Oracle® Fusion Middleware

Release Notes

11*g* Release 1 (11.1.1) for AIX Based Systems (64-Bit)

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Oracle Fusion Middleware Release Notes, 11*g* Release 1 (11.1.1) for AIX Based Systems (64-Bit)

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Preface

This preface includes the following sections:

- Audience
- Documentation Accessibility
- Related Documents
- Conventions

Audience

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

Documentation Accessibility

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

Accessibility of Code Examples in Documentation

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

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Oracle customers have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/support/contact.html or visit http://www.oracle.com/accessibility/support.html if you are hearing impaired.

Related Documents

For more information, see these Oracle resources:

- Oracle Fusion Middleware Documentation on Oracle Fusion Middleware Disk 1

- Oracle Fusion Middleware Documentation Library 11g Release 1 (11.1.1)

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

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
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.

Part I

Oracle Fusion Middleware

Part I contains the following chapters:

1

Introduction

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

- Section 1.1, "Latest Release Information"
- Section 1.2, "Purpose of this Document"
- Section 1.3, "Operating System Requirements"
- Section 1.4, "Memory Requirements"
- Section 1.5, "Certification Information"
- Section 1.6, "Licensing Information"

1.1 Latest Release Information

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

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

1.2 Purpose of this Document

This document contains the release information for Oracle Fusion Middleware 11g Release 1 (11.1.1). It describes differences between Oracle Fusion Middleware and its documented functionality.

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

1.3 Operating System Requirements

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

1.4 Memory Requirements

Oracle Fusion Middleware memory requirements for installation, configuration, and runtime are as follows:

1. Without a Database on the same server: Minimum 4 GB physical memory and 4 GB swap.

2. With a Database on the same server: Minimum 6 GB physical memory and 6 GB swap.

> **Note:** These minimum memory values are with the assumption that no user or operating system process is consuming any unusually high amount of memory. If such a condition exists, corresponding amount of additional physical memory will be required.

1.5 Certification Information

This section contains the following:

- Section 1.5.1, "Where to Find Oracle Fusion Middleware Certification Information"
- Section 1.5.2, "Certification Exceptions"

1.5.1 Where to Find Oracle Fusion Middleware Certification Information

The latest certification information for Oracle Fusion Middleware 11g Release 1 (11.1.1) is available at the Oracle Fusion Middleware Supported System Configurations Central Hub:

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

1.5.2 Certification Exceptions

This section describes known issues (exceptions) and their workarounds that are associated with Oracle Fusion Middleware 11g certifications. For a list of known issues that are associated with specific Oracle Fusion Middleware 11g Release 1 (11.1.1) components, see the Release Notes for the specific Oracle Fusion Middleware 11g Release 1 (11.1.1) component.

1.5.2.1 Certification Information for Oracle Fusion Middleware 11g R1 with Oracle Database 11.2.0.1

If you choose to configure Oracle Internet Directory with Database vault, do the following:

1. Apply patch 8897382 to fix bug 8897382.

> **Note:** the following workaround is required only if the Oracle Fusion Middleware version is 11.1.1.1.0 (11gR1). This issue will be fixed in 11.1.1.2.0.

2. Apply the workaround for bug 8987186 by editing `<OH>/ldap/datasecurity/dbv_oid_command_rules.sql` file and find the following declaration:

```
/declare
 begin
      dvsys.dbms_macadm.CREATE_COMMAND_RULE(
      command => 'CONNECT'
      ,rule_set_name => 'OID App Access'
```

```
        ,object_owner => 'ODS'
        ,object_name => '%'
        ,enabled => 'Y');
    commit;
    end;/
```

and change the line that is indicated in **bold**:

```
/declare
 begin
      dvsys.dbms_macadm.CREATE_COMMAND_RULE(
      command => 'CONNECT'
      ,rule_set_name => 'OID App Access'
      ,object_owner => '%'
      ,object_name => '%'
      ,enabled => 'Y');
 commit;
end;/
```

1.5.2.2 Restrictions on Specific Browsers

1.5.2.2.1 Java Plugin for Discoverer Plus Not Downloaded Automatically on Firefox When you attempt to connect to Discoverer Plus by using the Mozilla Firefox browser on a computer that does not have Java 1.6 installed, Firefox does not download the JRE 1.6 plug-in automatically. Instead, Firefox displays the following message: "Additional plugins are required to display this page..."

The workaround is to download the JRE 1.6 plug-in by clicking the Install Missing Plugin link to install it manually.

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

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

IBM AIX:

```
32-bit IBM JDK 1.6 SR4 +IZ51489+IZ45701+IZ52413+IZ52880
```

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

1. Install the supported 32-bit JDK

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

    ```
    export JAVA_HOME=/scratch/aime/jdk1.6.0_11
    export PATH=/scratch/aime/jdk1.6.0_11/bin:$PATH
    ```

3. Run the WebLogic Server generic installer to install WebLogic Server with 32-bit JDK:

    ```
    java -jar  wls1031_generic.jar
    ```

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

    ```
    ./runInstaller -jreLoc /scratch/aime/jdk1.6.0_11/jre
    ```

5. Run the configuration script to create the WebCenter Domain:

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

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

1.5.2.4 Patch for NoClassDefFound Error While Using JACC in AIX

In 11*g* Release 1, WebLogic Server JACC (Java Authorization Contract for Containers) uses Sun-specific PrincipalComparator, which is not supported on IBM JDK and, as a result, displays the NoClassDefFound Error.

Workaround

Download and install the following patch using the Oracle Smart Update tool to resolve the issue:

Patch ID: RDEQ Passcode: 8XI219W4

For more information on the Oracle Smart Update tool, refer to the "Smart Update Tool":

http://download.oracle.com/docs/cd/E14759_01/index.htm

1.5.2.5 Patch for NoClassDefFound Error While Using JACC in AIX for 11*g* Release 1 PS1

In 11*g* Release 1 PS1 Release, WebLogic Server JACC (Java Authorization Contract for Containers) uses Sun-specific PrincipalComparator, which is not supported on IBM JDK and, as a result, displays the NoClassDefFound Error.

Workaround

Download and install the following patches using the Oracle Smart Update tool to resolve the issue:

Patch ID: 1MIS Passcode: KTNAX6H1

For more information on the Oracle Smart Update tool, refer to the "Smart Update Tool":

http://download.oracle.com/docs/cd/E14759_01/index.htm

1.6 Licensing Information

Licensing information for Oracle Fusion Middleware is available at:

http://oraclestore.oracle.com

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

http://www.oracle.com/technology/products/ias/index.html

2

Installation and Configuration

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

- Section 2.1, "Installation Issues and Workarounds"
- Section 2.2, "Configuration Issues and Workarounds"
- Section 2.3, "Known Issues"
- Section 2.4, "Postinstallation Issue and Workaround"
- Section 2.5, "Documentation Errata"

2.1 Installation Issues and Workarounds

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

- Section 2.1.1, "Installing Oracle SOA Suite on a Dual Stack Host with IPv4"
- Section 2.1.2, "Installing Oracle Web Tier 32-bit on a 64-bit Linux Operating System"
- Section 2.1.3, "Prerequisite Warnings During Installation"
- Section 0.0.3, ""Null" Dialog Box Appears When Installing Oracle Identity Management to FAT32 File System on Windows"
- Section 2.1.4, "JRF Startup Class Exceptions May Appear in Oracle WebLogic Managed Server Logs After Extending Oracle Identity Management Domain"
- Section 2.1.5, "WebLogic Administration Server Must Be Running When Extending Oracle Identity Management Domains"
- Section 0.0.5, "Oracle Identity Management Must Be Installed on the C:\ Drive"
- Section 2.1.6, "Problems Installing in Thai and Turkish Locales"
- Section 2.1.7, "Installing Oracle UCM in Stand-Alone Mode"
- Section 2.1.8, "Setting the nls_length_semantics Parameter in your Database"
- Section 2.1.9, "Proper Deinstallation for Reinstallation in the Event of a Failed Installation"
- Section 2.1.10, "Running irca.sh or irca.bat Against an Oracle 10g Database"
- Section 2.1.11, "Installing the SOAINFRA Schema with DBA Permissions"
- Section 2.1.12, "Deinstallation Does Not Remove WebLogic Domains"

- Section 2.1.13, "Failures in the Installation Log File"

- Section 2.1.14, "Response File is Missing the MIDDLEWARE_HOME Entry"

- Section 2.1.15, "Running the rootpre.sh Script"

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

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

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

2.1.2 Installing Oracle Web Tier 32-bit on a 64-bit Linux Operating System

The following note exists in the *Oracle Fusion Middleware Installation Guide for Oracle Web Tier* and *Oracle Fusion Middleware Quick Installation Guide for Oracle Web Tier*:

Note: If you are installing the 32-bit version of the product, the system on which you are installing must also be a supported 32-bit system. Installing a 32-bit version of the product on a 64-bit system is not supported.

A 32-bit Linux version of Oracle Web Tier may be installed on a 64-bit Linux platform by doing the following:

1. Run the following command before starting the installer:

   ```
   linux32 bash
   ```

2. During the installation, you will receive an error during the linking phase. To work around this error:

   a. Login as `root` user.

   b. Move the existing `/usr/bin/gcc` file to `/usr/bin/gcc.orig` with the `mv` command:

   ```
   mv /usr/bin/gcc /usr/bin/gcc.orig
   ```

   c. Using a text editor such as vi, create a new file called `gcc41` that contains the following conent:

   ```
   #!/bin/sh
   exec /usr/bin/gcc.orig  -m32 -static-libgcc
   -B/usr/lib/gcc/i586-suse-linux/2.95.3/ $*
   ```

Note: The file `i586-suse-linux/2.95.3` may differ slightly depending on the exact version of your Linux operating system. Verify the exact version of your Linux operating system in use; search for the `32bit` directory in `/usr/lib/gcc` and obtain the exact file name.

---

   d. Change the file permission for the `gcc41` file using the following command:

```
chmod 755 /usr/bin/gcc41
```

e. Create a symbolic link to `/usr/bin/gcc` with the following command:

```
ln -s -f /usr/bin/gcc41 /usr/bin/gcc
```

2.1.3 Prerequisite Warnings During Installation

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

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

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

2.1.4 JRF Startup Class Exceptions May Appear in Oracle WebLogic Managed Server Logs After Extending Oracle Identity Management Domain

After extending an Oracle Identity Management domain, you may see exception messages related to JRF Startup Class in the managed server log files. For example:

```
Failed to invoke startup class "JRF Startup Class",
oracle.jrf.PortabilityLayerException: Fail to retrieve the property for the Common
Components Home.
oracle.jrf.PortabilityLayerException: Fail to retrieve the property for the Common
Components Home.
```

You can safely ignore these exception messages—there is no loss in functionality.

2.1.5 WebLogic Administration Server Must Be Running When Extending Oracle Identity Management Domains

When you install Oracle Identity Management, you have several options for choosing how the Oracle Identity Management components are installed in relation to an Oracle WebLogic Server administration domain. If you select the **Extend Existing Domain** option on the installer's Select Domain screen, Oracle Identity Management components are installed in an existing Oracle WebLogic Server administration domain.

To install Oracle Identity Management components in an existing administration domain using the **Extend Existing Domain** option, the Oracle WebLogic Administration Server instance must be running.

2.1.6 Problems Installing in Thai and Turkish Locales

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

2.1.7 Installing Oracle UCM in Stand-Alone Mode

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

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

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

- Section 2.1.7.1, "Do Not Include Folders_g in the Installation"

- Section 2.1.7.2, "Disable Trash in the Installation"

2.1.7.1 Do Not Include Folders_g in the Installation

The last question is during the installation procedure is:

```
Select components to install.
        1. ContentFolios: Collect related items in folios
        2. Folders_g: Organize content into hierarchical folders
        3. LinkManager8: Hypertext link management support
        4. OracleTextSearch: External Oracle 11g database as
           search indexer support
        5. ThreadedDiscussions: Threaded discussion management
Enter numbers separated by commas to toggle, 0 to unselect all, F to finish:
```

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

2.1.7.2 Disable Trash in the Installation

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

To see if Trash is enabled in the Content Server:

1. Go to Administration.

2. Go to Folder Configuration.

3. Go to System Folder Configuration.

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

   - Green = enabled

   - Gray = disabled

To disable the Trash:

1. Ensure you can edit marked folders:

   a. Open the *stellent_dir*/custom/Folders_g/folders_ environment.cfg (on UNIX) or *stellent_dir*\custom\Folders_ g\folders_environment.cfg (on Windows) file.

   b. Verify that the `CollectionReadOnlyMarkedFolders` value is set to `true`:

      `CollectionReadOnlyMarkedFolders=true`

2. Restart the Content Server if you changed the `folders_environment.cfg` file.

3. Log in to the Content Server Home Page as a user with Administrator privileges.

4. Go to Administration.

5. Go to Folder Configuration.

6. Go to System Folder Configuration.

7. Click on the green dot next to Trash. This will disable the Trash folder and will turn the dot grey.

8. Restore the value of `CollectionReadOnlyMarkedFolders` if you had changed it and restart the Content Server.

2.1.8 Setting the nls_length_semantics Parameter in your Database

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

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

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

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

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

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

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

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

1. Make sure that all the managed servers in the failed installation are shut down. You must verify this in the Administration Console; the word "SHUTDOWN" must appear next to the managed server name.

2. Deinstall the binaries in the Oracle Home directory using the deinstaller in the `ORACLE_HOME`/oui/bin directory.

3. Delete all the managed servers from the failed installation in the `config.xml` file by using the Administration Console or WLST.

4. Delete all directories in the `DOMAIN_HOME`/servers directory:

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

2.1.10 Running irca.sh or irca.bat Against an Oracle 10*g* Database

If you run the Integration Repository Creation Assistance Tool (`irca.sh` on UNIX operating systems or `irca.bat` on Windows operating systems) against an Oracle 10*g* database, you will get a `java.lang.UnsupportedClassVersionError` error.

2.1.11 Installing the SOAINFRA Schema with DBA Permissions

If you need to install the `SOAINFRA` schema and you are using a user with only DBA permissions, run the following commands on your database prior to running RCU:

```
GRANT ALL ON dbms_aqadm TO user WITH GRANT OPTION;
GRANT ALL ON dbms_aq TO user WITH GRANT OPTION;
```

Replace `user` in the command with the name of your database user.

2.1.12 Deinstallation Does Not Remove WebLogic Domains

There may be certain scenarios where you will need to remove WebLogic Domains that you have created. The Oracle Universal Installer is used to remove Oracle Instances and Oracle Home directories only; it does not remove WebLogic Domains.

If you need to remove a WebLogic Domain, you must do so manually. Please refer to your Oracle WebLogic Server documentation for more information.

2.1.13 Failures in the Installation Log File

Upon completing of an Oracle Web Tier, Oracle Identity Management, or Oracle Portal, Forms, Reports and Discoverer installation, the following errors may be seen in the `install`*`time_and_date`*`.log` file:

```
[2009-11-04T21:15:13.959-06:00] [OUI] [NOTIFICATION] [] [OUI] [tid: 16]
[ecid: 0000IJ2LeAeFs1ALJa5Eif1Aw^9l000007,0] OUI-10080:The pre-requisite for
the component Sun JDK 1.6.0.14.08  has failed.

[2009-11-04T21:15:13.960-06:00] [OUI] [NOTIFICATION] [] [OUI] [tid: 16]
[ecid: 0000IJ2LeAeFs1ALJa5Eif1Aw^9l000007,0] OUI-10080:The pre-requisite for
the component Oracle Configuration Manager 10.3.1.2.0  has failed.
```

These messages occur because the Sun JDK and Oracle Configuration Manager are not installed in the `oracle_common` directory. You can safely ignore these messages.

2.1.14 Response File is Missing the MIDDLEWARE_HOME Entry

When installing Oracle Web Tier, the sample response files that are provided in the `Disk1/stage/Response` (on UNIX operating systems) or `Disk1\stage\Response` (on Windows operating systems) directories are missing an entry for specifying the Middleware Home directory.

If you plan on using these response files for silent installation, you must add the `MIDDLEWARE_HOME` entry to the file. For example:

```
MIDDLEWARE_HOME=/home/Oracle/Middleware
```

2.1.15 Running the rootpre.sh Script

Running the `rootpre.sh` script is one of the preinstallation requirements during the installation of WebTier, Identity Management, Portal, Forms, Reports, and Discoverer, on the AIX platform.

The `rootpre.sh` script should be run only once on a system, to load the right kernel extensions required for Oracle Database or Oracle Fusion Middleware.

Your platform requires the `root` user to perform certain preinstallation operating system preparations. The `root` user should run the shell script `rootpre.sh` before proceeding with Oracle installation. `rootpre.sh` can be found at the top level of the CD or the stage area.

Once the `runInstaller` is started on IBM AIX, the `rootpre.sh` message is automatically prompted. The following is an example of the `rootpre.sh` message:

```
./runInstaller

  Answer 'y' if root has run 'rootpre.sh' so you can proceed with Oracle
installation.
  Answer 'n' to abort installation and then ask root to run 'rootpre.sh'.
```

```
       Has 'rootpre.sh' been run by root? [y/n] (n)

     Answer 'y', if root has run 'rootpre.sh' so that you can proceed with Oracle
installation.
     Answer 'n', to abort installation and then ask root to run 'rootpre.sh'.
```

To skip the `rootpre.sh` prompt on systems where it has run before, set the `SKIP_ROOTPRE` environment variable to *TRUE*.

2.2 Configuration Issues and Workarounds

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

- Section 2.2.1, "Installing Oracle SOA Suite and Oracle Portal, Forms, Reports and Discoverer in the Same Middleware Home"

- Section 2.2.3, "Specify Security Updates Screen Does Not Appear in the Configuration Wizard"

- Section 2.2.4, "Unsupported Database Appears in the Configuration Wizard"

- Section 2.2.5, "Configuring Oracle Identity Management When WebLogic Node Manager is Running"

- Section 2.2.6, "Configuring OID with Oracle Data Vault"

- Section 2.2.7, "Password Requirements for Oracle Internet Directory Administrator"

- Section 2.2.8, "Some Text Truncated on the "Server Start Mode and JDK Configuration" Screen"

- Section 2.2.9, "Changing the Listen Address of a Managed Server"

- Section 2.2.10, "Expand Cluster Requires Changes to the emd.properties File"

- Section 2.2.11, "Domain Extension Overwrites JDBC Data Source Name"

- Section 2.2.12, "Schemas Are Not Visible After Upgrade of Oracle Identity Management"

- Section 2.2.13, "RCU Summary Screen Issues"

- Section 2.2.14, "Error Message When Configuring Oracle Identity Federation"

- Section 2.2.15, "Ensure There Are No Missing Products When Using unpack.sh or unpack.cmd"

- Section 2.2.16, "Running unpack.sh or unpack.cmd on a Different Host"

- Section 2.2.17, "Rerouting to Original URL After SSO Authentication in Firefox Browser"

- Section 2.2.18, "Timed Out Error at the Create Domain Stage"

2.2.1 Installing Oracle SOA Suite and Oracle Portal, Forms, Reports and Discoverer in the Same Middleware Home

Oracle Portal, Forms, Reports and Discoverer should be installed in its own Middleware home, which it can not share with any other Fusion Middleware products. All other Fusion Middleware products, such as Oracle SOA Suite, Oracle WebCenter Webcenter, or Oracle Identity Management, can share a Middleware Home.

2.2.2 Extend Domain and Expand Cluster Scenarios with Remote Machines

In scenarios where you are using the Fusion Middleware Configuration Wizard to extend a domain or expand a cluster with remote machines, you must make sure that both the source and destination Middleware Home and Oracle Home directories are identical.

2.2.3 Specify Security Updates Screen Does Not Appear in the Configuration Wizard

If you use silent installation (response file) to configure Oracle Identity Management, security updates (through Oracle Configuration Manager) are not configured. However, the `ocm.rsp` file is created in the Oracle Home directory. If you run the Configuration Wizard GUI from the Oracle Home, you will not see the Specify Security Updates Screen because of the presence of the `ocm.rsp` file.

To work around this issue, delete the `ocm.rsp` file from the Oracle Home and run the Configuration Wizard to see the Specify Security Updates screen.

2.2.4 Unsupported Database Appears in the Configuration Wizard

When running the Configuration Wizard after an Oracle SOA Suite, Oracle WebCenter, or Oracle Application Developer installation, the "Configure JDBC Component Schema Screen" lists IBM DB2 as one of the options in the drop-down list of the "Vendor" field.

IBM DB2 is not yet supported and should not be selected on this screen.

2.2.5 Configuring Oracle Identity Management When WebLogic Node Manager is Running

To configure Oracle Identity Management, using either the Install and Configure option or the Configuration Wizard, when the WebLogic Node Manager utility is running from the same Middleware Home directory where Oracle Identity Management is installed, the `StartScriptEnabled` parameter in the nodemanager.properties file must be set to true. For example: `StartScriptEnabled=true`

To configure Oracle Identity Management when the `StartScriptEnabled` parameter is set to `false`, you must:

1. Set the `StartScriptEnabled` parameter to true.

2. Stop, then restart the Node Manager utility.

3. Configure Oracle Identity Management using either the Install and Configure option or the Configuration Wizard.

> **Note:** The nodemanager.properties file is located in the *WL_HOME*/common/nodemanager/ directory.

2.2.6 Configuring OID with Oracle Data Vault

If you choose to configure Oracle Internet Directory (OID) with Oracle Data Vault:

1. Apply patch 8897382 (see the README file in the patch for instructions).

2. In the *ORACLE_HOME*/ldap/datasecurity/dbv_oid_command_rules.sql (on UNIX operating systems) or *ORACLE_HOME*\ldap\datasecurity\dbv_

`oid_command_rules.sql` (on Windows operating systems) file, find the following code:

```
/declare
.
begin
.
   dvsys.dbms_macadm.CREATE_COMMAND_RULE(
   command => 'CONNECT'
   ,rule_set_name => 'OID App Access'
   ,object_owner => 'ODS'
   ,object_name => '%'
   ,enabled => 'Y');
.
commit;
.
end;/
```

3. Change the following line:

```
,object_owner => 'ODS'
```

to:

```
,object_owner => '%'
```

2.2.7 Password Requirements for Oracle Internet Directory Administrator

When configuring Oracle Internet Directory, using either the installer's Install and Configure option or the Configuration Wizard, you must enter and confirm the Administrator Password.

The following is a list of the requirements for the Oracle Internet Directory Administrator Password. The password must contain:

- At least 5 characters

- No more than 30 characters

- At least one number

- Only alpha-numeric characters, underscore (_), dollar sign ($), and pound/hash (#)

> **Note:** If the password you enter does not satisfy these requirements, the following error message appears:
>
> ```
> INST-07037: Administrator Password field value contains one or more
> invalid characters or the value is not in proper format.
> ```

2.2.8 Some Text Truncated on the "Server Start Mode and JDK Configuration" Screen

If you run the Oracle Fusion Middleware Configuration Wizard on an AIX 64-bit system, the Graphics Manager on that system will cause some text to be truncated on the "Server Start Mode and JDK Configuration" screen.

There is no work around for this issue.

2.2.9 Changing the Listen Address of a Managed Server

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

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

2.2.10 Expand Cluster Requires Changes to the emd.properties File

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

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

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

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

2.2.11 Domain Extension Overwrites JDBC Data Source Name

When a WebLogic Domain with JDBC resources is extended to either Oracle SOA Suite or Oracle WebCenter, the JDBC data source name will be changed. This behavior is commonly observed in cases where WebLogic Server version lower than 9.x is upgraded to a version higher than 9.x and then extended to Oracle SOA Suite or Oracle WebCenter.

To work around this issue, you must manually edit the JDBC data source names.

2.2.12 Schemas Are Not Visible After Upgrade of Oracle Identity Management

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

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

2.2.13 RCU Summary Screen Issues

If you are dropping the Identity Management schemas and you select both Oracle Internet Directory (`ODS`) and Oracle Identity Federation (`OIF`) to be dropped, the RCU summary screen may not be displayed and an exception may be thrown in the console.

To work around this issue, select and drop one component at a time instead of selecting them both and dropping them together.

When other components are selected for a drop schema operation, the summary screen may display inaccurate information. However, the selected schemas will be

successfully dropped from the database in spite of the erroneous information on the summary screen.

To work around this issue, select and drop only one component at a time.

2.2.14 Error Message When Configuring Oracle Identity Federation

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

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

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

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

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

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

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

2.2.16 Running unpack.sh or unpack.cmd on a Different Host

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

Below is a valid example:

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

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

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

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

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

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

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

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

2.2.17 Rerouting to Original URL After SSO Authentication in Firefox Browser

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

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

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

should be changed to:

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

Replace *port* with the actual port number.

2.2.18 Timed Out Error at the Create Domain Stage

To prevent Starting the Admin_Server timed out errors during the installation and configuration of Oracle Fusion Middleware on AIX, Oracle recommends a ulimit nofiles setting of 10240 or higher.

Example in ksh:

```
$ ulimit -n 10240
```

Ulimit settings have limits set by the operating system. Consult your system administrator if the ulimit nofiles value cannot be increased to 10K or higher.

2.3 Known Issues

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

- Section 2.3.1, "Forms and Reports Builder Not Supported"

- Section 2.3.2, "Issue While Creating File Handler in AIX JDK in Silent Clone Mode"

- Section 2.3.3, "Execution of rootpre.sh Script While Installing Appdev"

- Section 2.3.4, "Execution of rootpre.sh Script While Installing Oracle WebLogic Communication Services"

2.3.1 Forms and Reports Builder Not Supported

Forms and Reports Builder is not suported on Linux x86-64, Solaris Operating System (SPARC 64-Bit), AIX Based Systems (64-Bit), HP-UX PA-RISC (64-Bit), HP-UX Itanium,

and Microsoft Windows x64 platforms. It is supported on Linux x86 and Microsoft Windows (32-Bit) platforms only.

2.3.2 Issue While Creating File Handler in AIX JDK in Silent Clone Mode

During the silent cloning process, some of the install scripts expect the files available in the base installed home to be available in the cloned home too and they do a chmod on the same. This error occurs as Java APIs do not find the required `libnio.so` library, which is available in `ORACLE_HOME/jdk/jre/lib/ppc64` as part of the actions or scripts while the *LIBPATH* is set to `ORACLE_HOME/lib` only.

For example:

```
LIBPATH :/scratch/aime/AS11G/classic_rc5/bea/as_1_clone_3/lib
```

To work around this issue set the LIBPATH before invoking cloningclient in applyClone mode.

For example:

```
export LIBPATH=
/usr/lib:<JDK_HOME>/jre/lib/ppc64/j9vm:<JDK_HOME>/jre/lib/ppc64:<JDK_HOME>/jre
/../lib/ppc64:$LIBPATH
```

The following error message must be ignored as it is a stack trace only and has no loss of functionality due to this exception.

```
2009-06-11_03-27-51AM : INFO   : CLONE-21020   ASInstall configuration for
Oracle home /scratch/aime/AS11G/classic_rc5/bea/clone_test1 is in progress...
java.lang.NoSuchFieldException: sys_paths
                    at java.lang.Class.getDeclaredFieldImpl(Native Method)
                    at java.lang.Class.getDeclaredField(Class.java:510)
```

2.3.3 Execution of rootpre.sh Script While Installing Appdev

Appdev is installed using the `runInstaller` script as follows:

```
>~/appdev/Disk1/runInstaller -jreloc JRE_Location
```

While installing Appdev using the `runInstaller` script, the installation process prompts for the execution of the `rootpre.sh` script:

```
Has 'rootpre.sh' been run by root? [y/n] (n)
```

Workaround

Select *y* and continue with the installation, or export `SKIP_ROOTPRE=true` in the session before running the Appdev `runInstaller` for succesful completion of the installation.

2.3.4 Execution of rootpre.sh Script While Installing Oracle WebLogic Communication Services

Oracle WebLogic Communication Services (OWLCS) is installed using the `runInstaller` script as follows:

```
>~/owlcs/Disk1/runInstaller -jreloc JRE_Location
```

While installing Oracle WebLogic Communication Services (OWLCS) using the `runInstaller` script, the installation process prompts for the execution of `rootpre.sh` script:

```
Has 'rootpre.sh' been run by root? [y/n] (n)
```

Workaround

Select `y` and continue with the installation, or export `SKIP_ROOTPRE=true` in the session, before running the OWLCS `runInstaller` for the succesful completion of installation.

2.4 Postinstallation Issue and Workaround

This section describes postinstallation issue and workaround. It includes the following topic:

- Section 2.4.1, "Opmnctl Stopall Fails to Stop EMAgent Processes Cleanly"

2.4.1 Opmnctl Stopall Fails to Stop EMAgent Processes Cleanly

Sometimes, the `opmnctl stopall` command does not stop emagent processes cleanly.

If this happens, any subsequent `opmn startall` command would fail to start emagent.

To work around this issue, the user has to set the `ulimit` value for open file descriptors in the shell, where the `opmnctl` command is run.

In particular, set the softlimit `ulimit -n` value as 4096 and the hardlimit `ulimit -H -n` value as 62356.

If the `ulimit` settings fail to stop emagent cleanly, then the user has to manually kill the emagent processes so that any subsequent `opmnctl startall` command has no issue starting emagent.

2.5 Documentation Errata

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

- Section 2.5.1, "Oracle Portal, Forms, Reports and Discoverer Installation Guide: Missing Step for Restarting Node Manager"
- Section 2.5.2, "Oracle Portal, Forms, Reports and Discoverer Installation Guide: Missing Information in the Deinstallation Chapter"
- Section 2.5.3, "Missing Information for Deinstalling Oracle Homes"
- Section 2.5.4, "Invalid Oracle Home Installation Location Specified"
- Section 2.5.5, "Invalid Note in Some Installation Guides"

2.5.1 Oracle Portal, Forms, Reports and Discoverer Installation Guide: Missing Step for Restarting Node Manager

Section 2.7 ,"Installing in a Middleware Home Where Oracle SOA Suite or Oracle Identity Management Already Exist" in the Oracle Fusion Middleware Installation Guide for Oracle Portal, Forms, Reports and Discoverer is missing a third step. The complete instructions should be as follows:

If you are installing Oracle Portal, Forms, Reports and Discoverer into a Midldeware Home directory that already contains an Oracle SOA Suite or Oracle Identity Management installation, you must do the following before you install:

1. Navigate to the *MW_HOME*/wlserver_10.3/common/nodemanager (on UNIX operating systems) or *MW_HOME*\wlserver_10.3\common\nodemanager (on Windows operating systems) directory.

2. Edit the nodemanager.properties file and set the StartScriptEnabled property as follows:

   StartScriptEnabled=true

3. Restart Node Manager.

2.5.2 Oracle Portal, Forms, Reports and Discoverer Installation Guide: Missing Information in the Deinstallation Chapter

In the deinstallation chapter for the Oracle Fusion Middleware Installation Guide for Oracle Portal, Forms, Reports and Discoverer, Step 4 in Section 3.2.1, "Stopping Oracle Fusion Middleware" is missing a piece of information.

While the documentation instructs you to stop the Administration Server, it should be noted that the Administration Server must remain up and running if you are planning to deinstall managed instances.

2.5.3 Missing Information for Deinstalling Oracle Homes

When you run the deinstaller and you choose to remove an Oracle Home, the documentation is missing some information between the Deinstall Oracle Home and Deinstallation Progress screens.

On the Deinstall Oracle Home screen, you will see and be asked to verify the Oracle Home that is about to be deinstalled. When you click **Deinstall**, a warning dialog box will appear with the following options:

Click on "Yes" to continue.

Click on "No" to perform deinstall without deleting the directory.

Click on "Cancel" to go back to the "Inventory Dialog".

If you select "Yes" the Oracle Home directory will be removed at the end of the deinstallation procedure.

If you select "No" you must manually remove your Oracle Home directory after the deinstall is complete. For example, if you are deinstalling Oracle SOA Suite and your SOA Oracle Home directory was /home/Oracle/Middleware/Oracle_SOA1 on a UNIX operating system:

```
> cd /home/Oracle/Middleware
> rm -rf Oracle_SOA1
```

On a Windows operating system, if your SOA Oracle Home directory was C:\Oracle\Middleware\Oracle_SOA1, use a file manager window and navigate to the C:\Oracle\Middleware directory, then right-click on the Oracle_SOA1 folder and select **Delete**.

2.5.4 Invalid Oracle Home Installation Location Specified

In the installation guides for Oracle Web Tier and Oracle Portal, Forms, Reports and Discoverer, the documentation contains erroneous information regarding Oracle Home location on the Specify Installaton Location screen. The following text is incorrect:

You can specify a pre-existing Oracle Home directory (for example, you are reinstalling the software into an existing Oracle Home that was created from a previous installation that was incomplete).

If you specify an existing directory that you want to use for your Oracle Home, it must be an empty directory.

2.5.5 Invalid Note in Some Installation Guides

In the Installation Guides and Quick Installation Guides for Oracle SOA Suite, Oracle WebCenter, and Application Developer, the following note may appear:

> **Note:**   If you are installing the 32-bit version of the product, the system on which you are installing must also be a supported 32-bit system. Installing a 32-bit version of the product on a 64-bit system is not supported.

This note is not applicable for these products and should be ignored.

3

Upgrade

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

- Section 3.1, "General Issues and Workarounds"
- Section 3.2, "General Issues and Workarounds for Migrating from 11.1.1.1.0"
- Section 3.3, "Documentation Errata for Upgrade"

3.1 General Issues and Workarounds

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

- Section 3.1.1, "Patches Required to Address Specific Upgrade and Compatibility Requirements"
- Section 3.1.2, "Unable to Read Composite Model Error During SOA Application Upgrade"
- Section 3.1.3, "Oracle BAM Upgrade Issues"
- Section 3.1.4, "Error When Upgrading Oracle Internet Directory Due to Invalid ODS Schema"
- Section 3.1.5, "Restore From Backup Required If Upgrade Fails During a Colocated Oracle Internet Directory and Oracle Directory Integration Platform Upgrade"
- Section 3.1.6, "Cannot Verify Oracle Forms Services Upgrade When Oracle HTTP Server is Running On a Separate Host"
- Section 3.1.7, "WebCenter Security Upgrade Release Notes"
- Section 3.1.8, "Oracle B2B Upgrade Release Notes"
- Section 3.1.9, "Problem Accessing the Welcome Pages in Oracle HTTP Server After Upgrade"
- Section 3.1.10, "Misleading Error Message When Upgrading Oracle Internet Directory"
- Section 3.1.11, "Problem Starting Oracle Web Cache After Upgrade to 11g"

3.1.1 Patches Required to Address Specific Upgrade and Compatibility Requirements

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

In addition, in some specific cases, you must apply an additional software patches to your Oracle Application Server 10*g* components before you start the upgrade process.

These patches are designed to address specific interoperability issues that you might encounter while upgrading your Oracle Application Server 10*g* environment to Oracle Fusion Middleware 11*g*.

Table 3–1 lists the specific patch sets required to address specific upgrade and compatibility requirements for Oracle Fusion Middleware 11*g*.

For more information, refer to the following sections:

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

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

Patch Set Number	Description and Purpose	Additional Information
8404955	Before you can perform the Oracle B2B schema upgrade, you must apply this required patch to the Oracle Application Server Integration B2B 10g Release 2 (10.1.2) middle tier. This patch set is required in order to enable the Java command that you use to export the trading partner agreements, as described in the following step.	"Task 6b: If Necessary, Upgrade the B2B Schema" in the *Oracle Fusion Middleware Upgrade Guide for Oracle SOA Suite, WebCenter, and ADF*
5746866	If the database that hosts your Oracle Application Server 10*g* schemas is an Oracle Database 10g (10.1.0.x) database, then make sure that this database patch (or database patch 5126270) has been applied to the 10*g* (10.1.0.*x*) database before you upgrade the database to the required Oracle Database 10g (10.2.0.4). Note that database patch 5746866 includes patch 5126270.	"Upgrading to Oracle Database 10g Release 2 (10.2.0.4)" in the *Oracle Fusion Middleware Upgrade Planning Guide*
7685124	Apply this patch against Oracle Secure Enterprise Search (10.1.8.3.0) before you attempt to use Oracle Secure Enterprise Search with Oracle Portal 11*g*.	"Oracle Secure Enterprise Search" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal* Section 35.4, "Interoperability Issues and Workarounds."
8372141	Apply this patch on your Oracle Application Server 10g Release 3 (10.1.3.4) environment to enable interoperability between Oracle SOA Suite 10g Release 3 (10.1.3.4) and Oracle BPEL Process Manager 11*g*. This patch is also referred to as the Oracle SOA Suite 10g Release 3 (10.1.3.4) Cumulative MLR #7.	"Applying Patch Sets to Address Specific Upgrade Interoperability Issues" in the *Oracle Fusion Middleware Upgrade Planning Guide* "Upgrading Oracle SOA Suite Client Applications" in the *Oracle Fusion Middleware Upgrade Guide for Oracle SOA Suite, WebCenter, and ADF*

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

Patch Set Number	Description and Purpose	Additional Information
6522654	Apply this patch to your Oracle Database before you attempt to upgrade your Oracle BAM schema. If you do not apply this patch to your Oracle Database 10*g* (10.2.0.3), 10*g* (10.2.0.4), or Oracle Database 11*g* (11.1.0.7) before performing the schema upgrade, you will likely see the following error: BAM MRUA: SCHEMA UPGRADE FAILED SQLException: ORA-39002: invalid operation The description for this patch on My Oracle Support is "USING DATA PUMP THROUGH DBLINK CAUSED DATA CORRUPTION FOR CLOB VALUES".	"Task 6c: If Necessary, Upgrade the BAM Schema" in the *Oracle Fusion Middleware Upgrade Guide for Oracle SOA Suite, WebCenter, and ADF* Section 3.1.3.1, "Datapump Export for Oracle BAM Upgrade Plug-in Fails in Oracle Database 10g (10.2.0.3), 10g (10.1.2.0.4), and Oracle Database 11g (11.1.0.7)"
7675269	Apply this patch to prevent the occurrence of an ORA-01591 error in an Oracle Real Application Clusters (RAC) 11*g* (11.1.0.7) database. This error can occur for rows locked by transactions which were in the middle of two-phase commit. The description of this patch on My Oracle Support is "ODAC 2008:RAC NODE AFFINITY: DISTRIBUTED TXN ABORTS WITH ORA-01591."	"Upgrading and Preparing Your Databases" in the *Oracle Fusion Middleware Upgrade Planning Guide*
8291981	Apply this patch to correct a problem where Metadata Repository (MDS) queries against an Oracle Database 11*g* (11.1.0.7) database do not find all of the results (documents or elements) that they should. The description of this patch on My Oracle Support is: "SELECT INCORRECT RESULTS: SOME RESULTS NOT FOUND".	"Managing the MDS Repository" in the *Oracle Fusion Middleware Administrator's Guide*

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

Patch Set Number	Description and Purpose	Additional Information
9007079	Apply this bundled patch to your Oracle Database 11*g* (11.1.0.7) Real Application Clusters (RAC) environment to address three known issues while using the RAC database with Oracle Fusion Middleware Oracle SOA Suite components. See the Readme file for the patch for a list of the bugs addressed by the patch. The description of this patch on My Oracle Support is: "MERGE REQUEST FOR 8886255 AND 7675269".	"Oracle Real Application Clusters and Fusion Middleware" in the *Oracle Fusion Middleware High Availability Guide*.
8607693	Apply this patch to your Oracle Real Application Clusters (RAC) 11*g* (11.1.0.7) database to prevent an error that can occur if an XA transaction branch was being asynchronously rolled back by two or more sessions. The description of this patch on My Oracle Support is: "STRESS SOA - ORA-00600: INTERNAL ERROR CODE, ARGUMENTS: [504] (RAC)".	"Oracle Real Application Clusters and Fusion Middleware" in the *Oracle Fusion Middleware High Availability Guide*.
7682186	Apply this patch to your Oracle Real Application Clusters (RAC) 11*g* (11.1.0.7) database to prevent an issue that results in an ORA-600 error. Behavior includes CR-inconsistencies between index and the block, or incorrect results in a RAC multi-node global transaction environment. The description of this patch on My Oracle Support is: "ORA-600[KDSGRP1] SIGNALLED DURING BUGOLTP-XA WORKLOAD".	"Oracle Real Application Clusters and Fusion Middleware" in the *Oracle Fusion Middleware High Availability Guide*.

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

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

```
http://metalink.oracle.com/
```

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

3.1.2 Unable to Read Composite Model Error During SOA Application Upgrade

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

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

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

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

3.1.3 Oracle BAM Upgrade Issues

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

- Section 3.1.3.1, "Datapump Export for Oracle BAM Upgrade Plug-in Fails in Oracle Database 10g (10.2.0.3), 10g (10.1.2.0.4), and Oracle Database 11g (11.1.0.7)"

- Section 3.1.3.2, "Dependent Alerts Do Not Upgrade Correctly"

- Section 3.1.3.3, "Problem Upgrading a Report that Contains Calculated Fields"

- Section 3.1.3.4, "Calculated Fields Reference the Field ID Rather Than Field Names After Upgrade to Oracle BAM 11g"

- Section 3.1.3.5, "Using the Oracle BAM 11g Samples After Upgrade from Oracle BAM 10g"

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

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

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

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

For more information, see Section 3.1.1, "Patches Required to Address Specific Upgrade and Compatibility Requirements".

3.1.3.2 Dependent Alerts Do Not Upgrade Correctly

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

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

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

Change this:

```
&lt;param name=&quot;RuleID&quot; order=&quot;0&quot;&gt;
  //private:weblogic/Rule/624567ffe84de34c-6e6bdbaa120eb7f6ea6-8000
&lt;/param&gt;
```

To this:

```
&lt;param name=&quot;RuleID&quot; order=&quot;0&quot;&gt;
  ParentAlertName
&lt;/param&gt;
```

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

3.1.3.3 Problem Upgrading a Report that Contains Calculated Fields

If you created a report in Oracle BAM 10*g* or in Oracle BAM 11*g* Release 1 (11.1.1.1.0) and the report contains calculated fields that use using `datetime` type fields, then the Calculations tab displays this error in Oracle BAM 11*g* Release 1 (11.1.1.2.0):

```
BAM-01610: INVALID FILTER EXPRESSION
```

More specifically, this error occurs when the calculation is an expression for equality check against a datetime field in String format. For example, for a datetime field such as Last Modified, the following calculation does not work:

```
If {Last Modified}=="7/18/2002 1:33:10 PM"
```

Before you can upgrade the report, you must remove the calculated fields.

3.1.3.4 Calculated Fields Reference the Field ID Rather Than Field Names After Upgrade to Oracle BAM 11*g*

After upgrading to Oracle BAM 11*g* Release 1 (11.1.1.2.0), any calculated fields in your reports will reference fields by the field ID, rather than the field name.

Specifically, after upgrade, the field name referenced in the expression will be converted to use the field id (for example, `_Num_Sold`).

For example, the field reference might appear as follows after the upgrade:

```
If({_Num_Sold}==5000)
    Then("met")
    Else("notmet")
```

Note that the calculated fields will continue to work after the upgrade and after this automatic conversion.

3.1.3.5 Using the Oracle BAM 11*g* Samples After Upgrade from Oracle BAM 10*g*

When you install Oracle BAM 11*g*, the installer copies a set of sample applications to the Oracle SOA Suite Oracle home. Refer to the following sections for more information about using these samples after upgrading to Oracle BAM 11*g* from Oracle BAM 10*g*:

- Section 3.1.3.5.1, "General Information About the Oracle BAM Samples"

- Section 3.1.3.5.2, "Removing Any 10g Sample Applications Before Configuring the Oracle BAM 11g Samples"

For information about using the Oracle BAM 11*g* after migrating from Oracle Fusion Middleware 11*g* Release 1 (11.1.1.1.0), see Section 3.2.7, "Using the Oracle BAM 11g Prepackaged Samples After Migrating from 11.1.1.1.0".

3.1.3.5.1 General Information About the Oracle BAM Samples The Oracle Fusion Middleware installer copies the Oracle BAM samples to the following location in the Oracle SOA Suite Oracle home:

```
SOA_ORACLE_HOME/bam/samples/bam/
```

Instructions for configuring and using the samples, as well as updated samples, can be found at the following URL on the Oracle Technology Network (OTN):

`http://www.oracle.com/technology/products/integration/bam/collateral/samples11g.html`

The instructions explain how to use the propert setup script to configure the demos in your Oracle BAM 11*g* environment. You can also find individual readme file for each demo within each sample directory.

3.1.3.5.2   Removing Any 10*g* Sample Applications Before Configuring the Oracle BAM 11*g* Samples   Before you use the instructions on OTN to set up the Oracle BAM 11*g* samples, remove any data objects, reports, or alerts associated with any existing 10*g* samples.

For example, be sure to remove any artifacts associated with the Oracle BAM 10*g* Call Center and Atherton demos before you run the setup scripts.

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

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

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

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

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

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

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

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

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

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

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

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

3.1.7 WebCenter Security Upgrade Release Notes

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

- Section 3.1.7.1, "RowSetPermission check fails with compatibility flag set"
- Section 3.1.7.2, "Grants not migrated properly if application contains grants without permissions"
- Section 3.1.7.3, "Shared/public credentials not found after external application deployed"

3.1.7.1 RowSetPermission check fails with compatibility flag set

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

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

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

3.1.7.2 Grants not migrated properly if application contains grants without permissions

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

3.1.7.3 Shared/public credentials not found after external application deployed

If you have secured your 10.1.3 application, ensure there are no duplicate `JaasSecurityContext` and `CredentialStoreContext` elements in the application's `adf-config.xml` file prior to migration.In the following example, the first `JaasSecurityContext` element is empty and should be removed (see "**Remove entry**" in the XML snippet below).

```
<adf-config-child xmlns="http://xmlns.oracle.com/adf/security/config">
   <CredentialStoreContext
      credentialStoreClass=
```

```
              "oracle.adf.share.security.providers.jazn.JAZNCredentialStore"
        credentialStoreDefaultUser="anonymous"
        credentialStoreLocation="./credential-store.xml"/>
    <JaasSecurityContext/> <!--Remove entry-->
    <JaasSecurityContext
       initialContextFactoryClass=
            "oracle.adf.share.security.JAASInitialContextFactory"
       jaasProviderClass=
            "oracle.adf.share.security.providers.jazn.JAZNSecurityContext"
       authorizationEnforce="true"/>
</adf-config-child>
```

3.1.8 Oracle B2B Upgrade Release Notes

The following release notes apply when you are upgrading Oracle B2B 10*g* to Oracle B2B 11*g*:

- Section 3.1.8.1, "Service Name Is Required When Using ebMS with Oracle B2B"

- Section 3.1.8.2, "Converting Wallets to Keystores for Oracle B2B 11g"

- Section 3.1.8.3, "Oracle B2B UCCnet Documents Not Upgraded to 11g"

3.1.8.1 Service Name Is Required When Using ebMS with Oracle B2B

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

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

3.1.8.2 Converting Wallets to Keystores for Oracle B2B 11*g*

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

1. Back up the original keystore.

2. Use the orapki wallet pkcs12_to_jks option to convert to the keystore.

3. Use keytool -list to list the aliases and verify.

4. Use keytool -importkeystore to import the converted keystore to the backup of the original keystore (as done in Step 1)

3.1.8.3 Oracle B2B UCCnet Documents Not Upgraded to 11*g*

OracleAS Integration B2B provides support for UCCnet under the Custom Document option. UCCnet is a service that enables trading partners to exchange standards-compliant data in the retail and consumer goods industries.

Note, however, that UCCnet documents are not upgraded automatically to Oracle B2B 11*g*. For information about using UCCnet documents in Oracle B2B 11*g*, see "Using the UCCnet Document Protocol" in the *Oracle Fusion Middleware User's Guide for Oracle B2B*.

3.1.9 Problem Accessing the Welcome Pages in Oracle HTTP Server After Upgrade

After you upgrade to Oracle HTTP Server 11*g*, the `DirectoryIndex` directive in the `httpd.conf` set to `index.html`. As a result, if you go to the recommended URL to view the Oracle Fusion Middleware Welcome pages you instead see the "hello world" sample application page.

To address this issue:

1. Edit the `httpd.conf` file in the following location:

   ORACLE_INSTANCE/config/OHS/*ohs_component_name*/

2. Locate the `DirectoryIndex` directive in the `httpd.conf` file and change `index.html` to `welcome-index.html`.

3. Restart the Oracle HTTP Server instance.

3.1.10 Misleading Error Message When Upgrading Oracle Internet Directory

When upgrading to Oracle Internet Directory 11*g*, you might notice an error message in the Upgrade Assistant (Example 3–1). This error message indicates that some managed processes failed to start.

You can safely ignore this message, as long as the Upgrade Assistant messages also indicates that all components were upgraded successfully. This error occurs when the Upgrade Assistant attempts to start the Oracle Enterprise Manager agent and the agent is already running.

Example 3–1 Error Message When Upgrading Oracle Internet Directory

```
-----------------------------------------------------------
Starting Destination Components
    Starting OPMN and managed processes in the destination Oracle instance.
    ->UPGAST-00141: startup of 11g OPMN managed processes failed.
    Starting WebLogic managed server wls_ods1
    Clicked OK to continue
    Upgrade Progress 100%
    All components were upgraded successfully.
-----------------------------------------------------------
```

3.1.11 Problem Starting Oracle Web Cache After Upgrade to 11*g*

After upgrading from Oracle Web Cache 10*g*, you might experience problems starting the upgraded Oracle Web Cache 11*g* instance. If you cannot start Oracle Web Cache 11*g*, then perform the following post-upgrade task:

1. Locate the webcache.xml configuration file in the following directory:

   ORACLE_INSTANCE/config/WebCache/*webcache_component_name*/

2. Open the file with a text editor and search for any of the following three attributes:

   ```
   SSLCLIENTCERT_EXPAND
   ENABLEPOSTBODYLOGGING
   ANON_CRYPTO_FORBIDDEN
   ```

3. If any of these attributes exist, then remove the attributes and their values from the file.

   For example, suppose the following entry exists in the webcache.xml file:

   ```
   <HEADFORWARD SSLCLIENTCERT_TO_PEER="NO" SSLCLIENTCERT_ACCEPT="YES"
   ```

```
CLIENTIP="YES" SSLCLIENTCERT_EXPAND="YES"/>
```

Modify the entry so it appears as follows:

```
<HEADFORWARD SSLCLIENTCERT_TO_PEER="NO" SSLCLIENTCERT_ACCEPT="YES"
             CLIENTIP="YES"/>
```

3.2 General Issues and Workarounds for Migrating from 11.1.1.1.0

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

- Section 3.2.1, "Stopping the 11.1.1.2.0 Domain"
- Section 3.2.2, "Patching the Schema for Oracle Internet Directory"
- Section 3.2.3, "Changing the patchmaster.ValidationErrorContinue Property"
- Section 3.2.4, "Changing the Default Setting for Validation Tasks"
- Section 3.2.5, "Severe Error When Running the execute-sql-rcu Macro"
- Section 3.2.6, "Machine Names Do Not Appear in the Oracle WebLogic Server Administration Console"

3.2.1 Stopping the 11.1.1.2.0 Domain

While stopping the 11.1.1.2.0 domain by using the `ant master-stop-domain-new` command, you may see the following exceptions if the Administration Server and the Managed Servers are down:

```
java.net.ConnectException: Connection refused: connect; No available router to
destination.

The admin server and the managed servers should be up while running the command.
```

3.2.2 Patching the Schema for Oracle Internet Directory

While patching the schema for Oracle Internet Directory, ensure that you specify only `OID` as the parameter for the `patchMaster.Componentlist` property in the `patchMaster.properties` file.

3.2.3 Changing the patchmaster.ValidationErrorContinue Property

By default, the `patchMaster.ValidationErrorContinue` file appears as `patchmaster.ValidationErrorContinue`. When you run this property, an error occurs.

Therefore, if you are using this property, replace the default property with `patchMaster.ValidationErrorContinue` before running Patch Assistant.

3.2.4 Changing the Default Setting for Validation Tasks

Patch Assistant validates the properties specified in the `patchMaster.properties` file. Additionally it performs the following validation tasks:

- Verify whether the potential source, target home, and instance paths exist.
- Verify locations to discover it they are an instance, home, and so on.
- Validate individual migration task. For example, if you are migrating a domain, then schema-based properties are not required. If the schema-based properties are specified, be sure to set the complete and proper set of schema-based properties.

- Attempts to recognize exceptions to specific components. For example, if Oracle Internet Directory is solely specified as the component being patched, then the `property patchMaster.Schemaprefix` is not necessary. However, if other components are being patched, then it is assumed that `patchMaster.Schemaprefix` is a necessary part of schema property validation.

