Oracle® Fusion Middleware
Release Notes for Oracle WebLogic Server

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

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Preface

Oracle WebLogic Server 12c (12.2.1.4.0) Release Notes summarize release information related to new features or enhancements, resolved issues, general issues and workarounds, deprecated and removed functionality, and more.

- Audience
- Documentation Accessibility
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Audience

This document is intended for all users of Oracle WebLogic Server 12c (12.2.1.4.0).

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at `https://www.oracle.com/corporate/accessibility/`.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit `https://support.oracle.com/portal/` or visit `Oracle Accessibility Learning and Support` 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.

Related Documents

For more information, see the following Oracle resources:

- Oracle WebLogic Server Online Documentation library

- Oracle Technology Network at `http://www.oracle.com/technetwork/index.html`.

Conventions

The following text conventions are used in this document:

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

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1
Introduction

This chapter introduces the release notes for Oracle WebLogic Server 12c (12.2.1.4.0). This chapter includes the following topics:

- Latest Release Information
- Purpose of This Document
- System Requirements and Specifications
- Certification Information
- Product Documentation
- Oracle Support
- Licensing Information
- New Features in This Release
- 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 at: http://docs.oracle.com

Purpose of This Document

This document contains the release information for Oracle WebLogic Server 12c (12.2.1.4.0). It describes the differences between the software and its documented functionality.

Oracle recommends that you review its contents before installing or working with the product.

System Requirements and Specifications

Oracle WebLogic Server installation and configuration do not complete successfully unless the hardware and software pre-requisite requirements are met before installation.

For the latest information on supported system requirements and system configuration, see:

- System Requirements and Specifications
- Oracle Fusion Middleware Supported System Configurations

Certification Information

For the latest information on supported configurations and certifications, see Oracle Fusion Middleware Supported System Configurations page on Oracle Technology Network.

Product Documentation

For complete documentation on Oracle WebLogic Server, go to http://docs.oracle.com/middleware/12214/wls.

Oracle Support

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

Licensing Information

For the latest information on Oracle Fusion Middleware Licensing, see Licensing Information User Manual.

Detailed information regarding license compliance for Oracle Fusion Middleware is available at:

http://www.oracle.com/technetwork/middleware/ias/overview/index.html

New Features in This Release

For information about the new features in this release, see What's New in This Release in *What's New in Oracle WebLogic Server*.

Deprecated Features

> **Note:**
>
> OPatchAutoFMW (installed in `OPatch/auto/fmw` directory) is deprecated and is automatically removed when you update to OPatch 13.9.4.2.2 or later. Zero Downtime Patching continues to be supported, see the Zero Downtime Patching documentation.

For additional deprecated features, see Deprecated Features.

2

Known Issues and Workarounds

This chapter describes issues associated with Oracle WebLogic Server 12.2.1.4.0
This chapter includes the following sections:

- General Issues and Workarounds
- Administration Console Issues and Workarounds
- Clustering Issues and Workarounds
- Configuration Issues and Workarounds
- Core Server and Core Work Manager Issues and Workarounds
- Expected Behavior for Resource Consumption Manager (RCM) Triggers with Same Value and Different Actions
- Data Source Issues and Workarounds
- Dependency Injection Issues and Workarounds
- Deployment Issues and Workarounds
- Developer Experience Issues and Workarounds
- Domain to Domain Partition Migration Issues and Workarounds
- EJB Issues and Workarounds
- HTTP Publish/Subscribe Server Issues and Workarounds
- Installation and Patching Issues and Workarounds
- Java EE Issues and Workarounds
- JDK Issues and Workarounds
- JMS Issues and Workarounds
- JTA Issues and Workarounds
- Life Cycle Management Issues and Workarounds
- Monitoring Issues and Workarounds
- Node Manager Issues and Workarounds
- Oracle Kodo Issues and Workarounds
- Plug-ins Issues and Workarounds
- RMI-IIOP Issues and Workarounds
- Security Issues and Workarounds
- System Component Architecture (SCA) Issues and Workarounds
- Upgrade Issues and Workarounds
- Web Applications Issues and Workarounds
- WebLogic Server Scripting Tool (WLST) Issues and Workarounds

- [Web Server Plug-Ins Issues and Workarounds](#)
- [Web Services and XML Issues and Workarounds](#)
- [WebLogic Tuxedo Connector Issues and Workarounds](#)
- [Documentation Changes](#)

General Issues and Workarounds

This section describes the following issues and workarounds:

- [Multi-Byte Characters Display Incorrectly in Filenames When Using Safari](#)
- [Administration Server Reports a 'Too Many Open Files' Message on the EM Console](#)
- [Installation Requirements if Using Coherence with Maven](#)
- [Default WebLogic Server Message Prefix Will Change](#)
- [Partition with Japanese name cannot be created from Fusion Middleware Control](#)

Multi-Byte Characters Display Incorrectly in Filenames When Using Safari

Issue

Impacted Platforms: All

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

Workaround

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

```
connect("admin_name", "admin_password", "t3://localhost:port")
edit()
startEdit()
cd("Servers/server_name/WebServer/server_name")
set("UseHeaderEncoding", "true")
save()
activate()
exit()
```

Administration Server Reports a 'Too Many Open Files' Message on the EM Console

Issue

Impacted Platforms: Linux

The WebLogic Server Administration Server reports a `Too Many Open Files` message on the Enterprise Manager (EM) console when the maximum number of file descriptors configured for the Administration Server is less than 65535.

Workaround

Execute the following command to determine the maximum number of file descriptors currently configured:

```
cat /proc/sys/fs/file-max
```

If the value is less than 65535, perform the following steps:

1. Edit the file /etc/security/limits.conf with root permission:

   ```
   > sudo vi /etc/security/limits.conf
   ```

2. Append the following two lines, using a value of 65535 or greater:

   ```
   *               soft    nofile          65535
   *               hard    nofile          65535
   ```

3. Start a new terminal session.

4. Execute the `limit descriptors` command to verify that descriptors has been increased to the specified value (at least 65535).

   ```
   > limit descriptors
   descriptors  65535
   ```

Installation Requirements if Using Coherence with Maven

Issue

Impacted Platforms: N/A

Coherence users who do not have a dependency on Oracle WebLogic Server and want to use Maven should use the standalone Coherence installer.

Coherence users who do have a dependency on Oracle WebLogic Server and want to use Maven must choose the **WebLogic Server** or **Complete with Examples** installation options. Do not choose the **Coherence Installation** option.

Workaround

N/A

Default WebLogic Server Message Prefix Will Change

Issue

Impacted Platforms: All

The default WebLogic Server message prefix will change from BEA to WL in a future release of WebLogic Server.

Workaround

N/A

Partition with Japanese name cannot be created from Fusion Middleware Control

Issue

Impacted Platforms: All

Partition with Japanese name cannot be created due to `Life cycle Exception` on Fusion Middleware Control.

Workaround

Create a partition which uses an English name or create a Japanese name partition from WebLogic Server Administration Console.

Administration Console Issues and Workarounds

This section describes the following issues and workarounds:

- Pressing Browser Back Button Discards Context
- Creation of Unsupported Work Manager Configurations
- Server Status Table Reflects Inconsistent Information
- Exceptions When Defining a Security Policy for an EJB
- Administration Console Does Not Always Reflect External Changes Made in a Deployment Plan
- Application Testing Links Fail to Resolve in Administration Console
- java.lang.NoClassDefFoundError is Displayed
- Error When Configuring Security Role for a Newly Created Coherence Cluster Service or Cache
- Administration Console Extensibility is Deprecated
- Inconsistent Behavior Between Consoles When Creating a Partition
- Console Monitoring Dashboard Incompatible with Internet Explorer-11 Browser

Pressing Browser Back Button Discards Context

Issue

Impacted Platforms: All

After a page flow completes in the Oracle WebLogic Server Administration Console, it forwards to a different page, typically a table.

Pressing the browser Back button at this point results in an attempt to load the last JSP file in the completed assistant. At this point, all contexts for this assistant are discarded.

Workaround

Oracle recommends that you do not use the browser Back button to go back into an assistant after changes are canceled or finished and that you do not go back to a previous step in an assistant. Instead, use the navigation links and buttons in the Oracle WebLogic Server Administration Console.

Creation of Unsupported Work Manager Configurations

Issue

Impacted Platforms: All

The Oracle WebLogic Server Administration Console permits the creation of Work Manager configurations that are not supported and do not function as intended. Incorrect Work Manager configurations may result in several exceptions being recorded in the server logs, most commonly `Validation problems were found` exceptions while parsing deployment descriptors.

Workaround

Follow the guidelines described in the online help for Work Manager configurations. Specifically, you can only assign one request class to any given Work Manager, and that request class must be of the same or a broader scope than the Work Manager. You should not assign an application-scoped request class to a global Work Manager and you should not create more than one application-scoped request class for an application-scoped Work Manager.

Correcting the Work Manager configurations to match the documented constraints resolves these issues.

Server Status Table Reflects Inconsistent Information

Issue

Impacted Platforms: All

The Server Status table on the **Cluster: Monitoring: Summary** page includes two default columns: **Primary** and **Secondary Distribution Names**. These fields do not always reflect all of the replication statistics that are collected and displayed on the **Cluster: Monitoring: Failover** page, depending on the replication scenario.

See the **Cluster: Monitoring: Failover** page for definitive information.

Workaround

N/A

Exceptions When Defining a Security Policy for an EJB

Issue

Impacted Platforms: All

When defining security policies in the Oracle WebLogic Server Administration Console for an EJB deployment that references types defined in a separate library deployment, exceptions can be observed if that library deployment is unavailable to the console.

Workaround

Target all library deployments at the Oracle WebLogic Server Administration Server as well as any Managed Servers needed to support referencing applications. This setup will ensure that when defining policies, the console will have access to those library deployments so that referenced types can be class-loaded as needed.

Administration Console Does Not Always Reflect External Changes Made in a Deployment Plan

Issue

Impacted Platforms: All

The Oracle WebLogic Server Administration Console does not always reflect the external changes made in a deployment plan. If a change is made in a deployment plan outside of the console while a console user is also viewing that deployment plan, the console user will not see those changes. The changes may include using Workshop, editing the plan text files directly, or updating a deployment with a new plan using WLST or `webLogic.Deployer`.

Workaround

Navigate to a configuration page for a different deployment, then navigate back to the original deployment.

Application Testing Links Fail to Resolve in Administration Console

Issue

Impacted Platforms: All

In some configurations, the Application Testing pages included in the Oracle WebLogic Server Administration Console use IPv6 addresses in the testing links. These addresses are valid for Oracle WebLogic Server instances. However, in some mixed IPv4 and IPv6 environments, these addresses cannot be used from the browser to interact with applications and the testing links do not get resolved.

Workaround

This scenario typically happens when an administrator does not specify the listen address for a server in the configuration and the server is running on a dual stack (IPv6/IPv4) machine where Java and the operating system are configured to use IPv6 in preference to IPv4. In these mixed environments where the IPv4 stack cannot communicate with IPv6, Oracle recommends starting all server instances with the following command so that all servers are downgraded to use IPv4 only:

```
-Djava.net.preferIPv4Stack=true
```

java.lang.NoClassDefFoundError is Displayed

Issue

Impacted Platforms: All

While using the Oracle WebLogic Server Administration Console with applications or EJBs deployed on a Managed Server that depend on a deployed library, you may encounter a `java.lang.NoClassDefFoundError` error.

Workaround

The Oracle WebLogic Server Administration Console needs access to any shared library deployments so that Java data types and annotations can be processed. Therefore, all shared library deployments should always be targeted to the Oracle WebLogic Server Administration Server in addition to any Managed Servers or clusters.

Error When Configuring Security Role for a Newly Created Coherence Cluster Service or Cache

Issue

Impacted Platforms: All

An unexpected error is noted in the Oracle WebLogic Server Administration Console when configuring a security role for a newly created Coherence cluster service or cache. It is a common pattern in the Oracle WebLogic Server Administration Console that newly created artifacts must be saved and activated before it is possible to access them to configure security roles and policies on those artifacts. Many console pages check this and display a message indicating the following:

```
This page is not available because the necessary security providers have not been
configured, or those configuration changes are pending and not yet activated. Please
activate the changes and (if necessary) restart the Administration Server to make this
page available.
```

This check is not present in the Coherence security pages.

Workaround

After creating a new Coherence cluster, activate the configuration changes and restart any servers as indicated in the restarts changelist. This step ensures that the Coherence cluster resources are available for role and policy configuration.

Administration Console Extensibility is Deprecated

Issue

Impacted Platforms: All

Console extensibility is deprecated as of WebLogic Server 12.1.3. The related documentation, *Extending the Administration Console for Oracle WebLogic Server* and the *Java API Reference for the Oracle WebLogic Server Administration Console*, have been removed from the documentation set.

Workaround

N/A

Inconsistent Behavior Between Consoles When Creating a Partition

Platform: All

Partitions created in the WebLogic Server Administration Console that do not contain a virtual target and resource group are not displayed on the Partition Monitoring page in Fusion Middleware Control (FMWC). These partitions are displayed in the FMWC partitions table with an unknown status.

Workaround

As a workaround, select the partitions in the FMWC partitions table and add a virtual target and a resource group.

Console Monitoring Dashboard Incompatible with Internet Explorer-11 Browser

Issue

When you access WebLogic Console using Internet Explorer (IE) -11, clicking the *Monitoring Dashboard* link displays no information (empty space) on the Console.

Workaround

Use Microsoft Edge, or other browsers available on Window machines.

Clustering Issues and Workarounds

This section describes the following issues and workarounds:

- Threads Are Blocked on Cluster Messaging in Unicast Mode
- Impact of Minimum and Maximum Dynamic Cluster Size Constraints
- HTTP 503 Error for HTTP POST Requests During Cluster Scale Down or Failover

Threads Are Blocked on Cluster Messaging in Unicast Mode

Issue

Impacted Platforms: Linux

When using Unicast mode for cluster communication, many threads are blocked on cluster messaging, which may result in cluster members having difficulty sending heartbeat messages. In this situation, some cluster members drop out from the cluster and may take some time to rejoin the cluster.

Workaround

N/A

Impact of Minimum and Maximum Dynamic Cluster Size Constraints

Issue

Impacted Platforms: All

To support elasticity, Oracle WebLogic Server 12.2.1 introduced the following configurable constraints on the minimum and maximum size of a dynamic cluster:

- `MinDynamicClusterSize` (default=1)

- `MaxDynamicClusterSize` (default=8)

Additionally, the `MaximumDynamicServerCount` attribute is deprecated and replaced with the `DynamicClusterSize` attribute. The value of this attribute is validated against the previously mentioned minimum and maximum constraints. As a result, some existing user configurations and/or scripts may fail. If this occurs, you need to update the `MaxDynamicClusterSize` setting appropriately so that the `DynamicClusterSize` value is within the limits.

