t3:// soahost1:8001,soahost2:8001

e. Click **Save**.

f. Click the **Links** tab. Create the links for each of the BPM service listed in the table below.

g. Restart the BAM servers.

Service	Local JNDI Name	Remote JNDI Name
UserMetadataService	UserMetadataService	UserMetadataService
TaskEvidenceService	TaskEvidenceServiceBean	TaskEvidenceServiceBean
RuntimeConfigService	RuntimeConfigService	RuntimeConfigService
BPMProcessModelService	ejb/bpm/services/ ProcessModelServiceBean	ejb/bpm/services/ ProcessModelServiceBean
BPMProcessMetadataService	ejb/bpm/services/ ProcessMetadataServiceBean	ejb/bpm/services/ ProcessMetadataServiceBean
BPMProcessDashboardService	ejb/bpm/services/ ProcessDashboardServiceBean	ejb/bpm/services/ ProcessDashboardServiceBean
BPMProcessAnalyticsServiceBean	ejb/bpm/services/ ProcessAnalyticsServiceBean	ejb/bpm/services/ ProcessAnalyticsServiceBean
BPMInstanceQueryService	ejb/bpm/services/ InstanceQueryServiceBean	ejb/bpm/services/ InstanceQueryServiceBean
BPMInstanceManagementService	ejb/bpm/services/ InstanceManagementServiceBean	ejb/bpm/services/ InstanceManagementServiceBean
BPMUserAuthenticationService	ejb/bpm/services/ BPMUserAuthenticationServiceBean	ejb/bpm/services/ BPMUserAuthenticationServiceBean
TaskService	ejb/bpel/services/workflow/ TaskServiceBean	ejb/bpel/services/workflow/ TaskServiceBean
TaskMetadataService	ejb/bpel/services/workflow/ TaskMetadataServiceBean	ejb/bpel/services/workflow/ TaskMetadataServiceBean
BPMDataObjectSecurityService	BPMAnalytics#oracle.bpm.m etrics.dataobject.security.IBP MDataObjectSecurityService Remote	BPMAnalytics#oracle.bpm.m etrics.dataobject.security.IBP MDataObjectSecurityService Remote

Incorrect Migration Policy In UMSJMSJDBCSTORE_AUTO_2 After OSB Extension

If you are adding the OSB dynamic cluster to a domain containing a SOA dynamic cluster, where you already have changed the policy of the **UMSJMSJDBCSTORE_AUTO_1** persistent store to something different from **off**, the **UMSJMSJDBCSTORE_AUTO_2** created for **OSB_Cluster** will inherit that migration policy. This causes a configuration error because the OSB_Cluster doesn't have any leasing configuration by default, and the AdminServer fails to start.

Admin server fails to start by displaying the following error:

```
weblogic.management.ManagementException: [Management:141266]Parsing
failure in config.xml: The following failures occurred:
-- An attempt was made to set the migration-policy of JDBCStore
UMSJMSJDBCStore_auto_2 to "On-Failure". Before automatic migration of any
kind can be used, the MigrationBasis must be set in the ClusterMBean.
```

To correct this issue, follow the option mentioned below:

Manually correct the config.xml. Edit the domain `config.xml` .

*   Look for the **UMSJMSJDBCSTORE_AUTO_2** element that is targeted to the OSB Cluster .
*   Set its <migration-policy> to **off**.
*   For example:

```
<jdbc-store>
    <name>UMSJMSJDBCStore_auto_2</name>
  ..

    <migration-policy>off</migration-policy>
.....
  </jdbc-store>
```

6
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 Workarounds in *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
- USERNAME_ID_PROPAGATION Policies Deprecated
- Deprecated Commands for Oracle Infrastructure Web Services
- A Test Web Service Page Does Not Generate the Correct Date or Date Time Patterns When Importing a Locally Saved Payload
- A Test Web Service Page Does Not Save Loaded Payloads in the Correct Format

