

# Oracle® Fusion Middleware

## Release Notes for Oracle Fusion Middleware Infrastructure



12c (12.2.1.4.0)

E95157-09

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The Oracle logo, consisting of a solid red square with the word "ORACLE" in white, uppercase, sans-serif font centered within it.

ORACLE®

Oracle Fusion Middleware Release Notes for Oracle Fusion Middleware Infrastructure, 12c (12.2.1.4.0)

E95157-09

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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 functionalities, and more.

- [Audience](#)
- [Documentation Accessibility](#)
- [Diversity and Inclusion](#)
- [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.

## Diversity and Inclusion

Oracle is fully committed to diversity and inclusion. Oracle respects and values having a diverse workforce that increases thought leadership and innovation. As part of our initiative to build a more inclusive culture that positively impacts our employees, customers, and partners, we are working to remove insensitive terms from our products and documentation. We are also mindful of the necessity to maintain compatibility with our customers' existing technologies and the need to ensure continuity of service as Oracle's offerings and industry standards evolve. Because of these technical constraints, our effort to remove insensitive terms is ongoing and will take time and external cooperation.

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## Related Documents

For more information, see the following resources:

- [Oracle Fusion Middleware Documentation](#)  
This contains all documentation for all Oracle Fusion Middleware 12c 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
<b>boldface</b>	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
<code>monospace</code>	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

# 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 12c (12.2.1.4.0).

## 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

This section covers the deprecated features of Oracle Oracle Fusion Middleware products.

### Deprecated Features in 12c (12.2.1.4.0)

The table lists the deprecated features or components and their description.

Feature/Component	Description
Advanced Viewer	Advanced Viewer is deprecated and will be removed from the next release.  In the future, for equivalent functionality, use the Unified Viewer.
MapViewer	MapViewer is deprecated and will be removed from the next release.  In the future, for equivalent functionality, use Oracle Spatial and Graph (included with Oracle Database 12.2 or later) which includes a map visualization component that is fully compatible with MapViewer and with applications written to the MapViewer V2 API.
OPatchAuto	OPatchAutoFMW (installed in <code>OPatch/auto/fmw</code> directory) is deprecated and will be removed from the next release.  You can continue to use OPatchAutoCore (installed in <code>OPatch/auto/core</code> directory) for auto updates during Fusion Middleware installation.
Oracle Business Intelligence Enterprise Edition (OBIEE) Lineage Wizard	OBIEE Lineage Wizard in Oracle Data Integrator is deprecated and will be removed from the next release.  In the future, use Oracle Enterprise Metadata Management for any data lineage needs.
Oracle Traffic Director	Oracle Traffic Director is deprecated and will be removed from the next release.  In the future, for equivalent functionality, use Oracle HTTP Server, Microsoft IIS Web Server, or Apache HTTP Server plug-ins, or a native Kubernetes load balancer, such as Traefik.

### Deprecated Feature in 12c (12.2.1.3.0)

The following feature is deprecated:

- 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](#)
- [Issues Related to Product Installation and Configuration on an Autonomous Database](#)
- [Documentation Errata](#)

### Issues Related to Product Installation

This section contains the following topics:

- [Checking for Available Software Patches and Product Information](#)
- [Downloading and Applying Required Patches](#)

### Checking for Available Software Patches and Product Information

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:

For example, you can access the following generic install jar file names and quickstart jar file names:

- **fmw\_12.2.1.4.0\_idm.jar**
- **fmw\_12.2.1.4.0\_idmquickstart.jar**
- **fmw\_12.2.1.4.0\_idmquickstart2.jar**

### Downloading and Applying Required Patches

After you install Oracle Fusion Middleware 12c (12.2.1.4.0), there might be cases where additional patches are required to address specific known issues.

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

<http://support.oracle.com>

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.