Workaround

N/A

HTTP 503 Error for HTTP POST Requests During Cluster Scale Down or Failover

Issue

Impacted Platforms: All

When `HTTP POST` requests are serviced by clustered Oracle WebLogic Server applications, which are configured with a load balancer such as Oracle HTTP Server, a web server using a Oracle WebLogic Server Proxy Plug-in, or Oracle Traffic Director, an HTTP 503 error can occur. If a POST request has been sent to a Oracle WebLogic Server clustered Managed server that is shutting down, and if the server is unable to complete the request, or if the result of the request is unknown, then the load balancer is required to return an HTTP 503 error. When Oracle Traffic Director is used with dynamic clusters, and the cluster is being scaled down, Oracle WebLogic Server notifies Oracle Traffic Director of the impending graceful shutdown of the servers and attempts to route requests to the remaining servers in the cluster. However, there may be a brief downtime in between the graceful shutdown operation and before Oracle Traffic Director redirects the HTTP traffic, when some HTTP requests may receive the 503 error.

Workaround

N/A

Configuration Issues and Workarounds

This section describes the following issues and workarounds:

- ASProvWorkflowException Occurs When Creating a WebLogic Domain

- Use the -Dfile.encoding Property When Running WLST in a Non-English Locale

- Configuration Tools Can Fail if the Oracle WebLogic Server Installation Path Contains Spaces
- Directory For a Non-Existent Server Name Is Created
- Abnormal Behavior in Terminal Window After Entering WebLogic Password
- Creating and Updating Domains Takes Too Long
- Password Field is Not Editable When Configuring a New Domain
- Administration Server Memory Consumption and JMX Notifications
- Issue Rolling Back Changes For editCustom()MBeans
- Issue Starting Multiple Development Servers On Same Host
- Coherence Cache Override Not Working
- Creating Managed Server Domain from a Template Causes Error
- Changing Domain From Development To Production Mode Does Not Change Start Scripts
- Error Occurs When Running WLST Script or Command
- Partition Listener May Not Receive MBean Unregistration Notification
- WL MT Partition Scoped Configuration Changes Are Ignored
- Resource Group May Not Reflect Changes After Retargeting
- No Support for Explicit Port and Port Offset for Global Virtual Targets
- Limitation of Using the JMX Thin Client
- BI Cluster1 is Down on a Pure IPv6 Deployment After Configuration
- Avoid Using the Default Configuration for Oracle WebLogic Server When Running with the ODA Cluster Configuration
- Configuring Oracle WebLogic Server to Access Oracle Internet Directory over SSL
- Unassigned Users Created Using WLST Offline Default to Administrators Group

ASProvWorkflowException Occurs When Creating a WebLogic Domain

Issue

Impacted Platforms: All

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

Workaround

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

Use the -Dfile.encoding Property When Running WLST in a Non-English Locale

Issue

Impacted Platforms: MS Windows

WLST can be run with localized messages by setting the desired locale. You should be aware of the following issue when running WLST in a non-English locale.

On Windows operating systems, if a DOS command window's active code page is different from the system's local (ANSI) code page, you must add the `-Dfile.encoding=<DOS window's active code page>` property to the WLST process when starting WLST by using a DOS command window. This property changes the default character set for the Java process. For example:

- The active code page for a DOS window is 850. This value can be achieved by issuing the `chcp` command in the WLST command window.

- The system's local (ANSI) code page is 1250. You can determine the system's local code page by viewing the value of the `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\NLS\CodePage\ACP` key in the Windows registry. Files that are created by standard Windows editing tools (such as Notepad or Wordpad) are encoded in this way.

Workaround

In this situation, you can start WLST as follows:

```
set WLST_PROPERTIES="-Dfile.encoding=cp850"
```

```
$WL_HOME%\common\bin\wlst.cmd
```

Configuration Tools Can Fail if the Oracle WebLogic Server Installation Path Contains Spaces

Issue

Impacted Platforms: MS Windows

On some Microsoft Windows platforms, the Oracle WebLogic Server configuration tool commands (including `wlst`, `config`, `pack`, and `unpack`) can fail if the Oracle WebLogic Server installation path contains a space. In this case, the command may fail with a `java.lang.ClassNotFoundException` error, where the class is derived from the portion of the installation path after the space. The commands fail if short file name generation is disabled in the Windows registry.

Workaround

You must enable short name generation in the Windows registry to ensure that spaces are handled properly by the configuration tools. To enable short name generation:

1. Run `regedit`.

2. Navigate to the
   `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\FileSyst`
   `em` folder.

3. Double-click `NtfsDisable8dot3NameCreation` and set its value to `0`.

4. Reboot for the change to take effect.

Directory For a Non-Existent Server Name Is Created

Issue

Impacted Platforms: All

If you attempt to connect to the WebLogic Server Administration Server with a non-existent server name, a directory for the non-existent server name is created under the *domain_name*/`servers` directory.

Workaround

Specify a valid server name when starting the Managed Server.

Abnormal Behavior in Terminal Window After Entering WebLogic Password

Issue

Impacted Platforms: Linux

After pressing **Ctrl-C** to terminate the `startManagedWebLogic.sh` process immediately after entering the WebLogic password, abnormal behavior may be experienced in the terminal window. For example, when pressing Return, the prompt is tabbed instead of going to the next line, and any characters that are entered at the prompt are not displayed in the terminal.

Workaround

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

Creating and Updating Domains Takes Too Long

Issue

Impacted Platforms: Linux

It can take a long time to create or update Oracle WebLogic Server domains when:

- Using any of the prescribed domain creation or update methods, such as the Configuration Wizard or WLST. The method may appear to hang or take significantly longer than normal when used on new Linux hosts. This issue occurs due to the lack of entropy on the host to initialize java security.

- Using the Oracle WebLogic Server Configuration Wizard to create or update a domain.

- Using WLST to create or update a domain.

Workaround

Set the *CONFIG_JVM_ARGS* environment variable to the following value:

```
-Djava.security.egd=file:/dev/./urandom
```

Password Field is Not Editable When Configuring a New Domain

Issue

Impacted Platforms: Linux

On Linux systems, when creating a new domain using the Oracle Fusion Middleware Configuration Wizard, the **Password** and **Confirm Password** fields are sometimes not editable, and you cannot enter a password to create a domain.

Workaround

There are two ways to work around this issue:

- To work around the issue each time it happens, click the Close Window **X** button in the upper right corner of the Configuration Wizard. In the confirmation dialog box, click **No** to return to the Configuration Wizard. You can then enter and confirm the password for the domain.

- To fix this issue permanently:

  1. Kill all scim processes. For example:

     ```
     kill `pgrep scim`
     ```

  2. Modify (or create) the `~/.scim/config` file to include the following line (case-sensitive):

     ```
     /FrontEnd/X11/Dynamic = true
     ```

  3. If you are running VNC, restart the VNC server.

  4. Run the Configuration Wizard again.

Administration Server Memory Consumption and JMX Notifications

Issue

Impacted Platforms: All

The Domain Runtime MBean Server is a federated MBean server with connections to all Managed Server Runtime MBean Servers in the domain. The federation architecture performs well with queries. However, when JMX notifications are added to MBeans, the Domain Runtime MBean Server can consume large amounts of memory.

When JMX notifications are used, two cases exist that cause the Administration Server to keep copies of all JMX object names registered in all Runtime MBean Servers running in all Managed Servers in the domain:

- At the WebLogic Server level, to simulate the unregister MBean notifications when a Managed Server shuts down.

- At the JDK JMX client notification layer.

The likelihood of encountering this issue increases when both of the following conditions exist:

- EM Fusion Middleware Control is being used to manage large domains, as it adds notification listeners to the Domain Runtime MBean Server.

- Fusion Middleware products that significantly increase the number of JMX runtime MBeans are included in the domain. This would include any product with MBeans that are registered in WebLogic Server Runtime MBean Server instances running in the domain; that is, in the Administration Server as well as all Managed Servers. (These products include Coherence, SOA Suite, OSB, and so on.)

Workaround

Disable the `managed-server-notifications-enabled` attribute. This configuration attribute disables the ability to define notifications on MBeans that are contained in the Managed Servers Runtime MBean Servers (these MBeans contain a `Location=key` in the ObjectName).

If Managed Server notifications are disabled, then the two sets of ObjectNames for MBeans contained in the WebLogic Server and JDK components will not be kept. Notifications listeners can still be defined on the MBeanServerDelegate and on MBeans contained in the local Domain Runtime MBean Server. However, notifications listeners cannot be added to the non-local MBeans.

Issue Rolling Back Changes For `editCustom()` MBeans

Issue

Impacted Platforms: All

The `editCustom()` tree contains MBeans for upper stack and system component products. If you make changes to these MBeans, the changes are persisted immediately to the pending directory. This is different from the WebLogic Server MBeans in the `edit()` tree, which require an explicit save.

If you use `stopEdit()`, `cancelEdit()` or exit WLST with an open edit session, then the unsaved changes to the WebLogic Server MBeans will be rolled back. However, the changes to the `editCustom()` tree will not be rolled back since they have been persisted.

Workaround

Use the `undo('y')` command to rollback the unactivated changes to the `editCustom()` MBeans.

Issue Starting Multiple Development Servers On Same Host

Issue

Impacted Platforms: All

Two development servers cannot be started on the same host if they are sharing a single Derby instance.

Workaround

Configure each development server to use its own unique instance of Derby instead of sharing a single Derby instance. For more information see Running Each Domain with a Unique Derby Instance in *Developer's Guide for Oracle Service Bus*.

Coherence Cache Override Not Working

Issue

Impacted Platforms: All

If the Oracle WebLogic Server Configuration Wizard (`config.sh`) is used to create a domain and the WebLogic Coherence Cluster Extension template is specified, then a Coherence cluster will be defined. The Coherence cluster will be associated with any Managed Server or Oracle WebLogic Server cluster that is also created by the Configuration Wizard. If no Managed Server or Oracle WebLogic Server cluster is created, then the Coherence cluster will be associated with the Administration Server. This association between the Coherence cluster and the servers is not completely defined using the Oracle WebLogic Server configuration tool, which results in the Coherence cache configuration override file not being detected by the Coherence cluster. Note that this issue only occurs if you are using the cache override feature.

Workaround

Use the following workaround:

1. Start the domain created with the Configuration Wizard and connect using the WebLogic Server Administration Console.

2. In the left pane of the WebLogic Server Administration Console, expand **Environment** and select **Coherence Clusters**.

3. Select your Coherence cluster. The Coherence cluster settings page is displayed.

4. Select the **Members** tab, which displays all of the members of the Coherence cluster.

5. Deselect the servers and clusters that are members of the Coherence cluster and click **Save**.

6. Reselect the servers and clusters that are the desired members for the Coherence cluster and click **Save**.

This will perform a complete association between the Coherence cluster and the targeted servers, which is required to detect and utilize the specified Coherence cluster cache configuration override file.

Creating Managed Server Domain from a Template Causes Error

Issue

Impacted Platforms: All

Specify `-managed=true` when creating a Managed Server domain directory from a template. If you do not specify `-managed=true`, the Managed Server will fail to boot because it does not have the correct set of files in the security directory.

Workaround

N/A

Changing Domain From Development To Production Mode Does Not Change Start Scripts

Issue

Impacted Platforms: All

When you change a domain from development mode to production mode:

- The domain start scripts (and the value of the `-Xverify` flag) do not change.

- The `boot.properties` file continues to be in use.

Workaround

In production mode domains:

1. The value of the `-Xverify` flag in the start scripts needs to be changed from `none` to `all`.

2. The `boot.propeties` file needs to be removed. For more information, see Development and Production Mode in *Understanding Domain Configuration for Oracle WebLogic Server*.

Error Occurs When Running WLST Script or Command

Issue

Impacted Platforms: All

When running a WLST script or command, a `TypeError: state(): 1st arg can't be coerced to String` error occurs. This error occurs because a WLST class name `server` is used as a variable name in a WLST command. For example, in the following command, the value for the variable `server` will be replaced with its class name during classloading and will therefore cause this error:

```
state(server,'Server')
```

Workaround

Use one of the following workarounds:

- Include the `-Dpython.cachedir.skip=true` parameter when starting WLST.

- Change the reserved string name to another string. For example, you can change the string name `server` to `srvr` to resolve the issue.

Partition Listener May Not Receive MBean Unregistration Notification

Issue

Impacted Platforms: N/A

In some cases, a partition listener may not receive notifications when an MBean is unregistered from an MBean server, even though the partition is enabled to receive notifications. This is due to some limitation in the current implementation of WebLogic Server 12.2.1.

Workaround

Currently there is no known workaround for this issue.

WL MT Partition Scoped Configuration Changes Are Ignored

Issue

Impacted Platforms: N/A

Changes to an existing RG and RGT scoped non-module configurations may be ignored even after a partition restart. Changes to resource group overrides may also be ignored. However, changes to module-scoped configurations such as data source tuning, JMS destinations, and connection factories are unaffected by this issue.

The changes appear to be correct if queried through WLST but old values continue to be consumed within the server instance.

Workaround

Restart the server for the new values to take effect.

Resource Group May Not Reflect Changes After Retargeting

Issue

Impacted Platforms: N/A

This issue occurs when there are two resource group templates containing resources of the same type and sharing the same name.

When a resource group is initially targeted to one resource group template, and is then targeted to the second resource group template, and changes are then made to the resource with the shared name in the second resource group template, those changes may not be reflected. The resource group might continue to use the value from the resource in the first resource group template.

Workaround

To bypass this issue, use either of the following workarounds:

- Avoid using resources with the same name across multiple resource group templates.
- After making changes to the resource in the second resource group template, restart the server for the new changes to take effect.

No Support for Explicit Port and Port Offset for Global Virtual Targets

Issue

Impacted Platforms: N/A

Oracle WebLogic Server provides support for setting the Explicit port and port offset for virtual targets. However, currently the setting for Explicit port and port offset can take effect only for virtual targets that are assigned to a partition. For Global Virtual Targets (the virtual targets that are not assigned to any partition), the settings for Explicit port and port offset do not take effect.

Workaround

N/A

Limitation of Using the JMX Thin Client

Issue

Impacted Platforms: N/A

Due to recent changes in JDK, WebLogic Server no longer supports JMX with just the `wlclient.jar` file. To use JMX, you must use either the WebLogic full client, `(weblogic.jar)`, or the `wljmxclient.jar` file.

Workaround

N/A

BI Cluster1 is Down on a Pure IPv6 Deployment After Configuration

Issue

Impacted Platforms: N/A

This is on a pure IPv6 environment. After installing WLS and configuring BI, the bi_cluster is down. This was not reported by the Configuration Wizard.

Workaround

To resolve this issue:

1. Log in to the Oracle WebLogic Server Administration Console.
2. Stop bi_server1.
3. Start bi_cluster1.
4. Start bi_server1.

Avoid Using the Default Configuration for Oracle WebLogic Server When Running with the ODA Cluster Configuration

Issue

Impacted Platforms: Linux

Using the current default multicast addresses blocks Oracle Clusterware if Oracle cluster is sharing the same subnet as Oracle WebLogic Server.

Workaround

Oracle recommends that you avoid using the current default configuration setting for Oracle WebLogic Server because this configuration can block Oracle Clusterware located in the same subnet.

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.*

Unassigned Users Created Using WLST Offline Default to Administrators Group

Issue

Impacted Platforms: All

If you create a domain using WLST offline and create multiple users that are not assigned to a group, those users are assigned to the Administrators group by default.

Workaround

When creating the domain, you must create one Administration user. If you create additional users and you do not want them assigned to the Administrators group, be sure to explicitly assign them to appropriate groups.