If you want to continue with the Patch Assistant task after a validation error occurs, then you can open the `patchMaster.properties` file (Located in your `patchMaster` directory) in a text editor, and change the value to `true` for the `patchMaster.ValidationErrorContinue` property (The default value is `false`). Alternatively, you can use the `Ant` command-line utility to override the properties set in the `patchMaster.properties` file. You must specify the required property on the command line as follows:

```
ant-DpatchMaster.ValidationErrorContinue
```

3.2.5 Severe Error When Running the execute-sql-rcu Macro

When running the `execute-sql-rcu` macro, you may see the following error message, while the SQL script is still running:

```
[java] SEVERE: Error while registering Oracle JDBC Diagnosability MBean.
[java] java.security.AccessControlException: access denied
(javax.management.MBeanTrustPermission register)
```

To resolve this error, you must grant the register permission by adding the following syntax to the `java.policy` file (Located at `JAVA_HOME/jre/lib/security` in UNIX and `JAVA_HOME\jre\lib\security` in Windows):

```
.
 grant codeBase "file:${PATCH-MASTER-HOME}/lib/*.jar" {
         permission javax.management.MBeanTrustPermission "register";
 };
```

> **Note:** Ensure that you replace `{PATCH-MASTER-HOME}` with your home path.

3.2.6 Machine Names Do Not Appear in the Oracle WebLogic Server Administration Console

After running Patch Assistant, you cannot see the list of machines (Machine-0 and Machine-1) configured during 11.1.1.1.0 and 11.1.1.2.0, in the Oracle WebLogic Server Administration Console. After migrating to 11.1.1.2.0, you must re-enter the machine names using the Oracle WebLogic Server Administration Console. For more information, see Create and configure machines topic in the *Oracle Fusion Middleware Oracle WebLogic Server Administration Console Online Help*.

3.2.7 Using the Oracle BAM 11*g* Prepackaged Samples After Migrating from 11.1.1.1.0

If you are using the Oracle BAM 11*g* sample applications, refer to the following sections for information about using the samples after migrating from Oracle Fusion Middleware 11*g* Release 1 (11.1.1.1.0) to Release 1 (11.1.1.2.0):

- Section 3.2.7.1, "Configuring the Oracle BAM 11g Samples After Migrating from 11.1.1.1.0"

- Section 3.2.7.2, "Using the Foreign Exchange Sample After Migrating from 11.1.1.1.0"

For more information about the Oracle BAM 11*g* samples, see Section 3.1.3.5.1, "General Information About the Oracle BAM Samples".

3.2.7.1 Configuring the Oracle BAM 11*g* Samples After Migrating from 11.1.1.1.0

After you migrate from Oracle Fusion Middleware 11*g* Release 1 (11.1.1.1.0) to 11*g* Release 1 (11.1.1.2.0), be sure to run the proper setup script for setting up samples. Specifically, you must run the recreate script instead of the setup script.

For more information, see the readme file for each of the Oracle BAM 11*g* samples.

3.2.7.2 Using the Foreign Exchange Sample After Migrating from 11.1.1.1.0

After you run the recreate script to set up the Foreign Exchange sample after migrating from 11.1.1.1.0, you might experience the following error when you open the report (`Shared Reports/Demos/Foreign Exchange`):

```
The "Trade Volume" has an error:
CACHEEXCEPTION_NULL_NULL_NULL
Message:BAM-01274: The field ID 1 is not recognized.
```

To fix this problem, perform the following steps:

1. Open Active Studio.

2. Open the report:

   `Shared Reports/Demos/Foreign Exchange/SLAViolation Report`

3. Click **Edit**.

4. Select the **Trade Volume** view and click **Edit View**.

5. In the **Fields** tab under **Group By**, select the field **GroupBy**.

6. Go to the **Surface Prompts** tab.

7. From the **Display in** drop-down menu, in select **View Title**.

8. Click **Apply** and save the report.

Visit the Oracle BAM samples page on OTN regularly to obtain updated samples and more information about the Oracle BAM sample applications.

3.3 Documentation Errata for Upgrade

This section provides documentation errata for the following guides:

- Section 3.3.1, "Documentation Errata for the Upgrade Guide for Oracle SOA Suite, WebCenter, and ADF"

- Section 3.3.2, "Documentation Errata for the Oracle Fusion Middleware Upgrade Guide for Oracle Identity Management"

- Section 3.3.3, "Documentation Errata for Using Patch Assistant to Migrate from 11.1.1.1.0 to 11.1.1.2"

3.3.1 Documentation Errata for the Upgrade Guide for Oracle SOA Suite, WebCenter, and ADF

The section, "Summary of Supported Starting Points for Oracle SOA Suite, WebCenter, and ADF," in the *Oracle Fusion Middleware Upgrade Guide for Oracle SOA Suite, WebCenter, and ADF* lists the starting points for upgrading to Oracle Fusion Middleware 11*g*, as well as the latest patch sets available for the Oracle SOA Suite.

The last column of the table in that section should state that the latest patch set available at the time this document was published is Oracle Application Server 10*g* Release 3 (10.1.3.5).

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

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

- Section 3.3.2.1, "Error in Procedure for Identifying Additional Oracle Internet Directory Instances"
- Section 3.3.2.2, "Error in Oracle Virtual Directory Releases Supported"

3.3.2.1 Error in Procedure for Identifying Additional Oracle Internet Directory Instances

In the section, "Recreating Any Non-Default Oracle Internet Directory Instances," in the Oracle Fusion Middleware Upgrade Guide for Oracle Identity Management, step 1 describes how to identify any additional, non-default Oracle Internet Directory instances you have created.

However, the procedure fails to indicate that the command provided will display a list of the default instances, as well as any non-default instances. Be sure to review the output of the command in Step 1 and identify only the Oracle Internet Directory instances that were not created by default, during the Oracle Internet Directory installation procedure.

If you have not created any non-default Oracle Internet Directory instances, then there is no need to perform the steps in the section, "Recreating Any Non-Default Oracle Internet Directory Instances."

3.3.2.2 Error in Oracle Virtual Directory Releases Supported

In Table 2-2, "Oracle Virtual Directory Releases Supported By This Guide," the "Description or Notes" section states:

This version of Oracle Identity Federation was available as part of Oracle Application Server 10g (10.1.4.0.1). It was installed using a separate isntallation procedure and installation guide.

It should say:

This version of Oracle Identity Federation was available as part of Oracle Application Server 10g (10.1.4.0.1). It was installed using a separate isntallation procedure and installation guide.

3.3.3 Documentation Errata for Using Patch Assistant to Migrate from 11.1.1.1.0 to 11.1.1.2

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

- Section 3.3.3.1, "Update the Translation Table in Audit Schema"

- Section 3.3.3.2, "Migrating Oracle Internet Directory Policy and Credential Store and Reusing an Existing Oracle Internet Directory Server"

- Section 3.3.3.3, "Migrating Configuration for User Messaging Service Worklist Driver"

3.3.3.1 Update the Translation Table in Audit Schema

Section "3.3.1.1 Update the Translation Table in Audit Schema" in the *Oracle Fusion Middleware Using Patch Assistant to Migrate from 11.1.1.1.0 to 11.1.1.2.0*, has an additional information. This information is for step 2, as follows:

To avoid scrambled characters, an Unicode-supported database is required to store the translation data. In addition, to ensure proper character set conversion between SQL*Plus and the database server, a compatible character set, such as `UTF8` or `AL32UTF8`, needs to be set for the `NLS_LANG` environment variable before running `disp_names.sql`.

For the complete list of legal `NLS_LANG` values, see the Oracle Database Documentation Library at `http://www.oracle.com/technology/documentation/database.html`.

3.3.3.2 Migrating Oracle Internet Directory Policy and Credential Store and Reusing an Existing Oracle Internet Directory Server

To start Oracle Internet Directory mentioned in step 7, in section "3.3.5.2 Migrating Oracle Internet Directory Policy and Credential Store and Reusing an Existing Oracle Internet Directory Server" in the *Oracle Fusion Middleware Using Patch Assistant to Migrate from 11.1.1.1.0 to 11.1.1.2.0* is not required. You must skip this step and proceed to the next step.

3.3.3.3 Migrating Configuration for User Messaging Service Worklist Driver

Section "3.3.8.2 Migrating Configuration for User Messaging Service Worklist Driver" in the *Oracle Fusion Middleware Using Patch Assistant to Migrate from 11.1.1.1.0 to 11.1.1.2.0*, has an inaccurate information. The correct information is as follows:

If your Oracle Fusion Middleware 11*g* Release 1 (11.1.1.1.0) domain has the User Messaging Service Worklist Driver installed and configured, the configuration of the Worklist Driver is automatically migrated by the Patch Assistant. Patch Assistant does not install this additional driver. You must re-install the driver in the Oracle Fusion Middleware 11*g* Release 1 (11.1.1.2.0) domain. For more information, see "Install the Worklist Driver" section in the *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite*.

4

Oracle Fusion Middleware Administration

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

- Section 4.1, "General Issues and Workarounds"
- Section 4.2, "Configuration Issues and Workarounds"
- Section 4.3, "Documentation Errata"

4.1 General Issues and Workarounds

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

- Section 4.1.1, "Fusion Middleware Control May Return Error in Mixed IPv6 and IPv4 Environment"
- Section 4.1.2, "Deploying JSF Applications"
- Section 4.1.3, "Limitations in Cloning Oracle Virtual Directory"

4.1.1 Fusion Middleware Control May Return Error in Mixed IPv6 and IPv4 Environment

If your environment contains both IPv6 and IPv4 network protocols, Fusion Middleware Control may return an error in certain circumstances.

If the browser that is accessing Fusion Middleware Control is on a host using the IPv4 protocol, and selects a control that accesses a host using the IPv6 protocol, Fusion Middleware Control will return an error. Similarly, if the browser that is accessing Fusion Middleware Control is on a host using the IPv6 protocol, and selects a control that accesses a host using the IPv4 protocol, Fusion Middleware Control will return an error.

For example, if you are using a browser that is on a host using the IPv4 protocol and you are using Fusion Middleware Control, Fusion Middleware Control returns an error when you navigate to an entity that is running on a host using the IPv6 protocol, such as in the following situations:

- From the Oracle Internet Directory home page, you select Directory Services Manager from the Oracle Internet Directory menu. Oracle Directory Services Manager is running on a host using the IPv6 protocol.
- From a Managed Server home page, you click the link for Oracle WebLogic Server Administration Console, which is running on IPv6.
- You test Web Services endpoints, which are on a host using IPv6.
- You click an application URL or Java application which is on a host using IPv6.

To work around this issue, you can add the following entry to the /etc/hosts file:

```
nnn.nn.nn.nn  myserver-ipv6 myserver-ipv6.example.com
```

In the example, *nnn.nn.nn.nn* is the IPv4 address of the Administration Server host, myserver.example.com.

4.1.2 Deploying JSF Applications

Some JSF applications may experience a memory leak due to incorrect Abstract Window Toolkit (AWT) application context classloader initialization in the Java class library. Setting the `oracle.jrf.EnableAppContextInit` system property to **true** will attempt eager initialization of the AWT application context classloader to prevent this leak from occurring. By default, this property is set to **false**.

4.1.3 Limitations in Cloning Oracle Virtual Directory

Note the following limitations in cloning Oracle Virtual Directory

- When you are cloning Oracle Virtual Directory, the Oracle instance name in the source environment cannot be the same as the Oracle instance name in the target environment. The Oracle instance name in the target must be different than the name in the source.

- After you clone Oracle Virtual Directory from one host to another, you must add a self-signed certificate to the Oracle Virtual Directory keystore and EM Agent wallet on Host B. Take the following steps:

  1. Set the ORACLE_HOME and JAVA_HOME environment variables.

  2. Delete the existing self-signed certificate:

     ```
     $JAVA_HOME/bin/keytool -delete -alias serverselfsigned
       -keystore ORACLE_INSTANCE/config/OVD/ovd_component_
     name/keystores/keys.jks
       -storepass OVD_Admin_password
     ```

  3. Generate a key pair:

     ```
     $JAVA_HOME/bin/keytool -genkeypair
       -keystore ORACLE_INSTANCE/config/OVD/ovd_component_
     name/keystores/keys.jks
       -storepass OVD_Admin_password -keypass OVD_Admin_password -alias
     serverselfsigned
       -keyalg rsa -dname "CN=Fully_qualified_hostname,O=test"
     ```

  4. Export the certificate:

     ```
     $JAVA_HOME/bin/keytool -exportcert
       -keystore ORACLE_INSTANCE/config/OVD/ovd_component_
     name/keystores/keys.jks
       -storepass OVD_Admin_password -rfc -alias serverselfsigned
       -file ORACLE_INSTANCE/config/OVD/<ovd_component_
     name/keystores/ovdcert.txt
     ```

  5. Add a wallet to the EM Agent:

     ```
     ORACLE_HOME/../oracle_common/bin/orapki wallet add
       -wallet ORACLE_INSTANCE/EMAGENT/EMAGENT/sysman/config/monwallet
       -pwd EM_Agent_Wallet_password -trusted_cert
       -cert ORACLE_INSTANCE/config/OVD/<ovd_component_
     name/keystores/ovdcert.txt
     ```

6.   Stop and start the Oracle Virtual Directory server.

7.   Stop and start the EM Agent.

4.2 Configuration Issues and Workarounds

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

4.2.1 Must Stop Oracle SOA Suite Managed Server Before Stopping soa-infra

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Using Fusion Middleware Control, if you stop a Oracle SOA Suite Managed Server before you stop soa-infra, then you start the Managed Server, the soa-infra application is not restarted automatically. If you try to restart the soa-infra, you will received an error. When you encounter the problem, you cannot close the dialog box in the browser, so you cannot take any further actions in Fusion Middleware Control.

To avoid this situation, you should stop the Managed Server, which stops all applications, including the soa-infra application. To start the Managed Server and the soa-infra, start the Managed Server.

To close the browser dialog box, enter the following URL in your browser:

```
http://host:port/em
```

4.2.2 Configuring Fusion Middleware Control for Windows Native Authentication

To use Windows Native Authentication (WNA) as the single sign-on mechanism between Fusion Middleware Control and Oracle WebLogic Server Administration Console, you must make changes to the following files:

- web.xml

- weblogic.xml

These files are located in the em.ear file. You must explode the em.ear file, edit the files, then rearchive the em.ear file. Take the following steps (which assume that while the front end is on Windows, the em.ear file is on UNIX):

1.   Set the JAVA_HOME environment variable. For example:

```
setenv JAVA_HOME /scratch/Oracle/Middleware/jrockit_160_05_R27.6.2-20
```

2.   Change to the directory containing the em.ear, and explode the file. For example:

```
cd /scratch/Oracle/Middleware/user_projects/applications/domain_name
JAVA_HOME/bin/jar xvf em.ear em.war
JAVA_HOME/bin/jar xvf em.war WEB-INF/web.xml
JAVA_HOME/bin/jar xvf em.war WEB-INF/weblogic.xml
```

3. Edit web.xml, commenting out the first login-config block and uncommenting the login-config block for WNA. (The file contains information about which block to comment and uncomment.) When you have done this, the portion of the file will appear as in the following example:

```
<!--<login-config>
     <auth-method>CLIENT-CERT</auth-method>
   </login-config>
-->
 <!--
   the following block is for Windows Native Authentication, if you are using
 WNA, do the following:
    1. uncomment the following block
    2. comment out the previous <login-config> section.
    3. you also need to uncomment a block in weblogic.xml
 -->
   <login-config>
     <auth-method>CLIENT-CERT,FORM</auth-method>
     <form-login-config>
        <form-login-page>/faces/targetauth/emasLogin</form-login-page>
        <form-error-page>/login/LoginError.jsp</form-error-page>
     </form-login-config>
   </login-config>
   <security-constraint>
 .
 .
 .
   <security-role>
     <role-name>Monitor</role-name>
   </security-role>
```

4. Edit weblogic.xml, uncommenting the following block. (The file contains information about which block to uncomment.) When you have done this, the portion of the file will appear as in the following example:

```
<!--
the following block is for Windows Native Authentication, if you are using
WNA, uncomment the following block.
-->
 <security-role-assignment>
    <role-name>Admin</role-name>
    <externally-defined/>
  </security-role-assignment>
 .
 .
 .
  <security-role-assignment>
    <role-name>Deployer</role-name>
    <externally-defined/>
  </security-role-assignment>
```

5. Rearchive the em.ear file. For example:

```
JAVA_HOME/bin/jar uvf em.war WEB-INF/web.xml
JAVA_HOME/bin/jar uvf em.war WEB-INF/weblogic.xml
JAVA_HOME/bin/jar uvf em.ear em.war
```

4.2.3 Fusion Middleware Control Does Not Keep Column Preferences in Log Viewer Pages

In Fusion Middleware Control, you can reorder the columns in the pages that display log files and log file messages. However, if you navigate away from the page and then back to it, the columns are set to their original order.

4.2.4 Changing Log File Format

When you change the log file format note the following:

- When you change the log file format from text to xml, specify the path, but omit the file name. The new file will be named log. xml.

- When you change the log file format from xml to text, specify both the path and the file name.

4.3 Documentation Errata

There are no known issues at this time.

5

Oracle Enterprise Manager Fusion Middleware Control

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

- Section 5.1, "General Issues and Workarounds"

5.1 General Issues and Workarounds

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

- Section 5.1.1, "Product Behavior After a Session Timeout"
- Section 5.1.2, "Fixing Errors Displayed When Selecting the TopLink Sessions Command in Fusion Middleware Control"
- Section 5.1.3, "Verifying the DISPLAY Variable to Correct Problems Displaying Graphics"
- Section 5.1.4, "Incomplete Information Available on the MDS Configuration Page"
- Section 5.1.5, "Exceptions When Starting Oracle Web Cache After Accessing Configuration Pages from Oracle Enterprise Manager Fusion Middleware Control"
- Section 5.1.6, "Table Display Problems When Using Some Language Variants"
- Section 5.1.7, "Problems When Internet Explorer 7 is Configured to Open Pop-Up Windows in a New Tab"
- Section 5.1.8, "Additional Fusion Middleware Control Release Notes"

5.1.1 Product Behavior After a Session Timeout

For security purposes, your sessions with the Fusion Middleware Control will time out after a predefined period of inactivity, and you will be asked to log in to the console again. In most cases, you are returned to the page you had displayed before the session timed out.

However, in some circumstances, such as when you are using the Fusion Middleware Control deployment wizards, you will not be returned the same location in the product after you log in. In those cases, you will have to navigate to the specific Fusion Middleware Control page you were using before the session timed out.

5.1.2 Fixing Errors Displayed When Selecting the TopLink Sessions Command in Fusion Middleware Control

In Fusion Middleware Control, you can view the Oracle TopLink management pages by selecting **TopLink Sessions** from the **Application Deployment** menu.

However, if you receive an error message when you select this command, you can remedy the problem by adding one or both of the following MBean system properties, as follows:

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

For more information, see the following URL on the Eclipse WIKI Web site:

```
http://wiki.eclipse.org/Integrating_EclipseLink_with_an_Application_Server_
(ELUG)#How_to_Integrate_JMX
```

5.1.3 Verifying the DISPLAY Variable to Correct Problems Displaying Graphics

The graphics subsystem for the Fusion Middleware Control generates some of its graphics on demand, and if the DISPLAY environment variable is set, Fusion Middleware Control tries to open the specified DISPLAY environment.

If Fusion Middleware Control fails to start due to graphics errors, check to see whether the DISPLAY environment variable is set to a proper DISPLAY environment.

If the DISPLAY environment variable is set incorrectly, unset the DISPLAY environment variable. Then restart Fusion Middleware Control.

5.1.4 Incomplete Information Available on the MDS Configuration Page

After deploying a Oracle SOA Suite application that requires Oracle Metadata Services (MDS), in some rare circumstances, you may find that the MDS configuration page for the application does not contain complete information about the MDS repository.

To address this problem, use the Metadata Repositories page to register the repository again. For more information, see "Create and Register an MDS Repository" in the Fusion Middleware Control online help.

5.1.5 Exceptions When Starting Oracle Web Cache After Accessing Configuration Pages from Oracle Enterprise Manager Fusion Middleware Control

To start, stop, or restart Oracle Web Cache from Fusion Middleware Control, from the **Web Cache** menu, you can choose **Control**, and then **Start Up**, **Shut Down**, or **Restart**.

If you select **Shut Down**, and then **Start Up** on a configuration page, Fusion Middleware Control may return exception errors. If these errors occur in your environment, perform the operations from Web Cache Home page.

5.1.6 Table Display Problems When Using Some Language Variants

When you use Fusion Middleware Control in some non-English language environments, some of the tables on the component home pages display incorrectly. For example, some rows of the table appear to be merged and without content.

These issues can be safely ignored, since no data on the pages is hidden. The table cells that appear incorrectly do not contain performance data or other information.

5.1.7 Problems When Internet Explorer 7 is Configured to Open Pop-Up Windows in a New Tab

If you configure Microsoft Internet Explorer 7 so it always displays pop-up windows in a new browser tab, then you may experience problems using Fusion Middleware Control. For example, in some cases, Enteprise Manager content displays in a new tab as expected, but Fusion Middleware Control stops responding to mouse clicks. The only way to continue working is to close the tab.

To avoid this problem, use the Internet Options dialog box in Internet Explorer to disable the option for displaying pop-up windows in a new tab.

5.1.8 Additional Fusion Middleware Control Release Notes

Refer to Chapter 4, "Oracle Fusion Middleware Administration" for additional Fusion Middleware Control release notes.

Additional Fusion Middleware Control release notes are also included in the component chapters of the Release Notes.

6

Oracle Fusion Middleware High Availability and Enterprise Deployment

This chapter describes issues associated with Oracle Fusion Middleware high availability and enterprise deployment. It includes the following topics:

- Section 6.1, "General Issues and Workarounds"
- Section 6.2, "Configuration Issues and Workarounds"
- Section 6.3, "Documentation Errata"

6.1 General Issues and Workarounds

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

- Section 6.1.1, "Secure Resources in Application Tier"
- Section 6.1.2, "mod_wl Not Supported for OHS Routing to Managed Server Cluster"
- Section 6.1.3, "Only Documented Procedures Supported"
- Section 6.1.4, "SOA Composer Generates Error During Failover"
- Section 6.1.5, "Accessing Web Services Policies Page in Cold Failover Environment"
- Section 6.1.6, "Considerations for Oracle Identity Federation HA in SSL mode"

6.1.1 Secure Resources in Application Tier

It is highly recommended that the application tier in the SOA Enterprise Deployment topology and the WebCenter Enterprise Deployment topology is protected against anonymous RMI connections. To prevent RMI access to the middle tier from outside the subset configured, follow the steps in "Configure connection filtering" in the Oracle WebLogic Server Administration Console Online Help. Execute all of the steps, except as noted in the following:

1. Do not execute the substep for configuring the default connection filter. Execute the substep for configuring a custom connection filter.

2. In the Connection Filter Rules field, add the rules that will allow all protocol access to servers from the middle tier subnet while allowing only http(s) access from outside the subnet, as shown in the following example:

```
nnn.nnn.0.0/nnn.nnn.0.0  * * allow
0.0.0.0/0 * * allow t3 t3s
```

6.1.2 mod_wl Not Supported for OHS Routing to Managed Server Cluster

Oracle Fusion Middleware supports only `mod_wls_ohs` and does not support `mod_wl` for Oracle HTTP Server routing to a cluster of managed servers.

6.1.3 Only Documented Procedures Supported

For Oracle Fusion Middleware high availability deployments, Oracle strongly recommends following only the configuration procedures documented in the *Oracle Fusion Middleware High Availability Guide* and the *Oracle Fusion Middleware Enterprise Deployment Guides*.

6.1.4 SOA Composer Generates Error During Failover

During failover, if you are in a SOA Composer dialog box and the connected server is down, you will receive an error, such as `Target Unreachable, 'messageData' returned null`.

To continue working in the SOA Composer, open a new browser window and navigate to the SOA Composer.

6.1.5 Accessing Web Services Policies Page in Cold Failover Environment

In a Cold Failover Cluster (CFC) environment, the following exception is displayed when Web Services policies page is accessed in Fusion Middleware Control:

```
Unable to connect to Oracle WSM Policy Manager.
Cannot locate policy manager query/update service. Policy manager service
look up did not find a valid service.
```

To avoid this, implement one the following options:

- Create virtual hostname aliased SSL certificate and add to the key store.

- Add "-Dweblogic.security.SSL.ignoreHostnameVerification=true" to the JAVA_OPTIONS parameter in the startWeblogic.sh or startWeblogic.cmd files

6.1.6 Considerations for Oracle Identity Federation HA in SSL mode

In a high availability environment with two (or more) Oracle Identity Federation servers mirroring one another and a load balancer at the front-end, there are two ways to set up SSL:

- Configure SSL on the load balancer, so that the SSL connection is between the user and the load balancer. In that case, the keystore/certificate used by the load balancer has a CN referencing the address of the load balancer.

  The communication between the load balancer and the WLS/Oracle Identity Federation can be clear or SSL (and in the latter case, Oracle WebLogic Server can use any keystore/certificates, as long as these are trusted by the load balancer).

- SSL is configured on the Oracle Identity Federation servers, so that the SSL connection is between the user and the Oracle Identity Federation server. In this case, the CN of the keystore/certificate from the Oracle WebLogic Server/Oracle Identity Federation installation needs to reference the address of the load balancer, as the user will connect using the hostname of the load balancer, and the Certificate CN needs to match the load balancer's address.

  In short, the keystore/certificate of the SSL endpoint connected to the user (load balancer or Oracle WebLogic Server/Oracle Identity Federation) needs to have its

CN set to the hostname of the load balancer, since it is the address that the user will use to connect to Oracle Identity Federation.

6.2 Configuration Issues and Workarounds

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

- Section 6.2.1, "jca.retry.count Doubled in a Clustered Environment"
- Section 6.2.2, "Cluster Time Zones Must Be the Same"
- Section 6.2.3, "WebLogic Server Restart after Abrupt Machine Failure"
- Section 6.2.4, "Cookie Persistence Setting on Load Balancer May Result in Intermittent Timeouts in accessing Portal on Windows platforms"
- Section 6.2.5, "Fusion Middleware Control May Display Incorrect Status"
- Section 6.2.6, "Accumulated BPEL Instances Cause Performance Decrease"
- Section 6.2.7, "Extra Message Enqueue when One a Cluster Server is Brought Down and Back Up"
- Section 6.2.8, "Duplicate Unrecoverable Human Workflow Instance Created with Oracle RAC Failover"
- Section 6.2.9, "Configuration Files Missing after Planned Administration Server Node Shutdown or Reboot"
- Section 6.2.10, "No High Availability Support for SOA B2B TCP/IP"
- Section 6.2.11, "WebLogic Administration Server on Machines with Multiple Network Cards"
- Section 6.2.12, "Additional Parameters for SOA and Oracle RAC Data Sources"
- Section 6.2.13, "Message Sequencing and MLLP Not Supported in Oracle B2B HA Environments"
- Section 6.2.14, "Access Control Exception After Expanding Cluster Against an Extended Domain"

6.2.1 jca.retry.count Doubled in a Clustered Environment

In a clustered environment, each node maintains its own in-memory Hasmap for inbound retry. The `jca.retry.count` property is specified as **3** for the inbound retry feature. However, each node tries three times. As a result, the total retry count becomes 6 if the clustered environment has two nodes.

6.2.2 Cluster Time Zones Must Be the Same

All the machines in a cluster must be in the same time zone. WAN clusters are not supported by Oracle Fusion Middleware high availability. Even machines in the same time zone may have issues when started by command line. Oracle recommends using Node Manager to start the servers.

6.2.3 WebLogic Server Restart after Abrupt Machine Failure

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

```
<MMM dd, yyyy hh:mm:ss a z> <Error> <Store> <BEA-280061> <The persistent
store "_WLS_server_soa1" could not be deployed:
weblogic.store.PersistentStoreException: java.io.IOException:
[Store:280021]There was an error while opening the file store file
"_WLS_SERVER_SOA1000000.DAT"
weblogic.store.PersistentStoreException: java.io.IOException:
[Store:280021]There was an error while opening the file store file
"_WLS_SERVER_SOA1000000.DAT"
        at weblogic.store.io.file.Heap.open(Heap.java:168)
        at weblogic.store.io.file.FileStoreIO.open(FileStoreIO.java:88)
```

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

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

Solution 1

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

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

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

Solution 2

Disable WebLogic file locking by disabling the native I/O wlfileio2 driver. The following sample steps move the shared object for the driver to a backup location, effectively removing it.

```
cd WL_HOME/server/native/platform/cpu_arch
mv libwlfileio2.so /shared/backup
```

With this solution, since the WebLogic locking is disabled, automated server restarts and failovers succeed. In addition, this may result in performance degradations. Be

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

6.2.4 Cookie Persistence Setting on Load Balancer May Result in Intermittent Timeouts in accessing Portal on Windows platforms

Cookie Persistence on the load balancer is not required for an Oracle Portal active-active setup. Any inadvertent setting of cookie Persistence to 'active cookie insert' on certain hardware load balancers for Portal deployments on Windows results in intermittent timeouts while accessing Oracle Portal.

6.2.5 Fusion Middleware Control May Display Incorrect Status

In some instances, Oracle WebLogic Fusion Middleware Control may display the incorrect status of a component immediately after the component has been restarted or failed over.

6.2.6 Accumulated BPEL Instances Cause Performance Decrease

In a scaled out clustered environment, if a large number of BPEL instances are accumulated in the database, it causes the database's performance to decrease, and the following error is generated: MANY THREADS STUCK FOR 600+ SECONDS.

To avoid this error, remove old BPEL instances from the database.

6.2.7 Extra Message Enqueue when One a Cluster Server is Brought Down and Back Up

In a non-XA environment, MQSeries Adapters do not guarantee the only once delivery of the messages from inbound adapters to the endpoint in case of local transaction. In this scenario, if an inbound message is published to the endpoint, and before committing the transaction, the SOA server is brought down, inbound message are rolled back and the same message is again dequeued and published to the endpoint. This creates an extra message in outbound queue.

In an XA environment, MQ Messages are actually not lost but held by Queue Manager due to an inconsistent state. To retrieve the held messages, restart the Queue Manager.

6.2.8 Duplicate Unrecoverable Human Workflow Instance Created with Oracle RAC Failover

As soon as Oracle Human Workflow commits its transaction, the control passes back to BPEL, which almost instantaneously commits its transaction. Between this window, if the Oracle RAC instance goes down, on failover, the message is retried and can cause duplicate tasks. The duplicate task can show up in two ways - either a duplicate task appears in worklistapp, or an unrecoverable BPEL instance is created. This BPEL instance appears in BPEL Recovery. It is not possible to recover this BPEL instance as **consumer**, because this task has already completed.

6.2.9 Configuration Files Missing after Planned Administration Server Node Shutdown or Reboot

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

When performing a planned stop of the Administration Server's node (rebooting or shutting down the Admin Server's machine), it may occur that the OS NFS service is disabled before the Administration Server itself is stopped. This (depending on the configuration of services at the OS level) can cause the detection of missing files in the Administration Server's domain directory and trigger their deletion in the domain directories in other nodes. This can result in the framework deleting some of the files under `domain_dir/fmwconfig/`. This behavior is typically not observed for unplanned downtimes, such as machine panic, power loss, or machine crash. To avoid this behavior, shutdown the Administration Server before performing reboots or, alternatively, use the appropriate OS configuration to set the order of services in such a way that NFS service is disabled with later precedence than the Administration Server's process. See your OS administration documentation for the corresponding required configuration for the services' order.

6.2.10 No High Availability Support for SOA B2B TCP/IP

High availability failover support is not available for SOA B2B TCP/IP protocol. This effects primarily deployments using HL7 over MLLP. For inbound communication in a clustered environment, all B2B servers are active and the address exposed for inbound traffic is a load balancer virtual server. Also, in an outage scenario where an active managed server is no longer available, the persistent TCP/IP connection is lost and the client is expected to reestablish the connection.

6.2.11 WebLogic Administration Server on Machines with Multiple Network Cards

When installing Oracle WebLogic Server on a server with multiple network cards, always specify a Listen Address for the Administration Server. The address used should be the DNS Name/IP Address of the network card you wish to use for Administration Server communication.

To set the Listen Address:

1. In the Oracle WebLogic Server Administration Console, select **Environment**, and then **Servers** from the domain structure menu.

2. Click the Administration Server.

3. Click **Lock and Edit** from the Change Center to allow editing.

4. Enter a Listen Address.

5. Click **Save**.

6. Click **Activate Changes** in the Change Center.

6.2.12 Additional Parameters for SOA and Oracle RAC Data Sources

In some deployments of SOA with Oracle RAC, you may need to set additional parameters in addition to the out of the box configuration of the individual data sources in an Oracle RAC configuration. The additional parameters are:

1. Add property `oracle.jdbc.ReadTimeout=300000` (300000 milliseconds) for each data source.

The actual value of the `ReadTimeout` parameter may differ based on additional considerations.

2. If the network is not reliable, then it is difficult for a client to detect the frequent disconnections when the server is abruptly disconnected. By default, a client running on Linux takes 7200 seconds (2 hours) to sense the abrupt disconnections. This value is equal to the value of the `tcp_keepalive_time` property. To configure the application to detect the disconnections faster, set the value of the `tcp_keepalive_time`, `tcp_keepalive_interval`, and `tcp_keepalive_probes` properties to a lower value at the operating system level.

> **Note:** Setting a low value for the `tcp_keepalive_interval` property leads to frequent probe packets on the network, which can make the system slower. Therefore, the value of this property should be set appropriately based on system requirements.

For example, set `tcp_keepalive_time=600` at the system running the WebLogic Server managed server.

Also, you must specify the `ENABLE=BROKEN` parameter in the `DESCRIPTION` clause in the connection descriptor. For example:

```
dbc:oracle:thin:@(DESCRIPTION=(enable=broken)(ADDRESS_LIST=(ADDRESS=(PRO
TOCOL=TCP)(HOST=node1-vip.mycompany.com)(PORT=1521)))(CONNECT_DATA=(SERVICE_
NAME=orcl.us.oracle.com)(INSTANCE_NAME=orcl1)))
```

As a result, the data source configuration appears as follows:

```
<url>jdbc:oracle:thin:@(DESCRIPTION=(enable=broken)(ADDRESS_LIST=(ADDRESS=(PRO
TOCOL=TCP)(HOST=node1-vip.us.oracle.com)(PORT=1521)))(CONNECT_DATA=(SERVICE_
NAME=orcl.us.oracle.com)(INSTANCE_NAME=orcl1)))</url>
    <driver-name>oracle.jdbc.xa.client.OracleXADataSource</driver-name>
    <properties>
      <property>
        <name>oracle.jdbc.ReadTimeout</name>
        <value>300000</value>
      </property>
      <property>
        <name>user</name>
        <value>jmsuser</value>
      </property>
      <property>
        <name>oracle.net.CONNECT_TIMEOUT</name>
        <value>10000</value>
      </property>
    </properties>
```

6.2.13 Message Sequencing and MLLP Not Supported in Oracle B2B HA Environments

Message sequencing and MLLP are not supported in oracle B2B high availability (HA) environments.

6.2.14 Access Control Exception After Expanding Cluster Against an Extended Domain

The Oracle Identity Federation server has been observed to fail due to access control exceptions under the following circumstances:

1. You create a domain with no Identity Management components on `host1`.

2. On `host2`, you extend that domain in clustered mode, select all Identity Management components, and select `Create Schema`.

3. On `host1`, you expand the cluster and select all components.

Due to a bug, the file *DOMAIN_HOME*/config/fmwconfig `system-jazn-data.xml` on `host1` is overwritten so that the `<grant>` element is removed, which causes the access control exceptions when the Oracle Identity Federation server is started.

To restore the `<grant>` element, you use the WLST `grantPermission` command.

On Linux, enter the following three commands at the bash prompt. Type each command on one line.

When typing the commands, replace *ORACLE_COMMON_HOME* with the path to the Oracle Common Home folder, located in the Middleware Home. When prompted for information to connect to WebLogic, enter the WLS Administrator Credentials and the location of the WebLogic Administration Server.

```
ORACLE_COMMON_HOME/common/bin/wlst.sh
ORACLE_COMMON_HOME/modules/oracle.jps_11.1.1/common/wlstscripts/grantPermissi
on.py -codeBaseURL
file:\${domain.home}/servers/\${weblogic.Name}/tmp/_WL_user/OIF_11.1.1.2.0/-
-permClass oracle.security.jps.service.credstore.CredentialAccessPermission
-permTarget context=SYSTEM,mapName=OIF,keyName=* -permActions read

ORACLE_COMMON_HOME/common/bin/wlst.sh
ORACLE_COMMON_HOME/modules/oracle.jps_11.1.1/common/wlstscripts/grantPermissi
on.py -codeBaseURL
file:\${domain.home}/servers/\${weblogic.Name}/tmp/_WL_user/OIF_11.1.1.2.0/-
-permClass oracle.security.jps.service.credstore.CredentialAccessPermission
-permTarget credstoressp.credstore -permActions read

ORACLE_COMMON_HOME/common/bin/wlst.sh
ORACLE_COMMON_HOME/modules/oracle.jps_11.1.1/common/wlstscripts/grantPermissi
on.py -codeBaseURL
file:\${domain.home}/servers/\${weblogic.Name}/tmp/_WL_user/OIF_11.1.1.2.0/-
-permClass oracle.security.jps.service.credstore.CredentialAccessPermission
-permTarget credstoressp.credstore.OIF.* -permActions read
```

On Windows, enter the following three commands at the command prompt. Type each command on one line.

When typing the commands, replace *ORACLE_COMMON_HOME* with the path to the Oracle Common Home folder, located in the Middleware Home. When prompted for information to connect to WebLogic, enter the WLS Administrator Credentials and the location of the WebLogic Administration Server.

```
ORACLE_COMMON_HOME\common\bin\wlst.cmd
ORACLE_COMMON_HOME\modules\oracle.jps_11.1.1\common\wlstscripts\grantPermiss
ion.py -codeBaseURL
file:${domain.home}/servers/\${weblogic.Name}/tmp/_WL_user/OIF_11.1.1.2.0/-
-permClass oracle.security.jps.service.credstore.CredentialAccessPermission
-permTarget context=SYSTEM,mapName=OIF,keyName=* -permActions read

ORACLE_COMMON_HOME\common\bin\wlst.cmd
ORACLE_COMMON_HOME\modules\oracle.jps_11.1.1\common\wlstscripts\grantPermiss
ion.py -codeBaseURL
file:${domain.home}/servers/${weblogic.Name}/tmp/_WL_user/OIF_11.1.1.2.0/-
```

```
-permClass oracle.security.jps.service.credstore.CredentialAccessPermission
-permTarget credstoressp.credstore -permActions read

ORACLE_COMMON_HOME\common\bin\wlst.cmd
ORACLE_COMMON_HOME\modules\oracle.jps_11.1.1\common\wlstscripts\grantPermiss
ion.py -codeBaseURL
file:${domain.home}/servers/${weblogic.Name}/tmp/_WL_user/OIF_11.1.1.2.0/-
-permClass oracle.security.jps.service.credstore.CredentialAccessPermission
-permTarget credstoressp.credstore.OIF.* -permActions read
```

6.3 Documentation Errata

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

- Section 6.3.1, "Documentation Errata for the Fusion Middleware High Availability Guide"

- Section 6.3.2, "Documentation Errata for the Fusion Middleware Enterprise Deployment Guide for Oracle WebCenter"

6.3.1 Documentation Errata for the Fusion Middleware High Availability Guide

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

6.3.1.1 Latest Requirements and Certification Information

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

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

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

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

- Oracle Fusion Middleware Certification information at:

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

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

6.3.1.2 Incorrect Path Given for CFC Procedure

In step 12, of section 10.2.3.7.2, "Transforming Oracle Reports for Cold Failover Clusters," in the *Oracle Fusion Middleware High Availability Guide*, the following directory path is incorrect:

```
DOMAIN_HOME/config/fmwconfig/servers/WLS_DISCO/applications/discoverer_
11.1.1.2.0/configuration
```

The correct directory path is as follows:

```
DOMAIN_HOME/config/fmwconfig/servers/WLS_REPORTS/applications/reports_
11.1.1.2.0/configuration
```

6.3.2 Documentation Errata for the Fusion Middleware Enterprise Deployment Guide for Oracle WebCenter

This section contains Documentation Errata for *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle WebCenter*.

6.3.2.1 Link to Section 8.1.3 is Missing

In Section 8.1, "Configuring the Discussion Forum Connection" of the *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle WebCenter*, the link to section 8.1.3, "Creating a Discussions Server Connection for WebCenter From EM" is missing.

6.3.2.2 Additional Information for Discussions Forum Mulitcast to Unicast Conversion

In section 6.14, "Converting Discussions Forum from Multicast to Unicast" of the *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle WebCenter*, the following information is missing from Step 3:

Step 3: Repeat steps 1 and 2 for WLS_Services2, swapping WCHost1 for WCHost2, and WCHost2 for WCHost1 as follows:

```
-Dtangosol.coherence.wka1=WCHost2  -Dtangosol.coherence.wka2=WCHost1
-Dtangosol.coherence.localhost=WCHost2 -Dtangosol.coherence.wka1.port=8089
-Dtangosol.coherence.wka2.port=8089
```

6.3.2.2.1 Additional Disscussion Connection Properties Explained in Administration Guide For additional Discussions Server connection properties associated with the procedure in Section 8.1.3 "Creating a Discussions Server Connection for WebCenter From EM" of the *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle WebCenter*, refer to section 12.3.1, "Registering Discussions Servers Using Fusion Middleware Control," in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.

Part II

Oracle Development Tools

Part II contains the following chapters:

7

Oracle JDeveloper and Oracle Application Development Framework (ADF)

The latest known issues associated with Oracle JDeveloper and Application Developer Framework (ADF) are available on the Oracle Technology Network (OTN) at: `http://www.oracle.com/technology/products/jdev/htdocs/11/index.html`.

For more information and technical resources for Oracle JDeveloper and Application Developer Framework (ADF), visit the product center on the Oracle Technology Network at: `http://www.oracle.com/technology/products/jdev/index.html`.

8

Oracle TopLink

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

- Section 8.1, "General Issues and Workarounds"

8.1 General Issues and Workarounds

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

- Section 8.1.1, "TopLink Object-Relational Issues"
- Section 8.1.2, "TopLink Workbench Issues"
- Section 8.1.3, "Oracle Database Extensions with TopLink"
- Section 8.1.4, "Allowing Zero Value Primary Keys"

8.1.1 TopLink Object-Relational Issues

This section contains information on the following issues:

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

8.1.1.1 Incorrect outer join SQL on SQLServer2005

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

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

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

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

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

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

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

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

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

8.1.1.3 Returning Policy for UPDATE with Optimistic Locking

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

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

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

8.1.1.4 JDBC Drivers returning Timestamps as Strings

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

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

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

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

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

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

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

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

For example, replace this code:

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

with the following:

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

8.1.1.6 Unit of Work does not add Deleted Objects to Change Set

When accessing the change set of a Unit of Work to determine what has changed, objects that are pending deletion (such as `uow.deleteObject( )` and `uow.deleteAllObjects( )`) will not be returned from the result set.

The objects pending deletion are only available through the Unit of Work `getDeletedObjects` call.

8.1.2 TopLink Workbench Issues

This section contains information on the following issues:

- Section 8.1.2.1, "Accessibility"
- Section 8.1.2.2, "Running the TopLink Workbench on Windows OS"

8.1.2.1 Accessibility

Due to an issue with IBM JDK 1.6, if NullPointExecption error dialog is generated when saving a file, the error dialog window is not in focus.

8.1.2.2 Running the TopLink Workbench on Windows OS

Due to an issue with certain configurations and versions of Windows operating systems, users that launch the TopLink Workbench with the `workbench.cmd` file may receive a dialog that states: *Could not find the main class*. This occurs because the classpath specified contains a directory path which has periods in it. The workaround is to rename the offending directory or change the classpath to use directory paths which do not contain periods.

8.1.3 Oracle Database Extensions with TopLink

This section contains information on the following issue:

- Section 8.1.3.1, "Template JAR for Spatial and XDB Support in Oracle WebLogic Server"

8.1.3.1 Template JAR for Spatial and XDB Support in Oracle WebLogic Server

To fully support Oracle Spatial and Oracle XDB mapping capabilities (in both standalone Oracle WebLogic Server and the Oracle JDeveloper integrated WebLogic Server), you must use the `toplink-spatial-template.jar` and `toplink-xdb-template.jar` to extend the WebLogic Server domain to support Oracle Spatial and XDB, respectively.

To extend your WebLogic Server domain:

1. Download the `toplink-spatial-template.jar` (to support Oracle Spatial) and `toplink-xdb-template.jar` (to support Oracle XDB) files from:

   - http://download.oracle.com/otn/java/toplink/111110/toplink-spatial-template.jar

   - http://download.oracle.com/otn/java/toplink/111110/toplink-xdb-template.jar

2. Use Table 8–1, " To Support Oracle Spatial" or Table 8–2, " To Support Oracle XDB" to determine which files to copy.

Table 8–1   To Support Oracle Spatial

Copy this file	From...[1]	To...[2]
sdoapi.jar	*<ORACLE_DATABASE_HOME>*/md/jlib	*<WEBLOGIC_HOME>*/server/lib

[1] These are the default locations. Your actual location may vary depending on your specific environment, installed options, and version.
[2] When using Oracle JDeveloper integrated WebLogic Server, the *<WEBLOGIC_HOME>* is located within the *<JDEVELOPER_HOME>* directory.

Table 8–2   To Support Oracle XDB

Copy this file	From...[1]	To...[2]
xdb.jar	*<ORACLE_DATABASE_HOME>*/rdbms/jlib	*<WEBLOGIC_HOME>*/server/lib
xml.jar	*<ORACLE_DATABASE_HOME>*/lib	*<WEBLOGIC_HOME>*/server/lib
xmlparserv2.jar	*<ORACLE_DATABASE_HOME>*/lib	*<WEBLOGIC_HOME>*/server/lib

[1] These are the default locations. Your actual location may vary depending on your specific environment, installed options, and version.
[2] When using Oracle JDeveloper integrated WebLogic Server, the *<WEBLOGIC_HOME>* is located within the *<JDEVELOPER_HOME>* directory.

> **Note:** Although the actual JAR file may be named differently in your **From** directory, the file must be named as shown, when copied to the **To** directory.

3. Launch the Config Wizard (`<WEBLOGIC_HOME>`/common/bin/config.sh (or `.bat`).

4. Select **Extend an existing WebLogic domain**.

5. Browse and select your WebLogic Server domain.

   When using JDeveloper with integrated WebLogic Server, the typical WebLogic Server domain location may be similar to:

   - In Windows environments:
     `%APPDATA%\JDeveloper\systemXX.XX.XX.XX\DefaultDomain`

     where `XX.XX.XX.XX` is the unique number of the product build.

     For Windows platforms, you must enable the **Show hidden files and folders** folder option.

   - In non-Windows environments, the default location is under the current user's default home directory: `<$Home>`/DefaultDomain

   Refer to the Oracle JDeveloper documentation for details.

6. Select **Extend my domain using an existing extension template**.

7. Browse and select the required template JAR (**toplink-spatial-template.jar** for Oracle Spatial, **toplink-xdb-template.jar** for Oracle XDB).

8. Complete the remaining pages of the wizard.

8.1.4 Allowing Zero Value Primary Keys

By default, EclipseLink interprets *zero* as *null* for primitive types that cannot be null (such as `int` and `long`) causing zero to be an invalid value for primary keys. You can modify this setting by using the `allow-zero-id` property in the `persistence.xml` file. Valid values are:

- **true** – EclipseLink interprets zero values as *zero*. This permits primary keys to use a value of zero.

- **false** (default) – EclipseLink interprets zero as *null*.

Refer the *EclipseLink User's Guide* at
http://wiki.eclipse.org/EclipseLink/UserGuide for more information.

Part III

Web Tier

Part III contains the following chapters:

9

Oracle HTTP Server

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

- Section 9.1, "Documentation Errata"

9.1 Documentation Errata

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

- Section 9.1.1, "Corrections to Sun Java System Plug-in Instructions for Oracle Proxy and Oracle SSO Plug-ins"
- Section 9.1.2, "The mod_security Module and Reference Manual Are Not Shipped With Oracle HTTP Server"

9.1.1 Corrections to Sun Java System Plug-in Instructions for Oracle Proxy and Oracle SSO Plug-ins

The "Using Oracle Plug-ins for Third-Party Web Servers" appendix of the *Oracle Fusion Middleware Administrator's Guide for Oracle HTTP Server* contains incorrect information about the Sun Java System plug-in shared library names and relevant paths.

A.1.2 Installing the Oracle Proxy Plug-in

All relevant plug-ins for a given platform are under `Disk1/plugins` (UNIX) or `Disk1\plugins` (Windows) respectively.

Table A-1 Oracle Proxy Plug-In Shared Libraries

The plug-in shared library name for Microsoft Windows should be `oracle_proxy_nes.dll`, as follows:

Microsoft Windows: `\Disk1\plugins\sjsws\oracle_proxy_nes.dll`

A.1.4 Configuring Sun Java System Listener to Use Oracle Proxy Plug-In

In Step 2, the plug-in shared library for Microsoft Windows should be `oracle_proxy_nes.dll`, as follows:

```
Init fn="load-modules" shlib="/path/oracle_proxy_nes.dll" funcs=op_init,op_
objecttype,op_service
```

A.2.2 Installing the Oracle SSO Plug-in

All relevant plug-ins for a given platform are under `Disk1/plugins` (UNIX) or `Disk1\plugins` (Windows) respectively.

Table A-2 Oracle SSO Plug-In Shared Libraries

The plug-in shared library names for UNIX and Microsoft Windows are incorrect, and should be changed, as follows:

- UNIX: `/Disk1/plugins/sjsws/oracle_proxy.dll`

- Microsoft Windows: `\Disk1\plugins\sjsws\oracle_proxy_nes.dll`

A.2.5 Configuring Sun Java System Listener for Single Sign-on

- In Step 2, the plug-in shared library names for UNIX and Microsoft Windows are incorrect, and should be changed, as follows:

  On UNIX:

  ```
  Init fn="load-modules" shlib="/path1/oracle_proxy.so" funcs=osso_init, \oracle_
  single_sign_on,osso_redirect_service,osso_success_service"
  ```

  On Windows:

  ```
  Init fn="load-modules" shlib="/path/oracle_proxy_nes.dll" funcs=op_init,op_
  objecttype,op_service
  ```

- In Step 6, the `ORACLE_HOME` library directory is incorrectly referred to as `ORACLE_HOME/lib32`. Therefore, replace the Step 6 instructions with the following text:

  Change the library path variable in the start script for your environment to include the location of the `ORACLE_HOME/lib` directory, where `ORACLE_HOME` is the same Web Tier installation described in Section A.2.2, "Installing the Oracle SSO Plug-in". This Web Tier installation must be on the same machine as the third-party listener (it does not need to be running), so the SSO plug-in can access the dependency libraries.

  - Sun Java System 6.1 on UNIX – `start`
  - Sun Java System 7.0 on UNIX – `bin/startserv`

    Then modify the value of `LD_LIBRARY_PATH` to include the path to `ORACLE_HOME/lib`.

  - Sun Java System on Windows – set `LD_LIBRARY_PATH` in your environment to the path to `ORACLE_HOME\lib`.

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

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

10

Oracle Web Cache

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

- Section 10.1, "Configuration Issues and Workarounds"
- Section 10.2, "Documentation Errata"

10.1 Configuration Issues and Workarounds

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

- Section 10.1.1, "Reset the Random Password Generated in the Oracle Portal, Forms, Reports and Discoverer Install Types"
- Section 10.1.2, "Running Oracle Web Cache Processes as a Different User Is Not Supported"
- Section 10.1.3, "Defining Duplicate Origin Servers Causes Startup Failure"
- Section 10.1.4, "Mixed Protocols in Site-to-Server Mappings Causes Startup Failures"
- Section 10.1.5, "Oracle Web Cache Not Restarting When All Listening Ports Are SSL-Enabled"
- Section 10.1.6, "Exceptions When Starting Oracle Web Cache After Accessing Configuration Pages from Oracle Enterprise Manager Fusion Middleware Control"

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

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

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

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

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

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

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

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

1. Change the process identity of the Oracle Web Cache processes in the Process Identity page using Oracle Web Cache Manager (**Properties** > **Process Identity**).

2. Use the `webcache_setuser.sh` script as follows to change file and directory ownership:

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

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

3. Restart Oracle Web Cache using `opmnctl`.

   Oracle Web Cache will start and then immediately shut down.