## Issues Related to Product Configuration

This section contains the following topic:

- [A Partition with Japanese Name Cannot Be Created from Fusion Middleware Control](#)

### 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](#)
- [Compatibility of Oracle Business Intelligence with Oracle Fusion Middleware](#)

### 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
```

## Compatibility of Oracle Business Intelligence with Oracle Fusion Middleware

You must install Oracle Business Intelligence 12c (12.2.1.4.0) with Oracle Fusion Middleware 12.2.1.3.0.

You cannot install Oracle Business Intelligence 12.2.1.4.0 in the same Oracle home directory as Oracle Fusion Middleware 12.2.1.4.0.

## Issues Related to Product Installation and Configuration on an Autonomous Database

The following sections cover the known issues and workarounds, and the limitations, related to product installation and configuration for Oracle Fusion Middleware products using an Autonomous Transaction Processing database (both Oracle Autonomous Transaction Processing-Dedicated (ATP-D) and Oracle Autonomous Transaction Processing-Shared (ATP-S)):

### Note:

For the prerequisites to create schemas using Repository Creation Utility (RCU) on an Autonomous Transaction Processing database, see Prerequisites for Schema Creation on an Autonomous Transaction Processing Database in *Creating Schemas with the Repository Creation Utility*.

For the prerequisites required to configure the Oracle Internet Directory using ATP-S database, see the following topics in *Installing and Configuring Oracle Internet Directory* to:

- Set the `tns_admin` before starting the configuration wizard as described in *Starting the Configuration Wizard*.
- Modify the wallet settings and update the classpath before you start the servers and the instance as described in *Prerequisites for an Oracle Autonomous Transaction Processing-Shared (ATP-S) database and Starting Servers and Processes*.

- [Known Issues and Workarounds Related to Product Installation and Configuration on an Autonomous Transaction Processing Database](#)
- [Limitations Related to Product Installation and Configuration on an Autonomous Database](#)

## Known Issues and Workarounds Related to Product Installation and Configuration on an Autonomous Transaction Processing Database

This section describes the issues and workarounds related to product installation and configuration for Oracle Fusion Middleware products using an Autonomous Transaction Processing database (both Oracle Autonomous Transaction Processing-Dedicated (ATP-D) and Oracle Autonomous Transaction Processing-Shared (ATP-S)).

[Table 2-1](#) lists the general issues and workarounds you encounter in the RCU screens, when creating schemas for Oracle Fusion Middleware products using an Autonomous database.

**Table 2-1 General Issues and Workarounds**

Issue	Workaround
In the <b>Database Connection Details</b> screen, when you select the database user role as Normal, the warning <code>Sysdba</code> or <code>dba</code> privileges are required to load schema is displayed.	Click <b>Ignore</b> and continue with the schema creation.
In the <b>Map Tablespaces</b> screen, you may receive tablespace creation error due to insufficient privileges or exceeding of maximum number of <code>DB_FILES</code>	For an ATP-D database, you must override the default and temporary tablespaces by selecting <code>DATA</code> from the drop-down list in the <b>Default Tablespace</b> column, and <code>TEMP</code> from the drop-down list in the <b>Temp Tablespace</b> column.  For an ATP-S database, you must override the default and temporary tablespaces.  See Map Tablespaces in <i>Creating Schemas with the Repository Creation Utility</i> .

[Table 2-2](#) lists the issues and workarounds that are applicable for specific Oracle Fusion Middleware products using an Autonomous database.

**Table 2-2 Issues and Workarounds for Specific Oracle Fusion Middleware Products**

Product	Issue	Workaround