Core Server and Core Work Manager Issues and Workarounds

This section describes the following issues and workarounds:

- Using IPv6-Formatted Addresses
- Cannot Start Server After a Whole Server Migration
- Object State is Not Retained After Renaming a Field
- Servers Configured to Listen on a Host Name Are Listening on a Different Host Name After Startup
- Administration Server or Node Manager Cannot Track the Status of a Managed Server
- Multicast Traffic Observed to be Unreliable During or After a Network Partition
- No Java DB Leasing Script or Support
- Initial Connection May Remain Open When Using t3 Protocol with External Load Balancers
- Managed Server Fails to Start When Added to Multicast Cluster

- High Number of Application Threads May Cause a Server to Stall
- Enterprise Beans Can be Accessed by Remote Clients When Annotated with @Local

Using IPv6-Formatted Addresses

Issue

Impacted Platforms: All

When using an IPv6-formatted address for Oracle WebLogic Server, the URL should include square brackets ('[' and ']') for the host address. Otherwise, WLST may fail to connect to the running server.

Workaround

Add square brackets to the host address. For example:

```
t3://[fe80:0:0:0:203:baff:fe2f:59e5]:9991
```

Cannot Start Server After a Whole Server Migration

Issue

Impacted Platforms: All

If the Oracle WebLogic Server Administration Server is down when the whole server migration occurs for a clustered server to a machine on which it was never run, then you cannot start the server on the new machine.

Workaround

Use one of the following workarounds for this issue:

- Ensure that the Administration Server is up when the server migration is being performed.
- Use a shared disk/NFS for all the migratable servers in the cluster.

Object State is Not Retained After Renaming a Field

Issue

Impacted Platforms: All

When FastSwap is enabled in a J2EE application, you can make certain types of changes to Java classes during development and expect to see the change without re-deploying, with all instance states of the Java object being retained.

One type of change that does NOT retain the object state is when you change a field name. The field name change is treated as follows:

- The field with the old name is deleted.
- The field with the new name is added.

In this case, any state in the old field is not carried over to the renamed field.

Using the Workshop or FastSwap Ant task, you may see a `FastSwap operation completed successfully` message, even when an instance field name change causes a value to reset.

Workaround

You should expect an instance value to be reset when you change a field name.

Servers Configured to Listen on a Host Name Are Listening on a Different Host Name After Startup

Issue

Impacted Platforms: All

When using a host name to specify configuring the listen address on the WebLogic Server Administration Server or a Managed Server, machines that are configured with multiple Ethernet cards may listen on a different host name after startup. For example:

- The machine has 3 Ethernet cards
- Card 1 is mapped to `hostname1-s` (DNS registered host name)
- Card 2 is mapped to `hostname1-i` (DNS registered host name)
- Card 3 is mapped to `hostname1` (actual node's host name)
- You configure the server to listen on `hostname1`
- After starting the server, it is listening on `hostname1-s` because Windows resolves the actual node's host name to the first enabled Ethernet card address

Workaround

Use one of the following three workarounds for this issue:

1. Use the IP address, instead of the host name, as the listen address of the WebLogic Server Administration Server. On Managed Servers, use the IP address as the listen address, or configure the actual physical host name to the first Ethernet card in the machine.
2. Add the following entry to the C:\Windows\system32\drivers\etc\hosts file on the machine:

   `<ip_address> <hostname>`

3. Change the order of the network cards in the machine so that the card with the actual node's host name is Card 1.

Administration Server or Node Manager Cannot Track the Status of a Managed Server

Issue

Impacted Platforms: Linux

If you start a managed server by providing an incorrect WebLogic Server Administration Server URL from the command line (that is, the Administration Server cannot be reachable at the provided URL), the managed server will start in Managed Server Independence (MSI) mode.

In this case, neither the Administration Server nor Node Manager can track the status of the managed server. The WebLogic Server Administration Console will show the status of the managed server as UNKNOWN, but the server will actually be RUNNING in MSI mode.

Workaround

N/A

Multicast Traffic Observed to be Unreliable During or After a Network Partition

Issue

Impacted Platforms: Linux

During or after a network partition that causes a server migration to take place, multicast traffic has been observed to be unreliable. For example, one node may be receiving multicast traffic, but traffic originating from this node is not received on other nodes in the network. As a result, the migrated servers are not added to the cluster because their heartbeats were not received.

Workaround

Currently, the only known workaround is to use unicast cluster messaging.

No Java DB Leasing Script or Support

Issue

Impacted Platforms: All

Oracle WebLogic Server does not support Java DB for migration. There is no leasing script available in the `WL_HOME`/server/db directory for Java DB.

Workaround

No workaround for this issue.

Initial Connection May Remain Open When Using t3 Protocol with External Load Balancers

Issue

Impacted Platforms: All

When using the `t3` protocol with external load balancers, the initial connection may remain associated with the IP address of the load balancer used to do the bootstrap into the cluster. Therefore, a small percentage of requests may pass through the load balancer after the initial connection. This behavior, if present, is a side-effect of the implementation that should not be relied upon since Oracle reserves the right to change this behavior at any point in time.

Workaround

N/A

Managed Server Fails to Start When Added to Multicast Cluster

Platform: All

If you have a cluster containing at least two Managed Servers, and the messaging mode of the cluster is set to multicast, then the Managed Servers in the cluster will fail to start.

Issue

Impacted Platforms: All

If you have a cluster containing at least two Managed Servers, and the messaging mode of the cluster is set to multicast, then the Managed Servers in the cluster will fail to start.

Workaround

To workaround this issue, add the following property to `JAVA_OPTIONS` in the startup script `startWebLogic.sh`. For example:

```
export JAVA_OPTIONS="${JAVA_OPTIONS} -Djava.net.preferIPv4Stack=true"
```

High Number of Application Threads May Cause a Server to Stall

Issue

Impacted Platforms: All

A server JVM appears to have stalled; and a thread dump of this JVM reveals that almost all `weblogic.kernel.Default` threads appear to be stalled in calls such as `wait-for-data` or `wait-for-prepare-acks`.

Workaround

- Disable the Work Manager enhanced increment advisor by specifying the `-Dweblogic.UseEnhancedIncrementAdvisor=false` system property on the server command line.

- If the previous workaround does not work, perform other workarounds listed below:

  – Set the `FEJmsDispatcher` and `BEJmsDispatcher` to have a minimum constraint of 1 and a maximum constraint of 6, while keeping `Dweblogic.UseEnhancedIncrementAdvisor=false`.

  – Tune applications to use fewer threads each. For examples related to thread management for Message-Driven Beans (MDB), see Tuning Message-Driven Beans in *Tuning Performance of Oracle WebLogic Server*

  – Set the `-Dweblogic.threadpool.MinPoolSize=NNN` property on all server JVMs in a cluster to a value that is 20% higher than the current number of `weblogic.kernel.Default` threads in the thread dump. If you are not sure of the NNN count, try 100, and if that does not work, try 150, and so on. Note that configuring too many minpool threads can cause very poor performance *or even an 'out of memory'*.

– Set a JTA min-threads-constraint of 20 or 30 on all servers in all involved clusters for the `JTACoordinatorWM` Work Manager. You can do this setting using the `-Dweblogic.transaction.jta.coordinator.wm.min.constraint=YYY` system property.

Enterprise Beans Can be Accessed by Remote Clients When Annotated with @Local

Issue

Impacted Platforms: N/A

As per expected behavior, if the bean class is annotated with `@Local` (or neither with `@Local` nor `@Remote`), and if one of the implemented interfaces is extended with the `java.rmi.Remote` interface, then the interfaces should be accessed only by the local client, not by the remote client.

However, in 12.2.1, the interface can be accessed by the remote client when annotated with `@Local`.

Workaround

If you want access to an EJB to be restricted to local clients only, you should *avoid* both of the following in the EJB implementation:

* Using the `@Local` annotation
* Extending the `java.rmi.Remote` interface

Expected Behavior for Resource Consumption Manager (RCM) Triggers with Same Value and Different Actions

Issue

Impacted Platforms: N/A

A slow trigger and a shutdown trigger can be created for the same value. Similarly, a shutdown value as well as a notify value can be created. This should be validated or prevented manually by WebLogic System Administrator while configuring RCM triggers.

Workaround

N/A

Data Source Issues and Workarounds

This section describes the following issue and workaround:

* Data Source Validation Fails for SQL Server When Specifying a Port Number

Data Source Validation Fails for SQL Server When Specifying a Port Number

Starting from Oracle WebLogic Server 12.2.1, when you connect to a SQL Server named instance with a port number specified in the connection URL, the DataDirect JDBC driver for SQL Server returns the following error:

```
[FMWGEN][SQLServer JDBC Driver]Conflicting connection information. When the
instance name is specified, it is invalid to specify the port number.
```

The data source fails to deploy.

Workaround

Update the JDBC descriptor file to set the `allowPortWithNamedInstance` property to `true` or remove the port number from the URL.

When a port number is specified, the Oracle WebLogic Server Administration Console automatically appends the URL with the `allowPortWithNamedInstance=true` property. The WLST scripts must be updated by the administrator to set this property to `true`. The following sample URLs are valid:

```
jdbc:weblogic:sqlserver://host\
\INSTANCE:1433;DatabaseName=db;allowPortWithNamedInstance=true"
jdbc:weblogic:sqlserver://host:1433;DatabaseName=db"
jdbc:weblogic:sqlserver://host\\INSTANCE;DatabaseName=db"
```

Dependency Injection Issues and Workarounds

This section describes the following issues and workarounds:

- BeanManager Does Not Contain a ValidatorFactory Bean in Lifecycle Events
- CDI Enabled EAR with Non-CDI Enabled WAR Does Not Work Correctly
- CDI Treatment of RAR Changes in 12.2.1

BeanManager Does Not Contain a ValidatorFactory Bean in Lifecycle Events

Issue

Impacted Platforms: N/A

If a CDI extension is observing the lifecycle events AfterBeanDiscovery or AfterDeploymentValidation, an attempt to get a `javax.validation.ValidatoryFactory` bean instance will fail. For example:

```
public class MyExtension implements Extension {
    void checkValidatorFactoryBean(@Observes AfterBeanDiscovery abd, BeanManager bm) {
        Set<Bean<?>> validatorFactoryBeans
        = bm.getBeans(ValidatorFactory.class,
        new AnnotationLiteral<Default>() {});
    if (validatorFactoryBeans.isEmpty()) {
        throw new RuntimeException("Container provided BeanManager doesn't contain a
```

```
bean of javax.validation.ValidationFactory");
        }
    }
}
```

The example code above will cause a `RuntimeException` because the BeanManager cannot get a ValidatorFactory bean instance. This occurs because the ValidatorFactory and Validator bean types were removed from the built-in beans starting in CDI 1.1. In CDI 1.1 and later, ValidatorFactory and Validator beans are defined by the following extension: `org.hibernate.validator.internal.cdi.ValidationExtension`.

Note that when called during invocation of an AfterBeanDiscovery event observer, this method will only return beans discovered by the container before the AfterBeanDiscovery event is fired.

Workaround

N/A

CDI Enabled EAR with Non-CDI Enabled WAR Does Not Work Correctly

Issue

Impacted Platforms : N/A

If an application contains both a CDI enabled EJB module and a non-CDI enabled web module, events defined with the following qualifier are not sent:

`@Initialized(ApplicationScoped.class) and @Destroyed(ApplicationScoped.class)`

Workaround

Place an empty `beans.xml` file in the WEB-INF directory of the WAR file.

CDI Treatment of RAR Changes in 12.2.1

Issue

Impacted Platforms: N/A

For CDI 1.0 in Oracle WebLogic Server, RAR archives are treated as CDI bean archives if the `beans.xml` file is present in the META-INF directory, and the embedded library JAR classes are included as part of that bean archive. As of Oracle WebLogic Server 12.2.1, each archive, including embedded library JARs, is individually considered as a candidate bean archive based on the presence of the `META-inf/beans.xml` file or at least one class with a bean-defining annotation.

Therefore, to reproduce the previous behavior, the embedded library JARs must have either a META-INF/beans.xml entry or at least one class with a bean-defining annotation.

Workaround

N/A

Deployment Issues and Workarounds

This section describes the following issues and workarounds:

- security-permission Element is Not Available in weblogic-application.xml
- Extraneous String Values Interpreted as File Specification
- restore Method Does Not Update the DConfig Bean with Plan Overrides
- Attempting to Redeploy an Application Fails if the Application is Already Deployed Using a Different Source File Location
- Relevant Output Message Not Displayed
- Application Names Must be Unique Within a Domain

security-permission Element is Not Available in weblogic-application.xml

Issue

Impacted Platforms: All

The `security-permission` element is available in the `weblogic.xml` and `weblogic-ejb-jar.xml` deployment descriptors but is not available in the `weblogic-application.xml` descriptor. Therefore, in an Enterprise application, you can apply security policies only to JAR files that are EJBs or web applications.

Workaround

N/A

Extraneous String Values Interpreted as File Specification

Issue

Impacted Platforms: All

The `weblogic.Deployer` tool interprets any extraneous string values between command-line arguments as a file specification. For example, consider the following command:

```
java weblogic.Deployer -activate -nostage true -name myname -source
c:\myapp\mymodule
```

In this case, the tool attempts to activate a file specification named `true` because the `-nostage` option takes no arguments and `true` is an extraneous string value.

Workaround

N/A

restore Method Does Not Update the DConfig Bean with Plan Overrides

Issue

Impacted Platforms: All

The `restore` method does not correctly update the DConfig Bean with the plan overrides. For example, consider the following steps:

```
DeployableObject dObject =
    WebLogicDeployableObject.createDeployableObject(new File(appName));
DeploymentConfiguration dConfig =
    WebLogicDeploymentManager.createConfiguration(dObject);
dConfig.restore(new FileInputStream(new File(plan)));
```

In this case, the plan does not override the DConfig Bean correctly.

Workaround

Specify the plan when initializing the configuration for the application. For example:

```
helper = SessionHelper.getInstance(
    SessionHelper.getDisconnectedDeploymentManager());
helper.setApplication(app);
helper.setPlan(new File(plan));
helper.initializeConfiguration();
```

Attempting to Redeploy an Application Fails if the Application is Already Deployed Using a Different Source File Location

Issue

Impacted Platforms: Linux

If you initially deployed an application using one source file location, then attempt to redeploy the application using a new location for the source file, the deployment fails with the following exception:

```
New source location <new_source_file_path> cannot be configured deployed to
configured application, <application_name>. The application source is at
original_source_file_path. Changing the source location is not allowed for a
previously attempted deployment. Try deploying without specifying the source.
```

This is due to a Oracle WebLogic Server deployment restriction. Once you specify the source file for a deployment, you cannot change it on a redeployment.

Workaround

Undeploy the application before attempting to redeploy it using a new source file location.

Relevant Output Message Not Displayed

Issue

Impacted Platforms: All

If you create an application and deploy it to a target, and then try to deploy that same application to that same target, no relevant output message is displayed to inform you that your application is already deployed to that particular target. This occurs because when the application is deployed the second time it is considered to be the equivalent of a redeploy.

Workaround

N/A

Application Names Must be Unique Within a Domain

Issue

Impacted Platforms: All

As of Oracle WebLogic Server 12.2.1, when deploying an application to a domain with a specified application name, if the application name is already in use in the current domain, the application deployment fails.

This is a behavior change from previous Oracle WebLogic Server versions, where specifying the same application name caused Oracle WebLogic Server to automatically derive a unique name based on the specified name.