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

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

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

10.1.3 Defining Duplicate Origin Servers Causes Startup Failure

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

To resolve this issue:

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

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

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

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

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

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

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

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

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

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

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

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

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

To resolve this issue:

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

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

2. And the `VIRTUALHOSTMAP` element:

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

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

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

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

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

10.1.5 Oracle Web Cache Not Restarting When All Listening Ports Are SSL-Enabled

Oracle Process Manager and Notification Server pings Oracle Web Cache. If the ping fails, OPMN attempts to restart Oracle Web Cache. If you configure all of the Oracle Web Cache listening ports for SSL, OPMN may unsuccessfully restart Oracle Web Cache unless you import the certificate to the OPMN wallet with one of the following methods:

- WLST Utility

    1. Use the `exportWalletObject` to export a certificate or other wallet object to a file.

    2. Use the `importWalletObject` to import a certificate or other object into an Oracle wallet.

- `orapki` Utility

    1. Use the `orapki wallet export` command to export a certificate to a file.

    2. Use the `orapki wallet add` command to import a certificate into an Oracle wallet.

For further information about these utilities, see the *Oracle Fusion Middleware Administrator's Guide*.

10.1.6 Exceptions When Starting Oracle Web Cache After Accessing Configuration Pages from Oracle Enterprise Manager Fusion Middleware Control

To start, stop, or restart Oracle Web Cache from Fusion Middleware Control, from the Web Cache menu, you can choose Control, and then Start Up, Shut Down, or Restart. If you select Shut Down, and then a Start Up on a configuration page, Fusion Middleware Control may return exception errors. If these errors occur in your environment, perform the operations from Web Cache Home page.

10.2 Documentation Errata

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

- Section 10.2.1, "Supported SSL Protocol Versions"

10.2.1 Supported SSL Protocol Versions

The online help for the SSL Configuration section of the Edit Port page in Fusion Middleware Control and Chapter 5, "Configuring Security" of *Oracle Fusion Middleware Administrator's Guide for Oracle Web Cache* do not provide details about the versions of SSL from the **SSL Protocol Version** list. The SSL version are mapped as follows:

- **All:** This selection enables the **v1**, **v3**, and **v3-v2Hello** options.

- **v1:** This selection supports TLS version 1 traffic.

- **v3:** This selection provides SSL version 3 traffic.

- **v3_v2Hello:** This selection combines the SSL version 2 hello message format with SSL version 3 handling to support SSL version upgrade during handshake operations.

Part IV

Oracle WebLogic Server

Part IV contains the following chapters:

11

Oracle WebLogic Server

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

- [Section 11.27, "Security Issues and Workarounds"](#)

- [Section 11.28, "Spring Framework on WebLogic Server Issues and Workarounds"](#)

- [Section 11.29, "Upgrade Issues and Workarounds"](#)

- [Section 11.30, "Web Applications Issues and Workarounds"](#)

- [Section 11.31, "WebLogic Server Scripting Tool (WLST) Issues and Workarounds"](#)

- [Section 11.32, "Web Server Plug-Ins Issues and Workarounds"](#)

- [Section 11.33, "Web Services and XML Issues and Workarounds"](#)

- [Section 11.34, "WebLogic Tuxedo Connector Issues and Workarounds"](#)

- [Section 11.35, "Documentation Errata"](#)

> **Note:** For a list of bugs that were fixed in WebLogic Server 11*g* Release 1 (10.3.1) or WebLogic Server 11*g* Release 1 (10.3.2), log in to My Oracle Support and enter the appropriate document ID in the Search Knowledge Base field. You must enter the entire document ID.
>
> Document ID for the 10.3.1 fixed bugs list: 982209.1
>
> Document ID for the 10.3.2 fixed bugs list: 1063554.1
>
> The 10.3.2 list includes fixed bugs for both the WebLogic Server 10.3.1 and 10.3.2 releases.

11.1 General Issues and Workarounds

This section describes the following issues and workarounds:

- [Section 11.1.1, "Oracle WebLogic Server Version Number"](#)

- [Section 11.1.2, "Version Number on Oracle WebLogic Server Documentation"](#)

- [Section 11.1.3, "Oracle ojdbc14.jar File Has Been Changed to ojdbc6.jar"](#)

- [Section 11.1.4, "Strong Password Enforcement May Cause Issues With WLST Offline Scripts"](#)

- [Section 11.1.5, "In Turkish Locale, MDS Initialization Fails"](#)

- [Section 11.1.6, "Administration Server Reports a 'Too Many Open Files' Message on the Enterprise Manager Console"](#)

- [Section 11.1.7, "Accessing Topology Viewer on AIX SOA-Web Tier Environment Throws `Too Many Open Files` Error Message"](#)

- [Section 11.1.8, "AspectJClassLoader Not Supported"](#)

- [Section 11.1.9, "Sun JS 7.0 Webserver Support"](#)

- [Section 11.1.10, "Setting Open File Descriptor Limit on AIX"](#)

11.1.1 Oracle WebLogic Server Version Number

Oracle Fusion Middleware 11*g* contains Oracle WebLogic Server 11*g*. The version number of Oracle WebLogic Server is 10.3.2.

11.1.2 Version Number on Oracle WebLogic Server Documentation

Oracle WebLogic Server documents that were updated for Release 11*g* Patch Set 1 display the following WebLogic Server version number:

11*g* Release 1 (10.3.1)

The WebLogic Server documents that were updated for Patch Set 1 will have a print date of October 2009 on the title page of PDFs and printed documents. The document part number revision on the updated PDF, printed, and HTML versions is -02 (for example, E14529-02) instead of -01.

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

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

11.1.4 Strong Password Enforcement May Cause Issues With WLST Offline Scripts

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

Workaround

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

- Set the `BACKWARD_COMPAT_PW_CHECK` environment variable to `true`.

- Include the `-Dbackward.compat.pw.check=true` option when invoking WLST.

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

11.1.5 In Turkish Locale, MDS Initialization Fails

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

Workaround

Start the server in English locale.

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

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

Workaround

Increase the number of file descriptors within the shell and restart the WLS Administration Server within that shell. The command to increase the number of file descriptors (nofiles) differs across Operating Systems and shells but it's usually done with the ulimit command on UNIX platforms so consult the man pages for `ulimit`.

For example:

```
$ ulimit -n 65535
```

11.1.7 Accessing Topology Viewer on AIX SOA-Web Tier Environment Throws `Too Many Open Files` **Error Message**

If you see the error `Too Many Open Files` while accessing the topology viewer on AIX (RC5) SOA-WEBTIER environment, you might need to increase the file descriptor limit.

This occurs as the `resetFd` command on `commEnv.sh` file in the weblogic install bin directory, resets the max file descriptors to 1024, each time the weblogic server is started.

Workaround

Perform these steps to workaround this issue:

1. Set the number of file descriptors to the appropriate number for AIX

2. Edit the `commEnv.sh` file in WLS install bin directory

3. Comment out the `ulimit` command

4. Set the shell file limit at 2000 or above

5. Restart the server

11.1.8 AspectJClassLoader Not Supported

The `weblogic.aspects.AspectJClassLoader` is not supported on AIX using IBM Java 6.

11.1.9 Sun JS 7.0 Webserver Support

Sun JS 7.0 webserver is not supported on AIX 6.1 SP1..

Workaround

Use 6100-00-04-0815 (AIX 6.1 SP4) or higher. Sun JS 7.0 is also supported on 5300-07-01-0819 (AIX 5.3 ML7) or higher.

11.1.10 Setting Open File Descriptor Limit on AIX

The WebLogic Server Administration Server and Managed servers cannot start, and the Java Virtual Machine (JVM) may dump core, if the open file descriptor limit is not set or set to unlimited on AIX platform.

Workaround

Set the `ulimit` to finite value. Change the `ulimit` to *4096* using `ulimit -n` *4096*.

11.2 Administration Console Issues and Workarounds

This section describes the following issues and workarounds:

- Section 11.2.1, "Cached JDBC Information is not Displayed"

- Section 11.2.2, "Pressing Browser Back Button Discards Context"

11.2.1 Cached JDBC Information is not Displayed

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

11.2.2 Pressing Browser Back Button Discards Context

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

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

Workaround

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

11.2.3 Unsupported Work Manager Configurations Can Be Created

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

Workaround

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

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

11.2.4 Server Status Table Reflects Inconsistent Information

The Server Status table on the **Cluster: Monitoring: Summary** page includes two default columns: **Primary** and **Secondary Distribution Names**. These fields do not

always reflect all of the replication statistics that are collected and displayed on the **Cluster: Monitoring: Failover** page, depending on the replication scenario.

Please refer to the **Cluster: Monitoring: Failover** page for definitive information.

11.2.5 Exceptions When Defining a Security Policy for an EJB

When defining security policies in the Administration Console for an EJB deployment that references types defined in a separate library deployment, exceptions can be observed if that library deployment is not available to the Console.

Workaround

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

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

The Administration Console does not always reflect external changes made in a deployment plan. If a change is made in a deployment plan outside of the Console (for example, using Workshop, editing the plan text files directly, or updating a deployment with a new plan using WLST or webLogic.Deployer) while a Console user is also viewing that deployment plan, the Console user will not see those changes.

Workaround

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

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

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

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

To configure JAWS to read link titles:

1. With WebLogic Server as the active browser window, activate JAWS' Personalized Settings dialog by pressing **Insert+Shift+V**.

2. For JAWS versions 6.x, 7.x, and 8.x:

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

    For JAWS version 9.x:

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

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

11.2.8 Oracle OCI Driver Support

The Oracle OCI driver is no longer explicitly listed as a preconfigured driver type in the Administration Console.

Workaround

The Oracle OCI driver remains a supported driver for application data connectivity, consistent with prior releases of Oracle WebLogic Server. However, users must now specify all required configuration properties manually, including the data base username.

11.2.9 Resource Changes May Not Be Reflected in Console Restart List

The WebLogic Server Administration Console's Change Center includes a link to display a list of servers that need to be restarted to reflect current configuration changes. Some configuration changes, such as those to a WLDF system resource, are not reflected in this list and may result in the Activate button on the Change center being enabled even after activating changes.

Workaround

You may need to restart the affected Managed Servers before you can make further configuration changes. You can view the current pending changes using the following WLST commands:

```
java weblogic.WLST

connect()

edit()

startEdit()

showChanges()
```

11.3 Apache Beehive Support Issues and Workarounds

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

11.4 Clustering Issues and Workarounds

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

11.5 Configuration Issues and Workarounds

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

- Section 11.5.1, "Directory For a Non-Existent Server Name Is Created"
- Section 11.5.2, "Abnormal Behavior in Terminal Window After Entering WebLogic Password"

11.5.1 Directory For a Non-Existent Server Name Is Created

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 connecting to the Administration Server.

11.5.2 Abnormal Behavior in Terminal Window After Entering WebLogic Password

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

Workaround

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

11.6 Connector (Resource Adapter) Issues and Workarounds

This section describes the following issues and workarounds:

- Section 11.6.1, "New Connection Instances in a Resource Adapter Do Not Take Effect"

- Section 11.6.2, "No available router to destination Message is Displayed When Attempting to Connect to the Administration Server from WLST"

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

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

Workaround

Restart the server after creating a new connection instance.

11.6.2 No available router to destination Message is Displayed When Attempting to Connect to the Administration Server from WLST

When trying to connect to the WebLogic Server Administration Server from WLST using `localhost` as the hostname, the following message may be displayed if the listen-address attribute of the Administration Server has been restricted to certain IP addresses:

```
 javax.naming.CommunicationException [Root exception is
java.net.ConnectException : <t3://HOST:PORT> : Destination unreachable;
nested exception is: java.net.ConnectException: Connection refused; No
available router to destination
```

Workaround

Use either of the following workarounds:

- Check that the listen-address attribute of the Administration Server has been set correctly in the domain configuration file. You can either remove the listen_ address line or simply comment it out. Oracle recommends that you comment it

out in case you need to know the value at a later time. For example, in the domain configuration file:

```
<server>
   <name>AdminServer</name>
   <ssl>
   .
   .
   .
   </ssl>
   <machine>machine_name</machine>
   <!-- listen-address>machine_ip_address</listen-address -->
</server>
```

- Use the hostname of the Administration Server, instead of `localhost`, in the WLST `connect` command.

11.7 Console Extensions Issues and Workarounds

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

11.8 Core Server and Core Work Manager Issues and Workarounds

This section describes the following issues and workarounds:

- Section 11.8.1, "Threads Become Stuck While Waiting to Get a Connection"
- Section 11.8.2, "Using IPv6-Formatted Addresses"
- Section 11.8.3, "Server Cannot Be Started After a Whole Server Migration"
- Section 11.8.4, "Object State is not Retained After Renaming Field"
- Section 11.8.5, "Servers Configured to Listen on a Hostname Are Listening on a Different Hostname After Startup"
- Section 11.8.6, "Administration Server or Node Manager Cannot Track the Status of a Managed Server in MSI mode"
- Section 11.8.7, "Multicast Traffic Observed to be Unreliable During or After a Network Partition"

11.8.1 Threads Become Stuck While Waiting to Get a Connection

When a machine that is hosting one of the Managed Servers is abruptly shut down, a network cable is pulled, or its network interface card has issues, and any server attempts communication with that managed server, threads become stuck waiting to get a connection.

Workaround

This can currently be resolved by using a private flag:

`-Dweblogic.client.SocketConnectTimeoutInSecs`

and setting an appropriate timeout value that will release the thread attempting to make the connection and allow the request to fail quickly.

11.8.2 Using IPv6-Formatted Addresses

When using an IPv6-formatted address for 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
```

11.8.3 Server Cannot Be Started After a Whole Server Migration

If the WebLogic Server Administration Server is down when a Whole Server Migration occurs for a clustered server, and the server migrates to a machine on which it was never run before, the server cannot be started on the new machine.

Workaround

Use one of the following workarounds for this issue:

- Ensure that the Administration Server is up when the server migration is being performed.

- Use a shared disk/NFS for all the migratable servers in the cluster.

11.8.4 Object State is not Retained After Renaming Field

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

One type of change that does NOT retain the object state is that when a field name is changed, it is treated as follows:

- the field with old name is deleted

- the field with new name is added

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

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

Workaround

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

11.8.5 Servers Configured to Listen on a Hostname Are Listening on a Different Hostname After Startup

When using a hostname 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 hostname after startup. For example:

- The machine has 3 Ethernet cards

- Card 1 is mapped to `hostname1-s` (DNS registered hostname)

- Card 2 is mapped to `hostname1-i` (DNS registered hostname)

- Card 3 is mapped to `hostname1` (actual node's hostname)

- 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 hostname 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 hostname, 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 hostname 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 hostname is Card 1.

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

If you start a managed server by providing an incorrect 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 Administration Console will show the status of the managed server as UNKNOWN, but the server will actually be RUNNING in MSI mode.

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

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

Workaround

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

11.9 Deployment Issues and Workarounds

This section describes the following issues and workarounds:

- Section 11.9.4, "The restore Method Does Not Update the DConfig Bean With Plan Overrides"

- Section 11.9.5, "config-root <directory> not found Warning Is Displayed When Applying a Deployment Plan"

- Section 11.9.6, "Application State Is Not Updated If the Server Starts in MSI Mode"

- Section 11.9.7, "Attempting to Redeploy an Application Fails if the Application is Already Deployed Using a Different Source File Location"

11.9.1 security-permission Element is not Available in weblogic-application.xml

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

11.9.2 Extraneous String Values Interpreted as File Specification

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

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

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

11.9.3 java.lang.NoClassDefFoundError is Displayed

While using the 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`.

Workaround

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

11.9.4 The restore Method Does Not Update the DConfig Bean With Plan Overrides

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

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

the plan does not correctly override the DConfig Bean.

Workaround

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

```
helper = SessionHelper.getInstance(
```

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

11.9.5 config-root *<directory>* not found Warning Is Displayed When Applying a Deployment Plan

If you use the Administration Console to make configuration changes to an application, a deployment plan will be generated. If external descriptors are generated as part of the deployment plan, they are placed in the config root plan directory. This directory will be set in the deployment plan 'config-root' attribute.

If no external descriptors are required, the config root directory will not be created, and a warning is displayed when you apply the deployment plan. This results in the following warning in the server output:

```
<Warning <WWebLogicDescriptorWL> <BEA-2156000><"config-root" C:\deployments\plan
was not found>.
```

Workaround

Create the plan directory manually.

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

A managed server will start in MSI mode if the WebLogic Server Administration Server is not available when the managed server starts. If you start the Administration Server later, the managed server will connect to the Administration Server. However, the state of each application deployed to the managed server is not updated to reflect the state of the applications on the managed server. Each application's state is displayed as NEW or PREPARED in the WebLogic Server Administration Console.

Workaround

There are two workarounds for this issue:

- Start the Administration Server before starting the managed server, or

- Redeploy the application after starting the Administration Server.

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

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 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.

11.10 EJB Issues and Workarounds Issues and Workarounds

This section describes the following issues and workarounds:

11.10.1 Primary Key in Oracle Table is CHAR

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

Workaround

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

11.10.2 No Available Annotation That Enables Creation of a Clusterable Timer

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

Workaround

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

11.10.3 Kodo's MappingTool Cannot Generate Schemas

Kodo's MappingTool cannot generate schemas for classes that use BLOBs in their primary key. BLOBs can be used in a primary key, but the schema must be defined manually. Note that support for BLOB columns in primary keys is not mandated by either the JDO or JPA specifications.

11.10.4 Extensions to the JPA Metadata Model Can Only Be Specified Via Annotations

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

Workaround

To specify Kodo-specific metadata for your object model, either:

- use the Kodo-specific annotations, or

- convert your XML-based metadata to the JDO metadata format, which does support XML specification of extensions.

11.10.5 Lookup Method Injection Not Supported by Spring

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

11.10.6 Deserializing a JDO PersistenceManagerFactory in a Managed Environment May Fail

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

11.10.7 Indexes Not Always Created During Schema Creation

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

Workaround

Create the indexes manually after running the schema generation tools.

11.10.8 OpenJPA throws an exception when @Id fields are also annotated as @Unique

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

Workaround

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

11.10.9 Cache Hit and Miss Counts May Rise Unexpectedly

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

Workaround

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

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

When using the MySQL database, and OpenJPA is configured to automatically run the mapping tool at runtime and create tables within the default schema (for example):

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

OpenJPA will try to create the table even if the table already exists in the database. A PersistenceException will be thrown to indicate that the table already exists and the table creation statement fails.

Workaround

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

11.10.11 EJB Applications Fail During Serialization

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

Workaround

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

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

11.10.12 Message-Driven EJB (MDB) Container Can Fail to Provide Reproducible Behavior

When using multi-threaded processing for non-transactional topic MDBs, the MDB container can fail to provide reproducible behavior. For example, if a runtimeException is thrown in the `onmessage()` method, the container may still acknowledge the message.

Workaround

Set the `max-beans-in-free-pool` attribute to 1 in the deployment descriptor.

11.11 Examples Issues and Workarounds

This section describes the following issues and workarounds:

- Section 11.11.1, "Security Configuration in medrec.wls.config"

- Section 11.11.2, "HTML File not Created for StreamParser.java File"

- Section 11.11.3, "Warning Message Appears When Starting Medrec or Samples Domain"

- Section 11.11.4, "Deployment Exception for MedRec Samples Server After Rollback from WebLogic Server 10.3.2"

11.11.1 Security Configuration in medrec.wls.config

The `medrec.wls.config` target in *SAMPLES_HOME*/server/medrec/setup/build.xml has a known issue with respect to security configuration.

11.11.2 HTML File not Created for StreamParser.java File

The ../xml/stax example contains two files with the same root but different extensions: `StreamParser.java` and `StreamParser.jsp`. The samples viewer build, however, creates just one corresponding HTML file, rather than two for each type of file. In this case only the `StreamParser.jsp` file has an equivalent HTML file; the `StreamParser.java` file does not.

The problem occurs because of a setting in the build.xml file that controls the behavior of `java2html` to generate the files for the documentation.

When using `java2html`, the `useShortFileName="true"` parameter crops off the file extensions for the source files to create the file names for the HTML output files. If two files have the same name and different file extensions, whichever HTML file is generated last will overwrite previous ones.

Workaround

Set the `useShortFileName` parameter to "false". This setting generates HTML files with the file extensions included in the name. The drawback to this solution is that every link that points to the HTML output file needs to be revised, regardless of whether the files in question were affected by the bug.

11.11.3 Warning Message Appears When Starting Medrec or Samples Domain

When you start the medrec or samples domains, you may see a warning message similar to this:

```
<Warning> <WorkManager> <BEA-002919> <Unable to find a WorkManager with name
 weblogic.wsee.mdb.DispatchPolicy. Dispatch policy
weblogic.wsee.mdb.DispatchPolicy will map to the default WorkManager
for the application bea_wls_async_response>
```

This warning message appears in the standard output of the Console while starting a WebLogic Server sample application with an asynchronous Web Service deployed.

Workaround

The warning is harmless and can be ignored.

11.11.4 Deployment Exception for MedRec Samples Server After Rollback from WebLogic Server 10.3.2

If you upgrade from WebLogic Server 10.3.1 to WebLogic Server 10.3.2, then roll back to the 10.3.1 installation, the MedRec samples server starts, but a Deployment exception occurs and the Administration Console cannot be accessed.

11.12 HTTP Publish/Subscribe Server Issues and Workarounds

This section describes the following issues and workarounds:

- Section 11.12.1, "Authentication and Authorization of the Local Client is not Supported"

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11.12.1 Authentication and Authorization of the Local Client is not Supported

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

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

In a clustering environment, event messages published by a local client on a server can be received only by subscribed clients connected to the same server. These messages cannot be received by subscribed clients connected to other servers in the cluster.

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

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

11.13 Installation Issues and Workarounds

This section describes the following issues and workarounds:

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11.13.1 Issue with Oracle WebLogic Server Upgrade Installation

The Oracle WebLogic Server 11*g* Release 1 installer does not download the Sybase JDBC drivers. When you try to upgrade an existing WebLogic Server 10.3 installation using the latest installer, it does not remove the Sybase JAR files from the original installation. The installer upgrades only the weblogic.jar file.

The Sybase JAR files (jconn2.jar, jconn3.jar, and jConnect.jar) in the /server/lib or /server/ext/jdbc/sybase directories are removed from the manifest classpath in the upgraded weblogic.jar file. Therefore, if the classpath of a WebLogic Server application does not include Sybase JAR files and only includes weblogic.jar then after the upgrade installation, the application will throw a ClassNotFoundException.

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

11.13.2 Configuration Wizard Password Does Not Allow Special Characters

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

Workaround

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

11.13.3 Installation Fails with Fatal Error

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

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

Workaround

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

```
$JAVA_HOME/bin/java -jar wls1032_generic.jar -log=log.out -log_priority=debug
```

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

11.14 Java EE Issues and Workarounds

This section describes the following issues and workarounds:

- Section 11.14.1, "FastSwap May Relax the Access Modifiers of Fields and Methods"
- Section 11.14.2, "FastSwap Does Not Support Redefinition of the Entity Bean and ejbClass (Session/MDB)"
- Section 11.14.3, "Classpath Order Is Not Guaranteed When There Are Multiple JARs in the Same EAR File"

11.14.1 FastSwap May Relax the Access Modifiers of Fields and Methods

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

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

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

Workaround

After updating an entity class, redeploy the application.

11.14.3 Classpath Order Is Not Guaranteed When There Are Multiple JARs in the Same EAR File

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

classes are the same, but if they are different implementations, the results are unpredictable.

Workaround

Currently there is no known workaround for this issue.

11.15 JDBC Issues and Workarounds

This section describes the following issues and workarounds:

- Section 11.15.1, "Queries Can Take Longer When Using Data Direct 4.0 MSSQL Driver"

- Section 11.15.2, "An Attempt to Access an LLR Data Source Fails From Multiple Server Instances"

- Section 11.15.3, "ORA-01591 Errors Occur on SOA Servers That Are Configured to Use Multiple RAC Database Nodes"

11.15.1 Queries Can Take Longer When Using Data Direct 4.0 MSSQL Driver

In WebLogic Server Release 11*g* R1 Patch Set 1, our OEM DataDirect drivers were upgraded to 4.0. In order for the SQLServer driver to fully handle new DBMS datatypes, when running in it's default configuration, queries will take longer. If application access to new datatypes can be limited to getString(), the following configuration workarounds will restore the performance.

Workaround

Add the following driver property to the list of driver properties for the WebLogic data source's connection pool. From the Administration Console, select the **Configuration>Connection Pool** tab for the data source.

For a non-XA connection pool, add:

```
ReportDateTimeTypes=false
```

For an XA connection pool, add:

```
ExtendedOptions=ReportDateTimeTypes=false
```

Alternatively, you can accomplish the same result by adding the property to the data source's XML configuration file.

For non-XA:

```
<jdbc-driver-params>
   <properties>
      <property>
        <name>ReportDateTimeTypes</name>
        <value>false</value>
      </property>
```

For XA:

```
<jdbc-driver-params>
   <properties>
      <property>
        <name>ExtendedOptions</name>
        <value>ReportDateTimeTypes=false</value>
      </property>
```

11.15.2 An Attempt to Access an LLR Data Source Fails From Multiple Server Instances

A new system property, `-Dweblogic.jdbc.remoteEnabled`, has been added to JDBC in Oracle WebLogic Server 11*g* Release 1 Patch Set 1 (10.3.2). For compatibility with prior releases of WebLogic Server, the default setting of this property is `true`. When this property is set to `false`, remote JDBC access is turned off, and such access via a remote client will result in an exception.

System Limitation

When the `-Dweblogic.jdbc.remoteEnabled` property is set to `false`, any attempt to access an LLR data source will fail from multiple server instances.

> **Note:** An LLR participant in a global transaction that is hosted locally on the transaction coordinating server will continue to work. This can be accomplished by optimizing your applications to use connection instances directly hosted on the coordinator as described in "Optimizing Performance with LLR" in *Oracle Fusion Middleware Programming JTA for Oracle WebLogic Server*.

This limitation also applies to the 1PC and emulate XA transaction options for non-XA data sources.

Workaround

Since there is no performance benefit when using LLR in a multiple server configuration, change the application to use XA instead.

11.15.3 ORA-01591 Errors Occur on SOA Servers That Are Configured to Use Multiple RAC Database Nodes

On SOA servers using multiple RAC database nodes, when WebLogic Server multidata sources are configured for XA and load balancing, ORA-10591 errors can occur.

Workaround

Apply RAC database patch p7675269_111070_Linux-x86.zip. You can download this patch from http://aru.us.oracle.com:8080/ARU/ViewPatchRequest/process_form?aru=11860090. The ps9007079_111070_Linux-x86.zip patch is a super-set patch that includes the p7675269 patch.

11.16 JDK Issues and Workarounds

This section describes the following issues and workarounds:

- Section 11.16.1, "SSLv2Hello Not Supported by IBM JDK"

11.16.1 SSLv2Hello Not Supported by IBM JDK

The IBMJSSE2 Provider does not support the SSL version 2 protocol.

Workaround

Set `oracle.net.ssl_version=3.0` or `oracle.net.ssl_version=1.0` which allows you use SSLv3 and TLSv1 protocols.

11.17 JMS Issues and Workarounds

This section describes the following issues and workarounds:

- Section 11.17.1, "Deployment Descriptor Validation Fails"
- Section 11.17.2, "Exception When Multiple JMS Producers Use the Same JMS Client SAF Instance"
- Section 11.17.3, "Multi-byte Characters are not Supported in WebLogic Server Store File and Directory Names"
- Section 11.17.4, "C Programs That Use the JMS C Client Library May Experience a JVM Failure"

11.17.1 Deployment Descriptor Validation Fails

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

Workaround

Make sure that there is at least one J2EE specification-compliant module in the EAR.

11.17.2 Exception When Multiple JMS Producers Use the Same JMS Client SAF Instance

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

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

Workaround

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

11.17.3 Multi-byte Characters are not Supported in WebLogic Server Store File and Directory Names

There is no support for multi-byte characters in WebLogic Store file and directory names. For instance, when the WebLogic Server name has multi-byte characters, the default store cannot be created, and WebLogic Server will not boot.

Workaround

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

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

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

Workaround

The workarounds are:

1. Add code in the client to detach the JVM from any C thread that exits and that has previously called into the JMS C-API.

2. Do not allow any C thread that has previously called into the JMS C-API to exit before the entire process exits.

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

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

3. Upgrade to a newer JVM.

11.18 JNDI Issues and Workarounds

This section describes the following issue and workaround:

- Section 11.18.1, "JMS Message Consumers Will Not Always Reconnect After a Service Migration"

11.18.1 JMS Message Consumers Will Not Always Reconnect After a Service Migration

JMS message consumers will not always reconnect after a service migration when an application's `WLConnection.getReconnectPolicy()` attribute is set to `all`. If the consumers do not get migrated, either an exception is thrown or `onException` will occur to inform the application that the consumer is no longer valid.

Workaround

The application can refresh the consumer either in the exception handler or through `onException`.

11.19 JSP and Servlet Issues and Workarounds

This section describes the following issues and workarounds:

- Section 11.19.1, "Deployment Plans Cannot Be Used To Override Two Descriptors"
- Section 11.19.2, "Spring Dependency Injection Not Supported on JSP Tag Handlers"
- Section 11.19.3, "503 Error When Accessing an Application With a Valid sessionid"

11.19.1 Deployment Plans Cannot Be Used To Override Two Descriptors

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

Workaround

Package WEB-INF/classes/META-INF/persistence.xml and WEB-INF/classes/META-INF/persistence-configuration.xml (if present) along with related class files into a JAR file. The JAR file must then be placed in the WEB-INF/lib

directory of the Web application or Web module. A deployment plan can be used to override the two descriptors in such a JAR file.

11.19.2 Spring Dependency Injection Not Supported on JSP Tag Handlers

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

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

11.19.3 503 Error When Accessing an Application With a Valid sessionid

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

For example, the session-persistent type of a versioned Web application is 'file'. A user can access the application successfully. Later, version 2 of the application is redeployed and version 1 is retired. If the same user accesses the application, they will get a 503 error.

11.20 JTA Issues and Workarounds

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

11.21 Java Virtual Machine (JVM) Issues and Workarounds

This section describes the following issues and workarounds:

- Section 11.21.1, "IIOP Thin Client Not Supported"
- Section 11.21.2, "Serial Version UID Mismatch"
- Section 11.21.3, "Using AWT libraries May Cause a JVM Crash"

11.21.1 IIOP Thin Client Not Supported

The IIOP thin client is not supported on AIX due to dependencies on the JVM. Only thin-client applications are affected by this issue.

Workaround

Run WebLogic Server on AIX and your thin client on another operating system.

11.21.2 Serial Version UID Mismatch

A Serial Version UID Mismatch issue is encountered if you deploy an application on a latest JVM, but compiled with previous Service Release of IBM Java 6 JDK.

Workaround

To be compatible with the serialization of previously compiled applications, modify the `BEA_HOME/wlserver_10.3/common/bin/commEnv.sh` file to include the following command:

```
JAVA_OPTIONS="$JAVA_OPTIONS
-Dcom.sun.xml.namespace.QName.useCompatibleSerialVersionUID=1.0"
```

Alternatively, you can use the command line option:

```
export IBM_JAVA_
OPTIONS="-Dcom.sun.xml.namespace.QName.useCompatibleSerialVersionUID=1.0"
```

If you intend to deploy new applications with previously compiled applications, they must be recompiled as necessary to have the same Serial Version UID.

11.21.3 Using AWT libraries May Cause a JVM Crash

You might encounter a JVM crash when using GUI libraries such as AWT or javax.swing (which often delegates to AWT).

Workaround

Start the server using the following flag:

```
-Djava.awt.headless=true
```

11.22 Monitoring Issues and Workarounds

This section describes the following issues and workarounds:

- Section 11.22.1, "MBean Attributes not Explicitly Marked as @unharvestable Appear as Harvestable in the WebLogic Server Administration Console"

- Section 11.22.2, "WatchData Field in an Outgoing Notification is Empty"

- Section 11.22.3, "NullPointerException Occurs When Configuring the First WLDF Watch"

- Section 11.22.4, "Complex and Array Type Attributes Have Been Removed From the SNMP MIB"

- Section 11.22.5, "The BEA Prefix in Message IDs Will Be Changed in a Future Release"

11.22.1 MBean Attributes not Explicitly Marked as @unharvestable Appear as Harvestable in the WebLogic Server Administration Console

The @unharvestable tag is not being honored at the interface level. If MBean attributes are not explicitly marked as @unharvestable, they are considered to be harvestable and will appear as harvestable in the WebLogic Administration Console.

Workaround

You can explicitly mark MBean attributes as @unharvestable.

11.22.2 WatchData Field in an Outgoing Notification is Empty

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

11.22.3 NullPointerException Occurs When Configuring the First WLDF Watch

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

This is not a serious error.

Workaround

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

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

Entries for MBean attributes that are either complex types or arrays of complex types have been removed from the SNMP MIB in WebLogic Server 10.3.1, as SNMP does not support these types natively. Previous versions of WebLogic Server returned `Object.toString()` for complex type objects, which is not meaningful for any monitoring purpose.

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

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

Workaround

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

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

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

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

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

11.23 Node Manager Issues and Workarounds

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

11.24 Operations, Administration, and Management Issues and Workarounds

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

11.25 Protocols Issues and Workarounds

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

11.26 RMI-IIOP Issues and Workarounds

This section describes the following issue and workaround:

- Section 11.26.1, "Ant 1.7 rmic Task Incompatibility"

11.26.1 Ant 1.7 rmic Task Incompatibility

Calls to the Ant version 1.7 rmic task automatically add a `-vcompat flag`, which is not compatible with rmic for Oracle WebLogic Server.

Workaround

Use either of the following workarounds if your rmic call is of the form:

```
rmic classname="com.bea.crmsimulation.legacyra.LegacyAdapter"
   base="${module_location}/core-legacy-ra/classes"
   classpath="${core.classes}" compiler="weblogic" />
```

- Add a `stubversion`

  ```
  <rmic classname="com.bea.crmsimulation.legacyra.LegacyAdapter"
     base="${module_location}/core-legacy-ra/classes"
     classpath="${core.classes}" compiler="weblogic"
     stubversion="1.2"/>
  ```

- Remove the `compiler` flag

  ```
  <rmic classname="com.bea.crmsimulation.legacyra.LegacyAdapter"
     base="${module_location}/core-legacy-ra/classes"
     classpath="${core.classes}"
  ```

11.27 Security Issues and Workarounds

This section describes the following issues and workarounds:

- Section 11.27.1, "StoreBootIdentity Option Works Only if the Appropriate Server Security Directory Exists"

- Section 11.27.2, "Connections Requiring a NULL Cipher Will Fail Unless AllowUnencryptedNull Cipher is Set to True"

- Section 11.27.3, "WebLogic Server Instance Experiences Boot Time Failure with SecurityServiceException"

- Section 11.27.4, "Authentication Failure After Upgrading a Domain From WLS 6.1"

- Section 11.27.5, "InvalidParameterException Message Generated and Displayed in the Administration Console"

- Section 11.27.6, "Default Web Permissions in weblogic.policy Do Not Work if There Is No weblogic.xml File"

- Section 11.27.7, "Enabling Both the Authentication and Passive Attributes In SML 2.0 Service Provider Services Is an Invalid Configuration"

- Section 11.27.8, "Authentication May Fail When Group Membership Caching Is Enabled"

- [Section 11.27.9, "Oracle Security Updates"](#)

- [Section 11.27.10, "Patch for No Such Provider: SunJSSE Error While Using WSEE Client on AIX"](#)

11.27.1 StoreBootIdentity Option Works Only if the Appropriate Server Security Directory Exists

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

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

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

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

In WebLogic Server 10.3 or greater, the use of the NULL cipher is now disabled by default. In order for a client to enable the NULL cipher, set the `weblogic.ssl.AllowUnencryptedNullCipher` system property to true. For example:

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

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

11.27.3 WebLogic Server Instance Experiences Boot Time Failure with SecurityServiceException

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.

11.27.4 Authentication Failure After Upgrading a Domain From WLS 6.1

After upgrading a domain from WLS 6.1, the WebLogic Server instance will not boot due to an authentication failure.

Workaround

A system user password must be set up in the WLS 6.1 domain before or after the upgrade process in order for the WebLogic Server instance to boot properly.

11.27.5 InvalidParameterException Message Generated and Displayed in the Administration Console

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

Workaround

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

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

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

Workaround

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

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

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.

11.27.8 Authentication May Fail When Group Membership Caching Is Enabled

When configuring any of the authentication providers included in WebLogic Server, setting **Group Membership Searching** to "limited" may result in authentication failures if **Enable Group Membership Lookup Hierarchy Caching** is enabled. Authentication may succeed or fail depending on the current content of the group membership cache.

In the authentication provider configuration page of the WebLogic Server Administration Console, the **Group Membership Searching** attribute is available from the **Provider Specific** tab, and the **Enable Group Membership Lookup Hierarchy Caching** attribute is available from the **Performance** tab.

Note that the default settings for these attributes are as follows:

- **Group Membership Searching** is set to "unlimited".

- **Enable Group Membership Lookup Hierarchy Caching** is enabled.

Workaround

These two configuration settings should not be used together. When configuring an authentication provider, use either of the following methods to avoid this problem:

1. Avoid setting **Group Membership Searching** to "limited".

2. If you must use the "limited" setting, disable the **Enable Group Membership Lookup Hierarchy Caching** setting. Note that disabling the group membership cache typically results in slower system performance.

11.27.9 Oracle Security Updates

While installing WebLogic Server, there is an issue that prevents Oracle security updates on AIX.

Workaround

Do the following:

1. Extract `archives/com.oracle.ocm_1.0.0.0.jar` from `wls1031_generic.jar`

   ```
    jar  xvf  wls1031_generic.jar  archives/com.oracle.ocm_1.0.0.0.jar
   ```

2. Include `-Xbootclasspath` to install `wls1031_generic.jar`

   ```
   java ${JAVA_OPTION} -jar -Xbootclasspath/p:archives/com.oracle.ocm_1.0.0.0.jar
   wls1031_generic.jar
   ```

11.27.10 Patch for No Such Provider: SunJSSE Error While Using WSEE Client on AIX

The WSEE client uses the SunJSEE provider, which is not supported on IBM JDK and, as a result, displays the No such provider: SunJSSE Error.

Workaround

Download and install the following patch using the Oracle Smart Update tool to resolve the issue:

Patch ID: `8RLQ` Passcode: `CTH8ERF1`

11.28 Spring Framework on WebLogic Server Issues and Workarounds

This section describes the following issues and workarounds:

- Section 11.28.1, "petclinic.ear Does Not Deploy on WebLogic Server"

11.28.1 petclinic.ear Does Not Deploy on WebLogic Server

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

11.29 Upgrade Issues and Workarounds

This section describes the following issues:

- Section 11.29.1, "Domains Created Using WebLogic Server 10.3.1 Cannot Be Run on WebLogic Server 10.3"

- Section 11.29.2, "Issues with Domains Created After Rollback from WebLogic Server 10.3.2 to 10.3.1"

- Section 11.29.3, "Downgrade Option is Unavailable in Smart Update After Upgrade to WebLogic Server 10.3.2"

11.29.1 Domains Created Using WebLogic Server 10.3.1 Cannot Be Run on WebLogic Server 10.3

If you create a domain using WebLogic Server 10.3.1, then roll back to WebLogic Server 10.3, you will not be able to start the servers that you created in that domain. This is a known restriction, as the `config.xml` file contains references to newer schema definitions (`xmlns.oracle.com`) that did not exist in WebLogic Server 10.3.

11.29.2 Issues with Domains Created After Rollback from WebLogic Server 10.3.2 to 10.3.1

After performing an upgrade from WebLogic Server 10.3.1 to WebLogic Server 10.3.2 using an upgrade installer or Smart Update, if you roll back to the 10.3.1 release (either with the WebLogic Server uninstaller Rollback option or via Smart Update), the following issues occur:

- WebLogic Server starts, but validation errors occur

- the Administration Console cannot be accessed (a 500 Error is displayed in the browser)

Note that these issues do not occur when upgrading from 10.3.0 to 10.3.2, and rolling back to 10.3.0.

Workaround

The only known workaround is to restore the original WebLogic Server 10.3.1 installation, if it is backed up.

11.29.3 Downgrade Option is Unavailable in Smart Update After Upgrade to WebLogic Server 10.3.2

If you have WebLogic Server 10.3.0 or 10.3.1 installed with the WorkShop for WebLogic component, and you use Smart Update to upgrade to WebLogic Server 10.3.2, there is no Downgrade Option available in Smart Update that will allow you to roll back from 10.3.2 to the prior release.

> **Note:** This issue does not occur if your WebLogic Server installation does not include the Workshop for WebLogic component.

Workaround

Run the WebLogic Server uninstaller and select the **Rollback** option to roll back to the original WebLogic Server 10.3.0 or 10.3.1 installation. For information on how to run the WebLogic Server uninstaller, see the *Installation Guide for Oracle WebLogic Server*.

11.30 Web Applications Issues and Workarounds

This section describes the following issue and workaround:

- Section 11.30.1, "Administration Console Fails to Implement session-timeout Changes"

- Section 11.30.2, "Servers Cannot Load Sessions That Are Written by Patched Servers"

11.30.1 Administration Console Fails to Implement session-timeout Changes

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

Workaround

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

11.30.2 Servers Cannot Load Sessions That Are Written by Patched Servers

In WebLogic Server 11*g* Release 1 Patch Set 1 (10.3.2), the session persistent formats for `file` and `jdbc` were changed. Therefore, if you have some servers in a cluster that have Patch Set 1 installed, while other servers do not, the servers without the patch cannot load sessions that were written by the patched servers. This also applies to unpatched servers in the same domain, when those servers are operating the same session persistent store as the patched servers. This issue occurs only when the application is deployed with a version ID and the session persistent type is either `file` or `jdbc`.

> **Note:** Patched servers (those upgraded to 11*g* Release 1 Patch Set 1) can load sessions in both session persistent formats (that is, the pre-Patch Set 1 format and the Patch Set 1 format). By default, patched servers persist sessions in the Release 1 Patch Set 1 (or greater) format.

Workaround

You can use either of the following workarounds for this issue.

1. Install Patch Set 1 on all servers at the same time.

2. Use the following system property to force the patched servers to persist sessions in the previous (pre-Patch Set 1) format:

   ```
   -Dweblogic.servlet.session.PersistentBackCompatibility=true"
   ```

11.31 WebLogic Server Scripting Tool (WLST) Issues and Workarounds

This section describes the following issues and workarounds:

- Section 11.31.1, "Property Names Containing '.' Characters Are Not Supported by loadProperties Command"

- Section 11.31.2, "Invalid cachedir Created by Jython Causes WLST to Error Out"

- Section 11.31.3, "Server Fails to Start When Using the WLST startServer() Command"

- Section 11.31.4, "WLST returnType='a' Option Returns Child Management Objects"

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

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

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

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

Workaround

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

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

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

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

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

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

Then import:

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

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

http://docs.python.org/tut/node8.html

11.31.2 Invalid cachedir Created by Jython Causes WLST to Error Out

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

Workaround

There are two workarounds for this issue:

- When invoking WLST, specify the `-Dpython.cachedir=<valid_directory>` parameter, or

- Install Jython 2.2.1 separately instead of using the partial Jython that is included in `weblogic.jar`.

11.31.3 Server Fails to Start When Using the WLST startServer() Command

Any attempt to start a WebLogic Server Administration Server using the WLST `startServer()` command will fail when you (a) start WLST from an ORACLE_HOME/common/bin directory instead of WL_HOME/common bin and (b) run the `startServer()` command from that WLST shell.

The `startServer()` command can only be used to start a WebLogic Server Administration Server instance issued from a WLST shell that was initiated by WL_HOME/common/bin/wlst.cmd or wlst.sh, where WL_HOME is the WebLogic Server specific installation directory. `startServer()` cannot be used to start an integrated WebLogic Server Administration Server instance installed with other products in the Fusion Middleware Suite, such as SOA or JRF.

Workaround

To start an integrated WebLogic Server Administration Server (one that is associated with a Fusion Middleware Suite product other than WebLogic Server), use either of the following methods:

- Execute the server startup script for the associated domain.

- Start the server using Node Manager. If you use this method, make sure that the `startScriptEnabled` property is set to `true` in Node Manager.

11.31.4 WLST returnType='a' Option Returns Child Management Objects

The WLST `returnType='a'` option should only return attributes from the specified directory. Instead it also returns child management objects. For example:

```
ls('Server')
drw-   AdminServer
drw-   worker01

ls('Server', returnMap='true', returnType='a')
drw-   AdminServer
drw-   worker01

ls('Server', returnMap='true',returnType='c')
drw-   AdminServer
drw-   worker01
```

The `ls` with `returnType='a'` should not list any child management objects, but `AdminServer` and `worker01` are children.

Workaround

When processing the output from `ls(returnType='a')`, check to see if the returned entry is a directory.

11.32 Web Server Plug-Ins Issues and Workarounds

This section describes the following issue:

- Section 11.32.1, "MOD_WLS_OHS DOES NOT FAILOVER"

11.32.1 MOD_WLS_OHS DOES NOT FAILOVER

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

11.33 Web Services and XML Issues and Workarounds

This section describes the following issues and workarounds:

- Section 11.33.1, "Sparse Arrays and Partially Transmitted Arrays Are Not Supported"

- Section 11.33.2, "WSDL Compiler Does Not Generate Serializable Data Types"

- Section 11.33.3, "Use of Custom Exception on a Callback"

- Section 11.33.4, "Cannot Use JMS Transport in an Environment That Also Uses a Proxy Server"

- Section 11.33.5, "clientgen Fails When Processing a WSDL"

- Section 11.33.6, "JAX RPC Handlers in Callback Web Services Are Not Supported"

- Section 11.33.7, "Message-level Security in Callback Web Services Is Not Supported"

- Section 11.33.8, "Handling of Java Method Arguments or Return Parameters That Are JAX-RPC-style JavaBeans"

- Section 11.33.9, "IllegalArgumentException When Using a Two-Dimensional XML Object in a JWS Callback"

- Section 11.33.10, "Using SoapElement[] Results in Empty Array"

- Section 11.33.11, "FileNotFound Exception When a Web Service Invokes Another Web Service"

- Section 11.33.12, "Client Side Fails to Validate the Signature on the Server Response Message"

- Section 11.33.13, "INFO Messages in Server Log for Domains Created Without Web Services-Specific Resources"

- Section 11.33.14, "Sending async Responses and acks Using a Client Certificate Is Not Supported by Reliable Messaging"

- Section 11.33.15, "xmlcatalog Element Entity Cannot Be a Remote File or a File in an Archive"

- [Section 11.33.16, "Catalog File's public Element Is Not Supported When Using XML Catalogs"](#)
- [Section 11.33.17, "Local xmlcatalog Element Does Not Work Well"](#)
- [Section 11.33.18, "JAXRPC Client Does Not Encode the HTTP SOAPAction Header With Multi-byte Characters"](#)
- [Section 11.33.19, "External Catalog File Cannot Be Used in the xmlcatalog Element of a clientgen Task"](#)
- [Section 11.33.20, "Exceptions When Running Web Services Reliable Messaging Under Heavy Load"](#)
- [Section 11.33.21, "jwsc Has Been Modified, Resulting in Methods With No @WebMethod Annotation to Be Included in the Service Endpoint Interface"](#)
- [Section 11.33.22, "MBean Encryption Property Setter Behavior Changed"](#)
- [Section 11.33.23, "ClassNotFound Exception Occurs When Using wseeclient.jar to Execute a Standalone JAX-WS Client Application"](#)
- [Section 11.33.24, "Incomplete Configuration When Adding WebLogic Server Advanced Web Services Component to Newly Created SOA Domain"](#)
- [Section 11.33.25, "Exception Occurs During Invocation of Clientside Policy Applied to a Service"](#)

11.33.1 Sparse Arrays and Partially Transmitted Arrays Are Not Supported

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

11.33.2 WSDL Compiler Does Not Generate Serializable Data Types

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

11.33.3 Use of Custom Exception on a Callback

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

Workaround

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

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

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

11.33.5 clientgen Fails When Processing a WSDL

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

11.33.6 JAX RPC Handlers in Callback Web Services Are Not Supported

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

Workaround

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

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

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

Workaround

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

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

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

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

where `myJavaBean` class is like:

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

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

Workaround

Currently there is no known workaround for this issue.

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

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

Workaround

Currently there is no known workaround for this issue.

11.33.10 Using SoapElement[] Results in Empty Array

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

Workaround

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

11.33.11 FileNotFound Exception When a Web Service Invokes Another Web Service

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

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

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

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

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

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

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

            <wsp:Policy>
```

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

Workaround

Use either of the following two solutions:

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

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

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

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

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

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

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

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

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

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

Workaround

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

- Use the configuration wizard and apply the `wls_webservice.jar` template to your domain.

- Manually configure these resources according to the rules given in the online documentation under domain configuration for Web services.

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

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

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

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

11.33.15 xmlcatalog Element Entity Cannot Be a Remote File or a File in an Archive

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

Workaround

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

11.33.16 Catalog File's public Element Is Not Supported When Using XML Catalogs

The `public` element in a catalog file is not supported when using the XML Catalogs feature. It is not supported to be consistent with JAX-WS EntityResolver implementation. WebLogic Server only supports defining the `system` element in a catalog file.

11.33.17 Local xmlcatalog Element Does Not Work Well

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

Workaround

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

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

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

Workaround

Change the SOAP action to ASCII in the WSDL.

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

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

```
<clientgen ...
  <xmlcatalog>
    <catalogpath>
```

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

This is a limitation of the Ant XML Catalog.

Workaround

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

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

11.33.20 Exceptions When Running Web Services Reliable Messaging Under Heavy Load

When running a Web services reliable messaging scenario under heavy load with file based storage that has the `Direct-Write` synchronous write policy setting, you may encounter IO exceptions similar to the following in the WebLogic Server log:

```
weblogic.store.PersistentStoreRuntimeException: [Store:280029]The
persistent store record <number> could not be found
```

or

```
Could not load conversation with id uuid:<some ID> -> Conversation read
failed:
    ...
   weblogic.wsee.jws.conversation.StoreException:
     Conversation read failed: id=uuid:<some ID>
       weblogic.store.PersistentStoreException: [Store:280052]The
       persistent store was not able to read a record.
         java.io.OptionalDataException
```

These exceptions are known to occur only when using Web Services reliable messaging. They indicate a failure to read a record from the file store and are considered 'fatal' data access errors.

The underlying issue causing these errors will be addressed in a future release.

Workaround

The following workarounds are available for this issue:

- Change the file store synchronous write policy to `Cache-Flush`.

  or

- Keep the Direct-Write synchronous write policy and add the following Java system property to your WebLogic server startup scripts:

  `-Dweblogic.store.AvoidDirectIO=true`

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

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

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

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

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

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

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

Workaround

After installing WebLogic Server 10.3.1 or greater, Oracle recommends that you evaluate your existing services for the following possible errors:

1. Public non-static methods that are not legal Web method declarations (these can cause jwsc to fail when building a service).

2. Public non-static methods that are legal Web methods, but were never intended to be exposed publicly on the service.

The two cases are described in detail here:

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

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

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

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

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

11.33.22 MBean Encryption Property Setter Behavior Changed

In Oracle WebLogic Server 11*g* Release 1 (10.3.1), the behavior of the MBean encryption algorithm changed.

In previous releases, if the newly set value was identical to the existing value, the encrypted value did not change. That is, you would always get the same encrypted value for a given password. The action was not treated as a **non-dynamic** change.

The behavior has been modified so that use of the setter on any existing encrypted value is considered to be a **dynamic** change, regardless of whether the new value matches the old value. Therefore, even if you set the password to the existing value, the setter now generates a different encrypted value for the given password.

11.33.23 ClassNotFound Exception Occurs When Using wseeclient.jar to Execute a Standalone JAX-WS Client Application

In some circumstances, when executing a standalone JAX-WS client application using wseeclient.jar (as described in "Using a Stand-Alone Client JAR File When Invoking Web Services" in *Oracle Fusion Middleware Getting Started With JAX-WS Web Services for Oracle WebLogic Server*), the application may fail with a ClassNotFound exception. For example:

```
Exception in thread "Main Thread" java.lang.NoClassDefFoundError:
com/oracle/xml /ws/transport/http/client/HttpTransportPipe at
weblogic.wsee.jaxws.WLSTransportTubeFactory.createHttpTransport(WLSTransportTubeFa
ctory.java:30
```

Workaround

Use the client-side JAX-WS 2.1 that is integrated with the Java Standard Edition Release 6 (JDK 1.6), Update 4 and later. This requires using the JAX-WS API instead of any WebLogic Server specific APIS.

Current releases of JDK 1.6 are available for download at http://java.sun.com/javase/downloads/index.jsp. For information about writing a standalone JAX WS 2.1 client application, see the *JAX-WS Users Guide* on the JAX-WS 2.1 Reference Implementation Web site at https://jax-ws.dev.java.net/.

11.33.24 Incomplete Configuration When Adding WebLogic Server Advanced Web Services Component to Newly Created SOA Domain

An incomplete configuration can result when you use the Configuration Wizard to add the WebLogic Server Advanced Web Services component to a newly created SOA domain. If you create a cluster that contains only the default 'out-of-the-box' soa_ server1 server definition, the resulting cluster does not include the resources needed to run WebLogic Server Web Services in that cluster.