Oracle SOA Infrastructure	During SOAINFRA schema creation, for Oracle Identity Management, the warning <code>ORA-24010: QUEUE DEV24_SOAINFRA.IP_IN_QUEUE does not exist</code> is displayed in the RCU logs.	You can ignore the warning and proceed with the schema creation.
Oracle Enterprise Scheduler (ESS) and Oracle Managed File Transfer (MFT)	During schema creation, in the <b>Summary</b> screen, the warning <code>ORA-01031: insufficient privileges</code> is displayed and the schema creation fails.	Add the <code>create any job</code> privilege to the <code>ADMIN</code> user, and restart the schema creation.
Oracle Enterprise Scheduler (ESS) and Oracle Managed File Transfer (MFT)	During schema creation, even after adding the <code>create any job</code> privilege, in the <b>Summary</b> screen, the warning <code>ORA-01031: insufficient privileges</code> is displayed.	For ATP-D, apply patch <a href="#">31443286</a> and restart the schema creation, and for ATP-S, apply patch <a href="#">33351665</a> and restart the schema creation.

**Table 2-2 (Cont.) Issues and Workarounds for Specific Oracle Fusion Middleware Products**

Product	Issue	Workaround
Oracle WebCenter Content (WCC)	<p>During schema creation, warnings are displayed in the <b>Summary</b> screen.</p> <p>Example warning messages:</p> <p>ORA-01031: insufficient privileges            File:/home/opc/idm/oracle_common/../wcccontent/common/sql/content/sql/oracle/contentserverrole.sql            Statement: GRANT SELECT ON CTXSYS.DR\$PENDING TO contentserver_role</p> <p>ORA-01450: maximum key length (6398) exceeded            File:/home/opc/jrf/oracle_common/../wcccontent/common/sql/content/sql/oracle/contentserverrole.sql            Statement: CREATE TABLE RunTimeConfigData</p> <p>ORA-01450: maximum key length (6398) exceeded            File:/home/opc/jrf/oracle_common/../wcccontent/common/sql/content/sql/oracle/intradoc.sql            STATEMENT Create table Subscription</p> <p>where,/home/opc/idm and /home/opc/jrf are the ORACLE HOME locations.</p>	<p>Click <b>Ignore</b> and continue with the schema creation.</p>

**Table 2-2 (Cont.) Issues and Workarounds for Specific Oracle Fusion Middleware Products**


Product	Issue	Workaround
Oracle WebCenter Content (WCC)	<p>Error messages are displayed in the UCM server logs. The error messages in the UCM_server logs are:</p> <ul style="list-style-type: none"> <li>• general exception:  <pre>java.sql.SQLException: ORA-01031: insufficient privileges.</pre> <p>This general exception is displayed for both ATP-D and ATP-S databases.</p> <p>You can apply the patch <a href="#">31443286</a> and restart the schema creation.</p> </li> <li>• data exception:  <p>Caused by: Error : 1450, Position : 0, Sql = CREATE TABLE Subscription</p> </li> <li>• data exception:  <p>Caused by: Error : 942, Position : 48, Sql = CREATE INDEX dRTLlastModified_RunTFB30128Ata ON RunTimeConfigData (dRTLlastModified)</p> </li> <li>• data exception:  <p>Caused by: Error : 1450, Position : 0, Sql = CREATE TABLE RunTimeConfigData</p> </li> </ul>	
<div style="border-left: 2px solid #0070C0; border-right: 2px solid #0070C0; border-bottom: 2px solid #0070C0; padding: 10px; background-color: #E6F2FF;">  <b>Note:</b>                      The data exceptions are displayed for Oracle Autonomous Transaction Processing-Dedicated (ATP-D) database only.                 </div>		
Oracle WebCenter Sites (WCS)	<p>You cannot install and configure FirstSiteI sample site, and therefore, you cannot create new promotion assets, for Oracle WebCenter Sites using ATP-S.</p> <p><b>Note:</b> This issue is applicable only for WebCenter Content using an ATP-S database.</p>	You must exclude FirstSiteI during the installation.
Oracle Forms	<p>Forms Builder throws an <code>ORA-01031: Insufficient Privileges</code> error when connecting to ATP-S.</p> <p><b>Note:</b> This issue is applicable only for Oracle Forms using an ATP-S database.</p>	This error can be ignored. However, as a result of this condition, Remote Dependency Mode is set to "TIMESTAMP".