Workaround

To avoid application deployment failure, specify unique names for all applications in a domain.

Developer Experience Issues and Workarounds

This section describes the following issue and workaround:

- Users Need to Set BEA_HOME System Property While Using Appc for Pub-Sub Modules

Users Need to Set BEA_HOME System Property While Using Appc for Pub-Sub Modules

Issue

Impacted Platforms: All

An error occurs when using the appc Maven plug-in after installing Oracle WebLogic Server Maven artifacts to the local repository using the Maven synchronization plug-in.

Workaround

Oracle WebLogic Server pub-sub libraries rely on the `BEA_HOME` system property to resolve compiler issues. Set the `BEA_HOME` system property while running appc on pub-sub applications for compilation to resolve these dependencies.

Domain to Domain Partition Migration Issues and Workarounds

This section describes the following issues and workarounds:

- JDBC Stores are not Consolidated when Targeted to Migratable Targets Pointing to the Same Cluster
- D-PCT Export Fails If MBean Name Contains Slash or Period

JDBC Stores are not Consolidated when Targeted to Migratable Targets Pointing to the Same Cluster

Issue

Impacted Platforms: All

When importing a domain, all persistent stores that are targeted to migratable targets and pointing to the same cluster must be consolidated to a single entity with distribution policy set to "Distributed" and targeted to a cluster through a virtual target. However, in 12.2.1.2.0, this consolidation fails for JDBC Stores.

As a result of this, some JDBC stores are not referenced by any of the JMS servers, SAF agents or Path Services after import. This might increase the resource usage.

Workaround

After importing a domain, delete the JDBC stores that are not referenced by any JMS Servers, SAF Agents and Path Services.

D-PCT Export Fails If MBean Name Contains Slash or Period

Issue

Impacted Platforms: All

While using WLST offline for exporting a domain using D-PCT, if the MBean name contains one of the following characters, then the export of the source domain fails with an exception:

- period (.)
- forward slash (/)
- backward slash (\ )

Workaround

You can workaround this issue in one of the following ways:

1. Remove the resource from the source domain and re-create it after importing the domain archive.
2. Rename the resource by removing the characters that are not allowed in WLST offline mode. You can do this by editing the config.xml along with other configuration files appropriately. After modifying the MBean name, restart the source domain and before exporting the source domain ensure that the configuration change did not cause any other issue.

EJB Issues and Workarounds

This section describes the following issues and workarounds:

- Primary Key in Oracle Table is CHAR

- No Annotation that Enables Creation of a Clusterable Timer
- Kodo's MappingTool Cannot Generate Schemas
- Extensions to the JPA Metadata Model can be Specified Only Through Annotations
- Lookup Method Injection Not Supported by Spring
- Deserializing a JDO PersistenceManagerFactory in a Managed Environment May Fail
- Indexes Not Always Created During Schema Creation
- OpenJPA Throws an Exception When @Id Fields are Also Annotated as @Unique
- Cache Hit and Miss Counts May Rise Unexpectedly
- Open JPA Tries to Create a Table Even if the Table Exists
- EJB Applications Fail During Serialization
- EJB Handle Serialization Fails When Using IIOP to Invoke 11g EJB
- WebLogic Client Cannot Use IIOP to Look Up EJB 3.x Specified with the Remote Annotation

Primary Key in Oracle Table is CHAR

Issue

Impacted Platforms: All

The primary key in an Oracle table is a CHAR but the query field in the SQL table is a VARCHAR2.

Workaround

Change the database schema from CHAR to VARCHAR2. Using CHAR as a primary key is not recommended for the Oracle database.

No Annotation that Enables Creation of a Clusterable Timer

Issue

Impacted Platforms: All

There is no annotation for EJB3 beans or `Ejbgen` that enables creation of a clusterable timer.

Workaround

Create a `weblogic-ejb-jar.xml` file and add the `<timer-implementation>` element and corresponding values in the file.

Kodo's MappingTool Cannot Generate Schemas

Issue

Impacted Platforms: All

Kodo's MappingTool cannot generate schemas for classes that use BLOBs in their primary key. BLOBs can be used in a primary key, but the schema must be defined manually. Note

that support for BLOB columns in primary keys is not mandated by either the JDO or JPA specifications.

Workaround

None.

Extensions to the JPA Metadata Model can be Specified Only Through Annotations

Issue

Impacted Platforms: All

Extensions to the JPA metadata model can be specified only through annotations and not by using a structure similar to the `orm.xml` file defined by the specification.

Workaround

To specify Kodo-specific metadata for your object model, do one of the following:

- Use the Kodo-specific annotations.
- Convert the XML-based metadata to the JDO metadata format, which does support XML specification of extensions.

Lookup Method Injection Not Supported by Spring

Issue

Impacted Platforms: All

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

Workaround

N/A

Deserializing a JDO PersistenceManagerFactory in a Managed Environment May Fail

Issue

Impacted Platforms: All

Deserializing a JDO `PersistenceManagerFactory` in a managed environment may fail. The exception states that the `javax.jdo.PersistenceManagerFactoryClass` property is missing. Note that serializing a `PersistenceManagerFactory` should not generally be necessary in a managed environment.

Workaround

None.

Indexes Not Always Created During Schema Creation

Issue

Impacted Platforms: All

Indexes declared at the class level are not always created during schema creation.

Workaround

Create the indexes manually after running the schema generation tools.

OpenJPA Throws an Exception When @Id Fields are Also Annotated as @Unique

Issue

Impacted Platforms: All

OpenJPA throws an exception when `@Id` fields are also annotated as `@Unique` in some databases. The database primary keys are unique by definition. Some databases implement this by creating a unique index on the column.

Workaround

Do not specify both `@Id` and `@Unique` on a single field.

Cache Hit and Miss Counts May Rise Unexpectedly

Issue

Impacted Platforms: All

The cache hit and miss counts may rise unexpectedly when manipulating entities without the version data. The extra cache access occurs when EntityManager closes and all contained entities are detached. Entities without version fields appear to the system to be missing their version data, and the system responds by checking their version in the cache before detachment.

Workaround

Entities with version fields or other version strategies do not cause extra cache access.

Open JPA Tries to Create a Table Even if the Table Exists

Issue

Impacted Platforms: All

When using the MySQL database, if OpenJPA is configured to automatically run the mapping tool at runtime and create tables within the default schema, it will try to create the table even if the table exists in the database. For example:

```
<property name='openjpa.jdbc.SynchronizeMappings' value='buildSchema'/>
<property name='openjpa.jdbc.Schema' value='MySQL database name' />
```

A `PersistenceException` message will be thrown to indicate that the table already exists and the table creation statement fails.

Workaround

To avoid this problem, if you are using the MySQL database, do not configure OpenJPA to automatically run the mapping tool at runtime and specify the default schema at the same time.

EJB Applications Fail During Serialization

Issue

Impacted Platforms: All

EJB applications that use IIOP and send JPA entities from the server to the client will fail during deserialization if the entities are Serializable (but not Externalizable) and do not declare a `writeObject()` method.

Workaround

Add a `writeObject()` method to such entity classes. The write object can be trivial:

```
private void
writeObject(java.io.ObjectOutputStream out)
   throws IOException {
  out.defaultWriteObject();
}
```

EJB Handle Serialization Fails When Using IIOP to Invoke 11g EJB

Issue

Impacted Platforms: All

As described in the Enterprise JavaBeans Specification, the remote home interface allows a client to obtain a handle for that remote home interface. The handle can be serialized and written to stable storage. Later, possibly in a different JVM, the handle can be deserialized from stable storage and used to obtain a reference to the remote home interface.

However, when a servlet hosted on Oracle WebLogic Server 12.2.1 (and later) uses the IIOP protocol to look up the remote home interface of an EJB hosted on Oracle WebLogic Server 11g, serialize the handle to a file, and then deserialize the handle from the file, the deserialization may fail with a `ClassNotFoundException`.

The situation also applies to an EJB hosted on Oracle WebLogic Server 11g that attempts to use IIOP to invoke an EJB hosted on Oracle WebLogic Server 12.2.1 (and later).

Workaround

Use the T3 protocol instead of IIOP.

WebLogic Client Cannot Use IIOP to Look Up EJB 3.x Specified with the Remote Annotation

Issue

Impacted Platforms: All

When an application using the WebLogic standard client (`wlclient.jar`) uses the IIOP protocol to look up the remote home interface of an EJB 3.*x* bean that has been decorated with the `@Remote` annotation, the lookup may fail with the `ClassNotFoundException` message.

Workaround

You can do one of the following:

- In the client classpath, use the WebLogic Install client, `weblogic.jar`, instead of the WebLogic standard client, `wlclient.jar`.

- Create the remote home interface of the EJB by extending the `java.rmi.Remote` interface instead of using the `@Remote` annotation.

HTTP Publish/Subscribe Server Issues and Workarounds

This section describes the following issues and workarounds:

- Authentication and Authorization of the Local Client is Not Supported
- Event Messages Published by Local Clients Do Not Go Through Filters

Authentication and Authorization of the Local Client is Not Supported

Issue

Impacted Platforms: All

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

Workaround

N/A

Event Messages Published by Local Clients Do Not Go Through Filters

Issue

Impacted Platforms: All

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

Workaround

N/A

Installation and Patching Issues and Workarounds

This section describes the following issues and workarounds:

- Installation Fails with Fatal Error
- FAILED Server State Interrupts ZDT Rollout During the Shutdown Operation
- Long Wait for JMS T3 Standalone Clients During JMS Service Failback

Installation Fails with Fatal Error

Issue

Impacted Platforms: All UNIX

The installer does not verify whether sufficient disk space is available on the machine prior to completing the installation. As a result, if an installation cannot be completed due to insufficient space, the installer displays the following error message and exits:

```
Fatal error encountered during file installation. The installer will now
cleanup and exit!
```

Workaround

If this problem occurs, restart the installer using the following command:

```
server103_linux32.bin -log=log.out -log_priority=debug
```

The preceding command generates a log of the installation procedure, providing details about the exact cause of the failure. If the cause is indeed insufficient space, the log file indicates it explicitly.

FAILED Server State Interrupts ZDT Rollout During the Shutdown Operation

Issue

Impacted Platforms: All

During server shutdown when executing rollouts, if the server enters the FAILED state, you may encounter the following error:

```
Workflow wf0008 failed and the revert process was not initiated. The failure
was: Failure performing execute of wf0008-3-1-0
(ShutdownServerResumeOnRevertCommand), caused by Failed to shut down server
server1: java.lang.Exception: The process for the server server1 has not
completely shut down. This problem should be reported and you may have to kill
the process manually.
```

This error is encountered when using WLST or the Administration Console.

Workaround

You must check the server logs carefully to determine the reason for the server failure which led to the shutdown failure. You can continue the rollout after resolving the issue and manually shutting down the server.

Long Wait for JMS T3 Standalone Clients During JMS Service Failback

Issue

Impacted Platforms: N/A

In the Zero Downtime (ZDT) patching scenario, when the rollout in progress involves the JMS service migration with a case of failback, the JMS T3 standalone clients are unable to perform JNDI look up for the connection factory and the destination objects on the JMS server.

Workaround

When the migrated service fails back to the original server, the JMS standalone clients must wait for nondeterministic time till the JNDI looked up successfully.

Java EE Issues and Workarounds

This section describes the following issues and workarounds:

- FastSwap May Relax the Access Modifiers of Fields and Methods
- FastSwap Does Not Support Redefinition of the Entity Bean and ejbClass
- Classpath Order Is Not Guaranteed When There Are Multiple JARs in an EAR File
- FastSwap Not Supported When Using CDI
- No Library is Loaded if the library-directory Element is Empty
- Disable Implicit CDI Scanning When Migrating Java EE 6 Applications to Java EE 7

FastSwap May Relax the Access Modifiers of Fields and Methods

Issue

Impacted Platforms: All

FastSwap may relax the access modifiers of fields and methods. Private and protected members may be made public at runtime. This change alters the behavior of reflection and may affect reflection-based frameworks such as Struts.

Workaround

N/A

FastSwap Does Not Support Redefinition of the Entity Bean and ejbClass

Issue

Impacted Platforms: All

FastSwap does not support redefinition of the Entity bean and ejbClass (Session/MDB). Therefore, any updates to entity classes will cause redefinition errors.

Workaround

After updating an entity class, redeploy the application.

Classpath Order Is Not Guaranteed When There Are Multiple JARs in an EAR File

Issue

Impacted Platforms: All

When you have an EAR file containing separate JAR files, and two or more of those JAR files have a class with the same name, it is not possible to predict from which of those JAR files Oracle WebLogic Server will instantiate the class. This is not an issue if the classes are the same, but if they are different implementations, the results are unpredictable.

Workaround

Currently there is no known workaround for this issue.

FastSwap Not Supported When Using CDI

Issue

Impacted Platforms: All

FastSwap is not supported when using CDI. If you deploy an application in exploded format with FastSwap enabled, this deployment fails and errors related to CDI occur.

Workaround

N/A

No Library is Loaded if the library-directory Element is Empty

Issue

Impacted Platforms: All

The Java EE 7 specification (https://jcp.org/en/jsr/detail?id=342) states that an empty `library-directory` element may be used to specify that there is no library directory.

In previous releases of Oracle WebLogic Server, an empty `library-directory` element in an `application.xml` file, as shown below, resulted in the library JAR files in the root directory of an EAR file being loaded as libraries:

```
<library-directory></library-directory>
```

As of Oracle WebLogic Server 12*c* (12.2.1.1) this behavior was changed to adhere to the Java EE 7 specification. Now, if an empty `library-directory` element exists in the

`application.xml` file, no library is loaded from the application root, the `lib` directory, or a shared library.

> **✎ Note:**
>
> If you create an empty directory in the application and point the `library-directory` element to that directory, you can load libraries from shared libraries (but not libraries from the `lib` directory) without removing libraries from the `lib` directory.

Workaround

N/A

Disable Implicit CDI Scanning When Migrating Java EE 6 Applications to Java EE 7

Issue

Impacted Platforms: All

When migrating existing applications to Oracle WebLogic Server 12.2.1.1, the performance of applications developed using Java EE 6 (or prior Java EE versions) may be adversely affected by changes to the default CDI scanning required by Java EE 7.

Workaround

To improve the deployment performance of applications developed on previous Java EE versions, you can disable implicit CDI scanning in Java EE 7 by setting the value of `implicit-bean-discovery-enabled` to `false`. You can set this value in one of the following ways:

- Using the Oracle WebLogic Server Administration Console, go to the Domain General Configuration page, and in the Advanced Setting section deselect **Enable Implicit Bean Discovery**.

- Using WLST online or offline.

  - To change this setting using WLST online, enter the following commands:

    ```
    connect('user','password','url')
    domainConfig()
    edit()
    cd('CdiContainer/mydomain')
    startEdit()
    set('ImplicitBeanDiscoveryEnabled',0)  // 1 to enable 0 to disable
    validate()
    save()
    activate(block="true")
    ```

  - To change this setting using WLST offline, enter the following commands:

    ```
    readDomain(domain)
    create('mydomain','CdiContainer')
    cd('CdiContainer/mydomain')
    set('ImplicitBeanDiscoveryEnabled',0)
    // 1 to enable 0 to disable
    ```

```
updateDomain()
closeDomain()
```

JDK Issues and Workarounds

This section describes the following issue and workaround:

- Keytool Error When Converting Non-FIPS Compliant Keystores Using JDK8u301 or Later

Keytool Error When Converting Non-FIPS Compliant Keystores Using JDK8u301 or Later

Issue

Impacted Platforms: All

The default JKS keystore with CA certificates, `cacerts`, included with the JDK is not FIPS compliant in WebLogic Server 12.2.1.3 and earlier. FIPS 140-2 requires a PKCS12 PBES2 keystore; JKS keystores and PKCS12 keystores created with keytool using the Sun JSSE provider (the default) are not supported and must be converted to a FIPS compliant keystore.