Workaround

Use either of the following workarounds for this issue:

1. While running Configuration Wizard, create a second server in the cluster:

a. On the **Select Optional Configuration** screen, select **Managed Servers, Clusters, and Machines**.

b. On the **Configure Managed Servers** screen, add a managed server.

c. On the **Assign Servers to Clusters** screen, add this server to the cluster in which the default soa_server1 server resides.

2. On the **Configuration Wizard Target Services to Servers or Clusters** screen, target Web Services resources (for example, WseeJmsServer, WseeJmsModule) to the cluster.

Either of these workarounds will cause the Configuration Wizard to apply the resources for the WebLogic Server Advanced Web Services component to the cluster.

11.33.25 Exception Occurs During Invocation of Clientside Policy Applied to a Service

When upgrading from WebLogic Server 11*g* Release 1 (10.3.1) to WebLogic Server 11*g* Patch Set 1 (10.3.2), if the value of the name attribute of `@WebParam(header=true)` is different from the Java parameter name in the JWS method, a WSDL part name exception may occur.

Workaround

Run `clientgen` against the service to rebuild the client artifacts.

11.34 WebLogic Tuxedo Connector Issues and Workarounds

This section describes the following issue and workaround:

- Section 11.34.1, "View Classes are not Set on a Per Connection Basis"

11.34.1 View Classes are not Set on a Per Connection Basis

View classes are not set on a per connection basis.

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

Workaround

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

11.35 Documentation Errata

This section describes documentation errata:

- Section 11.35.1, "Issues With Search Function in the Samples Viewer"
- Section 11.35.2, "Japanese Text Displays in Some Search Results Topics Avitek Medical Records"
- Section 11.35.3, "Some Interfaces to SAML2 Are Not Documented in the MBean Reference"
- Section 11.35.4, "Default Value Documented For JDBC TestConnectionsOnReserve Property Is Incorrect"

11.35.1 Issues With Search Function in the Samples Viewer

The **Search** function in the Samples viewer does not work when accessing the Examples documentation by selecting **Oracle Weblogic > Weblogic Server > Examples > Documentation** from the Windows **Start** menu.

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**.

11.35.2 Japanese Text Displays in Some Search Results Topics Avitek Medical Records

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

11.35.3 Some Interfaces to SAML2 Are Not Documented in the MBean Reference

The WebLogic Server 10.3.1 MBean Reference does not document the interfaces to the SAML 2.0 Identity Asserter and SAML 2.0 Credential Mapping provider. Instead, Javadoc for these MBean interfaces is provided in the *WebLogic Server 10.3.1 MBean API Reference Guide*.

11.35.4 Default Value Documented For JDBC TestConnectionsOnReserve Property Is Incorrect

The "Test Connections on Reserve to Enable Fail-Over" section of *Oracle Fusion Middleware Configuring and Managing JDBC for Oracle WebLogic Server* states that the `TestConnectionsOnReserve` property is enabled (true) by default.

The actual default value of `TestConnectionsOnReserve` is false (disabled).

Part V

Oracle WebCenter

Part V contains the following chapter:

-

12

Oracle WebCenter

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

- Section 12.1, "General Issues and Workarounds"

12.1 General Issues and Workarounds

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

12.1.1 Using Oracle WebLogic Communications Server

Oracle WebLogic Communications Server (OWLCS) is provided as a sample for development only. It should not be used for production deployments.

12.1.2 Using Jive Forums Documentation

Oracle WebCenter Discussions (Jive Forums) is an optional component of Oracle WebCenter. Complete documentation for Jive Forums is included for reference. However, Jive software installations and upgrades outside of the WebCenter product installation are not supported.

12.1.3 Using the Rich Text Portlet

At runtime, if you encounter a null pointer exception while trying to customize or refresh the content of a Rich Text Portlet, reload the page, and then customize or refresh your portlet.

12.1.4 Moving the Active Cursor When Launching a New Page (Accessibility Issue)

Upon selecting a link in a WebCenter Spaces application, the active cursor does not automatically move to the content area in new non-popup/popover pages that are launched. To work around this issue, you can manually tab over to the new content area.

12.1.5 Moving Favorites Into an Existing Folder (Accessibility Issue)

When using only the keyboard in WebCenter Spaces, you cannot move a favorite into an existing folder. To work around this issue, create a new, duplicate favorite within the existing folder, then delete the original favorite that exists outside the folder.

12.1.6 Selecting a Date in Your Personal Profile (Accessibility Issue)

When using only the keyboard in WebCenter Spaces, you cannot select a date from the date picker in the Message Board tab and the Feedback tab of your personal profile. To work around this issue, instead of using the date picker, type the date into the required field.

12.1.7 Expanding/Collapsing Folders in the All Saved Searches Task Flow (Accessibility Issue)

When using only the keyboard in WebCenter Spaces, you cannot expand or collapse folders in the All Saved Searches task flow. To work around this issue, view the saved searches using the Search main view task flow for personal saved searches, or the Search group main view task flow for group space-specific saved searches.

12.1.8 Adding RSS Feeds

When you click the RSS icon in a WebCenter Spaces application, if SSO is not configured, a Login dialog prompts for your user name and password. The user name that you enter must contain only ASCII characters.

12.1.9 Displaying Group Space Name in Activity Stream

After you migrate from Oracle WebCenter 11.1.1.1.0 to Oracle WebCenter 11.1.1.2.0, you may initially see a group space GUID in Activity Stream in lieu of a group space

name in WebCenter Spaces. This can occur when you configure an Activity Stream task flow instance and select to display activity from a group space that was migrated. You can work around this issue by generating some activity in that group space, like adding or removing a member. This refreshes the Activity Stream instance with the group space display name.

12.1.10 Clearing Customizations Stored in MDS

In JDeveloper, choosing **Clean Runtime MDS Customizations** from the **Application** menu does not clear customizations made at runtime that are stored in the MetaData Services (MDS). You can delete customizations by either manually deleting them from the configured directory or by using JDeveloper.

To clear these customizations by using JDeveloper:

1. In the Application Navigator, click the **Application Menu** icon next to your application's name and select **Application Properties**.

2. In the Application Properties dialog, expand the **Run** node in the left pane, then select **MDS**.

3. In the right pane, under **Run: MDS**, select **Delete customizations before each run**. Doing so clears the MDS of any runtime customizations every time you run the application. To save the runtime customizations every time you run the application, select **Preserve customizations across application runs**.

12.1.11 Reapplying Profile Settings in WebCenter Spaces After Upgrading Oracle WebCenter

In WebCenter Spaces, profile settings set on the **WebCenter Administration** > **Services** > **Profile** screen are *not* retained when you upgrade from Oracle WebCenter 11.1.1.1.0 to Oracle WebCenter 11.1.1.2.0. After the upgrade, a WebCenter administrator must reapply the required profile settings on the **WebCenter Administration** > **Services** > **People Connections** > **Profiles** screen.

12.1.12 Handling Exceptions Reported for Custom WebCenter Applications

At runtime or when you deploy a custom WebCenter application to a Managed Server, diagnostic logs may report exceptions similar to the one listed below. Such exceptions do not impact application functionality, and can be ignored.

```
[2009-11-01T23:18:37.160-08:00] [CustomAppServer] [ERROR] []
[oracle.webcenter.concurrent.Submission] [tid: pool-1-daemon-thread-7]
[userId: Lisa] [ecid: 0000IInkaNCDsXlfwtq2T01AvcNC000013,0:3]
[APP:TutorialApp#V2.0]caught exception removing thread context
```

12.1.13 Navigating in the Documents Tab in Internet Explorer 7 (Accessibility Issue)

When using only the keyboard in WebCenter Spaces in Internet Explorer 7, cursor position is not highlighted for certain buttons in the Documents tab and the Document List Viewer task flow in page edit mode. Although the cursor position indicator is not shown, the cursor focus for the button objects is correct. To work around this issue, use Internet Explorer 8 or any other supported browser like Safari 4.x or Firefox 3.x.

12.1.14 Adding Content to a Text Page in WebCenter Spaces

If the Oracle WebCenter instance is running in a native encoding, when you try to add content to a page based on the Text Page template in WebCenter Spaces, you may encounter a metadata repository error due to incorrect character length calculation. This error occurs when the calculated character length is less than or equal to 4000 bytes but the actual occupied bytes is more than 4000.

To work around this error, set the environment variable `LC_ALL` to `utf-8` on the server on which Oracle WebCenter is deployed.

12.1.15 Error Displayed While Configuring UCM to OID

On Configuring Oracle Universal Content Management (UCM) to Oracle Internet Directory (OID), the following error can be seen:

```
java.lang.NoSuchMethodError:
org/apache/xpath/XPath.<init>
(Ljava/lang/String;Lorg/apache/xml/utils/PrefixResolver;
Ljavax/xml/xpath/XPathFunctionResolver;Ljavax/xml/xpath/XPathVariableResolver;ZZ)V
```

To workaround this issue, perform the following steps:

For New installations:

1. In intradoc.cfg, add `JAVA_ENDORSED_PATH_server=`

2. Restart the Content Server.

For Existing installations:

1. In intradoc.cfg, add `JAVA_ENDORSED_PATH_server=`

   If it does exist, ensure that it does not have any of these .jar files listed:

   ```
   * JAVA_CLASSPATH_xml1=$SHAREDDIR/classes/endorsed/xalan-2.5.2.jar
   * JAVA_CLASSPATH_xml2=$SHAREDDIR/classes/endorsed/xercesImpl-2.5.0.jar
   * JAVA_CLASSPATH_xml3=$SHAREDDIR/classes/endorsed/xml-apis-2.5.0.jar
   ```

   If you have questions about any additional .jar files, for this entry, please call support.

2. Restart the Content Server.

12.1.16 Enabling WS-Security on Discussion and Announcement Connections

When you define a connection for the Discussions or Announcements service you must always enable WS-Security and configure the associated keystore/encryption details. WS-Security is not optional as documented in the online help.

To enable WS-Security on discussions server connections:

- **JDeveloper**: Set `forum.connection.secure` to `true`

- **Fusion Middleware Control**: Select the **Connection Secured** checkbox

- **WLST**: Set `secured` to `true` in the WLST commands `createDiscussionForumConnection` and `setDiscussionForumConnection`

To configure WS-Security properties, specify:

- `keystore.location`

- `keystore.password`

- `keystore.type`
- `encryption.key.alias`
- `encryption.key.password`

12.1.17 Uploading Multiple Files to a Document Manager Task Flow in WebCenter Spaces

To upload multiple files to a group space or personal space, you can use WebDAV or the Oracle Content Server Batch Loader utility:

1. Go to the Document Manager task flow on a page or go to the **Documents** page (in a personal space or group space) where you want to upload files.

2. If desired, create a new folder for the documents you plan to upload. In the Create Folder dialog, make note of the root folder path specified by **Create Folder In**.

   > **Note:** The root folder where your group space is stored in Oracle Content Server is /spaces/*group_space_name*.

3. Choose either of the following methods for uploading files to the group space or personal space folder:

   - To use WebDAV, which is installed with Oracle Content Server out-of-the-box, refer to "Importing Documents for a Group Space" in *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.

   - To use the Batch Loader utility, refer to the "Batchloading Content" chapter in *Managing System Settings and Processes*, available at
     http://download.oracle.com/docs/cd/E10316_01/owc.htm

12.1.18 Installing Oracle SES

To install Oracle Secure Enterprise Search (Oracle SES):

1. Install Oracle SES 10.1.8.2.

   For information about how to install Oracle SES 10.1.8.2, refer to the Oracle Secure Enterprise Online Documentation Library 10*g* Release 1 (10.1.8.2) available here on OTN:

   http://www.oracle.com/technology/documentation/ses.html

2. Install the Oracle SES 10.1.8.4 patch set.

   To do this, download patch 7514463 from http://support.oracle.com.

3. Install the Oracle SES XML(RSS) Connector 10.1.8.4.3 patch set.

   To do this, download patch 8925942 from http://support.oracle.com.

Part VI

Oracle SOA Suite

Part VI contains the following chapters:

13

Oracle Adapter for Oracle Applications

This chapter describes issues associated with Oracle Adapter for Oracle Applications and the *Oracle Application Server Adapter for Oracle Applications User's Guide*. It includes the following topics:

- Section 13.1, "General Issues and Workarounds"
- Section 13.2, "Configuration Issues and Workarounds"
- Section 13.3, "Documentation Errata"

13.1 General Issues and Workarounds

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

- Section 13.1.1, "Populating Default Values for Record Types While Using PL/SQL APIs"
- Section 13.1.2, "Re-creating Wrapper Packages While Using Existing PL/SQL SOA Composites Against a Different Release Instance"

13.1.1 Populating Default Values for Record Types While Using PL/SQL APIs

Certain PL/SQL APIs exposed from Oracle E-Business Suite take record types as input. Such APIs expect default values to be populated for parameters within these record types for successful execution.

The default values are `FND_API.G_MISS_CHAR` for characters, `FND_API.G_MISS_DATE` for dates, and `FND_API.G_MISS_NUM` for numbers. Adapter for Oracle Applications can default these values when the parameters within the record type are passed as nil values, as shown in the following example:

```
<PRICE_LIST_REC>
<ATTRIBUTE1 xsi:nil="true"/>
<ATTRIBUTE2 xsi:nil="true"/>
<ATTRIBUTE3 xsi:nil="true"/>
...
</PRICE_LIST_REC>
```

This can be achieved with the help of a function in a Transform activity, or by directly passing the XML input with nil values and then assigning them to the record types within an Assign activity.

hnConfiguration Issues and Workarounds

13.1.2 Re-creating Wrapper Packages While Using Existing PL/SQL SOA Composites Against a Different Release Instance

When a user has a SOA composite of a PL/SQL API created against an Oracle E-Business Suite Release 11i instance and intends to use it against the Release 12 instance or vice versa, for the compatibility in the target instance, the wrapper package of the SOA composite must be recreated. This approach updates the signature in the generated wrapper SQL file for the target instance and avoids the possible confusion whether the signature is the same or has changed in the target instance.

13.2 Configuration Issues and Workarounds

There are no known configuration issues at this time.

13.3 Documentation Errata

This section describes documentation errata for *Oracle Application Server Adapter for Oracle Applications User's Guide*. It includes the following topics:

- Section 13.3.1, "Removing Interfaces Definitions Annotated at Design Time"
- Section 13.3.2, "Removing "One-time Workaround for Concurrent Programs and E-Commerce Gateway Interfaces""

13.3.1 Removing Interfaces Definitions Annotated at Design Time

In the section "Support for Oracle Integration Repository" of Chapter 2 "Adapter for Oracle Applications Features", the last sentence of the first paragraph reads:

"These interfaces are exposed because their definitions were annotated at design time as required by Oracle Integration Repository."

This is incorrect and should be removed from the section.

13.3.2 Removing "One-time Workaround for Concurrent Programs and E-Commerce Gateway Interfaces"

In the section "General Issues and Workarounds" of Appendix B, Troubleshooting and Workarounds, the following bullet point reads:

- **One-time Workaround for Concurrent Programs and E-Commerce Gateway Interfaces**

  When working with Concurrent Programs and E-Commerce Gateway interfaces, you must perform the following workaround exactly once for a given E-Business Suite instance.

  > **Note:** This is to work around the known issue with the Adapter Configuration wizard being unable to preserve DEFAULT clauses for PL/SQL wrappers that it generates underneath the covers.

  Load the following SQL file into the apps schema (using SQL*Plus) before launching the Adapter Configuration Wizard to create services for either Concurrent Programs or E-Commerce Gateway Interfaces.

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```
ORACLE_
HOME\bpel\samples\tutorials\150.AppsAdapter\OrderImportConcur
rentProgram\bpel\XX_BPEL_FND_REQUEST_SUBMIT_REQUEST.sql
```

Since Concurrent Programs and E-Commerce Gateway interfaces work fine without the need of loading SQL file, this one-time workaround needs to be removed.

14

Human Workflow

This chapter describes issues associated with human workflow. It includes the following topics:

- Section 14.1, "General Issues and Workarounds"
- Section 14.2, "Documentation Errata"

14.1 General Issues and Workarounds

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

- Section 14.1.1, "Must Create Separate ADF Task Flows If Both Contain the Same Element with Different Meta-attributes"
- Section 14.1.2, "Specifying the Template Version When Moving Human Workflow Data from Test to Production Environments"
- Section 14.1.3, "Editing Visibility Rules Invokes a Feedback Dialog with an Exception Error"
- Section 14.1.4, "Intermittent Error When Executing the Remote EJB API for Human Workflow"
- Section 14.1.5, "Approve and Reject Actions in Actions Tab of Human Task Editor for Admin User Should Be Disabled"
- Section 14.1.6, "Must Explicitly Save an Attachment Removal"
- Section 14.1.7, "Task Form Uses the Less Secure Port If Both the HTTP and HTTPS Ports Are Enabled"
- Section 14.1.8, "URL Files Attachments Are Not Being Sent to the Next Task Assignee"
- Section 14.1.9, "Pushback Action Overrides All Other Actions"
- Section 14.1.10, "Tasks Can Be Pushed Back to an Owner or Creator Who Was Not in the Past Approvers List"
- Section 14.1.11, "Task Flow Created with Notification Drop Handler Displays a Code Line in Oracle BPM Worklist"
- Section 14.1.12, "Specifying Values for Both the Date From and Date To Fields on the Notification Management Page"
- Section 14.1.13, "Oracle BPM Worklist Does Not Support a JNDI Connection Pool"
- Section 14.1.14, "Displaying Details for Stale Tasks on the Evidence Search Tab"

- Section 14.1.15, "Undeploying a Task Flow Does Not Remove the Database Entry for the URL"

- Section 14.1.16, "Changing the Task Display URL to Use the Correct Protocol and Port Number"

- Section 14.1.17, "Creating Custom Identity Store Providers"

- Section 14.1.18, "Some Fields Do Not Appear After Updating and Saving a ToDo Task in a Worklist Portlet"

- Section 14.1.19, "Notifications for ToDo Tasks are Not Supported"

- Section 14.1.20, "Best Practice Recommendation for Task Detail Deployment"

- Section 14.1.21, "History Section of a Task Details Page Does Not Display Correctly in an E-mail Notification"

- Section 14.1.22, "Admin Users Can Add and Update Comments and Attachments"

- Section 14.1.23, "Do Not Include Spaces in a Custom Outcome ACTION Name"

- Section 14.1.24, "Stuck Java Threads in `com.sun.jndi.ldap.Connection.readReply` in Workflow on AIX"

14.1.1 Must Create Separate ADF Task Flows If Both Contain the Same Element with Different Meta-attributes

You must create separate ADF task flows if both contain the same element, but with different meta-attributes specified (for example, editable and noneditable).

For example, assume you perform the following tasks.

1. Create two task form applications for a SOA composite application:

   - Task form application one (for example, named EnterBankDetails.task) has one editable payload (for example, named BankDetails) and one noneditable payload (for example, named Employee).

   - Task form application two (for example, named ValidatePersonalInformation.task) has one editable payload (for example, also Employee).

   While creating the task form, the wizard provides you with the option to define the ADF table for payload Employee.

2. Complete the wizard, then deploy the process.

3. Invoke the process.

4. Log in to Oracle BPM Worklist.

   There is a Validate Personal Information task (for ValidatePersonalInformation.task).

5. Select the task.

   Employee details are available for modification, as expected.

6. Add a new record, then approve the task.

7. Select the Enter Bank Details task (for EnterBankDetails.task). In the task form, note that the **Insert New** and **Delete** buttons are still present for Employee data, even though it is a noneditable payload.

8. Click **Delete**, then select **Approve**. The payload gets deleted.

Ensure that you create two separate ADF task flow applications because both contain the Employee element, but with different meta-attributes specified (editable and noneditable).

14.1.2 Specifying the Template Version When Moving Human Workflow Data from Test to Production Environments

Section "Moving Human Workflow Data from Test to Production Environments" of Chapter "Managing Human Workflow Service Components and Engines" of the *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite* describes how to use the `migration.properties` file to move your data from a test to a production environment. In addition to the `migration.properties` file properties described in this section, you must also add the `template.version` property to this file. For example:

```
operationType = EXPORT
objectType = VIEW
name = name of VIEW
user = username of VIEW
grantPermission = true
migrateAttributeLabel = true
override = true
skip = true
migrateToActiveVersion = true
template.version = 2009-June-11
```

Not adding the `template.version` property results in the occurrence of an exception error when you execute the `ant-t2p-worklist.xml` script.

14.1.3 Editing Visibility Rules Invokes a Feedback Dialog with an Exception Error

If you make changes to the visibility rules in the Access page of the Human Task Editor (for example, set assignees to have no access to task history), save your changes, switch to **Source** view, and then switch back to **Designer** view, a feedback dialog is displayed with an exception error.

Close this dialog. There is no loss of functionality.

14.1.4 Intermittent Error When Executing the Remote EJB API for Human Workflow

When executing the remote EJB API for human workflow, you can intermittently receive the following error:

```
javax.naming.ServiceUnavailableException
```

As a workaround, perform the following steps.

1. Open the *DOMAIN_HOME*/`config/fmwconfig/jps-config.xml` file.

2. Add the connection pooling size:

   change:

```
<!-- JPS WLS LDAP Identity Store Service Instance -->
  <serviceInstance name="idstore.ldap" provider="idstore.ldap.provider">
    <property name="idstore.config.provider"
value="oracle.security.jps.wls.internal.idstore.WlsLdapIdStoreConfigProvider"/>
    <property name="CONNECTION_POOL_CLASS"
value="oracle.security.idm.providers.stdldap.JNDIPool"/>
  </serviceInstance>
```

to:

```
<!-- JPS WLS LDAP Identity Store Service Instance -->
  <serviceInstance name="idstore.ldap" provider="idstore.ldap.provider">
    <property name="idstore.config.provider"
value="oracle.security.jps.wls.internal.idstore.WlsLdapIdStoreConfigProvider"/>
    <property name="CONNECTION_POOL_CLASS"
value="oracle.security.idm.providers.stdldap.JNDIPool"/>
    <property name="CONNECTION_POOL_MAX_CONNECTIONS" value="30"/>
  </serviceInstance>
```

14.1.5 Approve and Reject Actions in Actions Tab of Human Task Editor for Admin User Should Be Disabled

In the **Actions** tab of the Access page of the Human Task Editor, the Admin user is incorrectly assigned the actions Approve and Reject by default. These checkboxes should be disabled. During runtime, if you log in to Oracle BPM Worklist as the Admin user, the actions Approve and Reject are not in the **Actions** dropdown list. This is the expected behavior.

14.1.6 Must Explicitly Save an Attachment Removal

Adding an attachment to a task does not require you to select **Actions** > **Save**. The task is automatically updated and the full history shows the attachment was added. However, when you remove the attachment, the task is not automatically updated. You must explicitly select **Actions** > **Save**. Otherwise, the attachment is not removed, even though it is displayed as removed. This is the expected behavior.

14.1.7 Task Form Uses the Less Secure Port If Both the HTTP and HTTPS Ports Are Enabled

If you enable both the front end HTTP (non-SSL) and HTTPS (SSL) ports in Oracle WebLogic Server, deploy a SOA composite application and task form, invoke an instance, and attempt to access the task form, the less secure port is used.

For example, if you click the invoked task, the Oracle BPM Worklist URL is correctly displayed with the HTTPS port.

```
https://host:https_port/integration/worklistapp
```

However, the task form URL displays the less secure port:

```
http://host:http_port/workflow/taskflow
```

If the HTTPS port is enabled, it must use the more secure port, especially if the request is made on the HTTPS port. To use the HTTPS port, follow the task flow deployment instructions described in section "Deploying a Composite Application with a Task Flow" of the *Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite* for details.

14.1.8 URL Files Attachments Are Not Being Sent to the Next Task Assignee

For a task using a serial participant type, when the first assignee approves the task in Oracle BPM Worklist and adds a URL attachment to it (for example, `http://www.mycompany.com/technology/products/oem/management_partners/snmpwp6.gif`), the attachment is not sent along with the e-mail notification to the next participant. However, if a desktop file is added as an

attachment (for example, just `snmpwp6.gif`), then the attachment is sent with the e-mail notification to the next assignee.

14.1.9 Pushback Action Overrides All Other Actions

The pushback action overrides all other actions. For example, if a task is pushed back and then reassigned, after the reassignee approves it, the task goes to the user who performed the pushback. This is the expected behavior.

14.1.10 Tasks Can Be Pushed Back to an Owner or Creator Who Was Not in the Past Approvers List

A task owner or creator who was not a previous task approver displays in the list of approvers to whom the task can be pushed back. For example, perform the following tasks:

1. Create the Vacation Request SOA composite application in which you set the **Owner** field of the Human Task Editor with an XPath expression.

2. Set the creator from the payload as the owner of the task.

3. Deploy and create an instance with the creator as `jcooper`.

4. Log in as `jstein` to Oracle BPM Worklist.

5. Select **Actions** > **Request Information**.

6. In the Request More Information dialog in Oracle BPM Worklist, the task owner `jcooper` is shown as a past approver in the **Past Approvers** dropdown list. Since `jcooper` is not in the original list of approvers, if you select this user, a validation error similar to the following is correctly displayed:

```
Invalid action on workflow task or user does not have privilege to
perform this action. Action PUSH_BACK on task
89f227cd-7ea2-4fcf-83ff-845082e01416 cannot be performed by jstein. Make
sure that the action is valid with respect to the current state of the task or
ensure that the user has  privilege to perform this action on the workflow
task.
```

14.1.11 Task Flow Created with Notification Drop Handler Displays a Code Line in Oracle BPM Worklist

When you create the task flow for a human workflow task by dragging the **Task** object from the Application Navigator and selecting **Human Task** > **Task details for email** from the menu, then after task flow deployment, the following code line precedes the task details in Oracle BPM Worklist.

```
font {font-family: Tahoma, Verdana, Helvetica, sans-serif} H1 { font-size:
14px; color:#000000; margin-left: 5px} td {font-size: 11px;color:#000000}
label {font-size:11px;color:#704A00;margin-right:10px}
```

This does not effect any functionality. In Oracle BPM Worklist and in the e-mail notification, task details display correctly.

14.1.12 Specifying Values for Both the Date From and Date To Fields on the Notification Management Page

You must specify values for *both* the **Date From** and **Date To** fields in the **Search** sections on the Notification Management page in Oracle Enterprise Manager Fusion

Middleware Control Console to receive the correct search results. These fields do not work independently. Specifying values for only one of these fields does not display the correct search results. To access these fields:

1. Right-click **soa-infra** in the navigation tree, and select **Service Engines** > **Human Workflow** > **Notification Management**.

2. Expand the **Search** icon in the **Outgoing Notifications** section or **Incoming Notifications** section to display the **Date From** or **Date To** fields.

14.1.13 Oracle BPM Worklist Does Not Support a JNDI Connection Pool

The worklist engine uses a user and role connection pool. It does not support a JNDI connection pool.

14.1.14 Displaying Details for Stale Tasks on the Evidence Search Tab

Many of the task details for a stale task are not displayed, because stale tasks are typically purged. For this reason, content on the page is not aligned correctly and clicking a stale task results in an error message.

14.1.15 Undeploying a Task Flow Does Not Remove the Database Entry for the URL

When a task flow Web application is deployed, the task flow URL is registered in the database. This URL is displayed in Oracle BPM Worklist when a task is clicked and the task details are displayed. If the task flow Web application is later undeployed or stopped, the task flow URL in the database is not removed as part of the undeployment. Consequently, when you click the task in the worklist to see the task details, a `404 Not Found` error is displayed rather than the message `Details not available for task`. To avoid the `404 Not Found` error, use Oracle Enterprise Manager Fusion Middleware Control Console to undeploy the task flow application from the application home page.

14.1.16 Changing the Task Display URL to Use the Correct Protocol and Port Number

If the SOA Server is SSL enabled or disabled, then you must manually enable or disable SSL for any already deployed workflow task detail applications. Use Oracle Enterprise Manager Fusion Middleware Control Console to change the workflow task display URL to use the correct protocol and port number. To enable the use of the SSL (HTTPS) URL, ensure that the HTTP port setting is left blank. See *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite* for more information.

14.1.17 Creating Custom Identity Store Providers

Oracle Fusion Middleware supports providers that enable the User and Role API to interact with custom identity stores. For more information, visit the following URL:

http://www.oracle.com/technology/products/id_mgmt/opss/index.html

14.1.18 Some Fields Do Not Appear After Updating and Saving a ToDo Task in a Worklist Portlet

After you update and save a ToDo task or a ToDo subtask for a business task in a Worklist Portlet, the following fields should appear, but do not: **Assignee**, **Status**, and **Search** options.

14.1.19 Notifications for ToDo Tasks are Not Supported

Notifications for ToDo tasks are not supported. If you create a ToDo task with a notification in Oracle BPM Worklist, you receive a `404 Not Found` error message.

14.1.20 Best Practice Recommendation for Task Detail Deployment

It is recommended that task detail applications associated with a human workflow composite be deployed only to servers that have SOA configured on them, as well as the required ADF libraries.

14.1.21 History Section of a Task Details Page Does Not Display Correctly in an E-mail Notification

The task details page for e-mail notifications does not support the listing of the History section. If this section is included in the task details to be rendered for e-mails, then it does not display correctly in the e-mail notification.

14.1.22 Admin Users Can Add and Update Comments and Attachments

In Oracle BPM Worklist, Admin users can add and update comments and attachments with this release.

14.1.23 Do Not Include Spaces in a Custom Outcome ACTION Name

When creating a custom outcome for a task form, ensure that valid characters are used in the ACTION name. Spaces are not permitted.

14.1.24 Stuck Java Threads in `com.sun.jndi.ldap.Connection.readReply` in Workflow on AIX

When multiple LDAP calls to the Oracle WebLogic Embedded LDAP Server are made from Workflow on the IBM AIX platform using the IBM JDK, the client making the LDAP request may hang and errors like the following may be seen in the SOA managed server logs:

Jun 15, 2009 9:47:01 PM PDT Error WebLogicServer BEA-000337 [STUCK] ExecuteThread: '0' for queue: 'weblogic.kernel.Default (self-tuning)' has been busy for "606" seconds working on the request "oracle.bpel.services.workflow.query.ejb.TaskQueryService_oz1ipg_EOImpl", which is more than the configured time (StuckThreadMaxTime) of "600" seconds. Stack trace:

```
java.lang.Object.wait(Native Method)
java.lang.Object.wait(Object.java:196)
com.sun.jndi.ldap.Connection.readReply(Connection.java:442)
com.sun.jndi.ldap.LdapClient.getSearchReply(LdapClient.java:623)
com.sun.jndi.ldap.LdapClient.search(LdapClient.java:546)
com.sun.jndi.ldap.LdapCtx.doSearch(LdapCtx.java:1960)
com.sun.jndi.ldap.LdapCtx.doSearchOnce(LdapCtx.java:1909)
com.sun.jndi.ldap.LdapCtx.c_getAttributes(LdapCtx.java:1302)
com.sun.jndi.toolkit.ctx.ComponentDirContext.p_
getAttributes(ComponentDirContext.java:225)
com.sun.jndi.toolkit.ctx.PartialCompositeDirContext.getAttributes(PartialComposite
DirContext.java:133)
```

Oracle recommends using Oracle Internet Directory (OID) as the LDAP server for Workflow to avoid this error.

14.2 Documentation Errata

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

14.2.1 Withdraw Button in Task Details Page Displays for the Administrator

Section "Acting on Tasks: The Task Details Page" of Chapter "Using Oracle BPM Worklist" of *Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite* includes the following description for the Action buttons on the task details page:

Action buttons—Displays buttons for custom actions that are defined in the human task, such as setting task outcomes (for example, **Resolved** and **Unresolved** for a help desk request or **Approve** and **Reject** for a loan request). For the task initiator or a manager, **Withdraw** may also appear.

This description should also state that in addition to the task initiator or manager, **Withdraw** may also appear for the administrator.

14.2.2 Clarification of the Example Showing How To Initiate a Vacation Request Task Programmatically

In Example 28-8, "Initiating a Vacation Request Task Programmatically," the following change is required.

Replace this:

```
// set taskDefinitionId
  task.setTaskDefinitionId("/VacationRequestApp/
  VacationRequest!1.0*2007-04-26-10-49-50/
  VacationRequest");  (Your task definition ID will be different.)
```

With this:

```
// set taskDefinitionId. taskDefinitionId is the target
// namespace of the task
// If namespace is used, the active version of the composite corresponding
// to that of the namespace will be used.
task.setTaskDefinitionId("http://xmlns.oracle.com/VacationRequest/
Project1/Humantask1");  (Your task definition ID will be different.)
```

Example 14–1 shows the entire corrected example.

Example 14–1   Initiating a Vacation Request Task Programmatically

```
// create task object
ObjectFactory objectFactory = new ObjectFactory();
Task task = objectFactory.createTask();

// set title
task.setTitle("Vacation request for jcooper");
```

```
  // set creator
  task.setCreator("jcooper");

// set taskDefinitionId. taskDefinitionId is the target
// namespace of the task
// If namespace is used, the active version of the composite corresponding
// to that of the namespace will be used.
task.setTaskDefinitionId("http://xmlns.oracle.com/VacationRequest/
Project1/Humantask1");  (Your task definition ID will be different.)

  // create and set payload
  Document document = XMLUtil.createDocument();
  Element payloadElem = document.createElementNS(TASK_NS, "payload");
  Element vacationRequestElem = document.createElementNS(VACATION_REQUEST_NS,
    "VacationRequestProcessRequest");

  Element creatorChild = document.createElementNS(VACATION_REQUEST_NS, "creator");
  creatorChild.appendChild(document.createTextNode("jcooper"));
  vacationRequestElem.appendChild(creatorChild);

  Element fromDateChild = document.createElementNS(VACATION_REQUEST_NS, "fromDate");
  fromDateChild.appendChild(document.createTextNode("2006-08-05T12:00:00"));
  vacationRequestElem.appendChild(fromDateChild);

  Element toDateChild = document.createElementNS(VACATION_REQUEST_NS, "toDate");
  toDateChild.appendChild(document.createTextNode("2006-08-08T12:00:00"));
  vacationRequestElem.appendChild(toDateChild);

  Element reasonChild = document.createElementNS(VACATION_REQUEST_NS, "reason");
  reasonChild.appendChild(document.createTextNode("Hunting"));
  vacationRequestElem.appendChild(reasonChild);

  payloadElem.appendChild(vacationRequestElem);
  document.appendChild(payloadElem);

  task.setPayloadAsElement(payloadElem);

  IWorkflowServiceClient workflowServiceClient =
    WorkflowServiceClientFactory.getWorkflowServiceClient
    (WorkflowServiceClientFactory.SOAP_CLIENT);
  ITaskService taskService = workflowServiceClient.getTaskService();
  IInitiateTaskResponse iInitiateTaskResponse = taskService.initiateTask(task);
  Task retTask = iInitiateTaskResponse.getTask();
  System.out.println("Initiated: " + retTask.getSystemAttributes().getTaskNumber() + " - " +
    retTask.getSystemAttributes().getTaskId());
  return retTask;
```

14.2.3 Task Actions and Approvers Table in Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite

Section 27.5, "Approving Tasks" of *Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite* contains the following discrepancies on the types of actions that can be performed on tasks by the various task approvers.

- The owner and creator are listed as being unable to perform the purge task action. This is incorrect. Both of these approvers can perform the purge task action.

- The Admin is listed as being unable to perform the withdraw task action. This is incorrect. This approver can perform the withdraw task action.

14.2.4 Classpath for the workflow-120-SQLIdentityProvider Sample Must Be Replaced

The classpath in the `README.txt` file for the `workflow-120-SQLIdentityProvider` sample is incorrectly listed as `org.sample.providers.ff.DBIdentityStoreFactory`. Replace this value with `org.sample.providers.db.DBIdentityStoreFactory` in the `jps-config.xml` file for this sample to correctly work.

This and other human workflow samples are available from the following location on the Oracle Technology Network:

http://www.oracle.com/technology/sample_code/products/hwf/index.html

15

Oracle B2B

This chapter describes issues associated with Oracle B2B. It includes the following topics:

- Section 15.1, "General Issues and Workarounds"
- Section 15.2, "Configuration Issues and Workarounds"
- Section 15.3, "Documentation Errata"

15.1 General Issues and Workarounds

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

- Section 15.1.1, "Non-administrator Users Can Perform Certain Administrative Tasks"
- Section 15.1.2, "replyToAppMessageId Incorrectly Set in Ack Notifications"
- Section 15.1.3, "Batched EDI Message State Changes for FA Do Not Consider Individual Messages"
- Section 15.1.4, "Batch Messages and Batch Schedules"
- Section 15.1.5, "Notification Is Not Available for an Ack Received for an EDI FA"
- Section 15.1.6, "Oracle Enterprise Manager Displays Truncated Active Document Type Information"
- Section 15.1.7, "FileNotFoundException Message After Saving an EDI Document Definition"
- Section 15.1.8, "Incorrect User Information for Receipt Notification (AS2 MDN) to AQ"
- Section 15.1.9, "Application Message Report Displays Incorrect Document Type"
- Section 15.1.10, "Generated MDN Incorrectly Uses Name Identifier in Inbound Agreement"
- Section 15.1.11, "Oracle B2B Signs MDN Using the Algorithm Set in the Agreement Delivery Channel"
- Section 15.1.12, "Batch Scheduler Does Not Work Properly When Initiated Between 11:50 PM and Midnight"
- Section 15.1.13, "Displayed Data Does Not Automatically Refresh in Multiple Running Instances of the Oracle B2B Interface"

15.1.1 Non-administrator Users Can Perform Certain Administrative Tasks

Although the Save button is not displayed on the Agreement page for remote partner administrators, these users can update and save agreements by editing the agreement name on non-deployed agreements, and then updating and saving the agreements. Oracle B2B does not check the user authorization in this case.

15.1.2 replyToAppMessageId Incorrectly Set in Ack Notifications

Oracle B2B offers a notification of an Ack (AS2-MDN or EDI-FA) that is sent back to a composite or AQ (IP_IN_QUEUE) if configured using the Oracle B2B interface (Administration > Configuration page). The received Ack notification appears similar to the following:

```
<Acknowledgment xmlns="http://integration.oracle.com/B2B/Acknowledgment"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<replyToB2BMessageId>0AB1FE0211FE9335702000000120666E0</replyToB2BMessageId>
<replyToAppMessageId>0AB1FE0211FE9335702000000120666E0</replyToAppMessageId>
<ackB2BMessageId>0AB1FE0211FE9338CB80000012066930-1</ackB2BMessageId>
</Acknowledgment>
```

Note, however, that the `replyToAppMessageId` is always incorrectly set to be the same as the `replyToB2BMessageId`.

15.1.3 Batched EDI Message State Changes for FA Do Not Consider Individual Messages

In a batched message, if multiple documents batched as part of a single message have different settings for the FA in the agreement, Oracle B2B uses the FA setting for the first document and applies the setting to all other documents in the batch.

In the outbound case, documents that do not require functional acknowledgement wait on the FA with a status of MSG_WAIT_FA. In the inbound case, documents for which the FA need not be produced are generated and this can cause FA documents to transition to the MSG_ERROR state if there are no deployed agreements for the FA.

15.1.4 Batch Messages and Batch Schedules

Note the following:

- If an exception occurs during an outbound batch, the batch is not cleared from the repository. This is true even if a trigger has been fired. In this case, you must manually delete the scheduled batch entry using the Administration > Manage Batch page in the Oracle B2B interface.

- If you disable a single time invocation batch schedule, any messages set in WAIT_BATCH mode remain in this mode if the schedule is not re-enabled before the expiry time. Furthermore, a new batch schedule created for the same document will not process these messages. The workaround is to resend the message using the resubmit application message option.

15.1.5 Notification Is Not Available for an Ack Received for an EDI FA

Receipt notification does not occur for an Ack (AS2-MDN) received back for an EDI FA document that was sent.

15.1.6 Oracle Enterprise Manager Displays Truncated Active Document Type Information

In the Oracle Enterprise Manager B2B Infrastructure (SOA Binding) page, the Top 5 Active Document Types section displays inbound messages received using the AS2 exchange showing only the `DocumentTypeName` instead of `DocumentProtocolName DocumentProtocolVersion DocumentTypeName`. For example, 850 may display instead of EDI_X12 4010 850.

15.1.7 FileNotFoundException Message After Saving an EDI Document Definition

After creating an EDI document definition, accessing and saving the document definition (when no updates have been made to the ecs file) can cause a FileNotFoundException message to be generated.

15.1.8 Incorrect User Information for Receipt Notification (AS2 MDN) to AQ

When delivering a receipt notification (AS2 MDN) to AQ, Oracle B2B incorrectly sets the user information to the document routing ID (if the outbound document has a document routing ID set) instead of b2backuser.

15.1.9 Application Message Report Displays Incorrect Document Type

The application message report in the Oracle B2B interface incorrectly displays document types. Specifically, the application message report displays the following:

- For receipt messages, the displayed document type is for the outbound message. If you want to collect metric data on the number of inbound application messages for a specific document type, the issue can cause queries to report incorrect data.

- For FA messages, the displayed document type is the same as the FA message type.

15.1.10 Generated MDN Incorrectly Uses Name Identifier in Inbound Agreement

In synchronous AS2 mode, the generated MDN uses the AS2 Identifier set in the inbound agreement. If no AS2 Identifier is defined in the agreement, then the generated MDN incorrectly uses the name identifier. The workaround is to set the expected AS2 Identifier in the inbound agreement.

15.1.11 Oracle B2B Signs MDN Using the Algorithm Set in the Agreement Delivery Channel

In AS2, a request for a signed MDN from the recipient can specify the algorithm to use for signing. Oracle B2B, however, incorrectly signs the MDN with the algorithm set in the agreement delivery channel. This algorithm may be different from the requested algorithm.

15.1.12 Batch Scheduler Does Not Work Properly When Initiated Between 11:50 PM and Midnight

In the Oracle B2B interface, the default time to initiate an event in the Administration > Configuration > Schedule Batch page is 10 minutes ahead of the current server time. However, if you launch the scheduler between 11:50 PM and midnight, then this default time setting does not work properly.

15.1.13 Displayed Data Does Not Automatically Refresh in Multiple Running Instances of the Oracle B2B Interface

If the Oracle B2B interface is running in two Web browsers or Web browser windows (on the same or different computers), then actions performed in one instance of the Oracle B2B interface may not be automatically reflected in the other running instance. For example, importing metadata in one instance of the Oracle B2B interface is not reflected in the other instance, even after performing a browser refresh.

Clicking on another tab in the Oracle B2B interface and then returning to the previous page causes the information to refresh correctly.

15.1.14 Sending an Unknown AS2 From-Header Is Not Recognized as an Error

When receiving an EDI document over an AS2 exchange, if Oracle B2B fails to identify the trading partner using the AS2 From Identifier, Oracle B2B tries to identify the partner using the EDI Interchange and Group ID. The failure to identify the partner by the AS2 Identifier is ignored.

15.1.15 Incorrect URL in the Wire Message for a Received Synchronous MDN

The synchronous MDN received by the host server in response to an AS2 message sent over SSL shows an incorrect URL in the wire message. Specifically, the URL indicates the HTTPS protocol while the port information is for the HTTP listen port.

15.1.16 Invalid EDI Interchange ID Qualifier or Function Group Identifier Is Not Recognized as an Error

Setting an invalid EDI Interchange ID Qualifier or an invalid Function Group Identifier (not part of the default ecs Qualifier Standard Code List_105 or Function Identifier Code Standard Code List_479 respectively) is not signalled as a MSG_ERROR in the outbound case. Oracle B2B instead delivers the message to the configured endpoint without error.

15.1.17 Oracle Enterprise Manager Shows Incorrect Error Count Following Successful Resubmit

When a B2B channel is configured to retry following an error (such as a transport channel being unavailable) and the message is subsequently successfully delivered, Oracle Enterprise Manager fails to adjust the corresponding error count.

15.1.18 System Validates Saved Data

When validating an agreement, Oracle B2B validates the saved data. Oracle B2B does not validate any unsaved changes that you make to an agreement.

15.1.19 XEngine Is Not Installed on the Second Node in a Clustered Environment

In a clustered environment, the XEngine is not installed on the second node when the node is on another computer. This is because the XEngine extraction occurs only when you run the Configuration Wizard (which is not run automatically on the second node). The workaround is to perform the XEngine extraction manually and then restart the server.

15.1.20 Changes to Identification Fields Do Not Take Effect Until All Referring Agreements Are Purged

When you change the identification fields of a custom document (such as the XPath expression, value, start-position, or end-position, among others), you must retire and purge all agreements referring to the document definition before redeploying the agreements so that the changes take effect. Note that redeploying the agreements without purging does not ensure an update of the identification fields in memory.

15.1.21 Messages Remain in MSG_WAIT_ACK State After Receiving Acknowledgement

When sending EDI messages batched over the AS2 exchange protocol, only one message transitions to the MSG_COMPLETE state after receiving an acknowledgment (MDN). All other messages remain in the MSG_WAIT_ACK state.

15.1.22 EDI Batching Results in Incorrect Average Message Size on Metrics Page

When Oracle B2B batches multiple messages into a single message, the native message size for each business message is recorded as the size of all messages in the batch. This results in Oracle B2B reporting an incorrect average message size on the Metrics pages of the Oracle B2B interface.

15.1.23 Setting a Property Back to Null on the Configuration Page Generates an Error

When using the Administration > Configuration page in the Oracle B2B interface, after you enter a value for a property and save it, you cannot change the property value to null. Doing so causes the Oracle B2B interface to generate the following error:

```
The value must be of the following type: Type Name: non-empty-string Base Type:
string Primitive Type: string With the following constraints:
minimum length: 1 Value '' does not satisfy '' facet : minLength
```

Furthermore, after receiving this error, you cannot update any other values on the Administration > Configuration page. The workaround is to navigate to another page, return to the Administration > Configuration page, and then update the values.

15.1.24 User Deleted Using Oracle WebLogic Console Continues to Appear in Oracle B2B Interface for Several Minutes

After deleting a user using Oracle WebLogic Server Administration Console, the user continues to appear in the Oracle B2B interface for approximately five minutes. This is because the user information remains cached in the managed server (Oracle B2B) for a user-configurable period of time. Performing certain operations, such as provisioning this user, can generate an error.

The workaround is to wait for longer than five minutes after deleting a user using Oracle WebLogic Server Administration Console.

Alternatively, you can specify the following system property in the setDomain.sh file to disable the cache:

```
-Dweblogic.security.identityAssertionTTL=-1
```

15.1.25 Updating a Schedule May Result in Batched Messages Not Being Picked Up

In some cases, Oracle B2B may not pick up batched messages when you update the batching schedule. If you see that batched messages are not being picked up, delete the batch and create a new batch schedule with the same name as the previous batch.

The same name must be used so that Oracle B2B picks up the previous messages in WAIT_BATCH status.

15.1.26 Do Not Purge Instance Metadata When Messages Are Being Processed

Do not purge instance metadata (using the Purge Instance Metadata button on the Administration > Purge tab) when messages are being processed. Doing so can result in messages in progress being lost. Instead, use the `b2bpurge` command-line utility, which accepts a date range and message state as arguments. When using the `b2bpurge` command, remove messages in the Completed state only (unless you have a specific reason for doing otherwise).

15.1.27 Test Page for B2BMetadataWSPort Is Not Found

The test page for B2BMetadataWSPort results in a "404 Not Found" error. The workaround is to change the port number in the URL for the link from the managed server port to the admin server port (7001) and try again.

15.1.28 Use the Oracle B2B Interface Instead of Command-Line Utilities in a Clustered Environment

In a clustered environment, do not use the B2B command-line utilities for purging data, importing data, and exporting data. Use the Oracle B2B interface for these functions.

15.1.29 ebMS Negative Acknowledgments for Decryption and Signature Failures

For ebMS documents, negative acknowledgments for decryption and signature failures are sent as security severity errors. For all other negative ebMS acknowledgments, the error is set as UnknownError.

15.1.30 Issues When Resubmitting Messages Using the AS2 Exchange

Under certain circumstances, resubmitting an asynchronous AS2 inbound wire message does not work as expected. For example, change the state of an inbound agreement to inactive. On receiving a message, a negative acknowledgment is generated and sent back. The sender sees the message state as MSG_ERROR on receipt of the negative acknowledgment. Resolve the issue on the inbound side by changing the agreement state from inactive to active. Now two scenarios for resubmitting the asynchronous message exist:

Scenario A: Resubmit the wire message at the sender's side. Because the message was already processed at the receiver's end, this results in a duplicate error message.

Scenario B: Resubmit the wire message at the receiver's end. This passes at the receiver's end and pushes back a positive acknowledgment message. However, the state of the message on the sender's side is not changed. Although scenario A can be expected, scenario B should have worked. However, because the state of the message is MSG_ERROR, the incoming positive acknowledgment is ignored. This results in inconsistency in reporting at the two ends. The inbound side passes the message to the back-end successfully, whereas the outbound side has the message in the MSG_ ERROR state.

15.1.31 Instance Data Access Java API Is Not Available

The Oracle B2B Instance Data Access Java API is not available in this release. The API will be available in a future release.

15.1.32 XSLTCallout Is Not Available

The predefined callout, `XSLTCallout`, is not available in this release.

15.1.33 Using Oracle B2B Online Help

Allow pop-ups (disable the browser pop-up blocker) to use the Oracle B2B online help.

15.1.34 JTA Settings Based on Loads

Based on the database load and the application server load, tune the transaction timeout setting in the Oracle Weblogic Server Administration Console. Select JTA from the home page and increase the default setting of 30 to a higher value.

15.1.35 Settings for Large Payloads When Using Enqueue Scripts

Set the following properties in the `enqueue.properties` file when enqueuing large payloads:

```
payload=payload_filename_with_absolute_path
eventName=LARGE_PAYLOAD=true
```

Because the full directory path must be provided, use the local computer for this operation.

15.1.36 Batch with One Error in the Outbound CONTRL Message

If a CONTRL message contains multiple document types and one document is in error, then one ORDERS message remains in the `MSG_WAIT_FA` state.

Consider the following example:

A batch containing the following is sent from Acme to GlobalChips:

ORDERS

ORDRSP

ORDERS (duplicate GUID)

ORDERS (new GUID)

The outbound message is sent with one ORDERS message in the `MSG_ERROR` state, as expected. The other messages are in the `MSG_WAIT_FA` state. The inbound FA (CONTRL) updates only the status of one ORDERS and one ORDRSP message. The result is that one ORDERS message remains in `MSG_WAIT_FA`.

15.1.37 FTPS Connection Times Out with Implicit SSL Encryption

Implicit SSL encryption is not supported in the transport layer.

15.1.38 %ACTIONNAME% Filename Format Is Not Recognized

The `%ACTIONNAME%` filename format is not recognized when used with the File, FTP, and SFTP transport protocols.

15.1.39 RosettaNet Message Encoded in UTF-16 Fails at the Receiver's End

Oracle B2B is unable to process an inbound RosettaNet message encoded as UTF-16. A document protocol identification error is returned.

15.1.40 RosettaNet Delivery Channel Settings on Inbound Side

The RosettaNet delivery channel security settings for an inbound agreement must be set as follows:

- When sending back an unsigned receipt acknowledgment message, set both Message Signed and Ack Signed to false (do not select the boxes).

- When sending back a signed receipt acknowledgment message, set both Message Signed and Ack Signed to true (select the boxes). Select the signature algorithm and certificate alias as required.

15.1.41 Save Autogenerated Agreements Before Deployment

Save autogenerated agreements at least once before the agreements are deployed. The agreement parameter settings for translation/validation and FA are generated in the agreement only when you save an agreement and not when it is autogenerated. Although the interface may show the default values, they are not captured in the agreement metadata and are ignored at run time; that is, the inbound EDI message may not be translated.

15.1.42 Permanent MLLP Delivery Channels Can Become Transient After Activation

When creating an MLLP client delivery channel specified using a host name and a permanent connection, the permanent delivery channel can become transient when the in-flight message establishes the connection to the server. The workaround is to use an IP address instead of the host name when creating the client MLLP delivery channel. However, if the connection is pre-established (by enabling the client channel to establish the connection), then the connection works as a permanent connection.

15.1.43 Upgrading from Oracle Integration B2B 10g to Oracle B2B 11g

See the following for upgrade information:

- Section 3.1.1, "Patches Required to Address Specific Upgrade and Compatibility Requirements"

- Section 3.1.8.1, "Service Name Is Required When Using ebMS with Oracle B2B"

- Section 3.1.8.2, "Converting Wallets to Keystores for Oracle B2B 11g"

15.1.44 Some Listening Channel Details Are Not Relevant for the Selected Protocol

On the Listening Channel tab, some parameter fields that are displayed in the Channel Details area based on your protocol selection are not relevant to that protocol. Entering a value for these parameters has no effect. Table 15–1 lists the parameter fields that are *not* relevant.

Table 15–1   Fields That Display but Are Not Relevant for the Selected Protocol

If you select this protocol...	Then you can ignore these parameter fields...
AS1-1.0	Subject, Send as attachment, Ack Mode, Response Mode, Retry Count, Retry Interval, all fields on the Security tab
Generic File-1.0	Retry Count, Retry Interval
Generic AQ-1.0	Retry Count, Retry Interval
Generic FTP-1.0	Use Proxy, Retry Count, Retry Interval
Generic SFTP-1.0	Retry Count, Retry Interval
Generic JMS-1.0	Retry Count, Retry Interval
Generic Email-1.0	Subject, Send as attachment, Retry Count, Retry Interval

15.1.45 FTP Listening Channel Does Not Have Proxy Support

The Generic FTP-1.0 protocol for a listening channel does not have proxy support.

15.1.46 b2bpurge Command-Line Utility May Not Terminate Listening Threads for Inactive Channels

When using the `b2bpurge` command-line utility, if inactive channels exist, then those listening threads are not terminated. The workaround is to repeat the `b2bpurge` call two or three times until the listening threads for the inactive channels are terminated.

15.1.47 Exporting Multiple Agreements That Include Agreement Names That Use a Multibyte Character Language

If you select multiple agreements to export (from Administration > Import/Export), and any of those agreement names are in a multibyte character language, then in the export ZIP file, which contains a separate ZIP file for each agreement, the ZIP file names for the agreement names with the multibyte characters are garbled. The ZIP files with the garbled names are corrupted and cannot be successfully imported. However, a single agreement name (or repository name) in a multibyte character language is exported correctly.

15.1.48 ebMS Delivery Channel Is Required for ebMS Inbound Agreements with Asynchronous Ack Mode

For an inbound agreement that uses an ebMS exchange with the Ack Mode parameter set to asynchronous, an ebMS delivery channel is required.

15.1.49 Even with the Log Level Set to Default, Details Are Written to the Log File

Normally the default log level suppresses details in the log file. However, for RosettaNet deployments, log details are not suppressed even with the default log level setting.

15.1.50 B2B Interface Does Not Show the Custom Trading Partner Icon

If you use a custom icon for a trading partner (a PNG image file) and export the entire repository, then the icon image file is present in the exported configuration (ZIP file). However, if you import the ZIP file to another B2B server, then the custom icon for the trading partner does not appear in the B2B interface.

The workaround is to do the following:

1. Move the image file for the trading partner from the `images` directory to the `images\tpIcons` directory.

    The `images` directory is located under the `b2bui` directory. For example, the directory path looks something like

    DOMAIN_HOME\servers\soa_server1\tmp_WL_user\b2bui*xov2md*\b2bui\images

2. Rename the PNG image file to remove the prepended string, `tpIcons`.

    The directory name is added to the image file name. To preserve the image file name, remove the prepended directory name. For example, if your original image file name is `TP_ICON_tp_dGL-8506012758410451620_mobile.png`, then after moving it, rename it from `tpIconsTP_ICON_tp_dGL-8506012758410451620_mobile.png` back to the original file name, `TP_ICON_tp_dGL-8506012758410451620_mobile.png`.

15.1.51 Enabling Multibyte Support for EDIFACT and HL7 Documents

For documents using the XEngine, such as EDIFACT and HL7 documents, when you have a payload with multibyte characters that are not in the EDIFACT and HL7 document character set registry, you may see the error, "A data element contains characters not listed in the allowed character set."

To avoid this error, create a custom character set (CS) file in Oracle B2B Document Editor called `user.cs`:

1. In Oracle B2B Document Editor, click **Tools** > **Character Set Registry**.

2. In the Character Set Registry window, select the character set you want to override.

    For example, you may want to override EDIFACT UNOB CS or HL7 CS.

3. Click the **Duplicate** icon.

4. In the Duplicate Character Set Properties window, accept the defaults and add the specific multibyte characters at the end of the Charset blank; then click **OK**.

5. With the duplicated file still selected, click the **Export** icon.

6. Name the file `user.cs` and save it.

7. Copy `user.cs` to

    ORACLE_HOME/soa/thirdparty/edifecs/Common

    Now documents such as EDIFACT and HL7 will use the `user.cs` file instead of the default CS file to verify the payload file.

15.1.52 Use UNICODE in the Payload Header for an HL7 Document with Multibyte Characters

If the `a01.xml` payload for an HL7_2.3.1_ ADT_A01 XML document contains multibyte characters, then, to support multibyte characters, you must change the MSH.18 element in the payload from `<MSH.18>ASCII<MSH.18>` to `<MSH.18>UNICODE</MSH.18>`. If the `UNICODE` value is not included, you will get the error "Sub-Component PID5-1-1 (family name) contains characters not listed in the allowed character set." You must also create `user.cs` and modify it to contain the

multibyte characters. See Section 15.1.51, "Enabling Multibyte Support for EDIFACT and HL7 Documents," for more information.

15.1.53 Using Document Definition Names with Multibyte Characters in JDeveloper

When working with document definition names with multibyte characters (MBCS-named document definitions) in the B2B Configuration Wizard in JDeveloper, you may see the error " Invalid UTF8 encoding" at the step where the document definitions are loading for you to select the document definition for the service. This occurs when JDeveloper is running in a non-UTF-8 environment (for example, in Windows, using Simplified Chinese Win2k3, or in a native encoding Linux OS, using zh_CN.gb18030). However, in a Linux environment with UTF-8 encoding, such as zh_CN.utf8, MBCS-named document definitions load correctly. After loading, the MBCS-named document definition becomes the name of the document XSD folder in JDeveloper.

To ensure that MBCS-named document definitions load and display correctly in the B2B Configuration Wizard, do the following:

- When using JDeveloper in a Linux environment, first set the `LANG` and `LC_All` environment variables to a locale with the UTF-8 character set. This enables the operating system to process any characters in Unicode. Then start JDeveloper.

- When using JDeveloper in a Windows environment, start JDeveloper using UTF-8 encoding with `jdev -J-Dfile.encoding=utf-8`.

15.1.54 Do Not Use the anyType Document Handling Option with JMS

In the B2B Configuration Wizard in Oracle JDeveloper, do not select the **anyType** option on the Document Definition Handling - Advanced tab when using the JMS integration type. The **anyType** option allows you to use an XML document without specifying an XSD. However, when it is used with the JMS option to enqueue or dequeue, run-time errors result. Instead, use the opaque or the regular XSD-referenced settings to integrate when using JMS in the B2B Configuration Wizard.

15.1.55 Use Version 1.0 of the ecs and XSD Files for an EDIFACT CONTRL Message

For an EDIFACT document CONTRL message, you must use version 1.0 of the ecs and XSD files. Version 2.0 ecs and XSD CONTRL documents create validation errors for the outbound CONTRL message, which attempts to indicate an error for the failed inbound message.

15.1.56 NULL May Be Displayed in the Document Definition Names for Cloned Partners

Exports from an 11*g* R1 SOA - Oracle B2B installation that contain cloned trading partners will show *null* for document definition names for the definitions in the cloned trading partner. (This issue is not seen with partners cloned using the 11*g* PS1 SOA - Oracle B2B installation.) For example, the definition will appear as EDI_X12-4010-850-null.

When this occurs, recreate the document definition as follows:

1. Delete agreements associated with the document definition. (If you do not delete the agreement, trying to delete the definition produces an error.)

2. Delete the document definition.

3. Create the document definition and add it to the trading partner.

4. Create new agreements containing the document definition.

15.1.57 Suppressing Validation Errors on Extra Elements in HL7 Messages

For HL7 messages, set `HL7.AllowExtraData` to false in `XERegistry.xml` to suppress validation errors on extra elements.

The `XERegistry.xml` file is located in the following directory:

`SOA_HOME\thirdparty\edifecs\XEngine\config`

15.1.58 Oracle B2B in High Availability Environments

See Section 6.2.13, "Message Sequencing and MLLP Not Supported in Oracle B2B HA Environments," for more information.

15.1.59 Transport Callouts Are Not Exported

Transport callouts are not exported as part of trading partner or agreement exports. The channel contains the reference to the callout XML file; however, the file itself is not available. This causes import errors. The workaround is to export the entire repository to get the callout metadata along with the export ZIP file.

15.1.60 Methods for Recovering Messages in High-Stress Environments

Use the following solutions to recover messages that would otherwise be lost in high-stress environments involving outbound messages with multiple instances of Oracle B2B running, each with multiple threads.

Situation 1: Duplicate File Names

In situations where all message file names, *TPname_timestamp*, are sent to the same directory, the timestamps include milliseconds; thus, in normal situations, all file names are unique. However, in high-stress environments, duplicate file names can occur, resulting in files being overwritten by a later file with the same name.

The solution is to append the unique MSG_ID value to file names. In the B2B interface, go to the Partners link and select a remote trading partner. Go to Channels > Transport Protocol Parameters. For channels where the **Filename format** parameter is applicable, add %MSG_ID% as a filename format macro. All file names will then be unique.

Situation 2: Exhausted Message Redelivery Attempts

If you see the message `java.lang.RuntimeException: AppMessage is null:`*msg_id*, a race condition may be indicated. A race condition occurs when a JMS event has been enqueued and dequeued for processing, but the corresponding message is not committed in the run-time repository. The B2B engine will retry the transaction, but it may fail if retry occurs immediately. If all retry attempts are exhausted, the event delivery transaction is rolled back and an exception message is sent to the configured exception queue, if an exception queue is configured.

To configure the exception queue and to resubmit exhausted redelivered messages from the exception queue to B2BEventQueue, use Oracle WebLogic Server Administration Console.

Do the following:

1. Create a queue and name it something like B2BEventException.

2. In the console, go to the settings for B2BEventQueue (Home > JMSModules > SOAJMSModule) and click the Configuration > Delivery Failure tab.

3. For Expiration Policy, select Redirect.

4. For Error Destination, select the queue you created in step 1 (for example, B2BEventException).

   The messages that cannot be processed by B2B for the given redelivery count are forwarded to this error destination queue.

5. Move the messages from the configured error destination queue to B2BEventQueue to resubmit the messages for processing.

   See the Oracle Fusion Middleware Oracle WebLogic Server Administration Console Online Help topic, "Manage queue messages," for how to move messages.

15.1.61 Inbound ebMS Messages Checked Irrespective of Duplicate Elimination Setting

According to ebMS standards, Oracle B2B must check for duplicate inbound ebMS messages *only* if the DuplicateElimination tag is present in the ebMS message. However, currently, B2B tries to detect duplicate inbound ebMS messages irrespective of whether the DuplicateElimination tag is present or not in the ebMS message.

15.1.62 Resubmitting Outbound Complete ebMS Message Errors Out When @ Is Present in b2bmsgid

The @ symbol is not supported in Msgid.

15.1.63 SOA Infrastructure Schema Prevents the Use of Edition-Based Redefinition

Edition-based redefinitions are not supported for SOA B2B in the current release.

15.1.64 The Check Duplicate Control Number Flag Does Not Work with Inbound Messages from Multiple Trading Partners

The **Check Duplicate Control Number** flag, available on the Miscellaneous tab of the Document Protocol Version page for an EDI document, is used to reject incoming EDI messages with duplicate interchange control version numbers. In a situation with multiple trading partners or multi-version batched messages, there are multiple interchanges. However, in this situation, Oracle B2B picks up the setting for the first interchange that it processes and then applies this setting to subsequent interchanges, irrespective of the settings. For example, if the first interchange is received for partner GlobalChips, which has the flag set to reject the duplicate interchange number, then B2B also rejects duplicate interchange numbers for subsequent interchanges, including for trading partners that may not have the flag set to reject duplicates.

15.1.65 No Agreement Found for One Inbound Batched Document Type Errors All

In a batched, inbound EDI message containing multiple documents, failure to find an agreement for one of the documents causes the entire message to fail. The report shows only one business message for the failed document type and an error status. Other document types received as part of the batch are not seen in the reports.

15.1.66 Transport Callouts Are Not Available for Listening Channels

Transport callouts are not available for listening channels.

15.1.67 B2B User/Role Provisioning

In a multiple-node SOA server domain, the JMX framework propagates local changes to a file-based policy to each run-time environment, so that the data is refreshed based on caching policies and configuration.

In a multiple-node server environment, it is recommended that the domain policy and credential stores be centralized in an LDAP-based store. Otherwise, if they are file-based, then local changes to user privileges made in the B2B UI will not be properly propagated and can end up in error situations.

See *Oracle Fusion Middleware Security Guide* for more information.

15.2 Configuration Issues and Workarounds

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

- Section 15.2.1, "Functional Ack Internal Properties Setting Ignored for HL7"
- Section 15.2.2, "Unable To Specify Separate Parameters for Remote Trading Partner Sender and Receiver"
- Section 15.2.3, "Unable To Set Ack Requested Field for Interchange"
- Section 15.2.4, "Overriding Defaults in a Host Document Not Carried to the Remote Trading Partner"
- Section 15.2.5, ""Query Sent to an Unactivated UnitOfWork" Exception"
- Section 15.2.6, "Tablespace Configuration Recommendation for Production Environments"
- Section 15.2.7, "Changes to Ignore Validation on Envelope Elements Setting Require Server Restart"
- Section 15.2.8, "Enable Auto Search Feature Does Not Function"
- Section 15.2.9, "Payload Is Logged Under Trace Level"

15.2.1 Functional Ack Internal Properties Setting Ignored for HL7

For HL7, setting the Functional Ack internal property (FAInternalProperty) to false using the Administration > Configuration page in the Oracle B2B interface causes Oracle B2B to nevertheless use the payload header FA internal properties instead of the design-time parameters.

When the FAInternalProperty is set to true and there are different payload and design-time parameter values, you may see an error in the Ack message. Therefore, it is recommended that you do not set the FAInternalProperty to true for HL7.

15.2.2 Unable To Specify Separate Parameters for Remote Trading Partner Sender and Receiver

Although the metadata for a remote trading partner stores separate information for the sender and the receiver for the same document definition, you cannot specify these differences using the Oracle B2B interface.

The workaround is to create a new document definition and use the two definitions to specify the parameters for the sender and receiver separately.

15.2.3 Unable To Set Ack Requested Field for Interchange

The Oracle B2B interface does not offer the ability to set the Ack Requested field for Interchange.

15.2.4 Overriding Defaults in a Host Document Not Carried to the Remote Trading Partner

When creating a host document, including specifying the version, type, and definition, Oracle B2B assigns default values to certain fields that can be overridden by the user. If you override one or more nonmandatory fields by making them blank and then add the definition to the remote trading partner, the default values that you intentionally left blank reappear for the remote trading partner.

To resolve this issue, manually make the nonmandatory fields blank again for the remote trading partner.

15.2.5 "Query Sent to an Unactivated UnitOfWork" Exception

When using any document protocol, the following exception appears in the seller's soa.log file:

```
oracle.toplink.exceptions.QueryException
Exception Description: Query sent to an unactivated UnitOfWork.
```

The workaround is to increase the JTA timeout from 30 to a higher value using Oracle WebLogic Server Administration Console.

15.2.6 Tablespace Configuration Recommendation for Production Environments

Increase the default tablespace configuration in production environments to prevent error conditions that can occur when processing a large number of messages.

15.2.7 Changes to Ignore Validation on Envelope Elements Setting Require Server Restart

You can specify the envelope elements, separated by commas, to be ignored during look-up validation for agreements. The possible values for ignore validation on envelope elements varies based on the identifiers used in the agreement. For example, for HL7 agreements, you can specify MessageSendingApp, MessageReceivingApp, MessageSendingFacility, and MessageReceivingFacility, among others.

For EDI agreements, the possible values are InterchangeSenderID, InterchangeReceiverID, GroupReceiverID, GroupSenderID, TransactionAssociationAssignedCode, InterchangeReceiverQual, InterchangeSenderQual, and InterchangeControlVersion, among others.

Changes to the Ignore Validation on Envelope Elements setting require you to restart the Oracle B2B server for the setting to take effect.

15.2.8 Enable Auto Search Feature Does Not Function

In the Oracle B2B interface, the Enable Auto Search parameter (on the Administration > Configuration page) does not function in this release.

15.2.9 Payload Is Logged Under Trace Level

When the log level is set to trace for `oracle.soa.b2b.repository`, the payload received by B2B is logged in plain text into the server's `diagnostic.log` file.

15.3 Documentation Errata

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

- Section 15.3.1, "Oracle Fusion Middleware User's Guide for Oracle B2B Has More Information Than Online Help"

- Section 15.3.2, "Default Value for the b2b.r1ps1 Property Is True"

- Section 15.3.3, "B2B Configuration Wizard Tooltip in JDeveloper Incorrectly Refers to OC4J"

15.3.1 Oracle Fusion Middleware User's Guide for Oracle B2B Has More Information Than Online Help

See *Oracle Fusion Middleware User's Guide for Oracle B2B* for more complete information than what is available from the **Help** link in Oracle B2B. In particular, the guide includes descriptions of the Active Document Types fields and Active Trading Partners fields (Table 17-1) and the Summary fields (Table 17-2) that are not found in the online help.

15.3.2 Default Value for the b2b.r1ps1 Property Is True

In Figure 30-3, "Configuring B2B Attributes," in *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite*, the value displayed for the b2b.r1ps1 property in the Element_1 node is incorrect. The default value for this property is true, not false.

15.3.3 B2B Configuration Wizard Tooltip in JDeveloper Incorrectly Refers to OC4J

The descriptive text (tooltip) that pops up when you move the cursor over the **Test B2B** button on the Application Server Connection page of the B2B Configuration Wizard in Oracle JDeveloper incorrectly refers to the SOA OC4J HTTP port. Clicking this button tests the B2B server connection.

16

Oracle BPEL Process Manager

This chapter describes issues associated with Oracle BPEL Process Manager. It includes the following topic:

- Section 16.1, "General Issues and Workarounds"

Note: For details about restrictions on using non-ASCII characters in BPEL monitor metric names, see Section 17.1.24, "BPEL Monitor Metric Names in Non-ASCII Characters Causes Deployment Error, Missing Data Object on Oracle BAM Server."

16.1 General Issues and Workarounds

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

- Section 16.1.1, "No Restriction on Adding a Compensate Activity to any Part of a BPEL Process Flow"

- Section 16.1.2, "Exception in Switch Activity Evaluation Returns an Error"

- Section 16.1.3, "Use a Wait Activity Instead of thread.sleep() in a Java Embedding Activity"

- Section 16.1.4, "Using Dynamic HTML for Message Content in an Email Activity Requires the Use of a CDATA Function"

- Section 16.1.5, "Do Not Specify the wsa and bpel Normalized Message Property Prefixes with the bpelx:property"

- Section 16.1.6, "Oracle JDeveloper May Hang When Using the Expression Builder"

- Section 16.1.7, "Cannot Format the Body of an E-mail Message as HTML with the processXSLT Function"

- Section 16.1.8, "getVariableData Function Throws a selectionFailure if the Result Node Set is of a Size Other Than One During Execution"

- Section 16.1.9, "Oracle JDeveloper Hangs when Nested Expressions are Manually Entered in the Expression Builder"

- Section 16.1.10, "Selecting the Key for an Entity Variable in the Browse Entity Variable Dialog"

- Section 16.1.11, "BPEL Project Customization Does Not Support DVM and XREF Files"

- Section 16.1.12, "MIME Type for Voice Notification in BPEL Voice Activity Requires Modification"

- Section 16.1.13, "Callback Not Received When Two Asynchronous Methods Are Invoked Using the Same Partner Link Definition"

- Section 16.1.14, "Cannot Upgrade Oracle BPEL Process Manager Client Java API Reference to 11g Release 1"

- Section 16.1.15, "New Composite Instance Created when a Subsequent Invoke Activity Goes into a BPEL Midprocess Receive Activity"

- Section 16.1.16, "Parsing of MIME Attachments is Not Supported"

- Section 16.1.17, "sensorAction.xml File is Not Correctly Updated After Activity or Variable Sensor Changes"

16.1.1 No Restriction on Adding a Compensate Activity to any Part of a BPEL Process Flow

As described in section "Using Compensation After Undoing a Series of Operations" of the *Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite*, the compensate activity is only called in the fault handler or compensate handler of the area immediately encompassing a scope activity.

However, you are not restricted from adding a compensate activity to any other part of your BPEL process flow in the BPEL Process Designer of Oracle JDeveloper. If you add a compensate activity outside of a scope, a null pointer exception error is displayed during project compilation. Note that this error message does not clearly indicate that the problem is that you added the compensate activity outside of a scope activity.

Only use a compensate activity in a fault handler or compensate handler of a scope activity.

16.1.2 Exception in Switch Activity Evaluation Returns an Error

If you use a `selectionFailure` or an XPath expression in a switch case evaluation and an exception error occurs, the default behavior is to return an exception error to the client. This behavior is in compliance with the Business Process Execution Language for Web Services Specification. For example, the following switch activity condition returns an exception error, as expected.

```
<switch name="SwitchWhatIf">
  <case
condition="bpws:getVariableData('inputVariable','payload','/client:BPELBulkImp
ortProcessRequest/client:action') != 'PREIMPORT'">
```

This condition is only false, and therefore does not return an exception, when `action='PREIMPORT'`.

16.1.3 Use a Wait Activity Instead of thread.sleep() in a Java Embedding Activity

If you create and deploy a BPEL process that uses `thread.sleep()` in a Java Embedding activity, the executing thread is blocked and the transaction associated with that thread is prevented from committing. This causes BPEL instances to show up only after the wait is over, which is the expected behavior.

Instead, use a wait activity, which releases the resource upon entering the activity and enables the ongoing transaction to commit and the BPEL instance data to hydrate into the data store.

16.1.4 Using Dynamic HTML for Message Content in an Email Activity Requires the Use of a CDATA Function

If the HTML for the message content of an email activity is generated dynamically, (as with XSLT, file read, and so on), it must be wrapped in a CDATA function. This prevents conflicts between the XML/HTML content of the message body and BPEL's internal XML data structures.

For example, assume you use the following append operation for the message content inside the email activity:

```
<bpelx:append>
  <bpelx:from
    expression="ora:processXSLT('xsl/email.xslt',bpws:getVariableData('Variable_1'
    ))"/>
  <bpelx:to variable="varNotificationReq" part="EmailPayload"
    query="/EmailPayload/ns1:Content/ns1:ContentBody/ns1:MultiPart/ns1:BodyPart[1]
    /ns1:ContentBody"/>
</bpelx:append>
```

For this to work correctly, you must pass the output of the processXSLT() function to the CDATA() function.

```
<%ora:toCDATA(xdk:processXSLT('xsl/email.xslt',
 bpws:getVariableData('inputVariable','payload','/client:process/client:input')
 ))%>
```

16.1.5 Do Not Specify the wsa and bpel Normalized Message Property Prefixes with the bpelx:property

Tables H-1 and H-2 of Appendix H, "Normalized Message Properties" of the *Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite* describe the Oracle BPEL Process Manager and Oracle Web Services Addressing properties.To use these properties correctly with the bpelx:property in activities such as a receive activity, ensure that you do *not* include the wsa. or bpel. prefixes. For example:

```
<receive name="receiveInput" partnerLink="bpelprocessb_client"
portType="client:BPELProcessB" operation="process" variable="inputVariable"
 createInstance="yes">
          <bpelx:property name="action" variable="v1"/>
          <bpelx:property name="messageId" variable="v2"/>
          <bpelx:property name="relatesTo" variable="v3"/>
          <bpelx:property name="replyToAddress" variable="v4"/>
          <bpelx:property name="replyToPortType" variable="v5"/>
          <bpelx:property name="replyToService" variable="v6"/>
</receive>
```

16.1.6 Oracle JDeveloper May Hang When Using the Expression Builder

Using the Expression Builder to build XPath expressions may cause Oracle JDeveloper to hang. If that happens, perform the following steps:

1. Kill the Oracle JDeveloper process.

2. Restart Oracle JDeveloper.

3. Select **Tools** > **Preferences** > **SOA**, and deselect the **Validate Expression** checkbox.

After performing these steps, Oracle JDeveloper should no longer hang.

16.1.7 Cannot Format the Body of an E-mail Message as HTML with the processXSLT Function

You cannot use the BPEL XPath extension function `processXSLT` to format the body of an e-mail message as HTML. For example, assume you use the `append` operation for the content body and the `processXSLT` function to get the content in HTML format inside an e-mail activity:

```
<bpelx:append>
  <bpelx:from
    expression="ora:processXSLT('xsl/email.xslt',bpws:getVariableData('Variable_1'
      ))"/>
  <bpelx:to variable="varNotificationReq" part="EmailPayload"
    query="/EmailPayload/ns1:Content/ns1:ContentBody/ns1:MultiPart/ns1:BodyPart[1]
      /ns1:ContentBody"/>
</bpelx:append>
```

The Oracle Enterprise Manager Fusion Middleware Control Console audit trail indicates that the payload is passed to the notification service, but the e-mail that is sent contains no content.

16.1.8 getVariableData Function Throws a selectionFailure if the Result Node Set is of a Size Other Than One During Execution

According to the Business Process Execution Language for Web Services Specification, if the the `locationPath` argument of the `bpws:getVariableData()` function selects a node set of a size other than one during execution, the standard fault `bpws:selectionFailure` *must* be thrown by a compliant implementation.

For example, the following `count()` function does not work if there are multiple entries of `product` elements under `StoreRequest`, which would cause a `selectionFailure` fault to be thrown.

```
count(bpws:getVariableData('inputVariable',
 'payload','/ns2:StoreRequest/ns2:product'))
```

To make this work, change the syntax to the following:

```
"count($inputVariable.payload/ns2:product)"
```

16.1.9 Oracle JDeveloper Hangs when Nested Expressions are Manually Entered in the Expression Builder

Oracle JDeveloper hangs when you manually enter nested expressions in the **Expression** field of the Expression Builder dialog.

As a workaround, manually edit the BPEL project in **Source** view.

16.1.10 Selecting the Key for an Entity Variable in the Browse Entity Variable Dialog

When selecting the local part of an entity key by browsing entity variables, entity icons display in the expanded element tree. These icons are identified by a blue x inside parentheses, and indicate which elements include entity keys. Selecting these elements does not update the **Key Local Part** or **Key Namespace URI** fields in the Specify Key dialog. Instead, you must expand these elements to select the actual key to get the key's local part and namespace. For example:

1. In the Bind Entity dialog, click the **Add** icon to invoke the Specify Key dialog.

2. To the right of the **Key Local Part** field, click the **Browse Entity Variable** icon.

3. Note that a blue x inside parentheses indicates which elements include entity keys. Do *not* select these elements.

4. Expand these elements to display the entity keys available for selection.

5. Select an entity key, and click **OK**.

    The **Key Local Part** and **Key Namespace URI** fields of the Specify Key dialog are populated with information about your selection.

16.1.11 BPEL Project Customization Does Not Support DVM and XREF Files

Domain value map (DVM) and cross reference (XREF) files are not supported in a SOA composite application that is enabled for customization.

For more information about customization of BPEL projects, see Chapter 15, "Customizing SOA Composite Applications" of *Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite*.

16.1.12 MIME Type for Voice Notification in BPEL Voice Activity Requires Modification

In a BPEL voice activity, the MIME type for message content generated in the source code is in `text/vxml` format. However, the message sent from the composite to the voice XML driver must be in `text/plain` format. This is because the voice XML driver adds the voice XML wrapper to the message before sending it to the destination point.

If the message content sent to the driver is in `text/vxml` format for the MIME type, a message delivery failure occurs. Therefore, manually change the MIME type for the voice payload content to be `text/plain` in **Source** mode in Oracle JDeveloper.

```
<scope name="VoiceApproval">
. . .
. . .
  <copy>
    <from expression="string('text/plain')"/>
    <to variable="varNotificationReq" part="VoicePayload"
    query="/VoicePayload/ns1:Content/ns1:MimeType"/>
  </copy>
. . .
. . .
</scope>
```

16.1.13 Callback Not Received When Two Asynchronous Methods Are Invoked Using the Same Partner Link Definition

A BPEL process does not receive a callback when two asynchronous methods are invoked on an external stateless web service using the same partner link definition.

As a workaround, perform one of the following tasks:

- Create a separate partner link for each invoke and receive pair in the BPEL process when calling this type of web service. The callback is received and the BPEL process completes successfully when you have more than one method invoked on the same partner link.

- Add the extension attribute `bpelx:conversationId` to an invoke activity, receive activity, or onMessage branch of a pick activity. This enables you to

programmatically set the conversation ID and have multiple conversations on one partner link. For example:

```
<invoke name="Invoke_1" inputVariable="Variable_1"
        partnerLink="BPELProcess2.bpelprocess2_client"
        portType="ns4:BPELProcess2" operation="process"
        bpelx:conversationId="bpws:getVariableData('convId1')"/>
<invoke name="Invoke_2" inputVariable="Variable_1"
        partnerLink="BPELProcess2.bpelprocess2_client"
        portType="ns4:BPELProcess2" operation="process"
        bpelx:conversationId="bpws:getVariableData('convId2')"/>
<receive name="Receive_1" createInstance="no"
        variable="Variable_2"
        partnerLink="BPELProcess2.bpelprocess2_client"
        portType="ns4:BPELProcess2Callback"
        operation="processResponse"
        bpelx:conversationId="bpws:getVariableData('convId1')"/>
<receive name="Receive_2" createInstance="no"
        variable="Variable_2"
        partnerLink="BPELProcess2.bpelprocess2_client"
        portType="ns4:BPELProcess2Callback"
        operation="processResponse"
        bpelx:conversationId="bpws:getVariableData('convId2')"/>
```

16.1.14 Cannot Upgrade Oracle BPEL Process Manager Client Java API Reference to 11g Release 1

Custom applications coded with the Oracle BPEL Process Manager 10.1.3 Client Java API cannot currently be upgraded to the 11*g* Release 1 Client Java API. As a workaround, you can use the Infrastructure Management API that is shipped with Release 1. However, note that this API is currently being rationalized and reworked. Periodic updates to the Infrastructure Management JavaDoc are being made available on the Oracle Technology Network. Visit the following URL for details:

http://www.oracle.com/technology/products/soa/bpel/collateral/documentation.html

16.1.15 New Composite Instance Created when a Subsequent Invoke Activity Goes into a BPEL Midprocess Receive Activity

This occurs because the caller does not provide information about the composite instance ID in a subsequent call. Therefore, the Service Infrastructure creates a new composite instance, although the call is routed to an already-created composite instance.

16.1.16 Parsing of MIME Attachments is Not Supported

A BPEL process can receive a MIME attachment along with the payload. The attachment can be in any format (for example, doc, PDF, JPEG, XML, text, and so on). If the BPEL process receives an XML attachment and must parse the XML to get an element value, you cannot do it using a single XPath function. This task must be performed in two steps:

1. Use the `ora:writeBinaryToFile` XPath function.

```
<copy>
    <from expression="ora:writeBinaryToFile('input2','bin',
 'file:///tmp/out/attachment.xml')"/>
    <to variable="input2" part="bin"/>
```

```
    </copy>
```

2. Use the `doc` XPath function to read the XML element from the above file.

```
<copy>
    <from expression="ora:doc('file:///tmp/out/Input.xml')"/>
    <to variable="DecodedAttachment" query="/ns1:discountandshipping"/>
</copy>
```

16.1.17 sensorAction.xml File is Not Correctly Updated After Activity or Variable Sensor Changes

When you modify the name of an activity sensor or variable sensor in monitor view in Oracle BPEL Designer, the `sensorAction.xml` file is not correctly updated. Old sensor names still exist and must be removed manually from the `sensorAction.xml` file before deploying the SOA composite application. For example, assume you change a sensor name from `ActivitySensor_1` to `MyActivitySensor_1`. If you save your changes and look in the `sensorAction.xml` file, both the old and new names are displayed:

```
<?xml version = '1.0' encoding = 'UTF-8'?>
<actions
@ targetNamespace="http://xmlns.oracle.com/TryUpdateSensorApp_jws/TryUpdateSenso
@ rApp/TryUpdateSensorApp" xmlns="http://xmlns.oracle.com/bpel/sensor"
@ xmlns:tns="http://xmlns.oracle.com/TryUpdateSensorApp_jws/TryUpdateSensorApp/T
@ ryUpdateSensorApp" xmlns:pc="http://xmlns.oracle.com/bpel/sensor">
   <action name="SensorAction_1" publishName=""
publishType="BpelReportsSchema" enabled="true" filter="" publishTarget="">
      <sensorName>ActivitySensor_1</sensorName>
      <sensorName>MyActivitySensor_1</sensorName>
   </action>
</actions>
```

Open the file in **Source** view in Oracle BPEL Designer and remove the line with the old name, then save the file.

```
<sensorName>ActivitySensor_1</sensorName>
```

17

Oracle Business Activity Monitoring

This chapter describes issues associated with Oracle Business Activity Monitoring. It includes the following topics:

17.1 General Issues and Workarounds

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

- Section 17.1.18, "Select Higher Time Groupings in Crosstab Views"

- Section 17.1.19, "Invoking an Oracle Data Integrator Scenario With Date Input From Oracle BAM Alert Rule"

- Section 17.1.20, "Do Not Use Time Dimension For Drilling Down in a Collapsed List"

- Section 17.1.21, "Active Now Applied After Initial Prompt Creation Shows Error in View"

- Section 17.1.22, "Active Now Fails To Drop Rows When the Time Window Advances"

- Section 17.1.23, "Chart View Displays Text Instead of a Chart When the Window is Not Initially Maximized"

- Section 17.1.24, "BPEL Monitor Metric Names in Non-ASCII Characters Causes Deployment Error, Missing Data Object on Oracle BAM Server"

- Section 17.1.25, "Potential Issues with Oracle BAM Order Booking Sample Application"

- Section 17.1.26, "SSL Connection to Oracle BAM Is Not Supported for Monitor Express"

- Section 17.1.27, "Updated Oracle BAM Adapter Connection Pool Throws ClassLoaderException"

- Section 17.1.28, "Providing Incorrect Credentials to Oracle BAM Web Service Call Can Result in Lockout, Incorrect Exception Shown"

- Section 17.1.29, "Calculated Fields Cannot Use Datetime Type Field"

- Section 17.1.30, "Save in Excel 2007 Format Does Not Work"

- Section 17.1.31, "Matrix View Can Yield Incorrect Results in Certain Situations"

- Section 17.1.32, "Failure to Send Message to Oracle BAM is Not Reported on Oracle Fusion Middleware Control Console"

- Section 17.1.33, "Tabs Sometimes Missing in Oracle BAM Active Studio"

- Section 17.1.34, "SPC S-Chart Displays Incorrect Limits"

- Section 17.1.35, "SPC R-Chart Displays Incorrect Chart"

17.1.1 Oracle BAM Client System Requirements

Platforms:

Microsoft Windows Intel x86-32:

- Microsoft Windows XP Professional, Service Pack 2 or higher

- Microsoft Windows Vista

Web Browsers:

- Microsoft Internet Explorer 7.x

- Microsoft Internet Explorer 8.x

Hardware:

- 1 CPU at 1.2 GHz or faster minimum (a faster processor may be necessary to view complex dashboards)

- 512 MB RAM minimum

- 5 MB of free disk space

Display:

- Oracle BAM Active Studio requires 1024 x 768 minimum resolution

- Oracle BAM Active Viewer requires 800 x 600 or higher resolution

Additional Requirements for Optional Excel View in Oracle BAM Active Viewer or Oracle BAM Active Studio:

The Oracle BAM Excel view type requires that Microsoft Excel version XP, 2003, or 2007 is installed on the client computer.

Notes:

If you are using the Microsoft Windows pop-up blocker, or any other tool that blocks pop-up browser windows, you must configure it to allow pop-up windows while using the Oracle BAM Web applications. Turn off pop-up blockers in Microsoft Internet Explorer for the URL on which the Oracle BAM Web applications are hosted.

The Microsoft Internet Explorer installation on client systems must be a standard version, and it must not include customizations such as add-in tool bars or hot bars for other Web sites.

17.1.2 New Product Features in This Release

The following are new Oracle BAM features in this release:

- Oracle BAM data control for ADF development in Oracle JDeveloper

- Monitor Express dashboard for displaying BPEL monitoring object data

- Microsoft Internet Explorer 8 certification

- Enable and disable BPEL sensors (including Oracle BAM sensors) in BPEL processes at the global level in Oracle Enterprise Manager Fusion Middleware Control and at the project-level in Oracle JDeveloper.

- Oracle BAM Architect user interface enhancements for Enterprise Message Sources

- Improved Alert diagnostics in Oracle BAM Active Studio

- Improved purge (delete rows from a data object) Alert performance

- Configure Oracle BAM Adapter properties using Oracle WebLogic Server Administrative Console

- Support for `datetime` and `timestamp` filters to work in user preferred time zone

See the Oracle BAM page on the Oracle Technology Network Web site for additional information about this release:

http://www.oracle.com/technology/products/integration/bam

17.1.3 Some Product Features Previews Only

Preview features are for evaluation only.

ICommand Web Service is a preview feature.

Saving reports in MHT format is a preview feature. Save Offline, e-mailing rendered reports, and e-mailing a report in Alerts save the report in the MHT format.

The following report views are preview versions: P-Chart, R-Chart, S-Chart, Columnar, Crosstab, Summary Crosstab, Matrix, Excel, Column Group, and Row Group.

17.1.4 Accessibility Compliance Limitation

This version of Oracle BAM does not comply with accessibility standards provided in other Oracle products. Future versions plan to comply with these standards.

17.1.5 Oracle BAM Upgrade-Related Issues

For a complete list of Oracle BAM upgrade issues, see the following sections:

- Section 3.1.1, "Patches Required to Address Specific Upgrade and Compatibility Requirements", which includes information on an Oracle Database patch that is required before you perform an Oracle BAM schema upgrade.

- Section 3.1.3, "Oracle BAM Upgrade Issues", which consolidates various known issues and workarounds when upgrading Oracle BAM to 11*g*.

17.1.6 JDBC Data Source Statement-Cache-Size Must Be Set to Zero For Oracle BAM

For single instance database installs, the statement cache size will already be set to 0 (zero) by default. Do not change this to a non-zero value.

For installs against a RAC database, the statement cache size must manually be set to 0 for each RAC data source; otherwise, data corruption may occur and the Oracle BAM Active Data Cache may need to be restored from a backup (or reinitialized if no backups are available).

17.1.7 Database Must Be Started Before Oracle BAM

Oracle BAM applications are not functional if the database on which Oracle BAM depends is started few minutes later than Oracle BAM Server.

17.1.8 Batched Messages Lost on BPEL Server Restart

An Oracle BAM sensor action cannot be notified of BPEL events, and the messages sent to Oracle BAM from the BPEL server are only stored in memory; therefore, when the BPEL server restarts, all the messages still on the BPEL side are lost.

This behavior is by design, and there is no workaround.

17.1.9 Oracle Data Integrator IKM and LKM Operations For Oracle BAM Fail During RAC or Whole Server Migration Failover

When an interface involving Oracle BAM IKM and LKM modules is in execution when either the RAC database fails over or Oracle BAM Server undergoes whole server migration, then, at the instant that the failover starts, the Oracle Data Integrator session reports an exception for that particular step, and the execution for the entire interface is halted.

The user will have to re-execute that interface. If commit size was set to zero (for any of the IKM SQL to Oracle BAM-based interfaces), the entire transaction is rolled back. In those cases where a different commit size was used, the user will have to take adequate steps to avoid data duplication in the target data store upon re-execution.

17.1.10 Limitations With Single EAR and Two Oracle BAM Targets in Oracle Enterprise Manager Fusion Middleware Control

Oracle BAM presents the following limitations because in this release Oracle BAM Web applications and Oracle BAM Server are only deployed in a single EAR, but are represented in Oracle Enterprise Manager Fusion Middleware Control using two separate targets:

■   Along with two custom targets, Oracle BAM Server and Oracle BAM Web applications, The Oracle BAM application also appears as a generic J2EE application in the Application Deployments list in Oracle Enterprise Manager Fusion Middleware Control navigation tree, and in the Farm home page. It is recommended that the user only use custom Oracle BAM targets (`OracleBAMServer` and `OracleBAMWeb`), the internal application target (`oracle-bam`) should not be used.

Additional information about the generic `oracle-bam` J2EE application target: The generic J2EE application target (oracle-bam) despite being an internal application, still appears under parent Application Deployments and not in the sub-folder Internal Applications of Application Deployments. Moving oracle-bam generic J2EE application target to Internal Applications folder has been deferred.

■   The Stop and Start commands in the Oracle BAM Server and Oracle BAM Web applications menus in Oracle Enterprise Manager Fusion Middleware Control pages does not stop or start the corresponding target only, it stops the entire Oracle BAM application (Oracle BAM Server and Oracle BAM Web applications).

■   Viewing any J2EE metrics in the context of Oracle BAM Server or Oracle BAM Web applications actually presents the view for entire J2EE application. (From performance page and Oracle WebLogic Server page the user gets access to the J2EE application metric).

■   Oracle WebLogic Server (Managed Server) home page shows three deployed applications for each Oracle BAM install (two custom targets and one generic J2EE application target). Corresponding to each target there are few J2EE application metrics shown. Because J2EE metrics correspond to each deployment, the metrics values get repeated for all of the Oracle BAM targets. The workaround is displaying metric values only against one target and the other two showing n/a.

17.1.11 Oracle Enterprise Manager Fusion Middleware Control MBean Browser Does Not Validate Values

The MBean browser in Oracle Enterprise Manager Fusion Middleware Control does not have any validation in place to check whether the entered value is correct or not.

17.1.12 Unable To Extend Tablespace

When you see the `Unable to extend tablespace` error message, you can do the following:

■   Increase the tablespace size.

■   If you cleared a large amount of data from a data object, and expect the tablespace to have more data, you might still see this error. The table space release is not synchronous, and you must run command `ALTER TABLE` *table_name* `SHRINK SPACE`.

17.1.13 Unable to Create or View Report With User With No Permissions on System Folder

A user assigned to a non-Administrator role may be unable to create or view reports, but has the privileges to do so, and gets the following error:

DATAOBJECTPERMISSIONMISSINGEXCEPTION_ACTIVESTUDIO_ REPORTEDITOR_EDITREPORT

Exception Message BAM-01257: Insufficient permission to perform the requested action.

This is due to the user not having at least Read permissions on the /System folder in Oracle BAM Architect.

17.1.14 Opening Report on Two Systems Causes Language Mix

The same user opening a report on two different computers with different language settings causes a language mix in the Oracle BAM user interface.

A single user should not log in simultaneously on different computers with two different language settings.

17.1.15 Oracle BAM Event Engine Cannot Call WS-Security-Enabled Web Services

As part of an Oracle BAM alert action, Oracle BAM Event Engine can call external Web services. However, for secure Web services, Oracle BAM Event Engine supports calling only HTTP Basic authentication protected Web services. Configuring an alert action to call WS-Security enabled Web services is not supported.

The Web service alert action now supports a couple of basic OWSM security policies namely `oracle/wss_http_token_client_policy` and `oracle/wss_username_token_client_policy`. These policies could be used to invoke Web services which are protected by corresponding server side OWSM policies. By default, all secure Web service invocations (requiring user name and password to be passed) would use `oracle/wss_http_token_client_policy` which essentially makes client to go through BASIC HTTP authentication.

17.1.16 Use Single Quotation Marks in ICommand Web Service Export Command

Using double quotation marks (") around the `file` value in ICommand export does not work.

Use single quotation marks (') instead of double quotation marks to specify the `file` value.

```
<?xml version="1.0" encoding="utf-8"?><IstanteCommands><export name='/Samples/Film
Sales' file='c:\do_with_data.xml' type="dataobject"/></IstanteCommands>
```

17.1.17 Alert Fires Multiple Times Using COUNTDISTINCT Aggregate

When operation COUNTDISTINCT-based aggregate is chosen in Group filters in data object and report based alerts, the user might see the alert firing multiple times, even if the alert criterion was satisfied only once in the data. This behavior is seen when bulk data object operations are performed. That is, if multiple rows are inserted, deleted, updated, or upserted in the data object at one time.

17.1.18 Select Higher Time Groupings in Crosstab Views

Grouping by Week in a Crosstab or Chart view could cause group values for Day of Month or Day of Week to be calculated incorrectly for weeks that include the end of one month and the beginning of another.

Include Day of Year in the grouping along with Day of Month or Day of Week.

17.1.19 Invoking an Oracle Data Integrator Scenario With Date Input From Oracle BAM Alert Rule

When you must pass a date input through an Oracle BAM alert rule invocation to an Oracle Data Integrator scenario, it is recommended that you set up the Oracle Data Integrator scenario to use an `alphanumeric` type variable instead of `date` type. Using a `date` type variable may lead to a parse exception within the Oracle Data Integrator agent which results in a failure to invoke the scenario successfully.

When this `alphanumeric` type variable is used within the definition of the Oracle Data Integrator interface, use the `TO_DATE` function along with the format in which the date is expected. For example, with a project level variable named `alphVariableName`, the function usage would be:

```
TO_DATE('#alphVariableName','YYYY-MM-DD')
```

Within the Oracle BAM alert rule definition (for the **Run an ODI scenario** action), pass the date to be input in the same format.

17.1.20 Do Not Use Time Dimension For Drilling Down in a Collapsed List

Drilling down on a time or date dimension in a collapsed list view causes an exception. Use chart views only to drill down on time or date dimensions.

17.1.21 Active Now Applied After Initial Prompt Creation Shows Error in View

While creating filter on a `datetime` field, if you create a prompt with **is greater than** comparison first without configuring Active Now, then later on if you change the prompt from the Change Report Properties dialog to configure Active Now, an error does not appear in the user interface, but when the report view runs it will display an error, because the prompts are stored independently of the views they are used in.

In short, a prompt cannot detect how it is used in a report, so a change in a prompt may produce unexpected results.

17.1.22 Active Now Fails To Drop Rows When the Time Window Advances

If a user designs a report view with a combination of Continuous Time Series on a `datetime` or `timestamp` type column, and configures a filter for that column using **is within a time interval** and enabling **Active Now** (this combination is also known as Absolute Active Now), at times, the report might not drop or add the rows as the time window advances. This is due to the time boundary mismatch between Absolute Active Now and Continuous Time Series.

Active Now time is based on seconds, and considers the report opening time as its starting point (for example, the report is opened at 10.30:15 AM), and the end point is relative to the starting point.

However, Continuous Time Series considers the upper boundary at the time unit level chosen by the user (for example, the report is configured to use minutes as the time unit, so the starting time is considered to be 10.30:00 AM).

This mismatch in time units causes the report to not add or drop rows until the row has been dropped or added in terms of seconds according to the Absolute Active Now time period.

17.1.23 Chart View Displays Text Instead of a Chart When the Window is Not Initially Maximized

When report is opened in sub-maximal sized Web browser window, a chart view area may display the message "The view area is too small to represent the current data." When the Web browser window is maximized, the message might not be replaced by the expected chart view.

To work around this issue, always launch Oracle BAM reports in maximized Web browser windows.

17.1.24 BPEL Monitor Metric Names in Non-ASCII Characters Causes Deployment Error, Missing Data Object on Oracle BAM Server

Business Indicator monitoring object metric names cannot contain non-ASCII characters. In Oracle BAM Server, only the Component, Counter, and Business Indicator data objects are created correctly. The process-related data object is not created.

17.1.25 Potential Issues with Oracle BAM Order Booking Sample Application

Design-Time Issues

When the sample application archive (`SOA_ORACLE_HOME/bam/samples/bam/order_booking/jdev_project/OrderBookingWithBAMSensors.zip`) is opened in Oracle JDeveloper, it is possible that you may observe design-time issues, such as broken partnerlink associations or valid database connections that cannot connect to a target database when editing the database adapter, and so on.

It is also possible, that you may sometimes experience problems attempting to run tests using the Oracle Enterprise Manager test console after modifying and redeploying this application to the SOA server.

To avoid these issues, it is recommended that you download a more recent version of the sample application from the Oracle Technology Network Web site located at

http://www.oracle.com/technology/sample_code/products/bam

Oracle Enterprise Manager Test Console Issue

There is a known issue with Oracle Enterprise Manager test console when submitting a `datetime` type payload.

If a BPEL process requires a `datetime` type input argument in its payload, and this process is tested using Oracle Enterprise Manager test console, the console drops the time data provided and adds an offset to the date value provided.

For example, an input of `2001-01-01 08:00:00 AM` is modified, and reaches the BPEL process as `2000-12-31-08:00`. This modification happens when the input was provided using Tree View.

This issue is likely to impact attempts to test the BPEL and Oracle BAM integration, such as when testing the OrderBookingWithBAMSensors sample shipped with Oracle BAM.

It is recommended that you provide the input using XML View rather than Tree View, or enter the inputs in Tree View, then toggle to XML View, review the data, and then submit the test request from the XML View.

For your convenience, use the payload sample below to test the sample application. Copy this payload into the XML View in Oracle Enterprise Manager test console for the OrderBookingBAM BPEL process.

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
   <soap:Body xmlns:ns1="http://www.globalcompany.com/ns/order">
      <ns1:PurchaseOrder>
         <ns1:CustID>10</ns1:CustID>
         <ns1:ID>1</ns1:ID>
         <ns1:ShipTo><ns1:Name/><ns1:Address/></ns1:ShipTo>
         <ns1:BillTo><ns1:Name/><ns1:Address/></ns1:BillTo>
         <ns1:UserContact><ns1:PhoneNumber/><ns1:EmailAddress/></ns1:UserContact>
         <ns1:OrderItems/>
         <ns1:SupplierInfo>
            <ns1:SupplierPrice>10</ns1:SupplierPrice>
            <ns1:SupplierName>SupplierABC</ns1:SupplierName>
         </ns1:SupplierInfo>
         <ns1:OrderInfo>
            <ns1:OrderDate>2001-01-01T15:10:20.000-07:00</ns1:OrderDate>
            <ns1:OrderPrice>25</ns1:OrderPrice>
            <ns1:OrderStatus>open</ns1:OrderStatus>
            <ns1:OrderComments/>
         </ns1:OrderInfo>
      </ns1:PurchaseOrder>
   </soap:Body>
</soap:Envelope>
```

17.1.26 SSL Connection to Oracle BAM Is Not Supported for Monitor Express

Deployment to Oracle BAM Monitor Express data objects through an SSL connection is not supported.

17.1.27 Updated Oracle BAM Adapter Connection Pool Throws ClassLoaderException

In a SOA composite application, BPEL monitoring objects and Oracle BAM sensor actions can be configured to use RMI or SOAP connection pools from Oracle BAM Adapter.

The problematic scenario involves a SOA composite application in which an Oracle BAM connection resource is initially configured to use the RMI connection pool and deployed to SOA server.

Later, either

1) the application's Oracle BAM connection is updated to use the SOAP connection pool (with batching enabled), or

2) a new BAM sensor action, using the SOAP connection pool (with batching enabled), is configured in the BPEL process.

After redeploying this updated application to SOA server, and posting new requests to the BPEL process, the `ClassLoaderException` might occur at run time for the BPEL monitoring objects or BAM sensor actions.

Workaround: restart SOA server and Oracle BAM Server.

17.1.28 Providing Incorrect Credentials to Oracle BAM Web Service Call Can Result in Lockout, Incorrect Exception Shown

If an Oracle BAM Web service is invoked using a wrong/invalid credential, then Oracle WebLogic Server will lock out the user due to unsuccessful attempts, depending upon the number of calls to the Web service (For example an Oracle BAM alert invoking the Oracle BAM ReportMailer Web service). Default Oracle WebLogic Server behavior is to lock out a user if they have 5 unsuccessful attempts. User should fix the credentials and restart Oracle BAM Server or disable the Oracle WebLogic Server lockout feature.

In addition, every other alert error handling scenario fails after this. The exception will read "Authentication failed" in Alert History table in Oracle BAM Active Studio.

To disable Oracle WebLogic Server lockout, login to the Oracle WebLogic Server Administrative Console, in the Domain Structure tree, select **Security Realms** --> **myrealm** --> **User Lockout** tab, uncheck **Lockout Enabled**, and click **Save**.

17.1.29 Calculated Fields Cannot Use Datetime Type Field

If a user creates a new calculated field using `datetime` type fields, the Calculations tab displays this error:

```
BAM-01610: INVALID FILTER EXPRESSION
```

More specifically, this error occurs when the calculation is an expression for equality check against a `datetime` field in `String` format. For example, for a `datetime` field such as Last Modified, the following calculation does not work:

If {Last Modified}=="7/18/2002 1:33:10 PM"

Also, an upgrade to Oracle BAM release 11.1.1.0 or 11.1.1.2.0 on a report containing calculated fields with `datetime` fields results in the same error. The `datetime` field calculated fields must be removed from the report.

17.1.30 Save in Excel 2007 Format Does Not Work

In Oracle BAM Active Studio, when the user attempts to save an Excel view using Microsoft Excel 97-2003 format, it is possible that a message that reads "Excel 2007 or greater is required to edit this Excel view" will appear. This is a known issue.