Oracle Forms	<p>Forms Application Deployment Service (FADS) fails to deploy applications that contain SQL scripts when attempting to connect to ATP-D and ATP-S. The error <code>IO Error: Got minus one from a read call</code> Error establishing connection with the database is displayed in the Deployment Details.</p> <p><b>Note:</b>The deployment of SQL scripts is not supported on IBM AIX.</p>	Apply patch <a href="#">32645990</a> .
Oracle Internet Directory (OID)	<p>During schema creation using RCU, when the OID schema is loading, the warning <code>ORA-28007: the password cannot be reused</code> is displayed in the <b>Summary</b> screen.</p>	Click <b>Ignore</b> and continue with the schema creation.

Table 2-2 (Cont.) Issues and Workarounds for Specific Oracle Fusion Middleware Products

Product	Issue	Workaround
Oracle Internet Directory (OID)	<p>After you configure the domain, when you start the Administration Server for Collocated Oracle Internet Directory, error messages are displayed during the Administration Server startup.</p> <p><b>Note:</b> This issue is applicable only for Oracle Internet Directory using an ATP-S database.</p> <p>For more information, see Starting Servers and Processes for Collocated Oracle Internet Directory in <i>Installing and Configuring Oracle Internet Directory</i>.</p>	This message does not have any functional impact and can be ignored.
Oracle Internet Directory (OID)	<p>After you configure the domain, when you start the Administration Server for Collocated Oracle Internet Directory, a benign error message may be displayed in the Administration Server logs.</p> <p>For more information, see Starting Servers and Processes for Collocated Oracle Internet Directory in <i>Installing and Configuring Oracle Internet Directory</i>.</p>	This message does not have any functional impact and can be ignored.
Oracle Access Management (OAM)	<p>After you configure the domain, when you start the Administration Server, a benign error message may be displayed in the Administration Server logs.</p> <p>For more information, see Starting the Servers in <i>Installing and Configuring the Oracle Access Management Software</i>.</p>	This error message does not have any functional impact and can be ignored.
Oracle Identity Manager (OIM)	<p>After you configure the domain, when you start the Administration Server and access the Sysadmin Console (<a href="http://&lt;machine_name&gt;:&lt;oim_server_port&gt;/sysadmin">http://&lt;machine_name&gt;:&lt;oim_server_port&gt;/sysadmin</a>) and the OIM Console (<a href="http://&lt;machine_name&gt;:&lt;oim_server_port&gt;/identity">http://&lt;machine_name&gt;:&lt;oim_server_port&gt;/identity</a>), JET UI does not work and blank pages are displayed with error messages in the Administration Server logs.</p> <p>For more information, see Starting the Servers in <i>Installing and Configuring the Oracle Identity Governance Software</i></p>	<p>Restart the servers, Administration Server, Oracle SOA Server, and Oracle Identity Manager (OIM) Server from the terminal after unsetting classpath using the command: <code>EXPORT CLASSPATH=</code></p> <p><b>Note:</b> You must restart the servers in the following order:</p> <ul style="list-style-type: none"> <li>• Administration Server</li> <li>• Oracle SOA Server</li> <li>• Oracle OIM Server</li> </ul>

## Limitations Related to Product Installation and Configuration on an Autonomous Database

This section describes the limitations related to product installation and configuration for Oracle Fusion Middleware products using an Autonomous Transaction Processing database (both Oracle Autonomous Transaction Processing-Dedicated (ATP-D) and Oracle Autonomous Transaction Processing-Shared (ATP-S)).

The limitations associated with Oracle Fusion Middleware products using an Autonomous Transaction database:



- You must create schemas as a Normal user, and though, you do not have full SYS or SYSDBA privileges on the database, you must select **System Load and Product Load** on the **Create Repository** screen of RCU.
- You can run RCU in silent mode only for Oracle GoldenGate and not for other Oracle Fusion Middleware products.