Due to changes in JDK 8u301 and later, keytool throws an exception and the keystore is not created when using the keytool command to convert a non-FIPS compliant JKS or PKCS12 keystore to a FIPS compliant keystore. This error occurs if you set the `–srcprovidername` property to `JsafeJCE`.

Workaround

The topic Creating FIPS 140-2 Compliant Keystores in *Administering Security for Oracle WebLogic Server* provides procedures for converting non-FIPS compliant JKS and PKCS12 keystores using the RSA JCE provider. If you are using JDK 8u301 or later, omit the `-srcprovidername JsafeJCE` parameter from the keytool command. For example:

Example 2-1   Keytool command

```
keytool -importkeystore -srckeystore /u01/jdk/jre/lib/security/
cacerts.p12
-srcstoretype PKCS12
-destkeystore /u01/jdk/jre/lib/security/cacerts.rsa
-deststoretype PKCS12 -destprovidername JsafeJCE
-providerclass com.rsa.jsafe.provider.JsafeJCE
-providerpath $CLASSPATH
```

JMS Issues and Workarounds

This section describes the following issues and workarounds:

- Change in Behavior of Unmapped Connection Factory Resources
- Deployment Descriptor Validation Fails
- Exception When Multiple Producers Use the Same Client SAF Instance

- • [Multi-Byte Characters are Not Supported in Store File and Directory Names](#)

- • [Testing Abrupt Failures of WebLogic Server When Using File Stores on NFS](#)

- • [Custom Domain Template Upgrade May Result in Lost Topic Messages or Depleted Server Memory](#)

- • [Set System Properties for Interoperability with Existing JMS .NET Clients](#)

- • [JMS Distributed Destinations Are Not Present After Extending a Domain](#)

- • [Using JBoss 5 as a Foreign Provider for a JMS Messaging Bridge Causes Issues](#)

Change in Behavior of Unmapped Connection Factory Resources

Issue

Impacted Platforms: All

This issue may occur if you are using an EJB or servlet with resource reference to a JMS Connection Factory, that is, when a connection factory is obtained using an @Resource annotation or a context lookup of a resource defined in an application's XML descriptor, and if this resource reference does not explicitly specify a JNDI name via a lookup attribute, a mappedName attribute, or a jndi-name in a descriptor file.

In WebLogic Server 12.2.1 and later releases, the Java EE 7 Platform Specification mandates a change that can cause such resource references to unexpectedly return a Platform Default Connection Factory instead of either returning a connection factory from JNDI with a JNDI name that matches the resource name, or returning a `javax.naming.NameNotFoundException`. Following are some of the possible symptoms of this change in behavior of unmapped connection factory resources:

- • An INFO level log message indicating that an application has been given a default connection factory though it might have required a custom connection factory instead. For example,

    ```
    BEA-169827> <The resource reference "jms/my_cf" of type JMS Connection Factory in
    application "my_module" does not specify a JNDI name. As of Java EE 7 and WebLogic
    version 12.2.1.1, such references return a "java:comp/DefaultJMSConnectionFactory"
    by default when no Connection Factory with a JNDI name that matches the resource
    name is found.>
    ```

- • An application stops delivering customized behavior that is expected from a custom configured WL JMS connection factory, such as a default message expiration.

- • Errors, such as `Illegal Destination type`, which may occur while attempting to use an AQ JMS destination with a WebLogic JMS connection factory.

- • Exceptions such as `Destination not found` or `Dispatcher not found`.

- • Temporary destination is created on a local JMS Server instead of a JMS Server that is hosted in the same cluster as the intended connection factory.

Workaround

To ensure that applications work as expected, we recommend one of the following workarounds:

- • Explicitly configure the system to force old behavior by setting the WebLogic Server `JMSConnectionFactoryUnmappedResRefMode` configurable to the **FailSafe** mode. Note that this setting is compliant with the Java EE 7 specification although Java EE 7

mandates that this setting cannot default to the **FailSafe** mode. For more information, see Specifying the Unmapped Resource Reference Mode for Connection Factories in *Administering JMS Resources for Oracle WebLogic Server*.

- Examine and fix all unmapped resource reference in all servlets and EJB applications to make them explicitly specify their desired connection factory. If the desired connection factory is Java EE 7 default connection factory, then you can specify `java:comp/DefaultJMSConnectionFactory` as the JNDI name.

Deployment Descriptor Validation Fails

Issue

Impacted Platforms: All

Deployment descriptor validation fails when descriptor validation is enabled, and an EAR file contains only JMS modules.

Workaround

Ensure that there is at least one Java EE specification-compliant module in the EAR file.

Exception When Multiple Producers Use the Same Client SAF Instance

Issue

Impacted Platforms: All

When multiple JMS producers use the same JMS Client SAF instance (within a single JVM), depending on the timing of the JMS SAF client creation, you might receive the following exception:

```
Error getting GXA resource [Root exception is weblogic.jms.common.JMSException:
weblogic.messaging.kernel.KernelException: Error getting GXA resource]
```

Workaround

When using multiple JMS SAF client producers, introduce a small delay between the creation of each new client.

Multi-Byte Characters are Not Supported in Store File and Directory Names

Issue

Impacted Platforms: All

There is no support for multi-byte characters in the Oracle WebLogic Server Store file and directory names. For instance, if the Oracle WebLogic Server name has multi-byte characters, the default store is not created, and Oracle WebLogic Server fails to boot.

Workaround

Create the Oracle WebLogic Server instances without multi-byte characters in the path name and use that path name for the default store configuration. Do not use multi-byte characters.

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

Issue

Impacted Platforms: All

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

Workaround

None.

Custom Domain Template Upgrade May Result in Lost Topic Messages or Depleted Server Memory

Issue

Impacted Platforms: All

As of Oracle WebLogic Server 12.1.2, JMS server and WebLogic store targeting in the Configuration Wizard has changed.

In 12.1.2, the Configuration Wizard automatically targets JMS servers and WebLogic stores to migratable targets when these objects are not explicitly targeted to a Managed Server or a cluster in a domain template. Using migratable targets is a best practice that enables high availability for the JMS system.

If you use a custom domain template to create domains in Oracle WebLogic Server 12.1.2, and the template includes JMS servers and WebLogic stores that are not explicitly targeted to a Managed Server or a cluster, targeting results differ from previous releases.

This change in behavior also results in a change to durable topic subscriptions for message-driven beans (MDBs) that enable the `generate-unique-client-id` extension. When Oracle WebLogic Server creates durable topic subscriptions for such an MDB, it changes the subscription name to include the migratable target name. Messages stored under the original subscription names are not delivered to the MDB, and the original subscriptions continue to accumulate new messages.

When planning your upgrade, note the following important changes:

- Use the Reconfiguration Wizard to reconfigure your existing pre-12.1.2 domain for keeping the configuration and durable topic subscriptions intact. For instructions, see Reconfiguring a WebLogic Domain in *Upgrading Oracle WebLogic Server*.

- If you regenerate your domain using a custom template, as described above, the resulting configuration differs from previous releases and new durable topic subscriptions are created when the system is started. However, old durable topic subscriptions remain. Those subscriptions contain unprocessed messages that continue to accumulate messages, depleting the server memory.

Workaround

Choose one of the following recommended workarounds:

- Use the Reconfiguration Wizard to perform an in-place upgrade of the the domain.

- Drain messages before upgrading or regenerating the domain configuration. After upgrading, use the Oracle WebLogic Server Administration Console to search and delete the old JMS subscriptions.

- Delete the JMS file store files or JMS JDBC store tables. All messages persisted in the file or table are deleted.

Set System Properties for Interoperability with Existing JMS .NET Clients

Issue

Impacted Platforms: All

To enable JMS .NET clients developed prior to WebLogic Server 12.1.3 to interoperate with WebLogic Server 12.1.3, set the following system property on your WebLogic Server 12.1.3 instances:

```
-Dweblogic.protocol.t3.login.replyWithRel10Content=true
```

The default value is `false` for interoperability with existing JMS .NET clients developed prior to WebLogic Server 12.1.3.

Workaround

None.

JMS Distributed Destinations Are Not Present After Extending a Domain

Platform: All

Issue

Impacted Platforms: All

After extending a domain using an extension template that was generated from a domain that contains JMS distributed destinations, the distributed destinations are not present in the domain. This impacts the following distributed destinations:

- *distributed-queue*
- *distributed-topic*
- *uniform-distributed-queue*

- *uniform-distributed-topic*

If any of these elements are contained in the JMS XML files in the source template, they are not processed and are not configured in the destination domain.

Workaround

To resolve this, use the following sequence of WLST commands, either interactively or in a script:

```
readDomain('domain_path')

addTemplate('extension_template_file')

unassign('JmsSystemResource','resource_name','Target','destination_name')
For example: unassign('JmsSystemResource','JMSModule','Target','C1')

assign('JmsSystemResource','resource_name','Target','destination_name')
For example: assign('JmsSystemResource','testModule','Target','Server-1')

unassign('JmsSystemResource','resource_name','Target','destination_name')
For example: unassign('JmsSystemResource','testModule','Target','Server-1')

assign('JmsSystemResource','resource_name','Target','destination_name')For example:
assign('JmsSystemResource','testModule','Target','C1')

updateDomain()

closeDomain()
```

Using JBoss 5 as a Foreign Provider for a JMS Messaging Bridge Causes Issues

Issue

Impacted Platforms: All

When creating a JMS messaging bridge using JBoss 5 as a foreign provider, conflicting versions of the same class are loaded. This causes the bridge to fail during startup.

Workaround

Oracle recommends that you upgrade to JBoss 7 to avoid this issue.

JTA Issues and Workarounds

This section describes the following issue and workaround:

- Transaction Protocol Changes May Cause Inconsistent Transaction Outcomes

Transaction Protocol Changes May Cause Inconsistent Transaction Outcomes

Issue

Impacted Platforms: All

When the transaction protocol for a data source is changed, it is necessary to restart all targeted servers in order to avoid inconsistent transaction outcomes.

Workaround

N/A

Life Cycle Management Issues and Workarounds

This section describes the following issues and workarounds:

- Lifecycle Config Plug-In Path May Not be Updated After Unpacking a Domain
- Oracle Traffic Director is Not Being Updated With Resource Group Changes
- Partition Cannot be Created Due to Life Cycle Exception

Lifecycle Config Plug-In Path May Not be Updated After Unpacking a Domain

Issue

Impacted Platforms: All

When packing a domain that has been configured to use Lifecycle Manager in one environment using the `pack` command, and then unpacking it in another environment, the plug-in paths contained in the `<Domain>/config/lifecycle-config.xml` file may still reference the Oracle Home directory paths from the source environment.

Workaround

Rectify the file paths in the `lifecycle-config.xml` file to reflect the Oracle Home directory paths in the target environment.

Oracle Traffic Director is Not Being Updated With Resource Group Changes

Issue

Impacted Platforms: All

In an integrated environment involving Oracle Weblogic Server, Oracle Traffic Director (OTD), and Lifecycle Manager, if the out of band functionality of Lifecycle Manager is enabled, then the expectation is that any change in resource groups including the targeted changes to domain partitions will be sent to OTD using Lifecycle Manager.

However, as of 12.2.1, this behavior has changed; the updates to resource groups, including adding or deleting a resource group, are not being sent to OTD.

Workaround

You must restart the domain partition after the targeting configuration changes. This step ensures that OTD is updated with the latest configuration changes in resource groups.

Partition Cannot be Created Due to Life Cycle Exception

Issue

Impacted Platforms: Windows

A partition which uses a Japanese name virtual target cannot be created due to a life cycle exception. This only occurs on Windows platform.

Workaround

A partition which uses an English name as a virtual target can be created successfully.

Monitoring Issues and Workarounds

This section describes the following issues and workarounds:

- Issue with Ambiguous Watch Rule ObjectName Patterns
- Behavior Change in CreateSystemResourceControl
- Errors May Occur Writing to WLDF Archive During EBR Upgrade of WLDF Schema Using Upgrade Assistant

Issue with Ambiguous Watch Rule ObjectName Patterns

Issue

Impacted Platforms: All

When specifying a wildcard pattern in a variable for a watch rule expression that matches custom MBean ObjectName patterns, ensure that the pattern is sufficiently explicit. If you exclude an MBean type name and use an ambiguous instance pattern, the following may result:

- Only WebLogic Server runtime MBean instances are matched to the pattern.
- The desired custom MBean instances are ignored.

For example, the following ObjectName pattern does not explicitly declare a type and uses an ambiguous ObjectName pattern that can match a WebLogic Server runtime MBean instance:

```
${ServerRuntime//com.b*:Type=Server*,*}
```

Workaround

To avoid confusion, use a sufficiently explicit ObjectName pattern, or declare the MBean type in the variable expression.

Behavior Change in CreateSystemResourceControl

Issue

Impacted Platforms: All

This issue is related to a change in how WebLogic Diagnostic Framework (WLDF) uses the module name for harvester records and watch rule notifications. The internal descriptor name is now overridden to use the name that is provided when the external WLDF descriptor is registered through the Runtime Control API or WLST functions. You will notice this if you have been using the Runtime Control feature to deploy external WLDF system resources to gather Harvester metrics, or listen for a Watch rule notification based on the deployed module.

For example, assume that the Harvester and Watch elements in your deployed descriptor resemble the following:

```
<harvester>
    <name>MyExternalResource</name>
...
<watch-notification>
    <name>MyExternalResource></name>
...
```

In addition, you register this descriptor with the runtime control as `createSystemControl("resource1", ...)`. Then the previous harvester data would have been recorded using `MyExternalResource` as the `WLDFMODULE` column value for Harvester records in the archive for this resource. It would also be used for the module name in the Watch Notification payloads. Now, `resource1` would be used for the `WLDFMODULE` name in the harvester records and the watch and notification payloads.

Workaround

Use the name the external WLDF resource was registered with when using the WLST command `createSystemResourceControl()`. Additionally, any notification listeners for Watch notifications from an external resource that are dependent on the WLDF module name in the notification payload should be looking for the name the control was registered with.

For example, if you register your control as `createSystemResourceControl("resource1", ...)`, then the WLDF Accessor queries for this resource should include the module name as `WLDFMODULE='resource1'` in the query string.

Errors May Occur Writing to WLDF Archive During EBR Upgrade of WLDF Schema Using Upgrade Assistant

Issue

Impacted Platforms: All

If you have configured the WLDF archive for servers in a domain to use an Oracle EBR editioned schema, and then attempt to upgrade that schema using the Upgrade Assistant, it is possible that some errors may occur in servers that are still running against that schema when the upgrade is performed.

This is relevant in the following conditions:

- WLDF schemas are installed to an Oracle EBR database using the 12.1.2 Repository Creation Utility (RCU) or manually created WLDF schemas from an earlier version of the Oracle WebLogic Server.