17.1.31 Matrix View Can Yield Incorrect Results in Certain Situations

In Oracle BAM Active Studio, there may be data mismatch across various fields in a dataobject chosen for building the Matrix view. One such instance is when the data in the field begins a lowercase alphabetic character (for example, "alpha"). The problem is resolved if the field value begins with uppercase alphabetic character (for example, "Alpha"). The Matrix view is a preview feature and this is a known issue.

17.1.32 Failure to Send Message to Oracle BAM is Not Reported on Oracle Fusion Middleware Control Console

The Oracle BAM-BPEL integration is supported with the use of Oracle BAM Adapter (such as with Oracle BAM sensor actions and BPEL Monitor features). For BPEL processes and other services that attempt to send messages to Oracle BAM, the true status of whether such Oracle BAM invocations succeeded or failed cannot be determined by studying the audit trail for that process instance on the Oracle Enterprise Manager Fusion Middleware Control Console. It is intentionally designed

such that a failure to send sensor/monitor data to Oracle BAM should not cause the regular processing of input request (within a BPEL process) to be halted/failed. Accordingly, the console will therefore only report the status for the instance based on the non-Oracle BAM related activities. The Oracle BAM Server invocation failures, if any, will be noticeable in the SOA server diagnostic logs.

17.1.33 Tabs Sometimes Missing in Oracle BAM Active Studio

If you are using Microsoft Internet Explorer 8, and Oracle BAM Active Studio or one of the other Oracle BAM Web Applications does not open properly (for example, some of the main user interface tabs do not appear), try refreshing or reloading Oracle BAM Active Studio.

If that workaround does not resolve the issue, close Oracle BAM Active Studio, clear your Internet Explorer browser cache (via **Tools > Internet Options > Delete**), then reopen Oracle BAM Active Studio.

Alternatively, if the above workarounds do not resolve the issue, add the Oracle BAM Web server to Microsoft Internet Explorer's Trusted sites:

1. Go to **Tools > Internet Options > Security > Trusted sites** and click **Sites**.

2. Uncheck **Require server verification (https:) for all sites in this zone** if necessary (it is necessary unless you have Oracle BAM set up for SSL).

3. Add the Oracle BAM URL to the list:

   ```
   http://<bam_servername>
   ```

17.1.34 SPC S-Chart Displays Incorrect Limits

The SPC S-Chart view displays incorrect upper control limit (UCL) and lower control limit (LCL) series in the chart.

Although the S-Chart was corrected to display the Standard Deviation, rather than the average, the UCL and LCL value were not corrected. The limits do not correspond to the S-Chart, but they do correspond to the X-bar chart. This is a known issue.

17.1.35 SPC R-Chart Displays Incorrect Chart

The R-Chart view displays an incorrect chart. The R-Chart should plot a Range for the data set, rather than an Average as it currently displays. Also, the upper control limit (UCL) and lower control limit (LCL) values will require correction when moving from Average to Range.

17.2 Documentation Errata

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

- Section 17.2.1, "Updates to Oracle BAM Property Documentation"

- Section 17.2.2, "SPC S-Chart Behavior Changes"

- Section 17.2.3, "Instructions for Oracle BAM Data Control on SSL-Enabled Oracle BAM Server"

- Section 17.2.4, "Changes to "Configuring Oracle BAM Adapter Properties" Section"

- Section 17.2.5, "Recommended Memory Settings for Using Oracle Data Integrator with Oracle BAM"

- Section 17.2.6, "Excel View Requirements Incorrect in User's Guide"

- Section 17.2.7, "Online Help Topic on Filter Comparison Expressions is Empty"

17.2.1 Updates to Oracle BAM Property Documentation

References to properties in the *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite* are corrected as follows:

Additional Configuration Properties

`ActiveDataCache_Datasets_Batching_BlockOnBatchFull` and `Adapter_SOAP_Batching_BlockOnBatchFull` are available for configuration.

The block on batch full properties indicate whether batching operations should block when the batch is full. If set to `true`, then batching calls block until room is freed up in the batch for the operation. If set to `false`, a `BatchIsFullException` exception is thrown.

FlushOnDemand_Limit Property Not Configurable In XML

Because flush-on-demand can only be enabled programmatically, and it is currently not used by Oracle BAM, the `FlushOnDemand_Limit` properties should not appear in the documentation.

Oracle BAM Adapter Block_On_Batch_Full Default Value

The default values for `Block_On_Batch_Full` and `SOAP_Block_On_Batch_Full` are documented incorrectly. The default value for both properties is `false`.

Oracle BAM ADC API Property Clarification

It is not clearly stated in the documentation that the Oracle BAM ADC API properties are the properties used by all Oracle BAM clients (such as ICommand and Oracle Data Integrator), and the SOAP properties are only used by Oracle BAM Adapter when configured to use SOAP.

17.2.2 SPC S-Chart Behavior Changes

By definition, S charts plot standard deviation values on X-BAR, however, in previous versions of Oracle BAM, S charts plotted average/mean values on X-BAR. In this version of Oracle BAM and going forward, S charts plot standard deviation values on X-BAR.

S chart reports created earlier than this version will continue to show average values instead of standard deviation values. You must recreate the S chart to display standard deviation values on X-bar.

There are still some issues with the S-Chart as noted in Section 17.1.34, "SPC S-Chart Displays Incorrect Limits."

17.2.3 Instructions for Oracle BAM Data Control on SSL-Enabled Oracle BAM Server

To create an Oracle BAM data control against an SSL-enabled Oracle BAM Server Oracle JDeveloper must be started with the `-J-Djavax.net.ssl.trustStore` option, which should point to the location of the keystore. The connection to Oracle BAM Server cannot be created without this option.

Example:

```
C:\jdevrc1\jdeveloper\jdev\bin>jdev
```

```
-J-Djavax.net.ssl.trustStore=C:\jdevrc1\wlserver_10.3\server\lib\DemoTrust.jks
```

17.2.4 Changes to "Configuring Oracle BAM Adapter Properties" Section

In *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite*, Section 21.7.1 Configuring Oracle BAM Adapter Properties, step 6, the text states "Restart the server."

The server referred to is the SOA domain server. It needs to be restarted because that is where the Oracle BAM Adapter is deployed.

17.2.5 Recommended Memory Settings for Using Oracle Data Integrator with Oracle BAM

The default memory settings for Oracle Data Integrator are included in the `odiparams.sh` script (or `odiparams.bat` for windows). The values for the `ODI_INIT_HEAP` and `ODI_MAX_HEAP` properties default to 32M and 256M. It is recommended that you change these values to 256 M and 1024 M respectively. This will enhance Oracle Data Integrator performance. Otherwise, Oracle Data Integrator `OutOfMemory` errors may occur, especially when running memory intensive tasks.

17.2.6 Excel View Requirements Incorrect in User's Guide

In *Oracle Fusion Middleware User's Guide for Oracle Business Activity Monitoring*, Chapter 4 Creating and Using Views," section titled "Introduction to the Excel View," the statement "You must have Microsoft Excel 2003 or later to use this feature" is incorrect. Refer to Section 17.1.1, "Oracle BAM Client System Requirements" for Microsoft Excel requirements for using the Oracle BAM Excel view.

17.2.7 Online Help Topic on Filter Comparison Expressions is Empty

This topic should contain navigation links to a list of filter comparison expressions that are presented in the **Comparison** drop-down list. Click **Next** in the help viewer to see the correct topic.

18

Oracle Business Rules

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

- Section 18.1, "General Issues and Workarounds"
- Section 18.2, "Configuration Issues and Workarounds"

18.1 General Issues and Workarounds

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

- Section 18.1.1, "Migration of Common Java Classes with Aliases Applied"
- Section 18.1.2, "Alias and Visibility Settings Not Always Applied to Migrated Dictionary"
- Section 18.1.3, "Manual Updates Required for Release 10.1.3.x Migrated Dictionaries"
- Section 18.1.4, "Migrator Does not Migrate Certain Java Fact Type Properties"
- Section 18.1.5, "Migrator Throws a RUL-05003 Warning in Some Cases"
- Section 18.1.6, "Need to Hide Certain Properties When Using Classes with Misbehaving Methods"
- Section 18.1.7, "Oracle Business Rules Expressions: New Options and Built-in Functions"
- Section 18.1.8, "Exceptions When Opening a Dictionary From BPEL/Composite After Rename"
- Section 18.1.9, "SOA Composer Limitation: SOA Composer Provides Only a Subset of Rules Designer Functionality"
- Section 18.1.10, "SOA Composer Limitation: A Boolean Bucketset is Shown by Default"
- Section 18.1.11, "SOA Composer Limitation: Working with Oracle Business Rules Dictionary"
- Section 18.1.12, "SOA Composer Limitation: Cannot Revert Changes Unless a Dictionary is in a Valid State"
- Section 18.1.13, "SOA Composer Limitation: Split and Merge Selected Cells Operations Do Not Work"

18.1.1 Migration of Common Java Classes with Aliases Applied

In Oracle Fusion Middleware 11g Release 1 (11.1.1), there is the concept of the "built-in" dictionary which is linked to by all other dictionaries. The built-in dictionary includes fact types for several common Java classes, including: `Object`, `String`, `BigInteger`, `BigDecimal`, `Calendar`, `XMLGregorianCalendar`, `List`, and `JAXBElement`.

There is a limitation when you are migrating a Release 10.1.3.x dictionary to Oracle Fusion Middleware 11g Release 1 (11.1.1). In Oracle Business Rules Release 10.1.3.x, all classes had to be imported into each dictionary, including `Object` which was imported by default. Thus, a user could import the common Java class fact types and change the aliases for properties, methods, and fields. In Oracle Fusion Middleware 11g Release 1 (11.1.1), for such classes users cannot specify custom aliases and these fact types are not migrated from a Release 10.1.3.x dictionary that is being migrated to Oracle Fusion Middleware 11g Release 1 (11.1.1). Thus, if an alias is applied for a common Java class that is part of the built-in dictionary, in Oracle Fusion Middleware 11g Release 1 (11.1.1) these aliases are discarded and the aliases are not available to use in rules.

Workaround:

There is no workaround for this issue.

18.1.2 Alias and Visibility Settings Not Always Applied to Migrated Dictionary

During dictionary migration from Oracle Business Rules Release 10.1.3.x, Java classes are imported into the new Oracle Fusion Middleware 11g Release 1 (11.1.1) dictionary and then aliases and visibility settings are applied. A bug in the migration prevents the identification of some methods so that alias and visibility settings can be applied.

Workaround:

In such cases, the alias and visibility settings that applied for the Oracle Business Rules Release 10.1.3.x dictionary must be manually applied to the destination Oracle Fusion Middleware 11g Release 1 (11.1.1) dictionary.

18.1.3 Manual Updates Required for Release 10.1.3.x Migrated Dictionaries

Restricted Simple Types

Oracle Business Rules Release 10.1.3.x uses JAXB 1.0. In JAXB 1.0 restricted simple types do not have any special support in the generated Java classes, and are mapped to a property with the same type as the simple type. Oracle Business Rules for Oracle Fusion Middleware 11g Release 1 (11.1.1) uses JAXB 2.0. In JAXB 2.0, restricted simple

types of string type are transformed into Java `enum` values. Because of this difference, after migrating a Release 10.1.3.x dictionary, places in the dictionary that previously used raw strings to represent the restricted values must be manually updated to use the Java enum values.

xsd:dateTime in Migrated Dictionaries

Oracle Business Rules Release 10.1.3.x uses JAXB 1.0. In JAXB 1.0, `xsd:dateTime` types are mapped to `java.util.Calendar`. Oracle Business Rules for Oracle Fusion Middleware 11g Release 1 (11.1.1) uses JAXB 2.0. In JAXB 2.0, `xsd:dateTime` types are mapped to `XMLGregorianCalendar`, which more accurately contains the values of an `xsd:dateTime` element. Thus, in a dictionary migrated from Release 10.1.3.x, comparisons between properties may no longer function correctly because `Calendar` implements a method `compareTo` and `XMLGregorianCalendar` implements a method `compare`. Manual changes are required in the dictionary to change the comparisons. Alternatively, in Oracle Fusion Middleware 11g Release 1 (11.1.1) you can use a `Duration` to compare most common date and time formats. Making this change in a migrated dictionary requires manual changes to the data model and to the rules that use the imported fact types.

Invalid Expressions in Migrated Dictionary

Oracle Business Rules for Oracle Fusion Middleware 11g Release 1 (11.1.1) supports rich type-checking that invalidates some expressions migrated from Release 10.1.3.x. For example, if an instance of `Integer` is referenced to call the `intValue()` method, this may produce a validation warning if `Integer` has not been imported into the data model. The solution to this issue is to import `Integer` into the data model.

Index-based or Iterator-based Iteration in Collections with RL Functions

In Release 10.1.3.x, it was necessary in functions and RL actions to use index-based or iterator-based iteration over collections with raw RL. In Oracle Fusion Middleware 11g Release 1 (11.1.1), the pre-defined action type "for" implements the for-each iteration loop construct and can replace most uses of these older iteration constructs.

Calling Functions to Return New Variable Instances

In Release 10.1.3.x, it was not possible to invoke a constructor in the initialization expression for a variable. In Oracle Fusion Middleware 11g Release 1 (11.1.1) variables are called globals. Due to this Release 10.1.3.x limitation, in some Release 10.1.3.x dictionaries, there are function calls to initialize expressions and to invoke the constructor and return the new instance. In Oracle Fusion Middleware 11g Release 1 (11.1.1), you can use the `new` operator in initialization expressions.

18.1.4 Migrator Does not Migrate Certain Java Fact Type Properties

In Release 10.1.3.x, a property was created for a fact type if the fact type had either a setter or getter. In Oracle Fusion Middleware 11g Release 1 (11.1.1), a property is created only if there is both a setter and a getter for the property.

18.1.5 Migrator Throws a RUL-05003 Warning in Some Cases

In Oracle Fusion Middleware 11g Release 1 (11.1.1), there is a requirement that Java and XML fact types in a dictionary have a single-inheritance chain as determined by visible fact types. This limitation prevents multiple-inheritance chains, including interfaces, from causing runtime exceptions in the engine. The user must specify a single-inheritance chain by marking classes which should not be considered in an

inheritance chain as non-visible. When a multiple-inheritance chain is detected during validation, the follow warning is returned:

```
RUL-05003: The visible fact type "Foo" should only inherit from one visible fact
type, but inherits from visible fact types "Bar" and "Baz".
```

In this case, marking either `Bar` or `Baz` as non-visible will fix this warning.

18.1.6 Need to Hide Certain Properties When Using Classes with Misbehaving Methods

When asserting instances of some classes exceptions may be thrown because of misbehaving methods. When a fact is asserted, the fact is "shadowed" inside the rules engine. This shadowing requires the rules engine to invoke the accessors for all properties with the **Visible** checkbox selected (for all visible properties). If an accessor throws an exception when it is invoked, this exception propagates out of the rules engine.

A specific example of this limitation is the `java.sql.Date` class. This class includes several deprecated methods, for example `getYears` and `setYears`. These methods always throw an `IllegalArgumentException` when they are invoked. In Oracle Business Rules, if an instance of the `Date` class is asserted, an exception is thrown. This exception is due to the `getYears` method being called when the fact instances are shadowed inside the rules engine.

When using Oracle Business Rules, the `Date` class should not be asserted, but this assert may be out of the control of the user. For example the `Date` class is asserted when a large object graph contains a list of `Date` instances and you are using assert tree on the object graph.

Workaround:

You must mark all properties that include misbehaving methods as non visible. To do this you must deselect the **Visible** checkbox for the properties that cause an exception. For example, in the `java.sql.Date` class., the workaround is to deselect the **Visible** checkbox for the properties "years", "hours", and "minutes" for the `java.sql.Date` fact type in the datamodel.

18.1.7 Oracle Business Rules Expressions: New Options and Built-in Functions

Oracle Business Rules expressions used in Rules Designer and Oracle SOA Composer support the following:

1. Expressions support the new RL syntax. For example,

    ```
    (assign new) Driver d = new Driver(name: "Tom", age: 45)
    ```

2. Expressions support the `instanceof` keyword: For example,

    ```
    if (vehicle instanceof Car) {
      (assign new) Car car = (Car)vehicle;
    }
    else if (vehicle instanceof Truck) {
      (assign new) Truck truck = (Truck)vehicle;
    }
    ```

3. Expressions support the list type built-in functions, including the following:

    ```
    RL.list.intersect
    RL.list.reverse
    RL.list.insertBefore
    RL.list.concatenate
    ```

```
RL.list.union
RL.list.append
RL.list.except
RL.list.distinctValues
RL.list.remove
RL.list.indexOf
RL.list.create
```

For more information, see the descriptions in `oracle.rules.rl.extensions.RL`, in Oracle Fusion Middleware Java API Reference for Oracle Business Rules Javadoc.

4. Expressions can support a variable number of arguments. As in the Java Language, when the last parameter to a function or method is an array, then an expression can call the function or method with a variable number of arguments. For example, using the built-in `RL.list.create` function in an expression:

```
RL.list.create(Object[] items) returns List
```

The built-in `RL.list.create()` can be called as follows:

```
(assign new) List myList = RL.list.create(1, 2.0, "three")
```

In this example, the `myList` result contains three Objects: an Integer, a Double, and a String.

18.1.8 Exceptions When Opening a Dictionary From BPEL/Composite After Rename

There can be errors, such as the following when you open a dictionary from a BPEL/composite after a 'Rename' from the Oracle JDeveloper menu option File -> Rename:

```
java.io.FileNotFoundException
```

This is due to Oracle JDeveloper not fully supporting name changes for an Oracle Business Rules dictionary.

There is no workaround for this issue.

18.1.9 SOA Composer Limitation: SOA Composer Provides Only a Subset of Rules Designer Functionality

SOA Composer provides only a subset of the functionality available in Rules Designer. Some of the features/tabs in Rules Designer are currently not available in SOA Composer. For example, the **Functions** tab functionality is missing, the **Links** tab functionality is missing, and you cannot add new rulesets with SOA Composer.

18.1.10 SOA Composer Limitation: A Boolean Bucketset is Shown by Default

A Boolean bucketSet(LOV) is shown in the LOV list of bucketsets when you access a dictionary with SOA Composer. This bucketSet cannot be deleted. If you attempt to delete this bucketset, you will see the following exception:

```
javax.servlet.ServletException: Index: 0, Size: 0
```

Workaround: you can ignore this default built-in boolean bucketset.

18.1.11 SOA Composer Limitation: Working with Oracle Business Rules Dictionary

In SOA Composer, when working with a reasonable sized Oracle Business Rules dictionary, there are some performance issues. For example, with SOA Composer there is a significant performance degradation if you attempt to open and view a dictionary with fifty (50) items in a Decision Table.

18.1.12 SOA Composer Limitation: Cannot Revert Changes Unless a Dictionary is in a Valid State

You cannot revert changes to a dictionary unless the dictionary is valid. For example, if you edit a dictionary and then make some changes such that dictionary is invalid, if you then try to revert the changes, you will see messages such as the following:

```
Please correct all the errors before saving!
```

Using SOA Composer you must correct all validation errors before you perform a revert operation.

18.1.13 SOA Composer Limitation: Split and Merge Selected Cells Operations Do Not Work

Using SOA Composer with a Decision Table, the split and merge selected cells operations do not work.

There is no workaround for this issue.

18.1.14 SOA Composer Limitation: Composer Does Not Support Localized Number Formatting

SOA Composer does not support any number formatting. For example, you are using SOA Composer with U.S. English as the browser language. You enter a floating-point data, such as *34533223.2345*, as a value. However, when you change the browser language to French, the value is still displayed as *34533223.2345*. In French, the value should have been displayed as *34533223,2345*.

Workaround:

Irrespective of the browser language, you need to enter any numeric value in the U.S. English language without any number separator such as ",".

18.1.15 SOA Composer Limitation: Composer Does Not Display Any Dictionary Without a Ruleset

SOA Composer does not display any dictionary if you deploy a dictionary that contains no rulesets.

Workaround:

You need to add at least one ruleset to all dictionaries, even if it contains no rules. To avoid conflicts, it is best to name this blank ruleset with a random name rather than the default name of "Ruleset_1".

18.1.16 SOA Composer Limitation: Rule Effective Date Always Displays Server Time Zone Information

In a ruleset, using SOA Composer, you can customize the rule effective date that contains the time zone information. However, the time zone information is not saved and is converted to the server time automatically when you re-editing the rule.

There is no workaround for this issue.

18.1.17 SOA Composer Limitation: Date/Time Picker in a Bucketset Does Not Provide Option to Select Time Zone

Using Rules Designer in JDeveloper, you can customize the date, time and time zone in a bucketset. However, in SOA Composer, you cannot specify the time zone, because the SOA Composer does not have any option to customize the time zone using the Choose Time & Date picker. So, the time displayed is, by default, the server time.

There is no workaround for this issue.

18.1.18 SOA Composer Limitation: List of Dictionaries Does Not Display Newly Added Composites

When new rule dictionaries are deployed, the list of dictionaries in the existing SOA Composer session does not automatically refresh to display the new list.

Workaround:

You need to click the **Clear** button in the search area of the Rules Navigator. This refreshes the list to display the newly added dictionaries along with the existing ones.

18.2 Configuration Issues and Workarounds

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

- Section 18.2.1, "Too Many Open Files Message When Deploying a Business Rules Project"

18.2.1 Too Many Open Files Message When Deploying a Business Rules Project

If you see the error "Too Many Open Files" while deploying an Oracle Business Rules Decision Component, you might need to increase the file descriptor limit.

The "Too many open files" issue is due to JDK6 bugs. These bugs could occur at runtime or at compile time, depending on the number of JAR files used and a few other variations around the use of file descriptors by the JDK/JRE.

Workaround for this issue is to increase the limit of file descriptors. Per-process, per-user file descriptor limit can be preconfigured by default to the value 1024. If you increase this limit to 4096 or larger, the new value should resolve this issue.

These are the potentially relevant JDK6 bugs,

http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6533291

http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6485027

http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6400872

http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6456960

http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6206485

 http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6446657

And a blog entry describes this issue at

http://coldfused.blogspot.com/2007/02/mystery-of-too-many-open-files.html

The command to increase per-process, per-user file descriptor differs across Operating Systems and shells. It is typically done with `ulimit` on UNIX platforms so consult the man pages for `ulimit` for your Operating System and shell.

For example:

```
$ ulimit -n 4096
```

19

Oracle Enterprise Repository

The chapter describes the new and changed functionality in Oracle Enterprise Repository 11g Release 1 (11.1.1).

This chapter contains the following sections:

- Section 19.1, "What's New in Oracle Enterprise Repository 11g Release 1 (11.1.1)"
- Section 19.2, "General Issues and Workarounds"
- Section 19.3, "Enhancements in Oracle Enterprise Repository"
- Section 19.4, "Deprecated Features"

19.1 What's New in Oracle Enterprise Repository 11g Release 1 (11.1.1)

This section describes the new features and functionalities in Oracle Enterprise Repository 11g Release 1 (11.1.1):

- **Highly Automated Closed Loop Governance**

  In the Oracle Enterprise Repository 10*g* R3 release, the enterprise repository was able to harvest from design-time environments. In 11*g* R1, Oracle Enterprise Repository also harvests at deployment and runtime. The harvesting process automatically creates assets and their relationships in Oracle Enterprise Repository, saving huge amounts of time, providing the visibility that is needed to manage SOA, ensuring that information is fresh, and reducing risk.

  In addition to harvesting "down stream", Oracle Enterprise Repository can also harvest BPEL generated from Oracle's BPA product. In this way, you can design business processes in BPA. BPA generates a project in JDeveloper, and Oracle Enterprise Repository harvests the resulting artifacts.

  In the Oracle Enterprise Repository 11*g* R1 release, Oracle Enterprise Repository propagates services to multiple service registries supporting the runtime environments. As a service moves from development to testing, Oracle Enterprise Repository promotes the service to the organization's test registry. As the service moves from testing to staging, Oracle Enterprise Repository promotes the service to the organization's staging registry, and so on. The service keys are consistent across Oracle Enterprise Repository and all registry instances. This means that a Service Bus or SOA Suite project can perform dynamic endpoint discovery as the project moves through the lifecycle.

  Oracle Enterprise Repository can also promote partial information to the Service Registry. This enables you to perform late binding. In this scenario, the service descriptions and categorizations are established in Oracle Enterprise Repository at design-time, but the endpoint is not defined until runtime. When the service is

deployed, the endpoint is updated in Oracle Enterprise Repository. Oracle Enterprise Repository can promote the endpoint to Oracle Service Registry, or the endpoint can be directly populated to Oracle Service Registry, and harvested back into Oracle Enterprise Repository.

In addition, a summary of runtime performance metrics is being provided to Oracle Enterprise Repository from Enterprise Manager Management Pack Plus for SOA, as well as from third party tools including Amberpoint. This allows you to see whether your services are performing as expected. In addition, developers interested in using the service can determine whether it meets their performance criteria. This builds trust and increases adoption.

Summary of Supported Features:

- – Harvesting at Deployment

- – Harvesting at Runtime

- – Harvesting Oracle BPA artifacts from JDeveloper

- – Oracle Enterprise Repository promotes services to multiple Service Registries

- – Support for late binding

- – Support for Enterprise Manager metrics

- – Support for Amberpoint metrics

- **Support for SOA Suite 11g**

  In Oracle Enterprise Repository 10*g* R3, Oracle Enterprise Repository was able to harvest standards-based artifacts, including BPEL, WSDL, schemas and transformations. This ensured that Oracle could govern non-Oracle environments. In the 11*g* release, Oracle Enterprise Repository is harvesting more deeply from Oracle's own products. This provides with additional value - 1+1=3. In this release, Oracle Enterprise Repository can harvest composites from SOA Suite. Not only will Oracle Enterprise Repository capture the composite services and references, but it will capture the components within the composite. In addition, Oracle Enterprise Repository is harvesting more deeply from Oracle Service Bus, so customers will have visibility into the business services and their relationship to the proxy services, as well as xquery and microflows.

  Moreover, Oracle Enterprise Repository is providing the "glue" to allow service bus and SOA Suite to seamlessly interoperate. The services from SOA Suite are captured in Oracle Enterprise Repository and are made available to the service bus through the Eclipse development environment. In addition, the proxy services created by Oracle Service Bus are captured in Oracle Enterprise Repository and made available to SOA Suite developers through JDeveloper. Oracle Enterprise Repository is a critical part of the solution for customers that want to take advantage of both SOA Suite and Oracle Service Bus.

  Summary of Supported Features:

  - – Harvesting Oracle SOA Suite composites from Oracle JDeveloper

  - – Consuming through Oracle JDeveloper

  - – Harvesting of Oracle Service Bus projects through Eclipse

  - – Consuming services into an Oracle Service Bus project in Eclipse

- **Support for Applications**

  The Oracle Enterprise Repository 11*g* R1 release targets to use Oracle Enterprise Repository to manage application integrations. First of all, Oracle Enterprise

Repository is teaming up with Oracle's Application Integration Architecture(AIA). AIA provides pre-built application integrations to speed up the integration efforts. AIA assets are made visible through Oracle Enterprise Repository, so the Enterprise repository is now the container through which you can view their integrations.

The second piece of functionality targeted towards application integration is the ability to view the services and adapters exposed by enterprise applications such as EBusiness, Siebel, Peoplesoft, JD Edwards, and SAP. You can use this information to build out application integrations. Oracle Enterprise Repository also provides end-to-end visibility between applications - from one application, through the adapter or native service, to the second application. This provides visibility needed to conduct impact analysis, and support end to end visibility and control of application integrations and composite applications.

Summary of Supported Features:

- AIA 2.5 Solution Pack

- AIA 3.0 Solution Pack

- Adapter and Application assets included in the Harvester Solution Pack

Additional Features in Oracle Enterprise Repository 11g Release 1 (11.1.1):

- **Password Encryption** - Oracle Enterprise Repository generates encrypted passwords used to interact with the Oracle Enterprise Repository API.

- **"Rollup" information about Composites, BPEL, WSDL** - The Oracle Enterprise Repository User Interface has need refined to show a summary of the artifacts included in a composite application, business process, or Web service.

- **Harvesting WS-Policy Artifacts** - Oracle Enterprise Repository can harvest WS-Policies referenced in WSDL, BPEL, and Composite artifacts.

- **New Reporting Engine** - The Oracle Enterprise Repository Reporting engine is replaced by Oracle BI Publisher. Customers who purchase Oracle Enterprise Repository will receive a limited use license of Oracle BI Publisher for running Oracle Enterprise Repository reports. Customers will need a full use license to develop new reports in BI Publisher.

19.2 General Issues and Workarounds

This section describes the general issues and workarounds in Oracle Enterprise Repository 11g Release 1 (11.1.1). This section contains the following topics:

- Section 19.2.1, "Oracle Enterprise Repository"
- Section 19.2.2, "Asset Editor"
- Section 19.2.3, "Harvester"
- Section 19.2.4, "Exchange Utility"
- Section 19.2.5, "Repository Extensibility Framework (REX)"

19.2.1 Oracle Enterprise Repository

This section describes the issues and workarounds found in Oracle Enterprise Repository.

19.2.1.1 Update Password When Logged into Oracle Enterprise Repository

In Oracle Enterprise Repository 10g Release 3 (10.3), while you are logged into Oracle Enterprise Repository if admin also logs in and modifies your login password, then you would receive an HTTP Status 500 exception. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1).

19.2.1.2 Use / Download Components Ordered

In Oracle Enterprise Repository 11g Release 1 (11.1.1), when use/downloading an asset, the list of associated files are now ordered by name.

19.2.1.3 Exporting an Asset to Excel

In Oracle Enterprise Repository 10g Release 3 (10.3), when exporting an asset to Excel, the true/false properties of an asset that are represented by an option in Excel, were always set to `true`, regardless of the value in Oracle Enterprise Repository. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1).

19.2.1.4 Incorrect Registration Status in PDF Reports

In Oracle Enterprise Repository 10g Release 3 (10.3), some of the XSLTs for the PDF reports had a heading for Registration Status. However, they were showing values for the Active Status, which was incorrect. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1) to show Registration Status Values.

19.2.1.5 Missing Relationships When Importing Assets

In Oracle Enterprise Repository 10g Release 3 (10.3), when importing multiple assets that were related to each other using the Import/Export tool, if one of those assets already existed in the Oracle Enterprise Repository instance, then the import would not save the relationship between the two assets. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1).

19.2.1.6 Exporting Date Field Using Export to Excel Function

In Oracle Enterprise Repository 10g Release 3 (10.3), when exporting an asset to Excel, the date fields were not supported. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1) to support date fields.

19.2.1.7 Advanced Search with Acceptable Value List

In Oracle Enterprise Repository 10g Release 3 (10.3), the Advanced Search option was not working with Acceptable Value List values containing "&" character. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1).

19.2.1.8 Unable to Launch JNLP Files Using JWS 1.6.0_05

In Oracle Enterprise Repository 10g Release 3 (10.3), the security fix added in the newer versions of JRE such as 1.5.0_15, 1.6.0_05, 1.6.0_06, 1.6.0_07, and 1.6.0_10 RC caused authentication issues launching the Asset Editor window and Import/Export tool. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1).

19.2.1.9 Specifying URI for an Artifact Store

When specifying a URI relative to an Artifact Store, the URI must resolve to a file such as a `.wsdl` or `.zip` file. The URIs that point to directories are not supported.

19.2.1.10 Publishing Endpoints Without WSDLs

The Enterprise Manager has no information about the WSDL Location for Endpoints of WSDL Artifacts from Oracle Service Bus. So,whenever the Enterprise Manager Integration utility creates the missing Endpoints for the matching assets in Oracle Enterprise Repository, it can not relate such Endpoints to its WSDL Artifacts and hence publishing them to Oracle Service Registry is not supported.

19.2.1.11 System Properties Updated Only in Cluster Member Server

In Oracle Enterprise Repository 10g Release 3 (10.3), when an update was made to any property that was present in a `.properties` file in a clustered environment, then these get updated only on the cluster member server on which the user session was running. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1).

19.2.1.12 Import/Export Tool Integrated with SiteMinder

In Oracle Enterprise Repository 10g Release 3 (10.3), when Oracle Enterprise Repository is integrated with eTrust SiteMinder Single Sign-On (SSO), then the Import/Export tool is not available for a role which has the admin privilege. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1).

19.2.1.13 Synchronization Between Cluster Members

In Oracle Enterprise Repository 10g Release 3 (10.3), there was a synchronization issue between the cluster members when the load on application increases to three users working concurrently on the application. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1).

19.2.1.14 Error When Multiple Artifacts Yield the Same Fingerprint

In Oracle Enterprise Repository 11g Release 1 (11.1.1), it is expected that artifact assets will have unique fingerprints (SFIDs). When migrating assets from previous releases, multiple artifact assets yield the same fingerprint, then the migration tool logs an error indicating that the assets must be merged before migration. The migration tool can not automatically merge these assets because it would potentially lose data.

19.2.1.15 Display Issue in JDBC Driver Select Dialog

During installation of Oracle Enterprise Repository 11g Release 1 (11.1.1), in the Initialize Repository Database Properties dialog, you are prompted to click the Browse button to browse for the JDBC driver file. The JDBC Driver Jar File Selection dialog is displayed, but the text in this dialog do not display correctly.

19.2.1.16 Servlet Exception When Running Oracle Enterprise Repository on WebLogic Server on IBM AIX

When you run Oracle Enterprise Repository 11g Release 1 (11.1.1) console on WebLogic Server version 10.3.2 on IBM AIX on Power Systems (64-bit), then the following exception is displayed:

```
Root cause of ServletException.
weblogic.servlet.jsp.CompilationException: Failed to compile JSP /index.jsp
index.jsp:6:5: No tag library could be found with this URI. Possible causes
could be that the URI is incorrect, or that there were errors during parsing
of the .tld file.
<%@ taglib uri="/skintags" prefix="skin" %>
   ^----^
index.jsp:6:5: No tag library could be found with this URI. Possible causes
could be that the URI is incorrect, or that there were errors during parsing
```

```
of the .tld file.
<%@ taglib uri="/skintags" prefix="skin" %>
    ^----^
.
at
weblogic.servlet.jsp.JavelinxJSPStub.reportCompilationErrorIfNeccessary(Javeli
nxJSPStub.java:226)
at
weblogic.servlet.jsp.JavelinxJSPStub.compilePage(JavelinxJSPStub.java:162)
        at weblogic.servlet.jsp.JspStub.prepareServlet(JspStub.java:246)
        at weblogic.servlet.jsp.JspStub.prepareServlet(JspStub.java:191)
        at
weblogic.servlet.internal.ServletStubImpl.execute(ServletStubImpl.java:235)
        Truncated. see log file for complete stacktrace
>
```

Solution

You must apply the WebLogic Server patch 10.3.2, using the Smart Update tool, with the following details:

```
Patch id: 7LLC
```

```
Patch Passcode: 3JWIS7B5
```

This is valid only when Oracle Enterprise Repository 11gR1 is run on WebLogic Server version 10.3.2 on IBM AIX.

Then, you must set the JAVA_OPTIONS parameter for the Oracle Enterprise Repository Server as follows:

```
export JAVA_OPTION="$JAVA_OPTIONS
```

```
-Dorg.apache.xml.dtm.DTMManager=org.apache.xml.dtm.ref.DTMManage
rDefault"
```

19.2.2 Asset Editor

This section describes the issues and workarounds found in the Oracle Enterprise Repository Asset Editor:

19.2.2.1 Date Field in the Asset Editor

In the Asset Editor, the Table elements were not persisting Date sub-elements properly. If you do not enter a value for the Date field within a table element or if you leave it blank, then the field is automatically populated with the current date. Also, if you enter your own date, the Date field would still show the current date. However, when saved, the correct date would then appear.

1. In the Asset Editor, add a Table element to an Asset Type. Within that table, add a Text element and a Date element.

2. Pick an asset of that Asset Type and modify the new element. First, add only to the Text field and leave the Date field blank. Click **OK** to close the child window. The parent window should NOT show any date in the Date field.

3. Modify the Table element again. Now, add a date that is anything other than the current date. Click **OK**. The parent window should show the date you entered.

19.2.2.2 Use / Download Enhancements in Asset Editor

In Oracle Enterprise Repository 11g Release 1 (11.1.1), you have the option of searching for a specific service created by the harvester in the Asset Editor, and viewing that service's Endpoint and Interface Web Services. In the Use - Download dialog, you can either select Endpoint assets or Interface assets. If you select Endpoints, then usage is automatically recorded for Interfaces.

This feature is also extended to Business Process: BPEL assets. When you select a Business Process for a BPEL asset, then a list of all deployments of that asset and a list of all Entry Points for each deployment are displayed in the Use - Download dialog. For each Entry Point that is selected, usage for the defining interface is automatically recorded.

19.2.2.3 Duplicate Assets in Asset Editor

In Oracle Enterprise Repository 10g Release 3 (10.3), when creating an asset, if no version information was provided in the Asset Version field, then it would create duplicate assets. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1).

19.2.2.4 Submitting Large Files in Asset Editor

In Oracle Enterprise Repository 10g Release 3 (10.3), when submitting large files greater than 34,455,552 bytes in the Asset Editor, the Asset Editor would hang. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1).

19.2.2.5 Unable to Edit/Overwrite Contact Information in Asset Editor

In Oracle Enterprise Repository 10g Release 3 (10.3), the contacts in the Asset Editor were not able to be updated. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1).

19.2.2.6 Copy/Migrate Function in Asset Editor

In Oracle Enterprise Repository 10g Release 3 (10.3), the copy/migrate function in the Asset Editor does not create the proper registration status for an asset. If the asset being copied was set to the Registered status and if you selected the Unsubmitted status during the copy/migrate process, then the asset triggers the Registered Asset event. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1).

19.2.2.7 Producing Projects Display in Navigator

In Oracle Enterprise Repository 10g Release 3 (10.3), in the Navigator, the display name for the relationship to Producing Projects was hard coded. However, that display name could be modified in the Type Manager. In past releases, a change to the display name would never appear in the Navigator. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1).

19.2.2.8 Premature End of File Error in Asset Editor

When you open any asstes in Asset Editor, the post non-preview mode migration leads to "Premature end of file". This fails in Firefox with JDK 1.5.0_09 and lower, and also in WebLogic.

Workaround

The workaround for this issue is to ensure that you use JRE 1.5.0_10 when you run the Asset Editor. If you run the Asset Editor in Internet Explorer with the JDK version 1.5.0_09 and lower, then it will work. After running it in Internet Explorer, if you run it

immediately in Firefox, it again works. But, on the other hand, if you delete the cookies in Internet Explorer and then run in Firefox, then it fails.

19.2.2.9 Naigator Does Not Resize when Resizing Window

In Oracle Enterprise Repository 11g Release 1 (11.1.1), when you resize the navigator window quickly, it does not resize properly as there is a problem redrawing the applet,therefore the navigator window in the size of the original window. This is a noted JDK error.

19.2.3 Harvester

This section describes the issues and workarounds found in Oracle Enterprise Repository Harvester:

19.2.3.1 Harvesting a WSDL

In Oracle Enterprise Repository 10g Release 3 (10.3), when a WSDL was harvested, the documentation element was never stored in the Asset's description field. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1).

19.2.3.2 Harvesting MDS Config Fails

The MDS subsystem can only be initialized once per harvesting run. Therefore, in an ant script with multiple invocations of `<repository.submit>`, the value of the `mdsSettingsFile` attribute from the first invocation applies to all the later invocations.

19.2.3.3 Harvesting Remote Hosted Jar/Zip File

Harvesting any remote hosted artifacts leads to the `FileInfo` reference to the same remote host URL whereas harvesting the `.jar/.zip` files refers to the Oracle Enterprise Repository artifacts. When the `.jar` and `.zip` files are harvested from a remote server, their artifact contents are stored in Oracle Enterprise Repository. Therefore, downloads of these assets only download the files from Oracle Enterprise Repository. And Exchange Utility does not push these artifacts to UDDI because they are stored in Oracle Enterprise Repository.

19.2.3.4 Duplicate Composite Assets in Harvester

When you have two SOA Suite composite projects that have the same name and revision number, then harvester produces duplicate composite assets.

To avoid creating duplicate composite assets, ensure that you specify a different namespace in harvester when harvesting the two projects.

19.2.3.5 WSDL Summary Viewer Plugin Not Supported for Artifact:WSDL Type

In Oracle Enterprise Repository 10g Release 3 (10.3), WSDL summaries are are not stored on Artifact:WSDL assets by Harvester and Exchange Utility. These are stored on the associated Service and Interface:WebService assets. To view the WSDL Summary, see the Service or Interface:WebService assets.

19.2.3.6 Publishing Artifacts with CLASSPATH Imports

Whenever a WSDL with imports using the `Classpath` protocol is harvested and pushed to Oracle Service Registry, its t-models are not accessible in Oracle Service Registry. This is because Oracle Service Registry does not support the `Classpath` protocol.

In Oracle Enterprise Repository 11g Release 1 (11.1.1), publishing of artifacts using the `Classpath` protocol to Oracle Service Registry is not supported.

19.2.3.7 Harvesting Oracle Service Bus Artifacts: Supported Methods

The Harvester command-line and ant task do not support reading the filesystem directory, which backs a project in Oracle Service Bus Workshop. For example, `C:\bea\user_projects\workspaces\default\my_project`.

To introspect an Oracle Service Bus project, you must either:

- introspect it from Oracle Service Bus Workshop using the **Oracle Service Bus** > **Submit to Oracle Enterprise Repository** option.

- export the project using the **Export** > **Oracle Service Bus** > **Configuration Jar** option, and harvest the exported jar file from the Harvester command-line or ant task.

19.2.3.8 Creating Multiple METADATAENTRY in Harvester

In Oracle Enterprise Repository 10g Release 3 (10.3), Harvester creates multiple `METADATAENTRY` tables for every run, without verifying if the table already existed. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1), where the Harvester first verifies if the table exists, if not then creates a `METADATAENTRY` table.

19.2.3.9 Harvesting from the SCM Systems

When harvesting from the SCM systems, the following artifact types are not supported for CVS type SCM systems:

- http/https

- RawURI

Harvester supports only `RawSCM`.

19.2.3.10 Harvesting Whole Directory Files from the SCM Systems

When harvesting from the SCM systems, it is not possible to harvest the whole directory files (set of files under a directory) in a SCM system.

19.2.3.11 Migrating Older Oracle Service Bus Projects

When you upgrade to the 10.3.1 Harvester, you must re-harvest your Oracle Service Bus projects to ensure that the projects are in the correct format.Oracle Enterprise Repository does not support Oracle Service Bus projects from Oracle Service Bus Workshop (pre-10.3) in the same Oracle Enterprise Repository instance as Oracle Service Bus projects from the 10.3.1 Harvester.

19.2.3.12 Harvesting Oracle Service Bus Projects

Harvesting Oracle Service Bus project jars are not supported from JDeveloper because Oracle Service Bus is not yet integrated into JDeveloper. Harvesting Oracle Service Bus project jars must be done from Oracle Service Bus Workshop, the Harvester command-line, or the Harvester Ant task.

19.2.3.13 Harvesting Multiple Composites on Deployed Server Fails

By default, the harvester makes all of its changes to Oracle Enterprise Repository in a single transaction. When processing multiple composites on a server, the harvester fails.

The workaround for this problem is to harvest each project separately, in a separate command-line call or ant task by specifying each project:

```
<remoteProjects>
        <projectName>ExternalPartnerSupplierEjb</projectName>
</remoteProjects>
```

19.2.3.14 Harvesting from Oracle SOA Suite Server Fails

Harvesting from Oracle SOA Suite server fails, if the Oracle SOA Suite managed server has SSL enabled.

The following error messages are displayed by the Harvester:

```
@ javax.net.ssl.SSLHandshakeException: sun.security.validator.Validator
Exception: PKIX path building failed:
sun.security.provider.certpath.SunCertPath
BuilderException: unable to find valid certification path to requested target
```

Workarounds:

You can workaround this issue by following either of these methods:

- export the SSL certificate from the Oracle SOA Suite managed server, and import into the JVM, which is running Harvester.

- disable SSL on the Oracle SOA Suite managed server.

19.2.3.15 Harvesting OWSM Policies

In Oracle Enterprise Repository 11g Release 1 (11.1.1), the Oracle Web Services Manager (OWSM) policies are not harvested by harvester.

19.2.3.16 Harvesting 10g Enterprise Service Bus (ESB) Project

When harvesting 10*g* ESB project, exclude classes folder and zip file in the **harvester-ant.xml** file. For example:

```
<fileset dir="${project.dir}" excludes="deploy/**,output/**,
classes/**, *.zip" />
```

19.2.4 Exchange Utility

This section describes the issues and workarounds that are found in Oracle Enterprise Repository Exchange Utility:

19.2.4.1 Publishing Services with Multiple End Points

In Oracle Enterprise Repository 10g Release 3 (10.3), the Exchange Utility generates an exception when a service was published that had multiple end points and more than one of those end points had the same access point. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1).

19.2.4.2 Publishing All Services of a WSDL

In Oracle Enterprise Repository 10g Release 3 (10.3), when a WSDL had definitions for multiple services, port types, or bindings, the Exchange Utility was only publishing the first one it found. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1).

19.2.4.3 Publishing Retired/Inactive End Points

When publishing a service from Oracle Enterprise Repository to Oracle Service Registry, Exchange Utility creates a Binding Template TModel in Oracle Service Registry representing the Endpoint Asset from Oracle Enterprise Repository. If that asset is retired or inactive, Exchange Utility still creates that TModel, which is incorrect. The retired or inactive assets should not be published to Oracle Service Registry. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1).

19.2.4.4 Receiving Existing Sample Services Through Exchange Utility Fails

While receiving any sample service that already exists in Oracle Service Registry 10.3 to Oracle Enterprise Repository through the Exchange Utility, it fails with an exception due to the following reasons:

- The sample services in Oracle Service Registry 10.3 are digitally signed (contained enveloped digital signatures), therefore, Exchange Utility is unable to deserialize the soap response and receiving these services fail.

- There are XSD imports in the WSDL that are not resolvable, thus receiving services fails with an exception.

However, Oracle Service Registry receives a sample service through Exchange Utility, when a new service is published within Oracle Service Registry directly and then the utility is run to fetch it to Oracle Enterprise Repository.

19.2.4.5 Cleaning Up of Temporary Files in Exchange Utility

In Oracle Enterprise Repository 10g Release 3 (10.3), the Exchange Utility creates temporary files in the configured temp directory. In certain instances these files were not being cleaned up. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1).

19.2.4.6 Pushing Amberpoint Metrics in Exchange Utility

The Exchange Utility supports pushing Amberpoint Metrics to Oracle Enterprise Repository that are stored in Oracle Service Registry. However, those metrics are not published to Oracle Service Registry from Oracle Enterprise Repository because it only supports a one-way transaction.

19.2.4.7 Publishing Business Entity Descriptions in Exchange Utility

In Oracle Enterprise Repository 10g Release 3 (10.3), when publishing from Oracle Enterprise Repository to a UDDI Registry, the description of the Business Entity was not being included. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1).

19.2.4.8 Processing of Invalid Access Points in Exchange Utility

When publishing a service from Oracle Enterprise Repository to Oracle Service Registry, if the service's endpoint had an invalid access point, Exchange Utility generates an exception. In Oracle Enterprise Repository 11g Release 1 (11.1.1), if the access point is invalid, then no exception is generated, but the service is not published unless the following setting is set to `true` in the `orrxu.properties` file:

```
cmee.import.uddi.publish.ifendpointmissing=true
```

19.2.4.9 Receiving Services from Oracle Service Bus

In Oracle Enterprise Repository 10g Release 3 (10.3), when receiving services with no categorizations from Oracle Service Bus to Oracle Enterprise Repository, the Exchange

Utility encountered a null pointer exception. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1).

19.2.4.10 Updating Exchange Store for Few Assets

When an Oracle Enterprise Repository asset contains `internal.alrr.exchange.store` metadata from Exchange Utility, then the Data Migration Tool connects to Universal Description, Discovery and Integration (UDDI) registry to update this metadata. If the UDDI registry for a particular Oracle Enterprise Repository asset cannot be accessed, then migration fails for that asset.

19.2.4.11 Running the Migration Tool with Large Data Sets

In Oracle Enterprise Repository 11g Release 1 (11.1.1), the migration tool, with exceptionally large data sets, may take hours to run. Some application servers may time out the sessions and cause the migration to fail.

Workaround

To prevent this, the following entry should be added to the `web.xml` file, within the `<webapps>` element, where the number is in minutes:

```
@ <session-config>
@ <session-timeout>120</session-timeout>
@ </session-config>
```

19.2.4.12 Publishing from ALER 3.x to UDDI

In Oracle Enterprise Repository 11g Release 1 (11.1.1), services that are published from ALER 3.x to Universal Description, Discovery and Integration (UDDI) via Exchange Utility are not completely migrated, and therefore, they will fail publishing to UDDI after migration.

Workaround

Manually update the Service Key on the asset in Oracle Enterprise Repository, before or after data migration.

19.2.5 Repository Extensibility Framework (REX)

This section describes the issues and workarounds that are found in Oracle Enterprise Repository Extensibility Framework:

19.2.5.1 REX Query for All Artifact Stores

In Oracle Enterprise Repository 10g Release 3 (10.3), the `ArtifactStoreQuery` query only searched for RawSCMs and does not return the correct list of the artifact stores. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1), where the REX query searches and returns all artifact stores.

19.2.5.2 Null Exception Handling Added to REX

In Oracle Enterprise Repository 11g Release 1 (11.1.1), null exception handling is added to REX for querying on Acceptable Value Lists, Assets, Contacts, Departments, Relationship Types, Roles, System Settings, and Vendors.

19.2.5.3 Querying by Role Name in REX

In Oracle Enterprise Repository 10g Release 3 (10.3), querying in REX by Role Name does not work. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1).

19.2.5.4 Using In Operator for Asset Queries

In Oracle Enterprise Repository 10g Release 3 (10.3), the IN operator was supposed to perform asset searches in REX. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1), which means you can create searches with multiple criteria on the following fields: id, assettypeid, createdbyid, and submittedbyid.

The following is an example of how to create a SearchTerm object to perform this search:

SearchTerm term = new SearchTerm();

term.setKey("assettypeid");

term.setOperator("in");

term.setValue("159, 166");

19.2.5.5 RoleType Querying with No Criteria

In Oracle Enterprise Repository 10g Release 3 (10.3), when querying with all of the Repository Extensibility Framework (REX) subsystems, if no criteria is entered for a criteria object, then it returns all results. For Role Type querying, however, it would generate a null pointer exception. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1).

19.3 Enhancements in Oracle Enterprise Repository

This section describes the enhancements for Oracle Enterprise Repository 11g Release 1 (11.1.1). This section contains the following topics:

- Section 19.3.1, "General Oracle Enterprise Repository Enhancements"

- Section 19.3.2, "Harvester Enhancements"

- Section 19.3.3, "Repository Extensibility Framework (REX) Enhancements"

- Section 19.3.4, "Exchange Utility Enhancements"

19.3.1 General Oracle Enterprise Repository Enhancements

This section describes the general Oracle Enterprise Repository enhancements:

19.3.1.1 Oracle Enterprise Repository Diagnostics Page Disabled

In Oracle Enterprise Repository 11g Release 1 (11.1.1), Oracle Enterprise Repository Diagnostics page is disabled, by default. When you open the Diagnostics page in the default mode, the following message is displayed:

Diag pages are currently disabled. Please contact your Oracle Enterprise Repository Administrator.

To enable the Diagnostics page, the `vm-argument diagPagesEnabled` parameter must be set to `true`, when the system is started.

It is recommended to only enable when necessary and disable once the system is running without any issues.

19.3.1.2 Passwords Need to be Encrypted

In Oracle Enterprise Repository 11g Release 1 (11.1.1), it is recommended to use encrypted passwords. The key areas where the encrypted passwords must be used are:

- Oracle Enterprise Repository `database.properties` file

- Oracle Enterprise Repository property files

- Harvester configuration file and passing passwords on command line

- Exchange Utility configuration file and passing passwords on command line

To obtain an encrypted password, Oracle Enterprise Repository provides a encrypt string tool in the Diagnostics page. For Harvester and Exchange Utility, you can also run the `encrypt.bat` or `encrypt.sh` scripts to encrypt the passwords in the configuration files page.

For more information, see *Oracle Fusion Middleware Exchange Utility User Guide for Oracle Enterprise Repository*.

19.3.1.3 Search Results on Asset Search

Search results in the Asset Search, in the Web console, are now limited by default, to improve initial search performance. The number of results is configurable on the **Admin** > **System Properties** screen: `cmee.search.assets.maxresults`. If a search exceeds the maximum number of results, then the search results screen shows a result count such as Results (1000 of 2345), and the **Show All** link brings back all of the results.

19.3.1.4 Namespace Passed Out of Search Results

Assets that are prefixed with a namespace and are identified by surrounding curly brackets have that prefix parsed out of the name in the search results for Assets, Mystuff, and Projects.