- The schema password must be minimum 12 characters, and must contain at least one uppercase, one lower case, and one number.
- You can specify the connection credentials in RCU using the **Connection String** format only. See Connection Credentials for an Autonomous Transaction Processing Database in *Creating Schemas with the Repository Creation Utility*.
- When you configure the domain to specify details about the database and database schema, in the **Database Configuration Type** screen, you must select the **RCU Data** option only. You cannot manually fill in parameters for your schema using the **Manual Configuration** option.
- When you configure the domain for JDBC component schema settings, in the **JDBC Component Schema** screen, specify the connection credentials using the **Connection URL String** option only. For Oracle Internet Directory, see the connect sting format in Specifying JDBC Component Schema Information in *Installing and Configuring Oracle Internet Directory* and for other products, see the connection string format in Specifying JDBC Component Schema Information in *Installing and Configuring Oracle Identity and Access Management*.
- When you specify the connection credentials to connect to the database, for an Oracle Autonomous Transaction Processing-Shared (ATP-S)) database, you must use only one of the database service names, `<databasename>_tpurgent` or `<databasename>_tp`, specified in `tnsnames.ora`. See Connection Credentials for an Autonomous Transaction Processing Database in *Creating Schemas with the Repository Creation Utility*.

 **Note:**

This connection information is not applicable for an ATP-D database.

- Some Forms features normally available in an on-premise database are not available in Autonomous Transaction Processing (ATP) or may be partially exposed with limitations because of ATP's enhanced security features. Because of these limitations, Forms features like Advanced Queuing integration and Database Idle System Events are not supported. See Oracle Forms Issues and Workarounds in *Release Notes for Oracle Forms*.
- The product installation and configuration for Oracle Fusion Middleware products using an Autonomous Transaction Processing database is certified only on Linux.

## 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:

- [Incorrect Version Numbers After a Reduced Downtime Upgrade](#)  
Depending on the upgrade procedure you use to upgrade to 12c (12.2.1.4.0), you may notice that the post-upgrade version number and copyright year remain the same in Oracle Enterprise Manager. This is not an error.
- [Error Detecting MDS Schema in IPM-only Domain](#)
- [Upgrade Assistant Cannot Read a Domain with Multi-Data Sources Defined](#)
- [Standard Workspace Dashboards Missing Participant Information After Upgrade](#)
- [MissingResourceException May Occur During Reconfiguration](#)
- [EDN-JMS Backlogged Events Do Not Migrate During Upgrade](#)

### Incorrect Version Numbers After a Reduced Downtime Upgrade

Depending on the upgrade procedure you use to upgrade to 12c (12.2.1.4.0), you may notice that the post-upgrade version number and copyright year remain the same in Oracle Enterprise Manager. This is not an error.

After performing a successful reduced downtime upgrade, you will see incorrect copyright year and version numbers when accessing the Oracle Enterprise Manager. These incorrect versions are a known issue and do not require running the upgrade again. You can safely ignore the following:

- The copyright version year will still show 2017 instead of 2019
- The version will be 12.2.1.3.0 and the runtime version will be 12.2.1.4.0

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

## 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.

## 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 11g to Oracle Fusion Middleware 12c.

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](#)