- When using the Upgrade Assistant, the user chooses to upgrade the existing schema to use Oracle EBR editioned tables.

- There are servers running while the upgrade is performed (for example, if the schema is shared across multiple Oracle WebLogic Server domains).

During the upgrade, the WLDF tables are renamed and edition-based views are created to point to the renamed instances. No data is lost in this operation. However, in these situations, there may be a brief period where some errors can occur (during the time while the upgrade is performed) in the running servers when recording WLDF Harvester or Instrumentation data.

These errors are not critical and should not affect server performance but may result in a loss of a small amount of monitoring data for those servers.

Workaround

To avoid the potential of this occurrence, you can halt the affected WebLogic Server domain(s) during the Oracle Database upgrade process.

Node Manager Issues and Workarounds

This section describes the following issues and workarounds:

- Removing Primary Interface Causes Error During Server Migration
- Node Manager Not Putting Up -D64 When Starting Server Using Java Command
- Oracle HTTP Server Instances Start in UNKNOWN State
- Template Information For OPSS Missing In installNodeMgrSrv.cmd
- New Node Manager Property Names Cannot Be Used From WLST Offline

Removing Primary Interface Causes Error During Server Migration

Issue

Impacted Platforms: Linux

On some specific Linux platforms and versions, there is an issue removing a virtual interface/alias dynamically. Removing the virtual interface that is the primary address of the interface may result in other secondary virtual IP addresses being removed at the same time. This may lead to random exceptions occurring with Node Manager during server migration. If you have this issue, you may occasionally find exceptions in the Node Manager log file when shutting down a server after migration. For example, you may receive the following error:

```
java.io.IOException: Command '/<PATH to DOMAIN>/bin/server_migration/
wlsifconfig.sh -removeif -IPv4 eth0 X.X.X.X returned an unsuccessful exit code
'1'.
```

Here is an example of the issue:

First, add three virtual interfaces, with the first one being the primary:

```
$ sudo /sbin/ifconfig eth0:4 X.X.X.178 netmask 255.255.248.0
$ sudo /sbin/ifconfig eth0:5 X.X.X.179 netmask 255.255.248.0
$ sudo /sbin/ifconfig eth0:6 X.X.X.180 netmask 255.255.248.0
$ sudo /sbin/ifconfig eth0:4 down
```

When removing the primary (first one in list), the other two will be automatically removed at the same time.

Workaround

To fix this issue temporarily, use the following command to enable the `promote_secondaries` flag on your network interface. Replace `eth0` with your actual interface name:

```
$ sudo /sbin/sysctl net.ipv4.conf.eth0.promote_secondaries=1
```

You can also use the following command to update the default setting for all interfaces:

```
$ sudo /sbin/sysctl net.ipv4.conf.all.promote_secondaries=1
```

If this is enabled and the primary address of an interface gets deleted, a secondary interface will be upgraded to become the primary interface. The default is to purge all the secondary interfaces when you delete the primary interface.

To permanently remedy this issue after server reboot, update the `sysctl.conf` file. For example:

```
$ echo "net.ipv4.conf.eth0.promote_secondaries=1" >> /etc/sysctl.conf
```

Node Manager Not Putting Up -D64 When Starting Server Using Java Command

Issue

Impacted Platforms: HPUX IA64

There is a fundamental difference between Node Manager starting a server using a start script and Node Manager starting a server using the Java command. When using the start script, the -d64 flag is added based on some script language that detects the platform. Node Manager does not add this flag when starting a server with the Java command.

Workaround

When starting a server using Node Manager through the Java command, specify arguments such as -d64 in the `ServerStart` arguments field.

Oracle HTTP Server Instances Start in UNKNOWN State

Issue

Impacted Platforms: All

In rare cases, Oracle HTTP Server (OHS) instances that are managed by WebLogic Server may start in state `UNKNOWN`. This can occur if the Administration Server is unable to initialize the state of the OHS instance, for example, if Node Manager is not running

at the time the OHS instance is created and if you connect directly to Node Manager and bypass the Administration Server when checking the state for the first time.

Workaround

Continue to use the Administration Server. The state of the OHS instance should be properly initialized.

Template Information For OPSS Missing In installNodeMgrSrv.cmd

Issue

Impacted Platforms: MS Windows

The OPSS template information that is necessary to start Node Manager using `installNodeMgrSvc.cmd` is missing. As a result, `installNodeMgrSvc.cmd` cannot be used correctly in a JRF/OPSS environment. Node Manager will start without the information used to specify the correct classes to load KSS and will use JKS as the default keystore. You will notice this problem when you are setting up your environment and first run `startNodeManager.cmd`, which will load KSS.

Workaround

Edit the `installNodeMgrSvc.cmd` command before using it, copying the section from `startNodeManager.cmd`. For example:

```
set JAVA_OPTIONS=%JAVA_OPTIONS%
-
Doracle.security.jps.config=C:\OracleHome11g\user_projects\domains\mydomain\config\fmwc
onfig\jps-config-jse.xml
-Dcommon.components.home=C:\OracleHome1213\Oracle_Home\oracle_common -
Dopss.version=12.1.3
if NOT "%POST_CLASSPATH%"=="" (set
POST_CLASSPATH=C:\OracleHome1213\Oracle_Home\oracle_common\modules\oracle.jps_12.1.3\jp
s-manifest.jar;%POST_CLASSPATH%)
else (set
POST_CLASSPATH=C:\OracleHome1213\Oracle_Home\oracle_common\modules\oracle.jps_12.1.3\jp
s-manifest.jar)
```

New Node Manager Property Names Cannot Be Used From WLST Offline

Issue

Impacted Platforms: All

WLST offline, as well as the `pack` and `unpack` commands, do not support setting the following new Node Manager replacement properties that were introduced in WebLogic Server 12.1.3.

Deprecated Property	Replacement Property
CipherSuite	CipherSuites
CoherenceStartScriptEnabled	coherence.StartScriptEnabled
CoherenceStartScriptName	coherence.StartScriptName
IfConfigDir	weblogic.IfConfigDir

Deprecated Property	Replacement Property
`JavaHome`	Use `weblogic.startup.JavaHome` for WebLogic Server processes or `coherence.startup.JavaHome` for Coherence processes.
`StartScriptEnabled`	`weblogic.StartScriptEnabled`
`StartScriptName`	`weblogic.StartScriptName`
`StopScriptEnabled`	`weblogic.StopScriptEnabled`
`StopScriptName`	`weblogic.StopScriptName`
`UseMACBroadcast`	`weblogic.UseMACBroadcast`

Workaround

If you configure Node Manager properties using WLST offline, or the `pack` and `unpack` commands, you must continue to use the preceding deprecated properties, which remain fully supported in WebLogic Server. For more information, see Node Manager Properties in *Administering Node Manager for Oracle WebLogic Server*.

Oracle Kodo Issues and Workarounds

This section describes the following Oracle Kodo issue and workaround:

- Value Retrieved for an Empty Byte Array Field is NULL

Value Retrieved for an Empty Byte Array Field is NULL

Issue

Impacted Platforms: MS Windows 2000

When trying to persist an empty byte array field within an entity to a Sybase or Oracle database, the value gets stored as a NULL rather than as bytes. As a result, when retrieving the value, NULL is returned.

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

Workaround

N/A

Plug-ins Issues and Workarounds

This section describes the following issue and workaround:

- apr_socket_connection Exception Occurs When Using the Proxy Plug-In for IIS

apr_socket_connection Exception Occurs When Using the Proxy Plug-In for IIS

Issue

Impacted Platforms: All

The proxy plug-in for IIS does not work in the following conditions and results in an `apr_socket_connection` error:

1. Both the IIS and Oracle WebLogic Server instances are on the same machine.

2. IPv6 is enabled on the machine, but the machine is not in an IPv6 environment (that is, the IPv6 interface is enabled but is not working).

3. The listen address of the Oracle WebLogic Server instance is set to the simple host name.

4. Either the directive WebLogicHost or WebLogicCluster is set to the simple host name for the IIS instance.

Workaround

N/A

RMI-IIOP Issues and Workarounds

This section describes the following issue and workaround:

- Truncated Java Exception Stack Trace Returned to Client if EJB Invocation Fails

Truncated Java Exception Stack Trace Returned to Client if EJB Invocation Fails

Issue

Impacted Platforms: All

When a client invokes an EJB that is hosted in a WebLogic 12.1.2 domain configured to run in production mode, any invocation failure results in a truncated Java exception stack trace returned to the client.

Workaround

In the Java command that starts WebLogic Server, specify the following option:

`-Dweblogic.PrintStackTraceInProduction=true`

Security Issues and Workarounds

This section describes the following issues and workarounds:

- StoreBootIdentity Works Only if the Appropriate Server Security Directory Exists
- Boot Time Failure Occurs With SecurityServiceException

- InvalidParameterException Message Generated and Displayed
- Enabling Both the Authentication and Passive Attributes In SAML 2.0 Service Provider Services Is an Invalid Configuration
- Running the WebLogic Full Client in a Non-Forked VM
- Random Number Generator May Be Slow on Machines With Inadequate Entropy
- Additional Information for BEA-090402 Message
- LDAP Authenticator Log Messages Show Incorrect URL
- Security Errors Occur When Starting ODI Managed Server
- Use of WebLogic SAML Support For SSO is Not Supported with Security Realm Restart
- Compatibility Realm Domains Are Not Supported by WebLogic 12.2.1.1 Clients
- Partition Creation Fails after Upgrading a Domain

StoreBootIdentity Works Only if the Appropriate Server Security Directory Exists

Issue

Impacted Platforms: All

The `-Dweblogic.system.StoreBootIdentity` option works only if the appropriate server security directory exists. This directory is usually created by the Configuration Wizard or the upgrade tool.

However, the appropriate server security directory could be absent in domains checked into source-control systems.

Workaround

N/A

Boot Time Failure Occurs With SecurityServiceException

Issue

Impacted Platforms: All

A WebLogic Server instance can experience a boot time failure with a `SecurityServiceException` when the RDBMS Security Data Store is configured for a DB2 database using the DB2 driver supplied with WebLogic Server.

Workaround

When RDBMS Security Data Store is using the `AlternateId` connection property for a DB2 database, you must also set the additional property `BatchPerformanceWorkaround` as `true` when using the DB2 driver supplied with WebLogic Server.

InvalidParameterException Message Generated and Displayed

Issue

Impacted Platforms: All

After you configure either the Identity Provider or Service Provider services for SAML 2.0 and attempt to publish the SAML 2.0 services metadata file, an `InvalidParameterException` message may be generated and displayed in the WebLogic Server Administration Console.

Workaround

When configuring the SAML 2.0 federation services for a WebLogic Server instance, be sure to enable all binding types that are available for the SAML role being configured. For example, when configuring SAML 2.0 Identity Provider services, you should enable the POST, Redirect, and Artifact bindings. When configuring SAML 2.0 Service Provider services, enable the POST and Artifact bindings. Optionally, you may choose a preferred binding.

Enabling Both the Authentication and Passive Attributes In SAML 2.0 Service Provider Services Is an Invalid Configuration

Issue

Impacted Platforms: All

When configuring SAML 2.0 Service Provider services, enabling both the Force Authentication and Passive attributes is an invalid configuration that WebLogic Server is unable to detect. If both these attributes are enabled, and an unauthenticated user attempts to access a resource that is hosted at the Service Provider site, an exception is generated and the single sign-on session fails.

Note that the Force Authentication attribute has no effect because SAML logout is not supported in WebLogic Server. So even if the user is already authenticated at the Identity Provider site and Force Authentication is enabled, the user is not forced to authenticate again at the Identity Provider site.

Avoid enabling both these attributes.

Workaround

N/A

Running the WebLogic Full Client in a Non-Forked VM

Issue

Impacted Platforms: All

If the WebLogic Full Client is running in a non-forked VM, for example by means of a `<java>` task invoked from an Ant script without the `fork=true` attribute, the following error might be generated:

```
java.lang.SecurityException: The provider self-integrity check failed.
```

This error is caused by the self-integrity check that is automatically performed when the RSA Crypto-J library is loaded. (The Crypto-J library, `cryptoj.jar`, is in the `wlfullclient.jar` manifest classpath.)

This self-integrity check failure occurs when the client is started in a non-forked VM and it uses the Crypto-J API, either directly or indirectly, as in the following situations:

*   The client invokes the Crypto-J library directly.
*   The client attempts to make a T3S connection, which triggers the underlying client SSL implementation to invoke the Crypto-J API.

When the self-integrity check fails, further invocations of the Crypto-J API fail.

Workaround

When running the full client in a `<java>` task that is invoked from an Ant script, always set the `fork` attribute to `true`.

For more information about the self-integrity check, see "How a Provider Can Do Self-Integrity Checking" in How to Implement a Provider in the Java™ Cryptography Architecture, available at the following URL:

http://docs.oracle.com/javase/6/docs/technotes/guides/security/crypto/HowToImplAProvider.html#integritycheck

Random Number Generator May Be Slow on Machines With Inadequate Entropy

Issue

Impacted Platforms: Linux

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

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

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

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

Workaround

On low-entropy systems, you can use a non-blocking random number generator. To do this, add the `-Djava.security.egd=file:///dev/urandom` switch or `file://dev/./urandom` to the command that starts the Java process.

Optionally, you can raise the entropy level on Linux systems as follows:

- First, determine the current level

  ```
  cat/proc/sys/kernel/random/entropy_avail
  ```

- If the value is less than `500`, then you should configure the system to have more entropy.

  ```
  rngd -r /dev/urandom -o /dev/random -b -W 2048
  ```

  This will add bits to the entropy pool until the size is 2048.

Additional Information for BEA-090402 Message

Issue

Impacted Platforms: All

The `BEA-090402` message is a catalog message that explains what to do if a server instance fails to boot due to a problem with the `boot.properties` file.

However, the real issue is an authentication problem. `BEA-090402` describes the most likely root cause: the customer has modified the `boot.properties` file or the boot user password. Therefore, the authentication fails.

There are other causes for this failure that are less obvious. For instance, there could be an LDAP corruption, a disk failure, or a Managed Server may fail to connect to the Administration Server and falls back to authenticating on its local LDAP that is out-of-date. These causes are not mentioned in `BEA-090402`. If you are positive that you are not having a credential issue, `BEA-090402` may indicate one of these less common causes.

Workaround

N/A

LDAP Authenticator Log Messages Show Incorrect URL

Issue

Impacted Platforms: All

The Oracle WebLogic Server LDAP Authentication provider log messages show an incorrect URL for the LDAP connection returned by the `getConnection` method. The `getConnection` messages indicate that SSL is used, even if you did not specify SSL in the Oracle WebLogic Server provider configuration.

Workaround

The "Connecting to host" messages in the log file do correctly indicate whether SSL is used. For example,

- `<Connecting to host=somehost, port=3060>`

- `<Connecting to host=somehost, ssl port=3060>`

Security Errors Occur When Starting ODI Managed Server

Issue

Impacted Platforms: All

When starting an ODI Managed Server, the identity used to start the Managed Server is not mapping properly to the WebLogic Sever Administrator role, causing security errors. If these warnings are seen while starting the Managed Server, the embedded LDAP files from the Managed Server are causing a resynchronization of the policy from the Administration Server.