19.3.1.5 Asset Type Schema Contains Unique Element

The internally generated Asset Type schema now contains the Unique Element element.

19.3.1.6 SSO Header Only for the User ID

For SSO headers, Oracle Enterprise Repository offers the ability to control overwriting the following user attributes:

- Firstname

- Middlename

- Lastname

- Email

- Phone

- Status

These attributes are overwritten if values for them are passed in during login. Otherwise, the user attributes are unchanged.

19.3.1.7 Basic Authentication for Proxy Download Requests

Customers can now proxy download requests for asset file attachments to a repository host with a username and password.

19.3.1.8 Credential Information Removed from LDAP Log File

The selected credential information is removed from the LDAP log file.

19.3.1.9 Default Character Encoding for Oracle Enterprise Repository

In Oracle Enterprise Repository 11g Release 1 (11.1.1), the default character encoding for Oracle Enterprise Repository is changed to UTF-8.

19.3.1.10 Enhancement in Oracle Enterprise Repository Reports

In Oracle Enterprise Repository 11g Release 1 (11.1.1), the engine for reports has changed from an internal engine, to Oracle BI Publisher. After you have installed and upgraded to 11g Release 1 (11.1.1), you need to install Oracle BI Publisher, deploy reports, and configure Oracle Enterprise Repository to integrate with Oracle BI Publisher, else Reports will not function properly.

19.3.2 Harvester Enhancements

In Oracle Enterprise Repository 11g Release 1 (11.1.1), the Harvester is enhanced to support the following:

19.3.2.1 Harvester Supports Introspecting

Harvester now supports introspecting of remote artifacts, by their URL.

19.3.2.2 Harvester Support Relative Imports

Harvester now supports relative imports within local and remote artifacts.

Harvester now supports files and URLs with any extension. For example, this includes URLs that end with `?wsdl`. In the case where the file type cannot be determined by the harvester, it can be specified on the command line or in the `HarvesterSettings.xml` file.

19.3.2.3 Harvester Supports XSD Schemas

Harvester now supports XSD Schemas with `<DOCTYPE>` DTD elements.

19.3.2.4 Harvester Supports WSDL Extensions

Harvester has been enhanced to support WSDL Extensions for Java, JMS, and EJB types.

19.3.2.5 Relative Path is Not Persisted in Harvester

In Harvester, the relative path directory was not persisted after the second introspection because the `<import>` statement is ignored in SFID calculation. This is fixed in Oracle Enterprise Repository 11g Release 1 (11.1.1).

19.3.3 Repository Extensibility Framework (REX) Enhancements

Repository Extensibility Framework (REX) has been enhanced to support the IN operator for Asset searches. The only fields that are supported with this operator are id, assettypeid, createdbyid, and submittedbyid.

19.3.4 Exchange Utility Enhancements

In Oracle Enterprise Repository 11g Release 1 (11.1.1), the Exchange Utility has been enhanced to support the following:

19.3.4.1 Receives Oracle Service Registry Services

The Exchange Utility now handles receiving Oracle Service Registry services where the service's WSDL contains multiple service definitions.

19.3.4.2 Supports JAVA WSDL Entensions

The Exchange Utility has been enhanced to support Java WSDL Extensions.

19.3.4.3 Receive Services from Oracle Service Registry

The Exchange Utility has been enhanced to receive services from Oracle Service Registry to Oracle Enterprise Repository that have imports that reference a URL with the protocol of classpath.

19.3.4.4 Publish Service to UDDI Registry

When publishing the service to a UDDI Registry using the Exchange Utility, the WS-Policies that are applied to a service in Oracle Enterprise Repository are now included as metadata. These policies are represented as categorizations of a service.

19.3.4.5 Multiple UDDI Registries Supported

The UDDI Registry plugin, which can be applied to an Asset Type and is applied to Service by default, has multiple functions. First, if the asset has not been published to any UDDI registry, then you have the ability to enter in a Service Key that is to be associated with this asset when published to any registries in the future. Once this service has been published, then the service key becomes read-only.

Another function of the plug-in is to show all UDDI registries that this service has been applied to. This list includes the registry name (taken from the orrxu.xml file), the registry URL, and the service key.

19.3.4.6 Publish Services from Oracle Enterprise Repository

The Exchange Utility does not support publishing services from Oracle Enterprise Repository that have an Active Status of Retired, Inactive, or Deleted. Only Active services are published.

19.4 Deprecated Features

This section describes the deprecated features for Oracle Enterprise Repository 11g Release 1 (11.1.1). This section contains the following topics:

- Section 19.4.1, "Deprecated Legacy Introspectors"
- Section 19.4.2, "Asset Use by Project Within a Department Deprecated"
- Section 19.4.3, "Jive Forum Not Supported"
- Section 19.4.4, "Acutate Not Supported"
- Section 19.4.5, "Upcoming Deprecations"

19.4.1 Deprecated Legacy Introspectors

Instead of the using the several obsolete importers, which are removed from Oracle Enterprise Repository, use the Harvester tool.

> **Note:** For more information on how to use the Harvester tool, see *Oracle Fusion Middleware Harvester User Guide for Oracle Enterprise Repository*.

The following import options are removed from Web UI, under **Admin** > **Import**:

- Import WSDL

- Import BPEL

- Import from UDDI

The following options have been removed from the Asset Editor:

- Import WSDL part of the WSDL Plugin

- The UDDI Registries folder in the Assets tree

The support for the following formats are removed from the `FlashlineRegistry.importExecute()` REX method:

- WSDL

- BPEL

- UDDI

The following system properties that were related to the above are removed:

- `cmee.import.uddi.enabled`

- `cmee.import.wsdl.enabled`

- `cmee.import.wsdl.service.assettype`

- `cmee.import.wsdl.xsd.assettype`

- `cmee.import.wsdl.dtd.assettype`

- `cmee.import.wsdl.relationship.imports`

- `cmee.import.wsdl.relationship.same-wsdl`

- `cmee.import.bpel.enabled`

- `cmee.import.bpel.service.assettype`

- `cmee.import.bpel.relationship.imports`

- `cmee.import.bpel.relationship.same-bpel`

Oracle Enterprise Repository is no longer supported as a UDDI Registry. Therefore, the following system settings are deprecated:

- `cmee.uddi.server.wsdl.mapping`

- `cmee.uddi.server.accesspointtype.mapping`

- `cmee.uddi.server.accesspoint.mapping`

- `cmee.uddi.server.suppress.instdet`

- `cmee.uddi.user.password`

- `cmee.uddi.user`

19.4.2 Asset Use by Project Within a Department Deprecated

The `Asset Use by Project Within a Department` report has been deprecated and removed. You can retrieve the same information by using the `Asset Use by Project` report.

19.4.3 Jive Forum Not Supported

Jive forums have been completely removed from Oracle Enterprise Repository. It is no longer part of the Oracle Enterprise Repository product.

19.4.4 Acutate Not Supported

In Oracle Enterprise Repository 11g Release 1 (11.1.1), the Actuate Reporting Engine has been replaced with Oracle Business Intelligence Enterprise Edition.

19.4.5 Upcoming Deprecations

This section describes the deprecation planned for the upcoming Oracle Enterprise Repository releases.

- In the upcoming Oracle Enterprise Repository releases, support from Tomcat would be changed to JBoss. If you need to install Oracle Enterprise Repository 11g Release 1 (11.1.1) on Tomcat, then contact the Oracle Support team.

- In the upcoming Oracle Enterprise Repository releases, the support for the existing Repository Extensibility Framework (REX) API would be replaced with a newer version that would not support the features available in the current API.

20

Oracle Mediator

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

- Section 20.1, "General Issues and Workarounds"
- Section 20.2, "Configuration Issues and Workarounds"
- Section 20.3, "Documentation Errata"

20.1 General Issues and Workarounds

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

- Section 20.1.1, "Multi-lingual Support Depends on Database Character Set"
- Section 20.1.2, "SOAP Web Service With Attachments is Not Supported"
- Section 20.1.3, "Oracle Mediator - BPEL Process Manager Callback Processing"
- Section 20.1.4, "Mediator Components May Cause SOA Suite Server to Run Out of Memory"
- Section 20.1.5, "Mediator Advanced Functions Do Not Work in Design Time"
- Section 20.1.6, "endpointURI Property Is Not Displayed in the Assign Dialog"

20.1.1 Multi-lingual Support Depends on Database Character Set

If you want to use multi-language support feature for some functions in Oracle Mediator, then, to avoid any unexpected results, you must ensure that these characters are supported by Database character set. For example, for Unit Test function, if the initial message payload in Unit Test includes characters that are not supported by Database character set, then you will see that the characters fail to display correctly in Unit Test part of the Oracle Enterprise Manager Fusion Middleware Control Console. This issue does not occur for a Database that supports Unicode characters.

20.1.2 SOAP Web Service With Attachments is Not Supported

In Oracle Mediator, when you call a SOAP Web Service with attachments you will not be able to perform a payload manipulation using the Assign or Transform functions. It fails with an exception because SOAP with attachments is not supported in Oracle Mediator if you use the Assign or Transform functions.

Workaround

When calling a SOAP Web Service with attachments, use Oracle Service Bus instead of Oracle Mediator.

20.1.3 Oracle Mediator - BPEL Process Manager Callback Processing

If Oracle Mediator calls a BPEL Process with callback processing and timeout, it is a best practice to explicitly handle the Callback exceptions returned from Oracle Mediator, in BPEL process. This is to ensure that the global transaction associated with Callback processing gets committed and is not rolled back. This way, the timeout handler configured in Oracle Mediator will not kick in even if the Callback handling in Oracle Mediator fails.

20.1.4 Mediator Components May Cause SOA Suite Server to Run Out of Memory

Mediator applications may run out of memory sometimes. For example, if the rate of incoming messages to Mediator is faster than the rate of callback messages, then memory accumulation occurs in the Mediator cache.

To fix this issue, change the cache size through the Oracle Enterprise Manager Fusion Middleware Control Console by adding the following property in the `Parameters` attribute of the Mediator configuration properties:

```
mediator.runtime_cache.limit=<value>
```

For example, if you set the value of the `mediator.runtime_cache.limit` property to 100, then the size of the cache will be limited to 100. The cache size refers to the number of objects that can be stored in the cache. You can switch off caching completely by setting this property to zero.

20.1.5 Mediator Advanced Functions Do Not Work in Design Time

Mediator advanced functions like `mhdr:getCompositeName()`, `mhdr:getHeader` require a runtime context to execute. So, if these functions are run using the Mapper Test functionality during design time, then the target XML file is not generated and the following error is thrown:

```
XML-22044: (Error) Extension function error: Error invoking 'getComponentName':'
java.lang.IndexOutOfBoundsException: Index: 0, Size: 0'
```

These functions work fine in runtime environment.

20.1.6 endpointURI Property Is Not Displayed in the Assign Dialog

The outbound property `$out.property.endpointURI` is not listed as an available property in the Assign Value dialog for Mediator assign task, while specifying a routing rule.

If you want to assign value to this property, then you can type in the property as `endpointURI` in the Property field of the To section in the Assign Dialog.

20.2 Configuration Issues and Workarounds

There are no configuration issues for Oracle Mediator.

20.3 Documentation Errata

There are no documentation errata for Oracle Mediator.

21

Oracle SOA Suite Common Functionality

This chapter describes runtime and common functionality issues associated with Oracle SOA Suite. It includes the following topics:

- Section 21.1, "General Issues and Workarounds"
- Section 21.2, "Configuration Issues and Workarounds"
- Section 21.3, "Documentation Errata"

21.1 General Issues and Workarounds

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

- Section 21.1.1, "Client Classpath Requirements for Using Direct Binding Invocations"
- Section 21.1.2, "Flow Diagram Does Not Display The First Time on Some Lower End Hosts"
- Section 21.1.3, "Limitation on Using the Safari Browser to View WSDL File Content"
- Section 21.1.4, "Deploying Multiple Composites Programmatically in Bulk Causes Failure After Approximately 30 Composites"
- Section 21.1.5, "Multiple Instances Behavior for Technology Adapters in Deployed SOA Composite Applications"
- Section 21.1.6, "Removing the Mapping Between the Operators Role and the SOAOperator Role"
- Section 21.1.7, "BPEL Faulted Instances State Is Not Shown When the Capture Composite Instance State Checkbox is Unselected"
- Section 21.1.8, "Logins Required for Accessing Components from SSO-Enabled Oracle Enterprise Manager Fusion Middleware Control Console"
- Section 21.1.9, "SOA Composite Application State Is Not Updated After BPEL Recovery Of a Faulted Instance"
- Section 21.1.10, "Correctly Saving Physical Directory Property Changes in the System MBean Browser"
- Section 21.1.11, "Mediator One-way Interface SOAP Call Provides Response in Case of Error"
- Section 21.1.12, "Available Attribute in System MBean Browser is Disabled"

21.1.1 Client Classpath Requirements for Using Direct Binding Invocations

For a client to invoke composite services over direct binding, its classpath must include both `soa-infra-mgmt.jar` and `oracle-soa-client-api.jar`.

For more information about using the direct binding invocations, see *Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite*.

21.1.2 Flow Diagram Does Not Display The First Time on Some Lower End Hosts

The flow diagram for an instance ID of a deployed SOA composite application in Oracle Enterprise Manager Fusion Middleware Control Console may not display the first time on some lower end hosts. Instead, you receive a `failed to load resource` message.

As a workaround, close the flow trace page and click the instance ID to return to the flow trace page.

21.1.3 Limitation on Using the Safari Browser to View WSDL File Content

If you are using the Safari browser, note the following limitation and workaround for viewing WSDL file contents in Oracle Enterprise Manager Fusion Middleware Control

Console. Note also that Mozilla Firefox works correctly and does not require this workaround.

1. Go to the home page for a SOA composite application.

2. Click the **Show WSDL and endpoint URI** link at the top of the page.

3. Click the WSDL link that is displayed.

   This opens a blank page that does *not* display the contents of the selected WSDL. As a workaround, perform the following additional steps.

4. In the upper right corner of this page, click the **Display a menu for the current page** icon.

5. Select **View Source** from the menu that is displayed.

   This displays the contents of the selected WSDL in another page.

21.1.4 Deploying Multiple Composites Programmatically in Bulk Causes Failure After Approximately 30 Composites

If you deploy multiple SOA composite applications programmatically in bulk using `oracle.integration.platform.blocks.deploy.servlet.CompositeDeployerClient`, after the successful deployment of approximately 30 composites, out-of-memory errors are displayed in the SOA server log files for the remaining composite deployments, and the SOA server hangs.

21.1.5 Multiple Instances Behavior for Technology Adapters in Deployed SOA Composite Applications

Instance tracking (flow trace) for a specific instance can display other instances (not relevant to the flow trace of the instance) under the following scenarios:

- File adapter (inbound direction)

  For the first instance after a redeployment.

- File adapter (two composites polling on the same directory for different file filters)

  The first instance of the second composite (that gets invoked) displays other instances.

- File adapter (rejected messages carry over to the audit trails of completed instances)

  For example, if you perform the following steps:

  1. Create a BPEL process that reads from a file and writes to a file.

  2. Deploy the composite with the BPEL process to the SOA Infrastructure.

  3. Copy an incorrect file to the read directory so that the file is rejected and no instance is created.

     In Oracle Enterprise Manager Fusion Middleware Control Console, you see system faults with the rejected message.

  4. Copy the correct file to the read directory so that instances are created for the process.

     In Oracle Enterprise Manager Fusion Middleware Control Console, you see that the instance state has completed.

  5. Open the audit trail for the completed instances.

In the audit trial page, the faults section shows system faults from previously rejected messages.

- Database adapter

    Polling scenarios (`MaxRaiseSize` is greater than 1) always show multiple instances.

- MQ Series Adapter

    Basic enqueue — dequeue scenarios always show multiple instances.

21.1.6 Removing the Mapping Between the Operators Role and the SOAOperator Role

By default, the Oracle WebLogic Server Operators role is included as a member of the SOAOperator role in Oracle Enterprise Manager Fusion Middleware Control Console. Oracle recommends that you remove the Operators role.

Perform the following steps to remove the Operators role.

1. Log in to Oracle Enterprise Manager Fusion Middleware Control Console as a user with the Administrators role.

2. In the navigator, expand the **SOA** folder.

3. Right-click **soa-infra**, and select **Security** > **Application Roles**.

4. To the right of the **Role Name** field, click the **Search** icon.

    The list of roles appears.

5. Click **SOAOperator**.

    The Edit Application Role : SOAOperator page appears.

6. In the **Roles** section, select **Operators**.

7. Click **Delete**.

8. Click **OK** to save the changes.

    This removes the Oracle WebLogic Server Operators role as a member of the Oracle Enterprise Manager Fusion Middleware Control Console SOAOperator role. At this point, the SOAOperator role includes only the Oracle WebLogic Server Administrators role.

21.1.7 BPEL Faulted Instances State Is Not Shown When the Capture Composite Instance State Checkbox is Unselected

When the **Capture Composite Instance State** checkbox of the SOA Infrastructure Common Properties page is unselected, the state of BPEL faulted instances is not shown. This is not the case with business rules, human workflow, or mediator. For each of these, the composite instance state is displayed as faulted/recovery needed.

21.1.8 Logins Required for Accessing Components from SSO-Enabled Oracle Enterprise Manager Fusion Middleware Control Console

If you log in to an SSO-enabled Oracle Enterprise Manager Fusion Middleware Control Console and click the links to the following components, you are directed to non-SSL URLs for these components, and prompted to log in again.

- Oracle BPM Worklist

- Oracle B2B

- Oracle BAM

- SOA Composer

21.1.9 SOA Composite Application State Is Not Updated After BPEL Recovery Of a Faulted Instance

The state of a failed SOA composite application instance is not updated after you successfully perform a recovery from the Recovery page of the BPEL service engine. For example, assume you perform the following steps.

1. Enable payload validation on the SOA Infrastructure Common properties page in Oracle Enterprise Manager Fusion Middleware Control Console.

2. Invoke an instance of a SOA composite application. If payload validation fails (for example, because required elements in the schema are missing), a failure occurs at the BPEL service component level during execution of an invoke activity.

    The instance is displayed as faulted in the Dashboard and Instances pages of the composite.

3. Go to the Recovery page of the BPEL service engine and note that the same instance is pending recovery.

4. Disable payload validation on the SOA Infrastructure Common properties page.

5. From the Recovery page of the BPEL service engine, select the instance and click **Recover**. This recovers the instance.

6. View the completed instance in the flow trace. However, note that the instance state is not updated and is still shown as faulted, whereas the instance has actually recovered and completed successfully.

    This is the expected behavior. BPEL recovery created a new BPEL instance, which completed successfully. However, the previous BPEL instance (the one that failed schema validation) is still shown as faulted. The overall composite instance is counted as faulted, since one of its two component instances (the previous BPEL instance) is faulted.

21.1.10 Correctly Saving Physical Directory Property Changes in the System MBean Browser

Changing the physical directory property for the file or FTP adapter in the System MBean Browser does not take effect until you select the **save** attribute under the **Operations** tab, as described in Steps 8 and 9. Ensure that you perform all of the following steps.

1. In the navigator, right-click **soa-infra** and select **Administration** > **System MBean Browser**.

2. Navigate to **Application Defined MBeans** > **oracle.soa.config** > **Server:** *server_name* > **SCAComposite** > *deployed_SOA_composite_application_name* > **SCAComposite.SCAReference.SCABinding** > **AdapterBinding**.

3. Click the **Attributes** tab.

4. Click **Properties**.

5. Expand the **element_***number* folders that include the correct adapter endpoint values (for example, **element0**, **element_1**, and **element_2**).

6. Change the physical directory value in each, and click **Apply**.

7. Click **Return**.

8. Click the **Operations** tab.

9. Click **save**. This action persists the changes.

21.1.11 Mediator One-way Interface SOAP Call Provides Response in Case of Error

The one.way.returns.fault property controls how faults and one-way messages are handled. Add this property to the service binding component of the web service section for one-way web services in the composite.xml file. Table 21–1 provides details. This property is applicable only to services and *not* references, and is only applicable to the binding.ws binding type.

Table 21–1   one.way.returns.fault Property

If one.way.returns.fault Is...	Then...
Set to true: ```. . . <service name="Mediator1_2" ui:wsdlLocation="ReadFile.wsdl"> <interface.wsdl interface="http://xmlns.oracle.com/pcbpel/adapter/file /LocalSandbox/Project1/ReadFile%2F#wsdl.interface(Read_ ptt)"/> <binding.ws port="http://xmlns.oracle.com/pcbpel/adapter/file /LocalSandbox/Project1/ReadFile%2F#wsdl.endpoint (Mediator1/Read_pt)"> <property name="one.way.returns.fault" type="xs:string" many="false" override="may">true</property> </binding.ws> </service> . . .```	Any fault that occurs during downstream processing returns a SOAP fault to the client and an HTTP response code of 500. (The same behavior as 11*g* Release 1.)
Set to false: ```. . . <service name="Mediator1_2" ui:wsdlLocation="ReadFile.wsdl"> <interface.wsdl interface="http://xmlns.oracle.com/pcbpel/adapter/file/ Local Sandbox/Project1/ReadFile%2F#wsdl.interface(Read_ ptt)"/> <binding.ws port="http://xmlns.oracle.com/pcbpel/adapter/file/LocalSan dbox/Project1/ReadFile%2F#wsdl.endpoint(Mediator1/Read_ pt)"> <property name="one.way.returns.fault" type="xs:string" many="false" override="may">false</property> </binding.ws> </service> . . .```	Any fault that occurs during downstream processing returns only an HTTP response code of 500. No SOAP fault is returned to the client.

Table 21–1   (Cont.) one.way.returns.fault Property

If one.way.returns.fault Is...	Then...
Not set (the default case)	Any fault that occurs during downstream processing returns a SOAP fault to the client and an HTTP response code of 500. (The same behavior as 11*g* Release 1.)

To add this property:

1. In the SOA Composite Editor, select the service binding component to which to add this property.

2. Go to the Property Inspector section in the lower right part of the editor.

3. In the **Binding Properties** section, click the **Add** icon.

    The Create Property dialog is displayed.

4. In the **Name** field, enter `one.way.returns.fault`.

5. In the **Value** field, enter `true` or `false`.

6. Click **OK**.

21.1.12 Available Attribute in System MBean Browser is Disabled

Although the **Available** attribute for a SOA composite application in the System MBean Browser is currently disabled by design, you can change its value. However, changing the value and clicking **Apply** results in an exceptions error. Do *not* change the value for this attribute. This attribute is accessible through the following steps.

1. In the navigator, right-click **soa-infra** and select **Administration** > **System MBean Browser**.

2. Navigate to **Application Defined MBeans** > **oracle.soa.config** > **Server:** *server_name* > **SCAComposite** > *deployed_SOA_composite_application_name* > **SCAComposite.SCAService** > **client** > **SCAComposite.SCAService.SCABinding** > **WSBinding**.

3. Click the **Attributes** tab.

    The Available attribute is displayed.

21.1.13 XSLT Mapper Dictionary Does Not Generate Instructions in Which Functions are Used

You cannot create a dictionary for mappings in which functions are used. In these cases, the dictionary XML instructions are missing for the elements that were automapped or which had an XPath function mapping. For example, assume you use string functions to map XSDs during design time. If you right-click in the XSLT Mapper and select **Generate Dictionary**, the dictionary is created, but instructions are not created in all places in which the string functions were used during mapping.

Note that you can create a dictionary for simple type mappings.

21.1.14 Removing Extra Set Text Dialog Characters

Adding `&` to the **Text** field of the Edit Text dialog in Oracle JDeveloper adds extra characters to the XSL file. For example, perform the following steps:

1. In the XSLT Mapper, right-click a string element in the target pane.

2. Select **Set Text** > **Enter Text**.

3. In the Edit Text dialog, enter `&` in the **Text** field, and click **OK**.

4. Go to the **Source** view of the XSL file, and see that an extra `amp;` is appended.

   ```
   <xsl:text disable-output-escaping="no">&amp;amp;</xsl:text>
   ```

As a workaround, in **Source** view of the XSL file, remove the extra character `amp;` that was appended in the previous steps. The source view now looks as follows:

```
<xsl:text disable-output-escaping="no">&amp;</xsl:text>
```

21.1.15 SOA Composite Application in a Retired State Does Not Receive Business Events

A BPEL component in a retired SOA composite application cannot receive a business event, even if the event is associated with a noninitiating receive activity of the BPEL process.

21.1.16 Event Delivery Network Attribute Changes in System MBean Browser Require a SOA Infrastructure Restart

If you change event delivery network attribute properties in the System MBean Browser of Oracle Enterprise Manager Fusion Middleware Control Console, you must restart the SOA Infrastructure. Not performing this action results in failure of the event delivery cases. For example, perform the following procedures:

1. In the navigator, right-click **soa-infra** and select **Administration** > **System MBean Browser**.

2. Perform one of the following steps:

   a. Navigate to **Application Defined MBeans** > **oracle.soa.config** > **Server:** *server_name* > **EDNConfig** > **edn**.

   b. In the upper left part of the page, click the **Filter** icon, enter the following pattern in the **MBean Pattern Filter** field, and click **OK**:

      ```
      oracle.as.soainfra.config:name=edn,type=EDNConfig,Application=soa-infra
      ```

3. Change the value for either of the following attributes and click **Apply**.

   - **NumberOfThreads**

   - **QueueWaitTime**

   Note that the **NumberOfRetrys** attribute is also displayed. The NumberOfRetrys attribute is not supported for this release. Do not change the value for this attribute.

4. Note that the **Notification** tab generates the following notification message:

   ```
   Notification that a Config MBean attribute has changed and a restart is needed
   ```

5. To resolve the error, restart the SOA Infrastructure:

a. In the navigator, right-click **soa-infra** and select **Control** > **Shut Down**.

b. Wait for shutdown to complete.

c. Right-click **soa-infra** again and select **Control** > **Start Up**.

21.1.17 Oracle Database Users Should Use EDN-DB

The event delivery network is the subsystem of SOA that accepts and delivers published business events to subscribers. Starting with this release, the event delivery network has two different implementations:

- EDN-DB: Uses an Oracle database as a back-end store and depends on Oracle-specific features.

- EDN-JMS: Uses a generic JMS queue as a back-end store.

If you are using an Oracle database, Oracle recommends that you use EDN-DB instead of EDN-JMS.

21.1.18 Failure to Add and Update WSDL Binding After Migration

When you open Oracle JDeveloper and attempt to migrate a 10.1.3 application that includes WSIF binding information to version 11*g*, migration creates a web service reference with no WSDL binding information (`binding.wsif`) in the `composite.xml` file. When you then attempt to update the reference with the same WSDL in Oracle JDeveloper, the binding information is not saved, and you receive a compilation error.

This is because Oracle JDeveloper is handling the typical migration use case in which the reference is updated with a new WSDL location (same WSDL, but in a different location). Therefore, when you do not change the WSDL location, nothing happens.

As a workaround, perform either of the following steps:

1. Delete the reference and create a new one using the same WSDL.

2. (Easiest) Copy the WSDL to a different file name, but do not change its contents. Then, update the reference using this WSDL copy. This changes the location of the WSDL and correctly creates the `binding.ws`.

21.1.19 Business Process Modeling Notation MBean Can Be Ignored

The System MBean Browser in Oracle Enterprise Manager Fusion Middleware Control Console includes an MBean for Business Process Modeling Notation (BPMN). This MBean cannot be used for this release, and should be ignored. The presence of this MBean does not impact the runtime behavior of other Oracle SOA Suite components.

21.1.20 Storing Application Artifacts in a Source Control System and Deploying Them with the ant Utility

If you store application artifacts in a source control system that you later want to reuse for deployment with `ant`, the following changes are required if the application has metadata service (MDS)-based references.

Assume the original Oracle JDeveloper application has file-based MDS references such as the following:

```
<metadata-store-usage id="mstore-usage_1">
          <metadata-store
class-name="oracle.mds.persistence.stores.file.FileMetadataStore">
```

```
                    <property value="${oracle.home}/integration"
                             name="metadata-path"/>
                    <property value="seed" name="partition-name"/>
                </metadata-store>
```

Modify this code to use database-based MDS references in the *Application_
Directory*/.adf/META-INF/adf-config.xml file, as shown below:

```
<metadata-store-usage id="mstore-usage_1">
               <metadata-store
class-name="oracle.mds.persistence.stores.db.DBMetadataStore">
                   <property name="jdbc-userid" value="${mdsuser}"/>
 <property name="jdbc-password" value="${mdspassword}"/>
                   <property name="jdbc-url"
value="jdbc:oracle:thin:@${db.host.name}:${db.host.port}:${db.sid}"/>
                    <property name="partition-name" value="soa-infra"/>
               </metadata-store>
```

Check the modified application with these adf-config.xml entries into a source
control system. The following concrete example of a modified adf-config.xml file
is provided.

```
 <metadata-store-usage id="mstore-usage_1">
               <metadata-store
class-name="oracle.mds.persistence.stores.db.DBMetadataStore">
                   <property name="jdbc-userid" value="soainfra_mds"/>
                   <property name="jdbc-password" value="soainfra_mds"/>
                   <property name="jdbc-url"
value="jdbc:oracle:thin:@myhost56.us.oracle.com:15739:db2825"/>
                   <property name="partition-name" value="soa-infra"/>
               </metadata-store>
```

You can use a variable for the user ID and password and replace the values prior to
ant deployment in the application.

If the MDS database has a JNDI name, then use the following entries in
adf-config.xml:

```
<metadata-store
  class-name="oracle.mds.persistence.stores.db.DBMetadataStore">
     <property name="jndi-datasource" value="${db.jndi.name}"/>
     <property name="partition-name" value="soa-infra"/>
</metadata-store>
```

21.1.21 Understanding Issues with BPEL Process Global Transactions and Adapter Local Transactions

BPEL processes run in global transactions, while other Oracle SOA Suite components,
such as adapters, run in local transactions. This can cause inconsistencies with the
information displayed in Oracle Enterprise Manager Fusion Middleware Control
Console.

For example, assume you have a main synchronous BPEL process that invokes an
asynchronous BPEL process. There is one database adapter insert in the main
synchronous BPEL process before the invocation of the asynchronous BPEL process.
There is a second database adapter insert in the asynchronous BPEL process, at which
point a fault is expected to be thrown.

The expected behavior is as follows:

- An initial insert into the database is performed from the main process that completes successfully as expected.

- The second insert also executes in the asynchronous process, but after encountering the fault, the BPEL process rolls back the initial insert.

However, in Oracle Enterprise Manager Fusion Middleware Control Console, the second database insert also shows as having completed successfully, instead of the having faulted.

This is because the database adapter invocation is logged (instance tracked) in a local transaction that is not part of the global BPEL JTA transaction. Therefore, the database adapter invocation completes successfully, but the subsequent BPEL process incurs a global rollback.

```
<invoke name="Invoke_1" inputVariable="Invoke_1_insert_InputVariable"
   partnerLink="db" portType="ns1:db_ptt" operation="insert"/>
. . .
. . .
   <throw name="Throw_2" faultName="bpelx:rollback"/>
```

At that point, instance tracking has already recorded the outbound invocation as successful (in a local transaction). If the adapter throws an exception, instance tracking logs this as a fault. Also note that some partner links may invoke a file adapter, which cannot be rolled back, even if the BPEL process later throws a `bpelx:rollback`.

21.1.22 Descriptions for Data Source JNDI Fields are Interchanged

In the SOA Infrastructure Common Properties page of Oracle Enterprise Manager Fusion Middleware Control Console, the descriptions for **Server Data Source JNDI** and **Server Transaction Data Source JNDI** are interchanged. However, the **Configure** links go to the correct locations.

21.1.23 Display of XML Content Getting Cut Off with Mozilla Firefox

If you are using Mozilla Firefox and click an activity on the **Flow** tab of a BPEL process service component instance in Oracle Enterprise Manager Fusion Middleware Control Console, the popup window that displays the XML content gets cut off on the right side. You must use the scroll bar at the bottom on this window to move to the right and display all XML content. If you use Internet Explorer, this is not an issue.

21.1.24 Duplicate XML Declarations in XML Source Results in Audit Trail Errors with Mozilla Firefox

If you use Mozilla Firefox to click the **view XML document** link on the Audit Trail page in Oracle Enterprise Manager Fusion Middleware Control Console, an error message similar to the following can be displayed:

```
XML Parsing Error: XML or text declaration not at start of entity
Location:
http://myhost.us.oracle.com:7001/em/faces/ai/sca/share/audit/xmlAuditDetail.
jsp?detailId=0&_afrLoop=10355217141136524&_afrWindowMode=0&_afrWindowId=_new
Line Number 1, Column 39:<?xml version="1.0" encoding="UTF-8"?><?xml version
= '1.0' encoding = 'UTF-8'?>
```

This error occurs if the XML source already includes an XML declaration (for example, `<?xml version = '1.0' encoding = 'UTF-8'?>`).

`<?xml version = '1.0' encoding = 'UTF-8'?>`

```
<task xmlns="http://xmlns.oracle.com/bpel/workflow/task">
<title>Approve Discount</title>
 <payload xmlns="http://xmlns.oracle.com/bpel/workflow/task">
 <discountandshipping
xmlns:discountandshipping="http://www.globalcompany.com/ns/OrderBooking/rules"
   xmlns="http://www.globalcompany.com/ns/OrderBooking/rules">
  <price>5000.0</price>
. . . . .
. . . . .
</task>
```

During processing, Oracle Enterprise Manager Fusion Middleware Control Console adds a *second* XML declaration. This results in duplicate XML declarations, which causes Mozilla Firefox to report an error.

As a workaround, use Internet Explorer.

21.1.25 Granting the Same Role to the Same User Twice Produces an Inaccurate Message with WLST

1. Create a domain with Oracle WebCache and extend it with Oracle SOA Suite.

2. Associate the Oracle WebCache application with LDAP and grant the admin role to a user (for example, user name `test`) in Oracle Internet Directory using the WebLogic Scripting Tool (WLST).

3. Grant the same role (admin role) to the same user again (`test`).

   You expect to see a WLST error message such as the following:

   ```
   This particular user already has admin role to access your application
   ```

   Instead, you receive the following message, which is inaccurate:

   ```
   Command FAILED, Reason: Cannot add principal to application role
   ```

21.1.26 Fault Policy Retry Action May Not Execute with Multiple Faults in the Same Flow

The fault policy retry action may not execute with multiple faults in the same flow. This may be because the retry count has already been reached for any of the previous faults.

For example, assume you define a fault policy with two fault conditions: `fault1` and `fault2`. For both fault conditions, the retry action is specified with a retry count of three. Assume `fault1` occurs and the retry action executes three times. You correct the problem for `fault1` by modifying the payload, but ensure that `fault2` is to be raised when the instance is resubmitted. You then resubmit the faulted instance using Oracle Enterprise Manager Fusion Middleware Control Console. You expect the second fault condition, `fault2`, to retry three times as per the fault policy specification. However, this does not occur because the maximum number of retries was already executed for the previous `fault1` fault condition.

21.1.27 Mediator Instances Can Display as Running After Transaction Completion

A mediator service component relies on a successful commit of a local transaction to know whether an instance is recoverable. Even if a graceful shutdown is correctly implemented, and all transactions are allowed to complete (within the given time out

window), there can still be a local transaction that is denied because it fails to occur within the time out window. For example, assume the following:

1. A database adapter posts a message.

2. A mediator service component receives the message, sets its state to running, and invokes a BPEL process service component, whose state is also set to running.

3. A JMS adapter is invoked, and encounters and throws an exception. The reference fault tables are updated.

4. The BPEL process receives the exception, marks its state as completed with a fault, and rethrows the exception to the mediator.

5. The BPEL process triggers an asynchronous persistence of its audit information as the global transaction is rolled back.

6. The mediator receives the exception and persists the fault information in its error tables (in a separate local transaction).

7. The mediator sets its state to faulted.

If the server is shut down before the transaction can complete (for example, between Steps 5 through 7), the mediator instance can remain in a running state. The corresponding composite instance whose state is inferred from the components also displays as running. As the global transaction is rolled back, the message can be retried and reprocessed by the inbound adapter. Note that in this scenario, no mediator instances are lost.

21.1.28 Handling Business and Remote Faults in the Calling BPEL Processes

Oracle recommends that you handle both business and remote faults in BPEL processes during design time. If remote exceptions are not handled in the calling BPEL process, you can see discrepancies in the overall SOA composite application instance state and the server component instance states associated with the composite. For example, a situation may occur in which the composite instance is in a faulted state, while the service component instances are in a completed state. If the caller handles the remote exceptions, then the states of composite and component instances are accurate.

21.2 Configuration Issues and Workarounds

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

- Section 21.2.1, "Removing References to the Demo Certificates When Using Your Own SSL Certificates"

- Section 21.2.2, "Successfully Loading the SOAINFRA Schema with the Repository Creation Utility"

- Section 21.2.3, "Specifying a Nondefault XA Transaction Timeout Value for XA Data Sources"

- Section 21.2.4, "XA Configuration Required to Start the SOA Infrastructure on Microsoft SQL Server 2008"

- Section 21.2.5, "Streaming Inbound and Outbound Attachments"

- Section 21.2.6, "Increasing Memory to Recover from Compilation Errors"

- Section 21.2.7, "Using ADF Binding to Invoke a Composite Application from a JSP/Java Class"

- Section 21.2.8, "Increasing the XA Transaction Timeout Value"

21.2.1 Removing References to the Demo Certificates When Using Your Own SSL Certificates

If you use your own certificates for SSL, you must remove references to the demo certificates by removing the following line from the `setDomainEnv` file for your version of the operating system.

```
-Djavax.net.ssl.trustStore=${WL_HOME}/server/lib/DemoTrust.jks
```

Otherwise, Oracle BPEL Process Manager cannot access the external SOAP endpoint.

21.2.2 Successfully Loading the SOAINFRA Schema with the Repository Creation Utility

If the Repository Creation Utility (RCU) is run with any user other than `SYS` or `SYSTEM`, then that user must be granted the following roles and privileges to successfully load the `SOAINFRA` schema:

```
GRANT dba TO new_user;
GRANT ALL ON dbms_aqadm TO new_user WITH GRANT OPTION;
GRANT ALL ON dbms_aq TO new_user WITH GRANT OPTION;
```

With these roles and privileges, the `SOAINFRA` schema is successfully created.

21.2.3 Specifying a Nondefault XA Transaction Timeout Value for XA Data Sources

The default XA transaction timeout value for XA data sources is `0` seconds. You can change the default value in the Oracle WebLogic Server Administration Console. Follow these steps.

1. Log in to Oracle WebLogic Server Administration Console.

2. Under **Domain Structure** on the left side of the page, select **Services** > **JDBC** > **Data Sources**.

3. In the **Name** column of the **Data Sources** table, select EDNDataSource (for event delivery network transactions) or **SOADataSource** (for all other types of transactions).

4. Under the **Configuration** tab at the top, click the **Transaction** subtab.

5. In the **XA Transaction Timeout** field, enter a value in seconds.

6. Select the **Set XA Transaction Timeout** checkbox. You *must* select this checkbox for the new XA transaction timeout value to take effect.

7. Click **Save**.

21.2.4 XA Configuration Required to Start the SOA Infrastructure on Microsoft SQL Server 2008

You must configure XA support in both the Microsoft SQL Server database and Microsoft operating system to test the SOA Infrastructure connection during domain creation and to successfully start the SOA Infrastructure.

1. Install Oracle WebLogic Server.

2. Install Microsoft SQL Server JDBC XA procedures. These procedures enable you to use JDBC distributed transactions through JTA. This procedure must be repeated for each MS SQL Server installation to include in a distributed transaction.

   a. Copy the `sqljdbc.dll` and `instjdbc.sql` files to the directory appropriate to your version of SQL Server.

For SQL Server...	Copy Both Files From...	To...
2005	*WL_HOME_10.3*\server\lib	C:\Program Files\Microsoft SQL Server\MSSQL.1\MSSQL\Binn
2008	*WL_HOME_10.3*\server\lib	C:\Program Files\Microsoft SQL Server\MSSQL10.*INSTANCE_NAME*\MSSQL\Binn

> **Notes:**
>
> - If you are installing stored procedures on a database server with multiple Microsoft SQL Server instances, then each running SQL Server instance must be able to locate the `sqljdbc.dll` file. Therefore, the `sqljdbc.dll` file must be anywhere on the global PATH or on the application-specific PATH. For the application-specific PATH, place the `sqljdbc.dll` file into the *drive*:\Program Files\Microsoft SQL Server\MSSQL$*Instance_1_Name*\Binn directory for each instance.
>
> - If your Oracle WebLogic Server and Oracle SOA Suite installations are on a Linux host, the `sqljdbc.dll` file does not appear under the *WL_HOME_10.3*/server/lib directory. In these cases, you must copy this file from a host on which `sqljdbc.dll` is installed.

   b. From the database server, use the ISQL utility to run the `instjdbc.sql` script for your version of SQL Server. As a precaution, back up the master database before running `instjdbc.sql`.

For SQL Server...	Run...
2005	C:\Program Files\Microsoft SQL Server\90\Tools\Binn\SQLCMD.EXE -S "*DB_HOST**INSTANCE_NAME*" -U SA -P *SA_PASSWORD* -i instjdbc.sql -o LOG_FILE
2008	C:\program files\Microsoft SQL Server\100\Tools\Binn\SQLCMD.EXE -S "*DB_HOST**INSTANCE_NAME*" -U SA -P *SA_PASSWORD* -i instjdbc.sql -o LOG_FILE

where:

- *DB_HOST* is the name of the host on which SQL Server is installed.
- *INSTANCE_NAME* is the name of the SQL Server instance.
- *SA_PASSWORD* is the password of the system administrator.

The `instjdbc.sql` script generates many messages. In general, these messages can be ignored; however, scan the output for any messages that may indicate an execution error. The last message should indicate that `instjdbc.sql` ran successfully. The script fails when there is insufficient space available in the master database to store the JDBC XA procedures or to log changes to existing procedures.

3. Configure the Microsoft Distributed Transaction Coordinator (DTC) for the Microsoft operating system.

   a. From the **Start** menu, select **Control Panel** > **Administrative Tools** > **Component Services** icon > Component Services (in the navigator under **Console Root**) > **Computers** > **My Computer**.

   b. Right-click **My Computer** and select **Properties** > **MSDTC** > **Security Configuration**.

      The Security Configuration dialog appears.

   c. In the **Security Settings** section, select the **Network DTC Access** checkbox.

   d. In the **Client and Administration** section, select the **Allow Remote Clients** checkbox.

   e. In the **Transaction Manager Communication** section, select the **Allow Inbound**, **Allow Outbound**, **No Authentication Required**, and Enable Transaction Internet Protocol (TIP) Transactions checkboxes.

   f. In the **Security Settings** section, select the **Enable XA Transactions** checkbox.

   g. Click **OK** in the Security Configuration dialog.

   h. Click **OK** in the My Computer Properties dialog.

21.2.5 Streaming Inbound and Outbound Attachments

To stream attachments from the SOA WS binding layer, add the following properties in `composite.xml` for services and references:

```
streamIncomingAttachments="true" streamOutgoingAttachments="true"
```

Example 21–1 shows a sample.

Example 21–1

```
<binding.ws
port="http://services.otn.com#wsdl.endpoint(MIMEService/MIMEService)"
xmlns:ns="http://xmlns.oracle.com/sca/1.0"
streamIncomingAttachments="true" streamOutgoingAttachments="true"/>
>
```

21.2.6 Increasing Memory to Recover from Compilation Errors

If you receive out-of-memory errors during compilation of a SOA composite application, perform the following steps to increase memory.

1. Open the `ant-sca-compile.xml` file in the `$ORACLE_HOME/bin` directory.

2. Under the `scac` element, increase the memory setting. For example:

   ```
   <jvmarg value="-Xmx512M"/>
   ```

21.2.7 Using ADF Binding to Invoke a Composite Application from a JSP/Java Class

If a SOA composite application uses Web service (WS) binding to define an endpoint reference, the composite cannot be invoked from a JSP/Java class. WS binding is defined with the `binding.ws port="" location=""` tag in the `composite.xml` file:

```
<service name="client_ep" ui:wsdlLocation="BPEL.wsdl">
    <interface.wsdl interface="http://xmlns.oracle.com/Application/Project/
      BPEL#wsdl.interface(BPEL)"/>
    <binding.ws port="http://xmlns.oracle.com/App/BPELProj/
      BPELProcess#wsdl.endpoint(bpel_client_ep/BPELProcess_pt)"/>
  </service>
```

Instead, use ADF binding. After deployment of the composite with ADF binding, invocation from a JSP/Java class is successful.

```
<service name="client_ep" ui:wsdlLocation="BPEL.wsdl">
    <interface.wsdl interface="http://xmlns.oracle.com/Application/Project/
     BPEL#wsdl.interface(BPEL)"/>
    <binding.adf serviceName="bpel_client" registryName=""/>
  </service>
```

21.2.8 Increasing the XA Transaction Timeout Value

If you send notifications for parallel task assignments in human workflow, you can see the transaction close, SQL exceptions appear, and notification processing take a long time at runtime. If this occurs, increase the XA transaction timeout for an XA data source in Oracle WebLogic Server Administration Console. When set, this value overrides the value of the global transaction timeout.

1. Click **Lock and Edit**.

2. Choose **Services** > **Data Sources**.

3. Click the specific data source.

4. Click the **Transaction** tab.

5. Select **Set XA Transaction Timeout**.

6. In the **XA Transaction Timeout** field, specify the value of the transaction timeout.

7. Click **Save**.

8. Log into SQL*Plus.

9. Set the `distributed_lock_timeout` value.

   ```
   SQL> alter system set distributed_lock_timeout=value scope=spfile;
   ```

   Oracle recommends that you set `distributed_lock_timeout` to a value greater than or equal to that set in Step 6.

10. Shut down and restart your database after running this command.

11. Verify that the setting has changed.

    ```
    SQL> show parameter distributed_lock_timeout;
    ```

12. Set this parameter to the same value for all instances in an Oracle Real Application Cluster.

21.3 Documentation Errata

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

- Section 21.3.1, "Purge Script Name is purge_soainfra_oracle.sql"
- Section 21.3.2, "Undeploy SOA Composite Wizard Online Help and Viewing Flow Trace Details for Stale Instances"

21.3.1 Purge Script Name is purge_soainfra_oracle.sql

Section "Deleting Large Numbers of Instances" of Chapter "Managing SOA Composite Applications" of *Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite* mentions to use the `purge-script.sql` PL/SQL script for deleting instances and rejected messages.

The correct name for this script is `purge_soainfra_oracle.sql`.

The PL/SQL procedures in this script are populated into the database when you run the Repository Creation Utility during Oracle SOA Suite schema creation.

For more information about this script, see Oracle MetaLink Note 815896.1.

21.3.2 Undeploy SOA Composite Wizard Online Help and Viewing Flow Trace Details for Stale Instances

The online Help for the Undeploy SOA Composite Wizard states that when the instance state of the undeployed composite application is set to stale, you cannot access BPEL process audit trail details, but that flow diagram details are accessible for viewing.

In fact, both the audit trail and flow diagram are inaccessible. You must redeploy the composite to view the audit trail and flow diagram.

22

Oracle Technology Adapters

This chapter describes issues associated with Oracle Technology Adapters and the *Oracle Fusion Middleware User's Guide for Technology Adapters*. It includes the following topics:

- Section 22.1, "General Issues and Workarounds"
- Section 22.2, "Configuration Issues and Workarounds"
- Section 22.3, "Documentation Errata"

22.1 General Issues and Workarounds

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

- Section 22.1.1, "Oracle JCA Adapters Issues and Workarounds"
- Section 22.1.2, "Oracle JCA Adapter for Files/FTP Issues and Workarounds"
- Section 22.1.3, "Oracle JCA Adapter for AQ Issues and Workarounds"
- Section 22.1.4, "Oracle JCA Adapter for JMS Issues and Workarounds"
- Section 22.1.5, "Oracle JCA Adapter for Database Issues and Workarounds"
- Section 22.1.6, "Oracle JCA Adapter for MQ Series Issues and Workarounds"
- Section 22.1.7, "Oracle JCA Adapter for Socket Issues and Workarounds"
- Section 22.1.8, "Native Format Builder Issues and Workarounds"

22.1.1 Oracle JCA Adapters Issues and Workarounds

This section describes issues and workarounds that are applicable to all adapters: Oracle AQ Adapter, Oracle JMS Adapter, Oracle Files/FTP Adapter, Oracle MQ Series Adapter, Oracle Database Adapter, and Oracle Socket Adapter.

This section includes the following issue:

- Section 22.1.1.1, "ECID Propagation Is Not Supported by Oracle Technology Adapters"
- Section 22.1.1.2, "Outbound Adapter Does Not Perform an Outbound Retry If the Outbound Adapter Throws an Exception with GLOBAL_RETRY"
- Section 22.1.1.3, "JCA Binding Component Error Messages During Forceful Shutdown"

- Section 22.1.1.4, "Manual Edits to WSDL Lost When Re-running the Adapter Configuration Wizard"

22.1.1.1 ECID Propagation Is Not Supported by Oracle Technology Adapters

ECID (Execution Context Identifier) propagation is not supported by Oracle Technology adapters. The ECID is used to keep track of message flow in Oracle Enterprise Manager, and hence this feature is not available in Oracle Technology adapters.

22.1.1.2 Outbound Adapter Does Not Perform an Outbound Retry If the Outbound Adapter Throws an Exception with GLOBAL_RETRY

If an outbound adapter throws an exception with `GLOBAL_RETRY`, then the retry configured at the outbound adapter level will not take effect. The retry falls back to the caller which could be a BPEL process. It is observed that the retry happens from the inbound to the BPEL process (caller of BPEL process) in either of the following transaction semantics in Oracle BPEL process:

Scenario 1:
```
<property name="bpel.config.transaction">requiresNew</property>
<property name="bpel.config.oneWayDeliveryPolicy">sync</property>
```

Scenario 2:
```
<property  name="bpel.config.transaction">required</property>
<property name="bpel.config.oneWayDeliveryPolicy">sync</property>
```

If the adapter throws a `LOCAL_RETRY`, then the retry configured at the outbound adapter level will take effect.

Note that for the inbound retry to work, Oracle BPEL process must not have any dehydration points.

22.1.1.3 JCA Binding Component Error Messages During Forceful Shutdown

During forceful shutdown of Oracle WebLogic Server, if the severs are processing data, then you may see JCA Binding Component error messages. These messages are benign.

22.1.1.4 Manual Edits to WSDL Lost When Re-running the Adapter Configuration Wizard

Every time you use the Adapter Configuration Wizard to edit an adapter, the wizard uses the data you enter to recreate the adapter WSDL. If you made manual edits to the WSDL before, the Adapter Configuration Wizard will discard those changes the next time you edit the adapter.

The workaround for this issue is to make the same manual edits each time you use the Adapter Configuration Wizard.

22.1.2 Oracle JCA Adapter for Files/FTP Issues and Workarounds

This section describes the following issues and workarounds related to Oracle File and FTP Adapters:

It includes the following sections:

- Section 22.1.2.1, "Files Lost During an SOA Server Failover"

22.1.2.1 Files Lost During an SOA Server Failover

The Oracle File Adapter picks up a file from an inbound directory, processes the file, and sends the processed file to an output directory. However, during this process if a failover occurs in an SOA managed server, then the file may be lost because of the nontransactional nature of Oracle File Adapter. As a result, some files read by the inbound adapter may not be sent to the output directory. You must configure the Oracle File Adapter for high availability, to ensure that files are not lost during a failover.

22.1.2.2 DOM Parsing Exception at Run Time

When Oracle File and FTP Adapters read a Unicode XML file with byte order mark (BOM), a DOM parsing exception is thrown at runtime. If the Unicode XML file does not use BOM, then an exception is not thrown.

22.1.2.3 Rejection Handling Not Working Properly for XML-Debatching Scenarios

In case of debatching scenarios with XML payloads that have errors such as extra tags and spurious data, output files are created along with the rejected messages.

22.1.2.4 JCA Property Updates from Enterprise Manager Console Are Not Applied If a Logical Directory Is Used

If Oracle File and FTP Adapters use logical directories for inbound or outbound operations, then JCA property updates from Oracle Enterprise Manager Console are not applied.

22.1.2.5 Prerequisite for Oracle FTP Adapter Debatching Scenarios on FTPS

You must use a synchronous process in case of Oracle FTP Adapter debatching scenarios on FTP over SSL (FTPS) for large payloads. If a synchronous process is not used, then the FTP server throws the error code, 421.

22.1.2.6 Chunked Read Feature Not Supported for Secure FTP

The Chunked Read feature of Oracle FTP Adapter is not supported for SFTP (Secure FTP) using SSH transport.

22.1.2.7 Editable Append Property With Dynamic File Name

When a dynamic file name is specified for an output file, the `Append` property must not be edited. However, the Oracle Enterprise Manager Fusion Middleware Control

Console allows you to edit the `Append` property even when you specify a dynamic file name for an output file. Ensure that you do not edit the `Append` property when you specify a dynamic file name for an output file.