#### 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.

### 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 12c (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` utility, 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 Management Tools](#)

### Using WLST with the Lifecycle Management 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

## 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 the *Oracle Fusion Middleware Release Notes for Oracle WebLogic Server*.

- [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](#)
- [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](#)
- [Performance Improvements In Web Services Policy Pages](#)
- [Bulk Attachment of Policies Is not Supported In the Current Release](#)
- [Domain Configuration Is Not Supported in Classpath Mode](#)
- [Avoiding XML Encryption Attacks](#)
- [USERNAME\\_ID\\_PROPAGATION Policies Deprecated](#)
- [Deprecated Commands for Oracle Infrastructure Web Services](#)
- [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](#)
- [About Difference between Installed and Upgraded Configuration Files](#)

- [Oracle Infrastructure Web Service Applications Built in 11g Containing WebServiceRef Annotation Fails](#)
- [Disable XML External Entity Expansion \(XXE\) When Using MDDS API](#)

## 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.

## 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.

## 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](#)*.

## 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 12c (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 5-1 lists the WLST commands for Oracle Infrastructure Web Services (or clients) that were available in Oracle Fusion Middleware 11g 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 5-1** Deprecated Commands for Oracle Infrastructure Web Services

Deprecated Command (11g)	Recommended Command (12c)	Updating Your Code
abortRepositorySession	abortWSSession	<p>11g Release (for Repository operations):</p> <pre>wls:/jrfServer_domain/ serverConfig&gt; abortRepositorySession()</pre> <p>12c Release (for both Repository and PolicySubject operations):</p> <pre>wls:/jrfServer_domain/ serverConfig&gt; abortWSSession()</pre>
attachPolicySet	setWSPolicySetScope	<p>11g Release:</p> <pre>wls:/jrfServer_domain/ serverConfig&gt; attachPolicySet ('Domain("base_domain")')</pre> <p>12c Release:</p> <pre>wls:/jrfServer_domain/ serverConfig&gt; setWSPolicySetScope ('Domain("base_domain")')</pre>

**Table 5-1 (Cont.) Deprecated Commands for Oracle Infrastructure Web Services**

Deprecated Command (11g)	Recommended Command (12c)	Updating Your Code
attachPolicySetPolicy	attachWSMPolicy attachWSMPolicies	<p>11g Release (for both Repository and PolicySubject operation on policy set):</p> <pre>wls:/jrfServer_domain/ serverConfig&gt; <b>attachPolicySetPolicy ('oracle/ wss_username_token_service_policy' )</b></pre> <p>12c Release:</p> <pre>wls:/jrfServer_domain/ serverConfig&gt; <b>attachWSMPolicy ('oracle/ wss_username_token_service_policy' )</b></pre> <pre>wls:/wls-domain/ serverConfig&gt;<b>attachWSMPolicies ([ "oracle/ wss_username_token_client_polic y","oracle/log_policy"])</b></pre>
beginRespositorySession	beginWSMSession	<p>11g Release (for Repository operations):</p> <pre>wls:/jrfServer_domain/ serverConfig&gt; <b>beginRepositorySession ()</b></pre> <p>12c Release (for both Repository and PolicySubject operations):</p> <pre>wls:/jrfServer_domain/ serverConfig&gt; <b>beginWSMSession ()</b></pre>
clonePolicySet	cloneWSMPolicySet	<p>11g Release:</p> <pre>wls:/jrfServer_domain/ serverConfig&gt; <b>clonePolicySet ('myNewPolicySet', 'myPolicySet')</b></pre> <p>12c Release:</p> <pre>wls:/jrfServer_domain/ serverConfig&gt; <b>cloneWSMPolicySet ('myNewPolicySet', 'myPolicySet')</b></pre>

**Table 5-1 (Cont.) Deprecated Commands for Oracle Infrastructure Web Services**

Deprecated Command (11g)	Recommended Command (12c)	Updating Your Code
<code>commitRepositorySession</code>	<code>commitWSMSession</code>	<p><b>11g Release (for Repository operations):</b></p> <pre>wls:/jrfServer_domain/ serverConfig&gt; <b>commitRepositorySession()</b></pre> <p><b>12c Release (for both Repository and PolicySubject operations):</b></p> <pre>wls:/jrfServer_domain/ serverConfig&gt; <b>commitWSMSession()</b></pre>