- Using the Automatic Policy Configuration for STS May Not Result in a Compatible Policy for a Web Service Client
- Incompatible Policies Are Listed for Web Services and Clients Using SOAP Over JMS Transport
- NoSuchObjectException When the Server Hosting WSM-PM is Shut Down
- NullPointerException After Stopping the WebCenter Portal Managed Server
- ConnectException when the Server Hosting WSM-PM is Down
- The Repository Write Timestamp Cannot Be Retrieved When the Server Hosting WSM-PM Is Shut Down
- Harmless Warning Message When You Create Policy Sets
- About Difference between Installed and Upgraded Configuration Files
- Oracle Infrastructure Web Service Applications Built in 11g Containing WebServiceRef Annotation Fails
- WADL for OPSS and OWSM REST API Is Not Generated from the Browser
- Disable XML External Entity Expansion (XXE) When Using MDDS API
- java.security.NoSuchAlgorithmException When Using the FIPS 140 Algorithms

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(WSMUpgrad
ePlugin.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.

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 *Securing Web Services and Managing Policies with Oracle Web Services Manager*

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 *Securing Web Services and Managing Policies with Oracle Web Services Manager*.

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 *Administering Web Services*.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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*.

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 *Securing Web Services and Managing Policies with Oracle Web Services Manager*.

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 *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.

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 *Securing Web Services and Managing Policies with Oracle Web Services Manager*.

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 *Securing Web Services and Managing Policies with Oracle Web Services Manager*.

Deprecated Commands for Oracle Infrastructure Web Services

Table 6-1 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 *WLST Command Reference for Infrastructure Components*.

Table 6-1   Deprecated Commands for Oracle Infrastructure Web Services

Deprecated Command (11g)	Recommended Command (12c)	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()`**

Table 6-1   (Cont.) Deprecated Commands for Oracle Infrastructure Web Services

Deprecated Command (11g)	Recommended Command (12c)	Updating Your Code
attachPolicySet	setWSMPolicySetScope	11*g* Release: `wls:/jrfServer_domain/ serverConfig>` **`attachPolicySet ('Domain("base_domain")')`** 12*c* Release: `wls:/jrfServer_domain/ serverConfig>` **`setWSMPolicySetScope ('Domain("base_domain")')`**
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([ "oracle/ wss_username_token_client_polic y","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()`**

Table 6-1   (Cont.) Deprecated Commands for Oracle Infrastructure Web Services

Deprecated Command (11g)	Recommended Command (12c)	Updating Your Code
clonePolicySet	cloneWSMPolicySet	11*g* Release: wls:/jrfServer_domain/ serverConfig> **clonePolicySet ('myNewPolicySet', 'myPolicySet')** 12*c* Release: wls:/jrfServer_domain/ serverConfig> **cloneWSMPolicySet ('myNewPolicySet', 'myPolicySet')**
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')**

Table 6-1   (Cont.) Deprecated Commands for Oracle Infrastructure Web Services

Deprecated Command (11g)	Recommended Command (12c)	Updating Your Code
`describeRespositorySession`	`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()`**
`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([ "oracle/log_policy","oracle/ wss_username_token_client_polic y"])`**
`displayPolicySet`	`displayWSMPolicySet`	11*g* Release:
		`wls:/jrfServer_domain/ serverConfig>` **`displayPolicySet('myPolicySet')`**
		12*c* Release:
		`wls:/jrfServer_domain/ serverConfig>` **`displayWSMPolicySet ('myPolicySet')`**

Table 6-1   (Cont.) Deprecated Commands for Oracle Infrastructure Web Services

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

`enablePolicySet`	`enableWSMPolicySet`	11*g* Release:
		
		`wls:/jrfServer_domain/`
		`serverConfig>`
		`enablePolicySet(true)`
		
		12*c* Release:
		