Workaround

Remove the embedded LDAP files in the folder `<domain>/…/data/ldap/ldapfiles` from the Managed Server and restart the Managed Server.

> **✎ Note:**
>
> Do not delete the Embedded LDAP files from the Administration server as the Administration Server LDAP files contain the primary data for the security providers.

Use of WebLogic SAML Support For SSO is Not Supported with Security Realm Restart

Issue

Impacted Platforms: All

Using SAML for single sign-on with web browsers and HTTP clients is not supported for automatic realm restart.

However, the use of SAML with web services is fully supported with these features.

Workaround

N/A

Compatibility Realm Domains Are Not Supported by WebLogic 12.2.1.1 Clients

Issue

Impacted Platforms: All

In WebLogic Server version 12.2.1.1, support for Compatibility security, including compatibility realms, has been removed. For more information about Compatibility security and compatibility realms, see What Is Compatibility Security? in *Administering Security for Oracle WebLogic Server*.

The 6.*x* realms were deprecated in WebLogic Server version 9.0 (November 2006). WebLogic domains configured with realm adapter security providers and 6.*x* realm configuration elements are no longer supported in WebLogic Server 12.2.1.1. For information about the specific Compatibility security and 6.*x* realm components removed and no longer supported in WebLogic Server 12.2.1.1, see Removed Functionality in *What's New in Oracle WebLogic Server*.

In addition, WebLogic Server 12.2.1.1 clients, or servers acting as a client, can no longer invoke on servers if the target domain is configured with a compatibility realm. Such an invocation throws a `ClassNotFoundException (RealmAdapterUser)` and the invocation fails.

Interoperability between WebLogic Server 12.2.1.1 and prior release servers is supported if compatibility realms are not configured. See Protocol Compatibility in *Understanding Oracle WebLogic Server*.

Workaround

N/A

Partition Creation Fails after Upgrading a Domain

Issue

Impacted Platforms: All

In WebLogic Server 12.2.1.1, the default authorization and default role mappings have changed. The role mappings have changed to include identity domains. For example, the default role mapping for the WebLogic Sever Administrator role has changed from Group(Administrators) to AdminIDDGroup(Administrators) in order to support identity domains.

If you try to create a partition in a domain after upgrading the domain, then the partition creation fails. This is because the domain is validated to check if every security realm contains the new policies and predicates. Since, the upgraded domain contains a security realm that was created in the release prior to 12.2.1, it does not contain the new policies. Therefore, the validation fails and the partition creation fails.

Workaround

After upgrading the domain, you must perform the following tasks:

1. Create a new security realm and set the new realm as the default realm.
2. Delete the old security realm.

For information about creating a new security realm or deleting an existing security realm, see **Manage security realms** in *Oracle Fusion Middleware Administration Console Online Help for Oracle WebLogic Server*.

System Component Architecture (SCA) Issues and Workarounds

This section describes the following issue and workaround:

- No Support for SCA in Domain Partitions

No Support for SCA in Domain Partitions

Issue

Impacted Platforms: All

The SCA container has not been updated for use in domain partitions. Use of SCA in partitions will result in undefined behavior. If you need to run SCA applications, do not add domain partitions to your domain.

Workaround

N/A

Upgrade Issues and Workarounds

This section describes the following issues and workarounds:

- Set weblogic.upgradeExpirationDate to Allow Cluster Messaging during Rolling Upgrade to 12.2.1.4.0
- Reconfiguration Wizard Shows the Domain Version as 12.2.1.3.0 Instead of 12.2.1.4.0

Set weblogic.upgradeExpirationDate to Allow Cluster Messaging during Rolling Upgrade to 12.2.1.4.0

Issue

Rolling upgrade to WebLogic Server version 12.2.1.4.0 from previous versions fails.

Workaround

In 12.2.1.4.0, WebLogic Server Cluster messaging has been enhanced. When all servers in a cluster are running the same installation version of WebLogic Server, no changes are necessary. In order to perform a rolling upgrade from 12.2.1.3.0 to 12.2.1.4.0, the newer 12.2.1.4.0 servers must be explicitly set to temporarily allow the older protocol. By setting the system property `weblogic.upgradeExpirationDate` with an expiration date, the 12.2.1.4.0 server will allow communication on the cluster until that expiration datetime is reached. For example, `-Dweblogic.upgradeExpirationDate=2020-01-05T08:47`. If you expect to have clusters communicating that are at separate versions for an extended period of time, you will need to set the value to that future upgrade date.

Reconfiguration Wizard Shows the Domain Version as 12.2.1.3.0 Instead of 12.2.1.4.0

Issue

Impacted Platforms: All

When you run the Reconfiguration Wizard to upgrade the WebLogic Server 10.3.6 domain to 12.2.1.4.0, the template shows the domain version as 12.2.1.3.0 instead of 12.2.1.4.0 on the **Reconfiguration Summary** page.

Workaround

This is an error in the GUI and can be ignored.

Web Applications Issues and Workarounds

This section describes the following issues and workarounds:

- MaxPostSizeExceededException Reported in Web Browser
- Administration Console Fails to Implement session-timeout Changes
- Database Connections Become Unstable When a PoolLimitSQLException Error Occurs
- Web Page Fails to Open When Accessing it Using the SSL Port
- Unable to View the Output of SVG files in Internet Explorer 7
- Deployment Plans Cannot be Used to Override Two Descriptors
- Spring Dependency Injection Not Supported on JSP Tag Handlers
- 503 Error Occurs When Accessing an Application With a Valid sessionid
- Applications Configuring jdbc-connection-timeout-secs Fail to Deploy
- HttpServletRequest getLocale and getLocales Methods Changed
- WebSocket: Server Cannot Receive Messages Larger Than 4MB
- Default JSP Encoding Changed to UTF-8
- No Support for Annotations for JSF-Based Web Applications with Version Earlier than 2.5

MaxPostSizeExceededException Reported in Web Browser

Issue

Impacted Platforms:All

After upgrading an application from a WebLogic Server version prior to 12.1.2, a `MaxPostSizeExceededException` is reported in the web browser.

Workaround

Set the `max-save-post-size` session-descriptor to the maximum size (in bytes) of the POST that will be saved or buffered by the container during FORM authentication.

Administration Console Fails to Implement session-timeout Changes

Issue

Impacted Platforms: All

If the `session-timeout` is configured in the `web.xml` file, any changes made to change the `session-timeout` using the WebLogic Server Administration Console do not take effect.

Workaround

Use a deployment plan to override the `session-timeout` setting.

Database Connections Become Unstable When a PoolLimitSQLException Error Occurs

Issue

Impacted Platforms: All

When a `PoolLimitSQLException` error occurs during a JDBC persistence session, connections to the database become unstable, and may fail with recovery or fail without recovery. This results in the loss of session data. Either an older session or null is returned.

Workaround

No workaround available.

Web Page Fails to Open When Accessing it Using the SSL Port

Issue

Impacted Platforms: All

When accessing a web page using the SSL port, the page fails to open and the following error is reported:

```
Secure Connection Failed

An error occurred during a connection to <hostname>.

You have received an invalid certificate. Please contact the server
administrator or email correspondent and give them the following
information:

Your certificate contains the same serial number as another
certificate
issued by the certificate authority. Please get a new certificate
containing a unique serial number.
```

Workaround

The following workaround can be used for Firefox.

If you have received this error and are trying to access a web page that has a self-signed certificate, perform the following steps in Firefox:

1. Go to **Tools** , select **Options**, click **Advanced**, and then select the **Encryption tab** and click **View Certificates**.

2. On the **Servers** tab, remove the certificates.

3. On the **Authorities** tab, find the Certificate Authority (CA) for the security device that is causing the issue and delete it.

If you are using Internet Explorer or other web browsers, you can ignore the warning page that appears and continue to the web page.

Unable to View the Output of SVG files in Internet Explorer 7

Issue

Impacted Platforms: MS Windows

When a page using Scalar Vector Graphics is deployed and is then accessed using Internet Explorer 7 (IE7), the source is displayed instead of the page's graphic contents. This occurs in both normal and osjp.next modes.

Workaround

Application developers should avoid using SVG graphics in their applications, as it is not natively supported in IE7. If used, a warning similar to the following should be added:

```
All current browsers, with the exception of Internet Explorer, support SVG
files. Internet Explorer requires a plug-in to display SVG files. The plug-
ins
are available for free, for example, the Adobe SVG Viewer at
http://www.adobe.com/svg/viewer/install/.
```

Deployment Plans Cannot be Used to Override Two Descriptors

Issue

Impacted Platforms: All

Deployment plans cannot be used to override the following two descriptors during the deployment of a web application or a web module: `WEB-INF/classes/META-INF/persistence.xml` and `WEB-INF/classes/META-INF/persistence-configuration.xml`. Deployment plans can otherwise be used to override any descriptor.

Workaround

Package `WEB-INF/classes/META-INF/persistence.xml` and `WEB-INF/classes/META-INF/persistence-configuration.xml` (if present) along with the related class files into a JAR file. The JAR file must then be placed in the `WEB-INF/lib` directory of the web application or web module. A deployment plan can be used to override the two descriptors in such a JAR file.

Spring Dependency Injection Not Supported on JSP Tag Handlers

Issue

Impacted Platforms: All

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

Currently, Oracle WebLogic Server supports Spring DI on most web components. For example, servlets, filters, and listeners. However, Spring DI is not presently supported on JSP tag handlers for performance reasons.

Workaround

No workaround available.

503 Error Occurs When Accessing an Application With a Valid sessionid

Issue

Impacted Platforms: All

When a session is persistent and an older version of a servlet context is retired, accessing the application with a valid `sessionid` will result in a 503 error.

For example, assume that the session-persistent type of a versioned web application is 'file'; a user can access the application successfully. Later, version 2 of the application is redeployed, and version 1 is retired. If the same user accesses the application, a 503 error occurs.

Workaround

No workaround available.

Applications Configuring jdbc-connection-timeout-secs Fail to Deploy

Issue

Impacted Platforms: All

As of Oracle WebLogic Server 12.1.2, the `jdbc-connection-timeout-secs` element in the `weblogic.xml` deployment descriptor has been removed. Applications that configure `jdbc-connection-timeout-secs` will fail to deploy on Oracle WebLogic Server 12.1.2 server instances, resulting in the following error in the server log:

```
Unable to load descriptor /.../WEB-INF/weblogic.xml of module myweb.
The error is weblogic.descriptor.DescriptorException: VALIDATION
PROBLEMS WERE FOUND
  <6:7> problem: cvc-complex-type.2.4a: Expected elements 'timeout-
secs@http://xmlns.oracle.com/weblogic/weblogic-web-app ...' instead of
'jdbc-connection-timeout-secs@http://xmlns.oracle.com/weblogic/
weblogic-web-app' here in element session-descriptor@http://
xmlns.oracle.com/weblogic/weblogic-web-app
```

Workaround

Remove the `jdbc-connection-timeout-secs` element from the `weblogic.xml` deployment descriptor.

HttpServletRequest getLocale and getLocales Methods Changed

Issue

Impacted Platforms: All

The `HttpServletRequest getLocale` and `getLocales` methods changed their default behavior for getting the language tag in WebLogic Server. Before 12.1.3, the `getLocale` and `getLocales` methods return language tags according to RFC3066. Since 12.1.3, these methods return language tags according to RFC5646.

Workaround

If you want to get the language tag according to RFC3066, you need to set the `langtag-revision` element of `container-descriptor` in the `weblogic.xml` file to 3066. For example:

```
<container-descriptor>
        <langtag-revision>3066</langtag-revision>
</container-descriptor>
```

The system property `-Dweblogic.servlet.langtagRevision` can also determine the locale parsing mechanism. However, if you set a value in `langtag-revision`, that value overrides the setting in `-Dweblogic.servlet.langtagRevision`. For more information, see langtag-revision in *Developing Web Applications, Servlets, and JSPs for Oracle WebLogic Server*.

WebSocket: Server Cannot Receive Messages Larger Than 4MB

Issue

Impacted Platforms: All

In order to prevent incoming messages that are too large, Tyrus places a constraint on the message frame size. The default value is 4 MB.

Workaround

This value can be configured through the servlet context parameter. For WebLogic Server, this is the `weblogic.websocket.tyrus.incoming-buffer-size` parameter and it can be edited as follows:

```
<context-param>
    <param-name>weblogic.websocket.tyrus.incoming-buffer-size</param-name>
    <param-value>value_to_tune</param-value>
</context-param>
```

Default JSP Encoding Changed to UTF-8

Issue

Impacted Platforms: All

As of Oracle WebLogic Server 12.1.3, the default value of the `encoding` element for the `jsp-descriptor` element in `weblogic.xml` is `UTF-8` for JSP pages. Prior to Oracle WebLogic Server 12.1.3, the default value for JSP encoding was `ISO-8859-1`.

Workaround

To specify `ISO-8859-1` as the encoding value for a `jsp-descriptor` element, configure the `java-charset-name` element in the `input-charset` element to `ISO-8859-1`. For more information about these elements, see weblogic.xml Deployment Descriptor Elements in *Developing Web Applications, Servlets, and JSPs for Oracle WebLogic Server*.

No Support for Annotations for JSF-Based Web Applications with Version Earlier than 2.5

Issue

Impacted Platforms: All

As of 12.2.1.1, Oracle WebLogic Server does not support annotated custom tags for JSF-based web applications that have the version of the web application deployment descriptor, `web.xml`, set to 2.5 or later.

Workaround

For compatibility with your web application that has the version set to 2.5 or earlier, Oracle recommends that you upgrade the version of the web application deployment descriptor, `web.xml`, to 3.2.

For instance, if your existing web application has the version set to 2.3, you should upgrade it to 3.2 as shown in the following example:

```
<?xml version = '1.0' encoding = 'windows-1252'?>
<web-app xmlns="xmlns.jcp.org/xml/ns/javaee"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:schemaLocation="xmlns.jcp.org/xml/ns/javaee
xmlns.jcp.org/xml/ns/javaee/web-app_3_2.xsd"
        version="3.2">
  ...
</web-app>
```

WebLogic Server Scripting Tool (WLST) Issues and Workarounds

This section describes the following issues and workarounds:

- Property Names Containing Certain Characters Are Not Supported by loadProperties
- Invalid cachedir Created by Jython Causes WLST to Error Out
- WLST Error Messages Fail to Display in European Locales

Property Names Containing Certain Characters Are Not Supported by loadProperties

Issue

Impacted Platforms: All

The WLST `loadProperties` command does not support loading a property with a name that contains "." characters. For example, if the property `myapp.db.default` is present in the property file, WLST throws a name exception:

```
Problem invoking WLST - Traceback (innermost last):
  File "<iostream>", line 7, in ?
  File "<iostream>", line 4, in readCustomProperty
NameError: myapp
```

This is a system limitation of Python and the `loadProperties` command. WLST reads the variable names and values and sets them as variables in the Python interpreter. The Python interpreter uses "." as a delimiter to indicate module scoping for the namespace, or package naming, or both. Therefore, the properties file fails because `myapp.db.default.version=9i` is expected to be in the `myapp.db.default` package. This package does not exist.

Workaround

Use variable names that do not have periods. This will allow you to load the variables from the property file and refer to them in WLST scripts. You could use another character such as "_" or lowercase/uppercase character to delimit the namespace.