<code>createPolicySet</code>	<code>createWSMPolicySet</code>	<p><b>11g Release:</b></p> <pre>wls:/jrfServer_domain/ serverConfig&gt; <b>createPolicySet('myPolicySet', 'ws-service', 'Domain("base_domain")')</b></pre> <p><b>12c Release:</b></p> <pre>wls:/jrfServer_domain/ serverConfig&gt; <b>createWSMPolicySet ('myPolicySet', 'ws-service', 'Domain("base_domain")')</b></pre>
<code>deletePolicySet</code>	<code>deleteWSMPolicySet</code>	<p><b>11g Release:</b></p> <pre>wls:/jrfServer_domain/ serverConfig&gt; <b>deletePolicySet('myPolicySet')</b></pre> <p><b>12c Release:</b></p> <pre>wls:/jrfServer_domain/ serverConfig&gt; <b>deleteWSMPolicySet ('myPolicySet')</b></pre>
<code>describeRepositorySession</code>	<code>describeWSMSession</code>	<p><b>11g Release (for Repository operations):</b></p> <pre>wls:/jrfServer_domain/ serverConfig&gt; <b>describeRepositorySession()</b></pre> <p><b>11g Release (for PolicySubject operations):</b>  N/A</p> <p><b>12c Release (for both Repository and PolicySubject operations):</b></p> <pre>wls:/jrfServer_domain/ serverConfig&gt; <b>describeWSMSession()</b></pre>

**Table 5-1 (Cont.) Deprecated Commands for Oracle Infrastructure Web Services**

Deprecated Command (11g)	Recommended Command (12c)	Updating Your Code
detachPolicySet	detachWSMPolicy detachWSMPolicies	<p>11g Release (for both Repository and PolicySubject operation on policy set):</p> <pre>wls:/jrfServer_domain/ serverConfig&gt; detachPolicySet ('oracle/ wss_username_token_service_policy' )</pre> <p>12c Release:</p> <pre>wls:/jrfServer_domain/ serverConfig&gt; detachWSMPolicy('oracle/ wss_username_token_service_policy' )</pre> <pre>wls:/wls-domain/ serverConfig&gt;detachWSMPolicies([ "oracle/log_policy","oracle/ wss_username_token_client_polic y"])</pre>
displayPolicySet	displayWSMPolicySet	<p>11g Release:</p> <pre>wls:/jrfServer_domain/ serverConfig&gt; displayPolicySet('myPolicySet')</pre> <p>12c Release:</p> <pre>wls:/jrfServer_domain/ serverConfig&gt; displayWSMPolicySet ('myPolicySet')</pre>
enablePolicySet	enableWSMPolicySet	<p>11g Release:</p> <pre>wls:/jrfServer_domain/ serverConfig&gt; enablePolicySet(true)</pre> <p>12c Release:</p> <pre>wls:/jrfServer_domain/ serverConfig&gt; enableWSMPolicySet(true)</pre>

**Table 5-1 (Cont.) Deprecated Commands for Oracle Infrastructure Web Services**

Deprecated Command (11g)	Recommended Command (12c)	Updating Your Code
<code>enablePolicySetPolicy</code>	<code>enableWSMPolicy</code> <code>enableWSMPolicies</code>	<p><b>11g Release:</b></p> <pre>wls:/wls-domain/ serverConfig&gt;enablePolicySetPolicy('/oracle/log_policy',false)</pre> <p><b>12c Release:</b></p> <pre>wls:/wls-domain/ serverConfig&gt;enableWSMPolicy('/oracle/log_policy',false)</pre> <pre>wls:/wls-domain/ serverConfig&gt;enableWSMPolicies(["oracle/log_policy", "oracle/wss_username_token_client_policy"], true )</pre>
<code>exportRepository</code>	<code>exportWSMRepository</code>	<p><b>11g Release:</b></p> <pre>wls:/jrfServer_domain/ serverConfig&gt; exportRepository ("/tmp/repo.zip")</pre> <p><b>12c Release:</b></p> <pre>wls:/jrfServer_domain/ serverConfig&gt; exportWSMRepository ("/tmp/repo.zip")</pre>
<code>importRepository</code>	<code>importWSMArchive</code>	<p><b>11g Release (for repository documents):</b></p> <pre>wls:/jrfServer_domain/ serverConfig&gt; importRepository ("/tmp/repo.zip")</pre> <p><b>12c Release (for repository documents):</b></p> <pre>wls:/jrfServer_domain/ serverConfig&gt; importWSMArchive ("/tmp/repo.zip")</pre>
<code>listPolicySets</code>	<code>listWSMPolicySets</code>	<p><b>11g Release:</b></p> <pre>wls:/wls-domain/ serverConfig&gt;listPolicySets('sca-reference')</pre> <p><b>12c Release:</b></p> <pre>wls:/wls-domain/ serverConfig&gt;listWSMPolicySets('sca-reference')</pre>

**Table 5-1 (Cont.) Deprecated Commands for Oracle Infrastructure Web Services**

Deprecated Command (11g)	Recommended Command (12c)	Updating Your Code
migrateAttachments	migrateWSMAttachments	<p><b>11g Release:</b></p> <pre>wls:/jrfServer_domain/ serverConfig&gt; migrateAttachments ()</pre> <p><b>12c Release:</b></p> <pre>wls:/jrfServer_domain/ serverConfig&gt; migrateWSMAttachments ()</pre>