		`wls:/jrfServer_domain/`
		`serverConfig>`
		`enableWSMPolicySet(true)`

`enablePolicySetPolicy`	`enableWSMPolicy` `enableWSMPolicies`	11*g* Release: `wls:/wls-domain/` `serverConfig>`**`enablePolicySetPolic`** **`y('/oracle/log_policy',false)`** 12*c* Release: `wls:/wls-domain/` `serverConfig>`**`enableWSMPolicy('/`** **`oracle/log_policy',false)`** `wls:/wls-domain/` `serverConfig>`**`enableWSMPolicies([`** **`"oracle/log_policy", "oracle/`** **`wss_username_token_client_polic`** **`y"], 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")`**

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Table 6-1   (Cont.) Deprecated Commands for Oracle Infrastructure Web Services

Deprecated Command (11g)	Recommended Command (12c)	Updating Your Code
listPolicySets	listWSMPolicySets	11g Release: wls:/wls-domain/ serverConfig>**listPolicySets('sca-reference')** 12c Release: wls:/wls-domain/ serverConfig>**listWSMPolicySets('sca-reference')**
migrateAttachments	migrateWSMAttachments	11g Release: wls:/jrfServer_domain/ serverConfig> **migrateAttachments()** 12c Release: wls:/jrfServer_domain/ serverConfig> **migrateWSMAttachments()**
modifyPolicySet	selectWSMPolicySet	11g Release: wls:/jrfServer_domain/ serverConfig> **modifyPolicySet('myPolicySet')** 12c Release: wls:/jrfServer_domain/ serverConfig> **selectWSMPolicySet ('myPolicySet')**
resetWSMPolicyRepository	restWSMRepository	11g Release: wls:/jrfServer_domain/ serverConfig> **resetWSMPolicyRepository()** 12c Release: wls:/jrfServer_domain/ serverConfig> **resetWSMRepository()**

Table 6-1   (Cont.) Deprecated Commands for Oracle Infrastructure Web Services

Deprecated Command (11g)	Recommended Command (12c)	Updating Your Code
setConfiguration	setWSMConfiguration	11g Release wls:/jrfServer_domain/ serverConfig> **setConfiguration('/WLS/myDomain')** 12c Release wls:/jrfServer_domain/ serverConfig> **displayWSMConfiguration('WLS/ base_domain')**
setPolicySetConstraint	setWSMPolicySetConstraint	11*g* Release: wls:/jrfServer_domain/ serverConfig> **setPolicySetConstraint ('HTTPHeader("VIRTUAL_HOST_TYPE"," external")')** 12*c* Release: wls:/jrfServer_domain/ serverConfig> **setWSMPolicySetConstraint ('HTTPHeader("VIRTUAL_HOST_TYPE"," external")')**
setPolicySetDescription	setWSMPolicySetDescription	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 6-1   (Cont.) Deprecated Commands for Oracle Infrastructure Web Services

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

`setWebServicePolicyOverride`	`setWSMPolicyOverride`	11*g* Release:
		
		`wls:/jrfServer_domain/`
		`serverConfig>`
		`setWebServicePolicyOverride ('/`
		`base_domain/server1/`
		`HelloWorld#1_0','j2wbasicPolicy',`
		`'web', '{http://`
		`namespace/}WssUsernameService','JR`
		`FWssUsernamePort', '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 6-1   (Cont.) Deprecated Commands for Oracle Infrastructure Web Services

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

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

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.

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.

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*.

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 *Securing Web Services and Managing Policies with Oracle Web Services Manager*.

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.

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.

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.

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.

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.

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.

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>
```

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.

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);
```

java.security.NoSuchAlgorithmException When Using the FIPS 140 Algorithms

When using the FIPS 140 algorithms, the following error message may appear:

```
java.security.NoSuchAlgorithmException: Cannot find any provider
supporting RSA/ECB/OAEPWithSHA-1AndMGF1Padding
at javax.crypto.Cipher.getInstance(Cipher.java:529)
```

This is a known issue. No user action is needed.