As an alternative, you can set variables from a properties files. When you use the variables in your script, during execution, the variables are replaced with the actual values from the properties file. For example:

```
myapp.py
var1=10
var2=20
import myapp
print myapp.var1
10
print myapp.var2
20
```

This will work for one level of namespaces (`myapp.var1`, `myapp.var2`). It will not work for top level variables that share the same name as the namespace (for example, `myapp=oracle` and `myapp.var1=10`). Setting the `myapp` variable will override the `myapp` namespace.

If you need multiple levels, then you can define a package namespace using directories. Create a myapp/db/default directory with a `vars.py` file as follows:

```
var1=10
var2=20
```

Then import:

```
import myapp.db.default.vars
print myapp.db.default.vars.var1
10
```

You may need to add `__init__.py` files to the subdirectories. Refer to the Python documentation for more information on packages:

https://docs.python.org/3/tutorial/index.html

Invalid cachedir Created by Jython Causes WLST to Error Out

Issue

Impacted Platforms: All

The default `cachedir` created by Jython 2.2 is not a valid directory. If you are using Jython directly from `weblogic.jar`, this causes WLST to error out.

Workaround

There are two workarounds for this issue:

- When invoking WLST, specify the `-Dpython.cachedir=<valid_directory>` parameter, or
- Install Jython 2.2.1 separately instead of using the partial Jython that is included in `weblogic.jar`.

WLST Error Messages Fail to Display in European Locales

Issue

Impacted Platforms: All

In European locales, when using WLST, you will see a syntax error if the error message contains a single quotation mark.

Workaround

N/A

Web Server Plug-Ins Issues and Workarounds

This section describes the following issue:

- MOD_WLS_OHS Does Not Fail Over

MOD_WLS_OHS Does Not Fail Over

Issue

Impacted Platforms: All

Currently, `mod_wl` and `mod_wl_ohs` only support container level failover and not application level failover. `mod_wl_ohs` continues to route requests to a down application as long as the managed server is up and running. In the clustered case, requests continue to go to the container where the original session started even when the application is shutdown, typically resulting in the http error 404.

Workaround

N/A

Web Services and XML Issues and Workarounds

This section describes the following issues and workarounds:

- Sparse Arrays and Partially Transmitted Arrays Are Not Supported
- WSDL Compiler Does Not Generate Serializable Data Types
- Use of Custom Exception on a Callback
- Cannot Use JMS Transport in an Environment that Also Uses a Proxy Server
- clientgen Fails When Processing a WSDL
- IllegalArgumentException When Using a Two-Dimensional XML Object in a JWS Callback
- Using SoapElement[] Results in an Empty Array
- FileNotFound Exception When a Web Service Invokes Another Web Service
- Client Side Fails to Validate the Signature on the Server Response Message
- xmlcatalog Element Entity Cannot be a Remote File or a File in an Archive
- Local xmlcatalog Element Does Not Work Well
- External Catalog File Cannot be Used in the xmlcatalog Element of clientgen
- Occasional JAX-RS Error Message in the Server Log
- No Support for Cloning SAF Agents for Multiple Targets When Using JAX-RPC Extension Template
- Threads Deadlock Detected in weblogic.wsee.jaxws.spi.ClientIdentityRegistry Causing Servers to go into the Warning State

Sparse Arrays and Partially Transmitted Arrays Are Not Supported

Issue

Impacted Platforms: All

Oracle WebLogic Server does not support sparse arrays and partially transmitted arrays as required by the JAX-RPC 1.1 Spec.

Workaround

N/A

WSDL Compiler Does Not Generate Serializable Data Types

Issue

Impacted Platforms: All

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

Workaround

N/A

Use of Custom Exception on a Callback

Issue

Impacted Platforms: All

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

Workaround

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

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

Issue

Impacted Platforms: All

You cannot use JMS transport in an environment that also uses a proxy server. The reason is that in the case of JMS transport, the web service client always uses the T3 protocol to connect to the web service, and proxy servers accept only HTTP/HTTPS.

Workaround

N/A

clientgen Fails When Processing a WSDL

Issue

Impacted Platforms: All

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

Workaround

N/A

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

Issue

Impacted Platforms: All

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

Workaround

No workaround available.

Using SoapElement[] Results in an Empty Array

Issue

Impacted Platforms: All

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

Workaround

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

FileNotFound Exception When a Web Service Invokes Another Web Service

Issue

Impacted Platforms: All

When web service 'A' wants to invoke web service 'B', web service 'A' should use the `@ServiceClient` annotation. If web service 'B' needs a custom policy file that is not attached to the WSDL for web service 'B', then web service 'A' will fail to run. Web service 'A' will look for the policy file at `/Web-Inf/classes/policies/`*`filename`*`.xml`. Since no policy file exists at that location, Oracle WebLogic Server will throw a 'file not found' exception.

Workaround

Attach the custom policy file to Web Service B, as in this example:

```
@Policy(uri="CustomPolicy.xml",
        attachToWsdl=true)
public class B {
  ...
}
```

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

Issue

Impacted Platforms: All

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

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

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

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

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

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

Workaround

Use either of the following solutions:

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

```
<sp:AsymmetricBinding>
   <wsp:Policy>
      <sp:InitiatorToken>
```

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

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

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

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

xmlcatalog Element Entity Cannot be a Remote File or a File in an Archive

Issue

Impacted Platforms: All

For the `xmlcatalog` element in the `build.xml` file, the location of an entity must be a file on the local file system. It cannot be a remote file (for example, `http:`) or a file in an archive (for example, `jar:`).

Workaround

If necessary, define the remote element as an entity in a catalog file.

Local xmlcatalog Element Does Not Work Well

Issue

Impacted Platforms: All

The local `xmlcatalog` element does not work well due to an Ant limitation.

Workaround

In the Ant `build.xml` file, you have to define a local element above a `clientgen(wsdlc)` task when you are in the same target, or define the element outside of a target.

External Catalog File Cannot be Used in the xmlcatalog Element of clientgen

Issue

Impacted Platforms: All

An external catalog file cannot be used in the `xmlcatalog` element of a `clientgen` task. For example, this snippet of an Ant build file will not work:

```
<clientgen ...
  <xmlcatalog>
    <catalogpath>
      <pathelement location='wsdlcatalog.xml'/>
    </catalogpath>
  </xmlcatalog>
```

This is a limitation of the Ant XML Catalog.

Workaround

Resource locations can be specified either inline or in an external catalog file(s), or both. To use an external catalog file, the `xml-commons` resolver library (`resolver.jar`) must be in the classpath. External catalog files may be either plain text format or XML format. If the `xml-commons` resolver library is not found in the classpath, external catalog files, specified in `<catalogpath>` paths, will be ignored and a warning will be logged. However, in this case, processing of inline entries will proceed normally.

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

Occasional JAX-RS Error Message in the Server Log

Issue

Impacted Platforms: All

When shutting down an Oracle WebLogic Server instance that has a JAX-RS application running on it, you may observe the following error message in the server log:

```
<Error>
<org.glassfish.jersey.server.internal.monitoring.MonitoringStatisticsProcessor
> <BEA-000000> <Exception thrown when provider class
org.glassfish.jersey.server.internal.monitoring.MonitoringFeature$StatisticsLi
stener was processing MonitoringStatistics. Removing provider from further
processing. ...
```

Workaround

This error message is benign and can be ignored.

No Support for Cloning SAF Agents for Multiple Targets When Using JAX-RPC Extension Template

Issue

Impacted Platforms: All

When you extend your domain that has multiple targets using the JAX-RPC extension template, the CIE processing does not support SAF agent to be cloned for multiple targets. Each instance of SAF agent is targeted to a single target.

Workaround

You must use WLST to create additional SAF agents for multiple targets. However, each instance of SAF agent can be targeted to only one target. The following example creates SAF agents for the domain, *domain1*, containing two target clusters.

```
readDomain('domain1')
cd('/')
create('ReliableWseeSAFAgent1','SAFAgent')
create('ReliableWseeSAFAgent2','SAFAgent')
assign('SAFAgent','ReliableWseeSAFAgent1','Target','SenderCluster')
assign('SAFAgent','ReliableWseeSAFAgent2','Target','ReceiverCluster')
wlsuOfflineUpdateWLSDomain()
```

Threads Deadlock Detected in weblogic.wsee.jaxws.spi.ClientIdentityRegistry Causing Servers to go into the Warning State

Issue

Impacted Platforms: All

Due to the stuck threads in `weblogic.wsee.jaxws.spi.ClientIdentityRegistry`, the Managed Server goes into the `Warning` state with the following error:

```
Deadlock detected:
Thread 23:
wait to aquire: weblogic.wsee.jaxws.spi.ClientInstancePool.dispose:
_poolLock.writeLock().lock();
aquired:
weblogic.wsee.jaxws.spi.ClientIdentityRegistry.unregisterClientIdentity
: _clientRegistryInternalLock.writeLock().lock();
Thread 28:
wait to aquire:
weblogic.wsee.jaxws.spi.ClientIdentityRegistry.getClientInfo:
_clientRegistryInternalLock.readLock().lock();
aquired: weblogic.wsee.jaxws.spi.ClientInstancePool.release:
_poolLock.writeLock().lock();
```

Workaround

Download and apply patch 30965440: HOGGING THREADS CAUSE MANAGED SERVER WARNING AND USERS NOT ABLE TO LOG INTO APP. You can download this patch from My Oracle Support at `https://support.oracle.com/`.

WebLogic Tuxedo Connector Issues and Workarounds

This section describes the following issue and workaround:

- View Classes are not Set on a Per Connection Basis

View Classes are not Set on a Per Connection Basis

Issue

Impacted Platforms: All

View classes are not set on a per connection basis.

A shared WebLogic Tuxedo Connector hash table can cause unexpected behavior in the server if two applications point to the same VIEW name with different definitions. There should be a hash table for the view classes on the connection as well as for the Resource section.

Workaround

Ensure that all VIEW classes defined across all your WebLogic Workshop applications are consistent, meaning that you have the same VIEW name representing the same VIEW class.

Documentation Changes

This section describes the following documentation errata:

- Changes to the java.net Links
- Issues With Search Function in the Samples Viewer

- Search Results Display Japanese and English Text for Avitek Medical Records
- HTML Pages for Downloaded Libraries Do Not Display Properly
- Fixed Issue That Caused Class Version Mismatch Error in Previous Releases
- Deprecation Information for JMSInteropModule and JMSInteropModuleMBean is Missing in the WebLogic Server Documentation
- Deprecation Information for File T3 Service is Missing in the WebLogic Server Administration Console Online Help
- Default Value of NonBufferedDestination and NonBufferedSource is Incorrect in the WebLogic Server Administration Console Online Help
- Administration Console Online Help Incorrectly Displays the Configure the Default JPA Persistent Provider Page

Changes to the java.net Links

Issue

Impacted Platforms: All

The java.net site has closed. Most Open Source projects previously hosted on java.net have been relocated. See https://javaee.github.io. For any other questions or issues contact: java_administrator_grp@oracle.com.

Workaround

N/A

Issues With Search Function in the Samples Viewer

Issue

Impacted Platforms: All

The **Search** function in the Samples Viewer does not work when you access the Examples documentation from the Windows **Start** menu: select **Oracle WebLogic**, click **WebLogic Server**, select **Examples**, and then click **Documentation**.

Workaround

To search the Sample Applications and Code Examples, you must start the Examples server and navigate to `http://localhost:7001/examplesWebApp/docs/core/index.html`. Click **Instructions**, and then **Search**.

Search Results Display Japanese and English Text for Avitek Medical Records

Issue

Impacted Platforms: All

The samples viewer **Search** function may sometimes return results that simultaneously display both the Japanese and English versions of the Avitek Medical Records topics.

Workaround

N/A

HTML Pages for Downloaded Libraries Do Not Display Properly

Issue

Impacted Platforms: All

After extracting the Oracle WebLogic Server documentation library ZIP files that are available from http://www.oracle.com/technetwork/middleware/weblogic/documentation/index.html, the HTML pages may not display properly in some cases for the following libraries:

- E12840_01 (Oracle WebLogic Server 10.3.0 documentation library)
- E12839_01 (Oracle WebLogic Server 10.3.1 documentation library)
- E14571_01 (Oracle WebLogic Server 10.3.3 documentation library)

Workarounds

For library E12840-01, after extracting the E12840_01.zip library file, if the HTML pages are not formatting correctly, perform the following steps:

1. Go to the directory in which you extracted the zip file.

2. Locate the /global_resources directory in the directory structure.

3. Copy the /global_resources directory to the root directory of the same drive.

For libraries E12839-01 and E14571-01, this issue occurs only on Windows operating systems. If the HTML pages of the extracted library are not formatting correctly, extract the ZIP file using another extraction option in your unzip utility. For example, if you are using 7-Zip to extract the files, select the **Full pathnames** option. Note that you cannot use the Windows decompression utility to extract the library ZIP file.

Fixed Issue That Caused Class Version Mismatch Error in Previous Releases

Issue

Impacted Platforms: All

In previous versions of WebLogic Server, when a remote client (a call from outside the container) used IIOP and the wlclient.jar file to call an EJB, and that EJB returned a value object that caused a class version mismatch between the client and the EJB, the following error occurred:

```
org.omg.CORBA.BAD_PARAM: Could not find FVD class
```

This issue also occurred between WebLogic Server instances.

This issue is fixed in WebLogic Server 12.2.1.1

Workaround

N/A

Deprecation Information for JMSInteropModule and JMSInteropModuleMBean is Missing in the WebLogic Server Documentation

Issue

Impacted Platforms: All

As of WebLogic Server 12.2.1, JMS Interop Modules and related MBean `JMSInteropModuleMBean` are deprecated and will be removed in a future WebLogic Server release. However, this deprecation status is not reflected in WebLogic Server documentation. All such references to JMS Interop Modules and related MBean will be removed from the documentation in a future WebLogic Server release.

Workarounds

If you have a module named `interop-jms.xml` in your `config.xml`, convert it to a regular system module. See JMS System Module Configuration.

Deprecation Information for File T3 Service is Missing in the WebLogic Server Administration Console Online Help

Issue

Impacted Platforms: All

Support for WebLogic File T3 service is deprecated and will be removed in a future WebLogic Server release. However, this deprecation status is not reflected in some pages of the *Oracle WebLogic Server Administration Console Online Help* documentation. All such File T3 references will be removed from the *Oracle WebLogic Server Administration Console Online Help* in a future WebLogic Server release.

Workaround

N/A

Default Value of NonBufferedDestination and NonBufferedSource is Incorrect in the WebLogic Server Administration Console Online Help

Issue

The default value descriptions of the MBeans `NonBufferedDestination` and `NonBufferedSource` display the incorrect value **false** in the *Oracle WebLogic Server Administration Console Online Help* and the MBean reference documentation. The correct default value is **true**.

Workaround

N/A

Administration Console Online Help Incorrectly Displays the Configure the Default JPA Persistent Provider Page

Issue

Impacted Platforms: All

In Oracle WebLogic Server 12c (12.2.1.4.0) and later versions, there is no **JPA** tab under **Configuration > General** option for a domain in the Administration Console. The *Oracle WebLogic Server Administration Console Online Help* incorrectly displays the help page **Configure the default JPA persistence provider**.

This page will be removed from the *Oracle WebLogic Server Administration Console Online Help* in a future release of Oracle WebLogic Server.

Workaround

N/A