modifyPolicySet	selectWSMPolicySet	<p><b>11g Release:</b></p> <pre>wls:/jrfServer_domain/ serverConfig&gt; modifyPolicySet ('myPolicySet')</pre> <p><b>12c Release:</b></p> <pre>wls:/jrfServer_domain/ serverConfig&gt; selectWSMPolicySet ('myPolicySet')</pre>
resetWSMPolicyRepository	restWSMRepository	<p><b>11g Release:</b></p> <pre>wls:/jrfServer_domain/ serverConfig&gt; resetWSMPolicyRepository ()</pre> <p><b>12c Release:</b></p> <pre>wls:/jrfServer_domain/ serverConfig&gt; resetWSMRepository ()</pre>
setConfiguration	setWSMConfiguration	<p><b>11g Release</b></p> <pre>wls:/jrfServer_domain/ serverConfig&gt; setConfiguration ('/WLS/myDomain')</pre> <p><b>12c Release</b></p> <pre>wls:/jrfServer_domain/ serverConfig&gt; displayWSMConfiguration ('WLS/ base_domain')</pre>



Table 5-1 (Cont.) Deprecated Commands for Oracle Infrastructure Web Services

Deprecated Command (11g)	Recommended Command (12c)	Updating Your Code
setPolicySetConstraint	setWSMPolicySetConstraint	<p><b>11g Release:</b></p> <pre>wls:/jrfServer_domain/ serverConfig&gt; <b>setPolicySetConstraint</b> ('HTTPHeader("VIRTUAL_HOST_TYPE", " external")')</pre> <p><b>12c Release:</b></p> <pre>wls:/jrfServer_domain/ serverConfig&gt; <b>setWSMPolicySetConstraint</b> ('HTTPHeader("VIRTUAL_HOST_TYPE", " external")')</pre>
setPolicySetDescription	setWSMPolicySetDescription	<p><b>11g Release:</b></p> <pre>wls:/jrfServer_domain/ serverConfig&gt; <b>setPolicySetDescription</b> ('Global policy set for web service endpoint.')</pre> <p><b>12c Release:</b></p> <pre>wls:/jrfServer_domain/ serverConfig&gt; <b>setWSMPolicySetDescription</b> ('Global policy set for web service endpoint.')</pre>
setWebServicePolicyOverride	setWSMPolicyOverride	<p><b>11g Release:</b></p> <pre>wls:/jrfServer_domain/ serverConfig&gt; <b>setWebServicePolicyOverride</b> ('/ base_domain/server1/ HelloWorld#1_0', 'j2wbasicPolicy', 'web', '{http:// namespace/}WssUsernameService', 'JR FWssUsernamePort', 'oracle/ wss_username_token_service_policy' , 'reference.priority', '10')</pre> <p><b>12c Release:</b></p> <pre>wls:/jrfServer_domain/ serverConfig&gt; <b>setWSMPolicyOverride</b> ('oracle/ wss_username_token_service_policy' , 'reference.priority', '10')</pre>

Table 5-1 (Cont.) Deprecated Commands for Oracle Infrastructure Web Services

Deprecated Command (11g)	Recommended Command (12c)	Updating Your Code
<code>setPolicySetPolicyOverride</code>	<code>setWSMPolicyOverride</code>	<p>11g Release (for both Repository and PolicySubject operation on policy set):</p> <pre>wls:/jrfServer_domain/ serverConfig&gt; <b>setPolicySetPolicyOverride</b> ('oracle/ wss_username_token_service_policy' , 'reference.priority', '10')</pre> <p>12c Release:</p> <pre>wls:/jrfServer_domain/ serverConfig&gt; <b>setWSMPolicyOverride</b> ('oracle/ wss_username_token_service_policy' , 'reference.priority', '10')</pre>
<code>upgradeWSMPolicyRepository</code>	<code>upgradeWSMRepository</code>	<p>11g Release:</p> <pre>wls:/jrfServer_domain/ serverConfig&gt; <b>upgradeWSMPolicyRepository</b>()</pre> <p>12c Release:</p> <pre>wls:/jrfServer_domain/ serverConfig&gt; <b>upgradeWSMRepository</b>()</pre>
<code>validatePolicySet</code>	<code>validateWSMPolicySet</code>	<p>11g Release:</p> <pre>wls:/jrfServer_domain/ serverConfig&gt; <b>validatePolicySet</b> ('myPolicySet')</pre> <p>12c Release:</p> <pre>wls:/jrfServer_domain/ serverConfig&gt; <b>validateWSMPolicySet</b> ('myPolicySet')</pre>

## 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.

## 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 11g, 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 12c (12.2.1), all annotations are processed. As a result, any applications built in Release 11g that contain these generated example classes (`[Service]PortClient.java`) fails.

Note that Oracle Infrastructure Web Service applications built in 12c 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 11g 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>
```

## 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);
```