When using a dynamic file name the value of the `Append` property must be `false`. By default, the value of the `Append` property is `false` and this must not be edited while using a dynamic file name.

22.1.2.8 Data Lost During Read Operation from an Input File with Errors

When an Oracle File Adapter processes a file with some invalid records, the invalid records are sent to the rejected messages directory, whereas, the valid records are lost. To ensure that no data is lost, input files with invalid data must be sent to the error archive queue. You must set the following properties in the WSDL file for the Read file operation to ensure that input files with errors are sent to the error archive queue:

```
PhysicalErrorArchiveDirectory="physical_directory_ path"
LogicalErrorArchiveDirectory="logical_directory_path"
```

22.1.2.9 Attachments and Payload Validation are Incompatible

If you enable payload validation when using attachments, the Oracle FTP Adapter fails with a `java.lang.NullPointerException` and logs an error like: "FtpIn FtpInAdapter Service FtpIn was unable to perform delivery of inbound message to the composite".

When using attachments, disable payload validation. For Attachments, payload validation is unnecessary.

22.1.3 Oracle JCA Adapter for AQ Issues and Workarounds

This section describes the following issue and workaround related to Oracle JCA Adapter for AQ:

It includes the following section:

- Section 22.1.3.1, "Oracle JCA Adapter for AQ Reading Field from Object Type Depends on Server Locale Encoding"

- Section 22.1.3.2, "Oracle JCA Adapter for AQ Does Not Dequeue Messages from Queues in Oracle E-Business Suite Applications"

- Section 22.1.3.3, "AQ_INVALID_PAYLOAD_HEADERS_OUTBOUND Error When Payload Field is Selected"

- Section 22.1.3.4, "Enabling Payload Validation Using XSD"

22.1.3.1 Oracle JCA Adapter for AQ Reading Field from Object Type Depends on Server Locale Encoding

In an SOA project that contains outbound Oracle JCA Adapter for AQ, Mediator or BPEL, and an inbound Oracle JCA Adapter for AQ, when you select the business payload option as **Field within the Object**, the national characters are garbled. This issue depends on server locale encoding and exists only on native locale. However, when the server is running on UTF-8 encoding, this issue does not exist.

22.1.3.2 Oracle JCA Adapter for AQ Does Not Dequeue Messages from Queues in Oracle E-Business Suite Applications

It is recommended that you use Oracle Adapter for Oracle Applications to dequeue from queues in E-Business Suite Applications and *not* Oracle JCA Adapter for AQ.

22.1.3.3 AQ_INVALID_PAYLOAD_HEADERS_OUTBOUND Error When Payload Field is Selected

When using the Adapter Configuration Wizard to configure the object payload, you may configure the Business Payload as either:

- Whole Object
- Field within the Object

If you select **Field within the Object**, and you do not check the **Access to non-payload fields also needed** option, your composite may fail at run time with an AQ_INVALID_PAYLOAD_HEADERS_OUTBOUND error.

The workaround for this issue is to always select the **Access to non-payload fields also needed** option when you configure the Business Payload by selecting the **Field within the Object** option.

For more information, see "The Adapter Configuration Wizard Object Payload Page" in the *Oracle Fusion Middleware User's Guide for Technology Adapters*.

22.1.3.4 Enabling Payload Validation Using XSD

If you use Oracle Enterprise Manager Console to enable payload validation at the SOA-INFRA level, then for inbound Oracle JCA Adapter for AQ (including B2B adapters or Oracle Adapter for Oracle Applications that use Oracle JCA Adapter for AQ), then Oracle recommends that you use the following block in your payload XSD:

```
xmlns:nxsd="http://xmlns.oracle.com/pcbpel/nxsd"
nxsd:validation="true"
```

22.1.4 Oracle JCA Adapter for JMS Issues and Workarounds

This section describes the following issues and workarounds related to Oracle JMS Adapter:

- Section 22.1.4.1, "Example of Flow Control Settings for Oracle JMS Adapter"
- Section 22.1.4.2, "Oracle JMS Adapter Re-entrant Wizard Displays a Warning Message When the Destination and JNDI Names Are Invalid"
- Section 22.1.4.3, "Distributed Topic in Clustered Environment Creates Extra Messages"
- Section 22.1.4.4, "Old Queue is Still Polled After Changing Queue Name"

22.1.4.1 Example of Flow Control Settings for Oracle JMS Adapter

Anytime the exception weblogic.messaging.kernel.QuotaException: Quota blocking time exceeded and no quota available is encountered, WLS JMS provider allows flow control settings that you can tweak to control the number of messages that are produced/consumed.

For more information about tweaking the control settings, see

(http://download.oracle.com/docs/cd/E13222_
01/wls/docs90/ConsoleHelp/pagehelp/JMSjmsconnectionjmsconnection
factoryconfigflowcontroltitle.html)

The following is an example of the flow control settings used and the various thresholds for a message carrying a payload size of 5k:

```
Config JMSServer:
    Message Buffer Size:5000
```

```
Config JMSConnectionFactory:
    Flow Control:
    Flow Maximum: 30
    Flow Minimum: 1
    Flow Interval: 10
    Flow Step: 10

check Flow Control Enabled
    Default Delivery: Send Timeout: 3000000

Config JMS Destinations:
        Bytes Threshold High: 50000
        Bytes Threshold Low:  50
        Messages Threshold High: 100
        Messages Threshold Low: 1
        Set Quota
```

22.1.4.2 Oracle JMS Adapter Re-entrant Wizard Displays a Warning Message When the Destination and JNDI Names Are Invalid

While migrating a project from one environment to another, Oracle JMS Adapter Wizard populates the Destination and JNDI name fields in edit mode in the following pages:

- Consume Operation Parameters page

- Produce Operation Parameters page

- Request Operation Parameters page

- Reply Operation Parameters page

- Request/Reply Operation Parameters page

However, if you click **Next**, the Adapter Configuration Wizard validates whether this is a valid destination, and accordingly, displays a warning message if found to be invalid. You have the option to proceed or enter a valid destination.

22.1.4.3 Distributed Topic in Clustered Environment Creates Extra Messages

When you use Oracle JMS adapter with a distributed topic deployed in a cluster, the scenario would result in more messages processed than the actual number of messages passed to the topic.

Each subscriber to the topic is handed a copy of the message to be processed by WLS JMS. So, the number of processed messages will be equal to the number of active subscribers on the distributed topic. This is a known behavior of Oracle WebLogic JMS in Oracle WebLogic Application Server 10.3.

22.1.4.4 Old Queue is Still Polled After Changing Queue Name

When using the Oracle JMS Adapter in an Enqueue-Dequeue Request-Reply scenario, if you change the Queue name (Inbound Queue and Reply Queue) to a new value, the old queue is still polled.

The workaround for this issue is to configure the new Queue name and redeploy the composite.

22.1.5 Oracle JCA Adapter for Database Issues and Workarounds

This section describes the following issues and workarounds related to Oracle Database Adapter:

22.1.5.1 The Value Of the Active Unit Of Work Property Is Not Saved for Outbound SELECT Operation

While configuring an outbound Oracle Database Adapter to perform a SELECT operation, if you select **Get Active Unit of Work** in the Adapter Configuration Wizard - Advanced Option page, then the value of the `GetActiveUnitofWork` property is not saved in the `.jca` file.

The workaround for this issue is to manually add this property in the `.jca` file of the Oracle Database Adapter, as shown in the following example:

```
<property name="GetActiveUnitOfWork" value="true"/>
```

22.1.5.2 The Binding Fault Retries During Remote Fault Is Not Captured in the Oracle Enterprise Manager Console

Consider a scenario in which the Oracle Database Adapter retries the transaction at remote fault (that is, when the database is down) in a condition where the binding fault retry is specified in the `composite.xml` file, and there is no fault policy defined. In such a scenario, the binding fault retry performed by the Oracle Database Adapter is not captured in the Audit Trail in the Oracle Enterprise Manager Console.

22.1.5.3 Invalid Datatype Exception After Re-Creating Schema Object

If you re-create an Oracle Database PL/SQL statement or other schema object (such as a data type), or recompile a package body, and re-deploy a SOA composite that uses the Oracle Database Adapter, then the Oracle Database Adapter runtime will throw an ORA-00902: invalid datatype exception.

The workaround for this issue is to set the following Oracle WebLogic Server properties:

■ Data Source:

   – Initial Capacity: 0

   – Statement Cache Size: 0

■ Adapter Connection Pool:

   – Initial Capacity: 0

If your SOA composite is incompatible with these property settings, the workaround for this issue is to stop and start the Oracle WebLogic Server.

For more information, see:

- "Configuring JDBC Data Sources" in the *Oracle Fusion Middleware Configuring and Managing JDBC for Oracle WebLogic Server*

- "Connection Management" in the *Oracle Fusion Middleware Programming Resource Adapters for Oracle WebLogic Server*.

22.1.5.4 Distributed Polling Using MarkReservedValue Disabled by Default

In this release, Oracle recommends that you use the new distributed polling approach based on skip locking. When editing an Oracle Database Adapter service which has a MarkReservedValue set, that value will be removed to enable the new best practice.

To use the old distributed polling approach based on a reserved value, select the value from the drop down menu.

22.1.5.5 Stored Procedure Limitations in SQL Server 2008

The Oracle Database Adapter stored procedure interface does not support the following data types in SQL Server 2008:

- TIME

- DATE

- DATETIME

- DATETIME2

- DATETIMEOFFSET

22.1.6 Oracle JCA Adapter for MQ Series Issues and Workarounds

This section describes the following issues and workarounds related to Oracle MQ Series Adapter:

- Section 22.1.6.1, "Oracle MQ Series Adapter Does Not Support Asynchronous Request-Response Pattern for Mediator"

- Section 22.1.6.2, "Oracle MQ Series Adapter Does Not Perform an Outbound Retry If the Outbound Resource Is XA"

- Section 22.1.6.3, "Oracle MQ Series Hangs If the Channel Is Brought Down in a Cluster Environment"

- Section 22.1.6.4, "Adding Additional Encoding Not Supported"

- Section 22.1.6.5, "Using MQ Series version 7.0.0.2 and XA Transactions"

- Section 22.1.6.6, "Old Queue is Still Polled After Changing Queue Name"

- Section 22.1.6.7, "Oracle MQ Series Adapter Reconnect Failure After Forceful Queue Manager Shutdown"

22.1.6.1 Oracle MQ Series Adapter Does Not Support Asynchronous Request-Response Pattern for Mediator

Oracle MQ Series Adapter does not support asynchronous request-response pattern (where Mediator is the server).

22.1.6.2 Oracle MQ Series Adapter Does Not Perform an Outbound Retry If the Outbound Resource Is XA

If you select the outbound resource as XA, then the Oracle MQ Series Adapter throws an exception and does not retry because it does not support an outbound retry with outbound resource as XA. On the other hand, if the outbound resource is non-XA, then the retry happens correctly.

22.1.6.3 Oracle MQ Series Hangs If the Channel Is Brought Down in a Cluster Environment

When working with more than one managed server, if you try to bring down the channel, then Oracle MQ Series hangs. This occurs in both Windows and UNIX operating systems.

22.1.6.4 Adding Additional Encoding Not Supported

Standard Java encodings and their mappings are provided with the MQ Series Adapter but the Adapter Configuration Wizard does not support addition of additional Java encodings that you may require.

To add support for the standard Java encodings that are not provided in the list, you can perform the following steps:

1. Extract the `MQSeriesAdapter.jar` file from the `MQSeriesAdapter.rar` file.

2. Extract the `mq.properties` file from the MQSeriesAdapter.jar file.

3. Add the entry in the `mq.properties` file. This file has two entries for a mapping between MQ Series encoding and Java encoding. For each new encoding that you require, you must make two entries to the `mq.properties` file. Make an entry for the MQ Series encoding to the corresponding Java encoding and the other entry for the Java encoding to the corresponding MQ Series encoding.

22.1.6.5 Using MQ Series version 7.0.0.2 and XA Transactions

Oracle JCA Adapter for MQ Series is certified with MQ Series version 7.0.0.2. If you are using XA transactions, then you must configure the server connection channel with a level of conversation sharing set to 0.

22.1.6.6 Old Queue is Still Polled After Changing Queue Name

When using the Oracle MQ Series Adapter in an Enqueue-Dequeue Request-Reply or Dequeue-Enqueue Request-Reply scenario, if you change the Queue name (Inbound Queue and Reply Queue) to a new value, the old queue is still polled.

The workaround for this issue is to configure the new Queue name and redeploy the composite.

22.1.6.7 Oracle MQ Series Adapter Reconnect Failure After Forceful Queue Manager Shutdown

If you forcefully shutdown the Inbound Queue Manger using the `-i` option (such as `endmqm -i QUEUE-MANAGER`), and then bring it up again, the Oracle MQ Series Adapter does not reconnect properly:

- The Open Input count of the Inbound Queue is reduced from the default value 2 to 1 and the Inbound message is delivered to the Outbound Queue and then put back to the Inbound queue. The Oracle MQ Series Adapter repeats this infinitely.

- In some cases, the Open Input count is reduced from the default value 2 to 1 and the messages are just delivered to the Outbound Queue.

The workarounds for this issue are:

- Configure the SOA instances in non-blocking mode.

- Restart the inbound partner link.

- Stop and start the managed instance.

22.1.7 Oracle JCA Adapter for Socket Issues and Workarounds

This section describes the following issue and workaround related to Oracle Socket Adapter:

- Section 22.1.7.1, "Oracle Socket Adapter Not Supported On a Cluster-Based Environment"

- Section 22.1.7.2, "Inbound Operation Hostname Should Be an IP Address for a Multiple-NIC Host"

22.1.7.1 Oracle Socket Adapter Not Supported On a Cluster-Based Environment

Oracle Socket Adapter is not supported on a cluster-based environment. If you try to deploy an inbound Oracle Socket Adapter in a clustered environment, then one of the managed servers throws an error message that the server's port is already in use.

22.1.7.2 Inbound Operation Hostname Should Be an IP Address for a Multiple-NIC Host

When configuring the Oracle Socket Adapter using the Adapter Configuration Wizard, at step 4 of 7, if you select either of:

- **Inbound Synchronous Request/Reply**

- **Inbound Receive**

Then, at Adapter Configuration Wizard step 5 of 7, note the following:

- If you want to override the default port for the given socket connection JNDI name, check **Specify Host and Port**.

- If you check **Specify Host and Port**, you must enter a value for **Host Name**. Note the following:

  - If your host is associated with only one IP address, that is, if it has only one Network Interface Card (NIC), enter `localhost`.

  - If your host is associated with more than one IP address, that is, has more than one NIC, enter the one IP address you want the Oracle Socket Adapter to listen on.

    The Oracle Socket Adapter can listen on only one specific IP address. The Oracle Socket Adapter cannot listen on multiple IP addresses.

22.1.8 Native Format Builder Issues and Workarounds

This section describes the following issue and workaround related to Native Format Builder:

- Section 22.1.8.1, "Delimited by White Space Option Not Supported in NXSD"

- Section 22.1.8.2, "Payload Validation Fails for Payloads Greater Than 10 MB in Size"

22.1.8.1 Delimited by White Space Option Not Supported in NXSD

In the Specify Delimiter's page of the Native Format Builder wizard, the `White space (any number of tab, space)` option in the Delimited by list is not supported.

22.1.8.2 Payload Validation Fails for Payloads Greater Than 10 MB in Size

When payload validation is enabled, it may fail with a `java.lang.ClassCastException` for payloads greater than 10 MB in size.

For more information, see "Payload Validation" in the *Oracle Fusion Middleware User's Guide for Technology Adapters*.

22.2 Configuration Issues and Workarounds

There are no known configuration issues at this time.

22.3 Documentation Errata

This section describes documentation errata for *Oracle Fusion Middleware User's Guide for Technology Adapters*. It includes the following topics:

- Section 22.3.1, "The DBActivationSpec Property Undying Is Always True in 11g"
- Section 22.3.2, "Online Help for Third Party Adapter Does Not Define JCA File Attribute"
- Section 22.3.3, "Online Help for JMS Adapter Does Not Define the Payload Attribute"
- Section 22.3.4, "Online Help for JMS Adapter Does Not Define the As Attachment Attribute"
- Section 22.3.5, "Specifying a TCP Port in a Configuration Plan For an Oracle Socket Adapter"
- Section 22.3.6, "Oracle Database Adapter Certification"
- Section 22.3.7, "Oracle MQ Series Adapter Properties in an Asynchronous Outbound Request/Reply Scenario"

22.3.1 The DBActivationSpec Property Undying Is Always True in 11*g*

Section 9.3.6.2, "Undying" in Chapter Oracle JCA Adapter for Database states that the new Undying property is supported. Instead, Undying is now always *true*, so the configuration property has been removed.

22.3.2 Online Help for Third Party Adapter Does Not Define JCA File Attribute

When you drag and drop **Third Party Adapter** from the Service Adapters list to the Exposed components swim lane in the `composite.xml` page and click the Help button, the online help does not define the JCA File attribute.

The definition should read: The JCA file provides adapter configuration information for the service.

The title of this help topic should read: Third Party Adapter.

The bread crumbs for this help topic should read: Component Palette for SOA Composite Editor > Adapter Services > Third Party Adapter > Adapter Configuration Wizard.

22.3.3 Online Help for JMS Adapter Does Not Define the Payload Attribute

In the Adapter Configuration Wizard for an Oracle JMS Adapter, when Message Body Type is MapMessage, the online help for the Consume Operation Parameters page does not define the Payload attribute.

The definition should read: Optionally specify the name of the `MapMessage` entry you want to designate as the payload. All other `MapMessage` entries are converted to adapter properties identified by `jca.jms.Map.xxxx`, where `xxxx` is name of the `MapMessage` entry. If you do not configure the Payload attribute, then the entire `MapMessage` is converted to XML and the XML file is transferred as the payload.

22.3.4 Online Help for JMS Adapter Does Not Define the As Attachment Attribute

In the Adapter Configuration Wizard for an Oracle JMS Adapter, when Message Body Type is MapMessage, the online help for the Consume Operation Parameters page does not define the As Attachment attribute.

The definition should read: Check this option to instruct the Oracle JMS Adapter to opaquely copy the payload as an attachment. This allows you to transfer a large amount (of often binary) data efficiently, without processing its contents within the composite application.

22.3.5 Specifying a TCP Port in a Configuration Plan For an Oracle Socket Adapter

In the *Oracle Fusion Middleware User's Guide for Technology Adapters*, the Oracle Socket Adapter chapter is missing a topic on how to specify a TCP port in a configuration plan for an Oracle Socket Adapter.

To do so, perform the following steps:

1. Add the following code to your configuration plan XML file:

   ```
   <service name="Receive">
       <property name="Port">
             <replace>2222</replace>
       </property>
       <binding type="jca"/>
   </service>
   ```

2. Add a port property to your `.jca` file as follows:

   ```
   <property name="Port" value="Port"/>
   ```

3. Add the port property to your `composite.xml` file under the service element and specify a default value (in this example, 1111):

   ```
   <service name="Receive" ui:wsdlLocation="Receive.wsdl">
       <interface.wsdl interface="..." />
       <binding.jca config="Receive_tcp.jca"/>
       <property name="Port" type="xs:string" many="false"
   override="may">1111</property>
   </service>
   ```

4. Deploy your composite with the configuration plan.

When deployed, the Oracle Socket Adapter will listen on port 2222, as given in the configuration plan.

If you deploy the composite without a configuration plan or if the configuration plan does not override the `Port` property, then the Oracle Socket Adapter will listen on the socket that the `composite.xml` file's default `Port` property specifies (in this example, port 1111).

22.3.6 Oracle Database Adapter Certification

The beginning of Section 9.6, "JDBC Driver and Database Connection Configuration" in the *Oracle Fusion Middleware User's Guide for Technology Adapters* reads as follows:

"In this release, Oracle JCA Adapters are certified against the following third-party databases using Oracle WebLogic Server Type 4 JDBC drivers:

- Microsoft SQL Server 2008

- Sybase 15

- Informix 11.5"

It should read as follows:

"In this release, Oracle Database Adapter is certified against the following third-party databases using Oracle WebLogic Server Type 4 JDBC drivers:

- Microsoft SQL Server 2005, 2008

- Sybase 15

- Informix 11.5

- MySQL 5.x+

- DB2/UDB 9.5 and later FixPaks"

22.3.7 Oracle MQ Series Adapter Properties in an Asynchronous Outbound Request/Reply Scenario

The following note applies only to Section 10.4.1.3, "Asynchronous Request-Response (Oracle BPEL PM As Client)" and Section 10.4.1.9, "Asynchronous Request-Response (Oracle Mediator As Client)"It does not apply to Sections 10.4.1.5, 10.4.2 and 10.4.3.

> **Note:** For Oracle MQ Series Adapter in an asynchronous outbound request/reply scenario, properties are differentiated by an `(Enqueue)` or `(Dequeue)` label in Oracle Enterprise Manager Console. For example, `QueueName(Enqueue)` is used for putting a message and `QueueName(Dequeue)` is used for dequeuing the reply.
>
> When using Oracle Enterprise Manager Console to edit Oracle MQ Series Adapter properties in this scenario, note the following:
>
> - If you change the `ReplyToQueueName(Enqueue)` property, you must also change the `QueueName(Dequeue)` property to the same value.
>
> - If you change the `MessageId(Dequeue)` property, you must also change the `MessageId(Enqueue)` property to the same value.
>
> - If you change the `CorrelationId(Dequeue)` property, you must also change the `CorrelationId(Enqueue)` property to the same value.

23

Oracle WebLogic Communication Services

This chapter describes issues associated with Oracle WebLogic Communication Services (OWLCS). It includes the following topics:

- Section 23.1, "General Issues and Workarounds"
- Section 23.2, "Configuration Issues and Workarounds"

23.1 General Issues and Workarounds

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

- Section 23.1.1, "Active SIP Session and APP Session Count Show as -1 in Clustered Configuration"
- Section 23.1.2, "Oracle WebLogic Server Pack/Unpack Tool Does Not Function in OWLCS"
- Section 23.1.3, "Oracle WebLogic Server Cloning Tool Does Not Function in OWLCS"
- Section 23.1.4, "Messages Metrics Rendered as Unavailable in the Performance Page for User Messaging Server"

23.1.1 Active SIP Session and APP Session Count Show as -1 in Clustered Configuration

In the Administration Console, the **Monitoring -> General** tab displays *Undefined* for the Active SIP Session Count and Active Application Session Count attributes when monitoring a replicated WebLogic SIP Server deployment. There is currently no workaround for this problem.

23.1.2 Oracle WebLogic Server Pack/Unpack Tool Does Not Function in OWLCS

The Pack/Unpack tool in Oracle WebLogic Server does not work in this OWLCS release. There is no workaround currently available.

23.1.3 Oracle WebLogic Server Cloning Tool Does Not Function in OWLCS

The Cloning tool in Oracle WebLogic Server does not work in this OWLCS release. There is no workaround currently available.

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

When no metric data is found, for example when no messages have been sent or received after server setup, the Metrics Performance page will display *Unavailable*. This is not a problem with the software, and the Performance reporting is operating properly. As soon as *Send* and *Receive* traffic exists, the Performance page will display results normally.

23.2 Configuration Issues and Workarounds

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

- Section 23.2.1, "Launch_sash Option Error"
- Section 23.2.2, "Same User Who Installed WLS/WLSS Product Must Perform Uninstall"
- Section 23.2.3, "Uppercase Usernames Cause Reregistration and Presence Subscription Failures"
- Section 23.2.4, "Running the uninstall.sh Script in Text Mode Does Not Uninstall the Product"
- Section 23.2.5, "SIP Monitor in F5 Networks BigIP Does Not Work in UDP Mode"
- Section 23.2.6, "SIP Container Does Not Bind to IPV6 Interfaces for Listening on Windows"
- Section 23.2.7, "JAWS Unable to Read Some Install Screens"
- Section 23.2.8, "Configure VoiceXML Driver Receive URLs Correctly"

23.2.1 Launch_sash Option Error

An error has been reported when using the `launch_sash` command with the `-e` option. For example:

```
MW_HOME/user_projects/domains/base_domain/bin/launch_sash.sh -p
8001 -n weblogic -w welcome1 -a presenceapplication -e "xcap
appusage list"
```

does not properly process the *xcap appusage list* argument because the double quote (") is mishandled.

To work around this problem, issue the command at the `sash` prompt directly.

23.2.2 Same User Who Installed WLS/WLSS Product Must Perform Uninstall

In order to perform a clean uninstall, ensure that the same user (privileges) who accomplished the install also accomplishes the uninstall.

23.2.3 Uppercase Usernames Cause Reregistration and Presence Subscription Failures

When a user is created with an uppercase username, then the following occurs:

- Initial registration progresses normally, resulting in successful registration with Oracle Communicator.
- Presence subscriptions fails.

- After a few minutes, Oracle Communicator displays `Server Refused Registration (403).`

- User's account is locked and sign-in is blocked for 30 minutes.

To work around this issue, set *Trusted Authentication Hosts* for the SIP Container by doing the following (from the Administration Console):

1. Click **SipServer** in the left pane.

2. Click the **SIP Security** tab.

3. In Trusted Authentication Hosts, add the IP address of your server (that is running OWLCS).

4. Save and restart OWLCS.

Note: Using this workaround, presence functionality will fail for clients running on the same machine as the OWLCS server. Such cases (both Oracle Communicator and server running on the same machine) are mostly for demonstration and development environments. For these cases, ensure you create users with lowercase usernames.

Reregistration and presence subscription failures can also occur when users are created with `privateId` being different than the username part of the `publicId`.

For example, if privateId is *test.user1* and publicId is *sip:test.user1@example.com*, everything works because *test.user1* is the username part of the publicId *sip:test.user1@example.com*.

But if privateId is *tuser1* and publicId is *sip:test.user1@example.com*, the username part of the publicId is not the same as privateId. In this case, the first registration succeeds with Oracle Communicator, but reregistrations and presence subscriptions fail. Apply the same workaround (configure trusted host as described above) to resolve this issue.

23.2.4 Running the uninstall.sh Script in Text Mode Does Not Uninstall the Product

Perform uninstallation using the Administration Console to ensure that all components are uninstalled. Ensure that you use the same user privilege as when you installed.

23.2.5 SIP Monitor in F5 Networks BigIP Does Not Work in UDP Mode

When using the F5 Networks BigIP load balancer for a cluster of SIP engines and the SIP monitor in BigIP is used for failure detection, it must be configured to operate (sending OPTIONS requests) over TCP and not UDP. UDP mode will not work (the pool will indicate that the servers are down).

23.2.6 SIP Container Does Not Bind to IPV6 Interfaces for Listening on Windows

Due to limitations in the Windows IPv6 stack, the SIP Container cannot bind to IPv6 sockets for listening.

23.2.7 JAWS Unable to Read Some Install Screens

Due to an issue with the OWLCS Core Platform CIE-based installer, the JAWS tool cannot correctly read the installation screens. To work around this issue, you must run

the installer in silent mode. For information on Silent Mode installation, see *Oracle WebLogic Communication Services Installation Guide*.

23.2.8 Configure VoiceXML Driver Receive URLs Correctly

In a clustered (high-availability) environment with Oracle HTTP Server (OHS) configured, do not use the OHS port to configure the VoiceXML Driver Receive URLs. Using the OHS port to configure the VoiceXML Driver Receive URLs will cause a conflict with the drivers.

Each Voice XML Driver must be configured with its own WLS server's port (as described in the parameters' documentation).

24

Web Services Security and Administration

This chapter describes issues associated with Web services security and administration, including Oracle Web Services Manager. It includes the following topics:

- Section 24.20, "Web Service Test Page May Reference an Incorrect Namespace When Nesting Complex Type Is an Array"

- Section 24.21, "Web Service Clients Invoking Asynchronous SOA Web Services May Not Pass Service Compatibility Test"

- Section 24.22, "Vague Error Message for a Missing Key in cwallet"

- Section 24.23, "Enterprise Manager May Show Incorrect Information on Policy Usage Analysis Page in Cross-Domain Policy Store Configuration"

> **Note:**   See also Section 11.33, "Web Services and XML Issues and Workarounds."

24.1 Preventing Denial of Service Attack and Recursive Node Attack

Generally, DoS and recursive node attacks are prevented by XML firewall solutions. Oracle SOA Suite provides capabilities to prevent denial of service attack and recursive node attack by configuring the envelope size and nesting limits in the SCABindingProperties.xml and oracle-webservices.xml. For more information, see "Configuring Security in Web Services" in *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle SOA Suite*.

24.2 Guidelines for Using @SecurityPolicy Annotation

The SecurityPolicy annotations used for policy attachment to ADF and WebCenter versus WebLogic Web services are unique and not interchangeable. A security policy attachment defined in your Web service application **will not be enforced** in the following scenarios:

- If you attach a security policy to a ADF or WebCenter Web service using the weblogic.wsee.jws.jaxws.owsm.SecurityPolicy annotation.

- If you attach a security policy to a WebLogic (Java EE) Web service using the oracle.webservices.annotations.SecurityPolicy annotation.

To guarantee that a security policy attachment is enforced in your Web service application, ensure that you use the appropriate annotation in your application code:

- oracle.webservices.annotations.SecurityPolicy—Use to attach policies to ADF or WebCenter Web services.

- weblogic.wsee.jws.jaxws.owsm.SecurityPolicy—Use to attach policies to WebLogic (Java EE) Web services.

24.3 Restarting Applications After Attaching Policies to ADF and WebCenter Applications

After attaching a policy to a Web service in an ADF or WebCenter Web service application, you need to stop and then restart the application for the change to take effect. You need to wait approximately 30 seconds (or the equivalent of the configured Graceful Shutdown Timeout time) between stopping and restarting the application. During this time, the server is allowing all global transactions to complete before shutting down the application. If you do not wait the configured Graceful Shutdown Timeout time, then the application will not be restarted appropriately and you will not be able to access it.

To avoid waiting the graceful shutdown timeout period, you can restart the application twice.

24.4 Using Multibyte User Credentials with wss_http_token_* Policy

In this release, multibyte user credentials are not supported for the wss_http_token_* policies. If multibyte user credentials are required, use a different policy, such as wss_username_token_* policy. For more information about the available policies, see "Predefined Policies" in *Oracle Fusion Middleware Security and Administrator's Guide for Web Services*.

24.5 Importing Custom Policies—Delay Before Policy is Available

After importing a custom policy, there will be a delay before the policy is available.

24.6 Importing Custom Policies Before Attaching and Deploying to a Service Application

It is recommended that you import custom policies before attaching and deploying them to a service application.

If you deploy an application with policies that do not exist in the Metadata Store (MDS), and subsequently import the policies, you need to restart the server for the policy attachment count to be updated.

24.7 Performing a Bulk Upload of Policies

When performing a bulk import of policies to the MDS repository, if the operation does not succeed initially, retry the operation until the bulk import succeeds.

For the most part, this can occur for an Oracle RAC database when the database is switched during the metadata upload. If there are n databases in the Oracle RAC database, then you may need to retry this operation n times.

For more information about bulk import of policies, see "Migrating Policies" in the *Oracle Fusion Middleware Security and Administrator's Guide for Web Services*.

24.8 Reviewing Policy Configuration Override Values After Detaching a Client Policy

If you attach a policy to a client, override policy configuration values, and subsequently detach the policy, the policy configuration override values are not deleted. When attaching new policies to this client, ensure that you review the policy configuration override values and update them appropriately.

24.9 Deprecated and Unsupported Oracle Access Manager Policies

The following OAM scenario is **deprecated** for Oracle Fusion Middleware 11*g* R1:

- Authentication between ADF client and SOA service using Oracle WSM OAM security policies. In this scenario, the ADF client sends the ObSSOCookie in the Oracle proprietary SOAP header. It is recommended that you use a SAML-based policy instead.

The following Oracle Access Manager (OAM) scenarios are **not supported** in Oracle Fusion Middleware 11*g* R1:

- Authentication through Oracle WSM OAM service policy using ObSSOCookie in the HTTP header.

- Authentication through Oracle WSM OAM service policy using ObSSOCookie in a proprietary SOAP header of the request sent by another service.

In each case, clients should send a SAML token instead of an ObSSOCookie.

24.10 Removing Post-deployment Customizations

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

When you use Enterprise Manager to make changes to an application's connections.xml file after deployment, a new connections.xml file is created as a customization and stored in the MDS repository. This customization persists for the life of the application. Therefore, if you redeploy the application, the customized connections.xml file continues to be applied as a customization on the application.

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

For example, say you deploy an application with a Web services data control, then use Enterprise Manager to attach the 'username token client policy', and subsequently detach the policy. Then, you return to JDeveloper to edit the application and attach the 'http token client policy', and redeploy the application. When you view the application using Enterprise Manager, you see that it is not using the 'http token client policy' that you attached. That is because it is using the customized connections.xml file that you previously created using Enterprise Manager.

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

24.11 Reviewing Localization Limitations

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

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

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

24.12 Transport-Level Policies Must be at Class Level

If you specify a single transport-level security policy for your Web service, it must be at the class level. If you specify multiple transport-level security policies, at least one must be at the class level.

In addition, the transport-level security policy must apply to both the inbound and Outbound directions. That is, you cannot have HTTPS for inbound and HTTP for outbound.

The following coding is not supported because it applies only to inbound:

```
[INVALID USE]
@Policy(uri="policy:Wssp1.2-2007-Saml2.0-Bearer-Https.xml",
direction=Direction.inbound)
public class EchoService {
   ....
}
```

24.12.1 Example of Using Transport-Level Policies

In the following code fragment do not attach the
Wssp1.2-2007-Https-UsernameToken-Plain.xml policy at the method level:

```
[INVALID USE]
public class EchoService {
   ....
   @WebMethod()
   @Policy(uri="policy: Wssp1.2-2007-Https-UsernameToken-Plain.xml",
direction=Direction.inbound)
   public String echoFirstMethod(String input) {
       return " echoFirstMethod '" + input + "'...";
   }

   ....
   @WebMethod()
   @Policy(uri="policy: Wssp1.2-2007-Wss1.1-X509-Basic256.xml",
direction=Direction.inbound)
   public String echoSecondMethod(String input) {
       return " echoSecondMethod '" + input + "'...";
   }

}
```

Instead, change the code to have at least one of the transport-level policies be at the
class level, as follows:

```
[VALID USE]
@Policy(uri="policy:Wssp1.2-2007-Https.xml")
public class EchoService {
   ....
   @WebMethod()
   @Policy(uri="policy: Wssp1.2-2007-Https-UsernameToken-Plain.xml",
direction=Direction.inbound)
   public String echoFirstMethod(String input) {
       return " echoFirstMethod '" + input + "'...";
   }
   ....
```

Specifically, note that in the previous example, you changed the policy on the first
method:

```
/**
 *   Change the policy on this method to transport-level policy.
 */
 @WebMethod()
 @Policy(uri="Wssp1.2-2007-Https.xml)
 public String echoSecondMethod(String input) {
     return " echoSecondMethod '" + input + "'...";
 }

}
```

to:

```
@Policy(uri="policy:Wssp1.2-2007-Https.xml")public class EchoService {
```

24.13 When Using WLST to Import a Security Policy, the Same Policy May Be Repeatedly Imported

When WLST is used to import a security policy, be aware that the same policy may be repeatedly imported.

24.14 Security Policy Attachment Count May Not Increment Properly

After attaching a security policy to a service, the Policy Attachment count may not be reflected in Enterprise Manager Fusion Middleware Control. This is possibly due to a caching issue at either the ADF or MDS layer.

24.15 Identity in WSDLs Is Not Used for Enforcement with ADF DC Applications

For ADF DC applications, the identity extension in a WSDL (i.e., the certificate published in the WSDL), cannot be used as a recipient certificate for message protection policies. Instead, either the recipient key alias (declarative configuration override) or the default recipient key alias specified in the policy are used.

24.16 JVM limitation for Kerberos Token Policy with Message Protection Policy

In one JVM, the Kerberos acquire key works fine when there is only one Web service principal. However, for other Web service principals on the same JVM, the acquire key returns a null. There are no such issues when a Web service client and server are on two different JVMs.

24.17 Enterprise Manager Does Not List Policies When Two Servers Are SSL Enabled (2-way SSL)

When a Managed Server is 2-way enabled SSL (e.g., an SOA server hosting WSM-PM over 2-way SSL) and the Administration Server hosting Enterprise Manager is correctly configured to access the 2-way SSL-enabled Managed Server, Enterprise Manager still does not list the OWSM policies.

24.18 Documentation Errata: Creating Custom Assertions for WebLogic JAX-WS Web Service

> **Note:** This section should **replace** "Adding a Custom Oracle WSM WS-Security Policy" in *Securing Web Services for WebLogic Server*.

This section describes how to create custom assertions. It includes the following sections:

24.18.1 Overview of Custom Assertion Creation

If the predefined assertion templates, defined in "Predefined Assertion Templates" in *Oracle Fusion Middleware Security and Administrator's Guide for Web Services*, do not fit your needs, you can create your own custom assertions.

To create a custom assertion, you need to create the following files:

- Custom assertion class—Implements the Java class and its parsing and enforcement logic.
- Custom policy file—Enables you to define the bindings for and configure the custom assertion.

You package custom assertion class and policy file as JAR files and make the JAR files available in the CLASSPATH for your domain. Then, you import the custom policy file and attach it to your Web service or client, as required.

The following sections describe each step in the process.

24.18.2 Step 1: Create the Custom Policy File

Create the custom policy file to define the bindings for and configure the custom assertion. "Schema Reference for Custom Assertions" in *Oracle Fusion Middleware Security and Administrator's Guide for Web Services* describes the schema that you can use to construct your custom policy file and custom assertion.

The following example defines the oracle/ip_assertion_policy custom policy file. The assertion defines a comma-separated list of IP addresses that are valid for a request.

The executor class is specified as follows:

```
<orawsp:Implementation>sampleassertion.IpAssertionExecutor</orawsp:Implementation>
```

Example 24–1   Example Custom Policy File

```
<?xml version = '1.0' encoding = 'UTF-8'?>

<wsp:Policy xmlns="http://schemas.xmlsoap.org/ws/2004/09/policy"
   xmlns:orasp="http://schemas.oracle.com/ws/2006/01/securitypolicy"
   orawsp:status="enabled"
   xmlns:wsu="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-1.0.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" orawsp:category="security"
   orawsp:attachTo="binding.server" wsu:Id="ip_assertion_policy"
   xmlns:orawsp="http://schemas.oracle.com/ws/2006/01/policy"
   xmlns:wsp="http://schemas.xmlsoap.org/ws/2004/09/policy"
   wsp:Name="oracle/ip_assertion_policy">
    <orasp:ipAssertion orawsp:Silent="true" orawsp:Enforced="true"
        orawsp:name="WSSecurity IpAssertion Validator" orawsp:category="security/authentication">
```

```
        <orawsp:bindings>
              <orawsp:Implementation>sampleassertion.IpAssertionExecutor</orawsp:Implementation>
                  <orawsp:Config orawsp:name="ipassertion" orawsp:configType="declarative">
                      <orawsp:PropertySet orawsp:name="valid_ips">
                            <orawsp:Property orawsp:name="valid_ips" orawsp:type="string"
                             orawsp:contentType="constant">
                                  <orawsp:Value>127.0.0.1,192.168.1.1</orawsp:Value>
                            </orawsp:Property>
                      </orawsp:PropertySet>
                  </orawsp:Config>
        </orawsp:bindings>
      </orasp:ipAssertion>
</wsp:Policy>
```

24.18.3 Step 2: Create the Custom Policy JAR File

Once you create your custom policy file (in Step 1), you need to generate a JAR file. You can use Oracle JDeveloper, other IDE, or the jar tool to generate the JAR file.

The custom policy JAR file must match a specific directory structure. For example:

```
$ jar -tvf policy.jar
      0 Tue Oct 06 02:30:16 PDT 2009 META-INF/
     71 Tue Oct 06 02:30:16 PDT 2009 META-INF/MANIFEST.MF
     34 Mon Oct 05 04:17:48 PDT 2009 META-INF/service.security.policies
      0 Sun Oct 04 22:29:00 PDT 2009 META-INF/policies/
      0 Tue Oct 06 02:30:02 PDT 2009 META-INF/policies/oracle/
   1475 Tue Oct 06 02:30:02 PDT 2009 META-INF/policies/oracle/ip_assertion_policy
```

Please note:

- META-INF/policies/oracle/ip_assertion_policy—Specifies the custom policy generated in Step 1.

- META-INF/service.security.policies—Contains the policy URIs. You need to create this file and include an entry for the custom policy file. For example:

  ```
  $ cat META-INF/service.security.policiespolicy:oracle/ip_assertion_policy
  ```

24.18.4 Step 3: Create the Custom Assertion Class

Create the custom assertion class to execute and validate the logic of your policy assertion. The custom assertion class must extend `oracle.wsm.policyengine.impl.AssertionExecutor`.

When building the custom assertion class, ensure that the following JAR files are in your CLASSPATH: wsm-policy-core.jar and wsm-agent-core.jar.

The following example shows a custom assertion executor that can be used to validate the IP address of the request. If the IP address of the request is invalid, a `FAULT_ FAILED_CHECK` exception is thrown.

For more information about the APIs that are available to you for developing your own custom assertion class, see the Java API Reference for Oracle Web Services Manager.

Example 24–2   Example Custom Assertion Class

```
package sampleassertion;

import oracle.wsm.common.sdk.IContext;
```

```
import oracle.wsm.common.sdk.IMessageContext;
import oracle.wsm.common.sdk.IResult;
import oracle.wsm.common.sdk.Result;
import oracle.wsm.common.sdk.WSMException;
import oracle.wsm.policy.model.IAssertionBindings;
import oracle.wsm.policy.model.IConfig;
import oracle.wsm.policy.model.IPropertySet;
import oracle.wsm.policy.model.ISimpleOracleAssertion;
import oracle.wsm.policy.model.impl.SimpleAssertion;
import oracle.wsm.policyengine.impl.AssertionExecutor;

public class IpAssertionExecutor extends AssertionExecutor {
    public IpAssertionExecutor() {
    }
    public void destroy() {
    }

    public void init(oracle.wsm.policy.model.IAssertion assertion,
                     oracle.wsm.policyengine.IExecutionContext econtext,
                     oracle.wsm.common.sdk.IContext context) {
        this.assertion = assertion;
        this.econtext = econtext;
    }
    public oracle.wsm.policyengine.IExecutionContext getExecutionContext() {
        return this.econtext;
    }
    public boolean isAssertionEnabled() {
        return ((ISimpleOracleAssertion)this.assertion).isEnforced();
    }
    public String getAssertionName() {
        return this.assertion.getQName().toString();
    }

    /**
     * @param context
     * @return
     */
    public IResult execute(IContext context) throws WSMException {
        try {
            IAssertionBindings bindings =
                ((SimpleAssertion)(this.assertion)).getBindings();
            IConfig config = bindings.getConfigs().get(0);
            IPropertySet propertyset = config.getPropertySets().get(0);
            String valid_ips =
                propertyset.getPropertyByName("valid_ips").getValue();
            String ipAddr = ((IMessageContext)context).getRemoteAddr();
            IResult result = new Result();
            if (valid_ips != null && valid_ips.trim().length() > 0) {
                String[] valid_ips_array = valid_ips.split(",");
                boolean isPresent = false;
                for (String valid_ip : valid_ips_array) {
                    if (ipAddr.equals(valid_ip.trim())) {
                        isPresent = true;
                    }
                }
                if (isPresent) {
                    result.setStatus(IResult.SUCCEEDED);
                } else {
                  result.setStatus(IResult.FAILED);
                  result.setFault(new WSMException(WSMException.FAULT_FAILED_CHECK));
                }
            } else {
                result.setStatus(IResult.SUCCEEDED);
            }
            return result;
        } catch (Exception e) {
```

```
            throw new WSMException(WSMException.FAULT_FAILED_CHECK, e);
        }
    }

    public oracle.wsm.common.sdk.IResult postExecute(oracle.wsm.common.sdk.IContext p1) {
        IResult result = new Result();
        result.setStatus(IResult.SUCCEEDED);
        return result;
    }
}
```

24.18.5 Step 4: Create the Custom Assertion Class JAR File

Create a JAR file containing the custom assertion class file created in Step 3. You can use Oracle JDeveloper, other IDE, or the jar tool to generate the JAR file.

The JAR file should contain the class file and manifest file. For example:

```
$ jar -tvf assertionjar.jar
    25 Tue Oct 06 14:40:10 PDT 2009 META-INF/MANIFEST.MF
  3558 Tue Oct 06 14:40:10 PDT 2009 sampleassertion/IpAssertionExecutor.class
```

24.18.6 Step 5: Update Your CLASSPATH

You need to add the following files to your CLASSPATH:

- Custom policy JAR file created in Step 2.
- Custom assertion JAR file, created in Step 4, so that the custom assertion execution class is available in the server environment.

Add the JAR files to your CLASSPATH by performing the following steps:

1. Stop the WebLogic Server.

   For more information on stopping the WebLogic Server, see *Managing Server Startup and Shutdown for Oracle WebLogic Server*.

2. Copy the custom policy JAR and custom assertion JAR files created in Steps 2 and 4 to the following directory: $DOMAIN_HOME/lib.

3. Restart the WebLogic Server.

   For more information on restarting the WebLogic Server, see *Managing Server Startup and Shutdown for Oracle WebLogic Server*.

24.18.7 Step 6: Develop and Deploy a JAX-WS Web Service

Develop and deploy a JAX-WS Web service. The following provides a very simple example of a JAX-WS Web service:

```
package project1;
import javax.jws.WebService;
@WebService
public class Class1 {
    public Class1() {
        super();
    }

    public String echo1() {
        return "one";
    }
```

```
}
```

For more information about developing and deploying JAX-WS Web services, see:

- *Getting Started Using JAX-WS Web Services for Oracle WebLogic Server*
- *Programming Advanced Features of JAX-WS Web Services for Oracle WebLogic Server*
- "Developing with Web Services" in the Oracle JDeveloper Online Help

24.18.8 Step 7: Attach the Custom Policy to the JAX-WS Web Service

Attach the custom policy to the JAX-WS Web service using the Oracle WebLogic Administration Console. For detailed steps, see "Associating Policy Files at Runtime Using the Administration Console" in *Securing Web Services for Oracle WebLogic Server*.

24.18.9 Step 8: Create the JSE Client

You can test your Web service using a JSE client. For more information about creating a Web service client proxy, see:

- "Invoking Web Services" in *Getting Started Using JAX-WS Web Services for Oracle WebLogic Server*
- "Creating Web Service Proxies" in "Developing with Web Services" in the Oracle JDeveloper Online Help

24.19 Navigating Between the XML View and Tree View On the Test Client Page May Cause Data Loss

If you toggle between the XML view and the Tree view on the Test Client page in Enterprise Manager Fusion Middleware Control, some elements (non-mandatory) may not show up in the tree. As a workaround, refresh the Test Client page's Tree view or use the XML view to enter the values.

24.20 Web Service Test Page May Reference an Incorrect Namespace When Nesting Complex Type Is an Array

When using the Test Web Services page in Enterprise Manager Fusion Middleware Control and JDeveloper, and you have a schema with nested levels of complex type, and the nested type is an array, the generated test SOAP message may use the outermost namespace in the inner nested type instead of the actual namespace of the child element. For example:

```
<ns1:outermost>
   <ns2:nested1>
      <ns2:nested2>....</ns2:nested2>
      <ns2:nested2>....</ns2:nested2>
   </ns2:nested1>
</ns1:outermost>
```

Instead of the correct `ns2:nested2 namespace`, the SOAP message is being generated as `ns1:nested2 namespace`, as shown here:

```
<ns1:outermost>
   <ns2:nested1>
      <ns1:nested2>....</ns1:nested2>
      <ns1:nested2>....</ns1:nested2>
```

```
            </ns2:nested1>
        </ns1:outermost>
```

As a workaround, manually correct the inner `ns1:nested2` references to `ns2:nested2` in XML format before testing.

24.21 Web Service Clients Invoking Asynchronous SOA Web Services May Not Pass Service Compatibility Test

The policies attached to a Web service client invoking asynchronous SOA Web services may not pass the service compatibility test on the SOA Policy Attachment page in Enterprise Manager Fusion Middleware Control. For the service compatibility check to be successful, verify that the `oracle/wsaddr_policy` is attached to the Web service client that invokes the asynchronous SOA Web service.

24.22 Vague Error Message for a Missing Key in cwallet

If the following message is displayed in the error log, it indicates that the `csf` key corresponding to `keystore.sig.csf.key/keystore.enc.csf.key` does not exist in the credential store.

```
The certificate, mykey, is not retrieved
```

Since the error message does not specify which key is missing in the credential store to help diagnosis the error, the workaround solution is to ensure that `csf` keys corresponding to `keystore.sig.csf.key/keystore.enc.csf.key` are available in the credential store.

24.23 Enterprise Manager May Show Incorrect Information on Policy Usage Analysis Page in Cross-Domain Policy Store Configuration

The Policy Usage Analysis page in Enterprise Manager Fusion Middleware Control may show incorrect information for SOA Web services and ADF data control Web service clients, across all platforms, when attaching a policy using annotations.

For example, the Domain column for a SOA Web service may show `soainfra` instead of the correct domain name. And the **Component**, Service Ref, and Client Port for an ADF data control Web service client may show `default` instead of the correct information. This situation only occurs when attaching a policy using annotations. Such policies attached through Enterprise Manager Fusion Middleware Control are correctly displayed on the Policy Usage Analysis page.

Part VII

Communication Services

Part VII contains the following chapters:

25

Oracle Complex Event Processing

This chapter describes issues associated with Oracle Complex Event Processing (Oracle CEP). It includes the following topics:

- Section 25.1, "General Issues and Workarounds"

- Section 25.2, "Configuration Issues and Workarounds"

- Section 25.3, "Documentation Errata"

25.1 General Issues and Workarounds

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

- Section 25.1.1, "Deprecated API and Schemas"

- Section 25.1.2, "Adapter Changes"

- Section 25.1.3, "New and Deprecated Options in the Deployer Tool"

- Section 25.1.4, "Changes in Management, Monitoring, and JMX"

- Section 25.1.5, "Using stopwlevs.sh With Multiple Servers on the Same Host"

- Section 25.1.6, "Monitor Service may Underestimate Latency For Application-Timestamped Channels"

- Section 25.1.7, "Connecting to Oracle CEP Server Using JConsole may Throw Benign Null Pointer Exceptions"

- Section 25.1.8, "Variable Duration Non-Event Detection is not Supported in This Release"

- Section 25.1.9, "JMSAdapterMBean Getter Methods for New Connection and User and Password"

25.1.1 Deprecated API and Schemas

Table 25–1 lists Java API deprecated in 11g Release 1 (11.1.1) and the replacement API, if any.

Table 25–1   Deprecated Java API

Deprecated API	Replacement API
`com.bea.wlevs.ede.api.Stream`	`com.bea.wlevs.ede.api.EventChannel`
`com.bea.wlevs.ede.api.EventSender`	`com.bea.wlevs.ede.api.RelationSender` `com.bea.wlevs.ede.api.StreamSender`
`com.bea.wlevs.ede.api.EventSink`	`com.bea.wlevs.ede.api.RelationSink` `com.bea.wlevs.ede.api.StreamSink`
`com.bea.wlevs.ede.api.EventSource`	`com.bea.wlevs.ede.api.RelationSource` `com.bea.wlevs.ede.api.StreamSource`

`com.bea.wlevs.management.configuration.StageMBean` methods relating to event record and playback	`com.bea.wlevs.management.configuration.RecordPlaybackMBean`
	
	`com.bea.wlevs.management.configuration.StageMBean` method `getRecordPlaybackMBean` returning `RecordPlaybackMBean`

Table 25–2 lists Oracle CEP schema deprecated in 11g Release 1 (11.1.1) and the replacement schema, if any.

Table 25–2   Deprecated Oracle CEP Schema

Deprecated Schema	Deprecated in Assembly File?	Deprecated in Component Configuration File?	Replacement Schema
`wlevs:stream`	Yes	Yes	`wlevs:channel`
`wlevs:metadata`	Yes	N/A	`wlevs:property`
`wlevs:function` attribute `epl-name`	Yes	N/A	`wlevs:function` attribute `function-name`
`wlevs:adapter` attribute `manageable`	Yes	N/A	None.
`wlevs:channel` attribute `manageable`	Yes	N/A	None.
`wlevs:adapter` attribute `monitoring`	N/A	Yes	None.
`wlevs:channel` attribute `monitoring`	N/A	Yes	None.
`wlevs:processor` attribute `monitoring`	N/A	Yes	None.

25.1.2 Adapter Changes

The programming model for adapters has changed as follows:

- Outbound Adapters
- Lifecycle Callback Methods for Adapters
- Runnable Adapters
- Adapter Factories
- Publishing Adapter Providers
- StockTick Event Type Replaced by OracleStockTick

Outbound Adapters

Adapters can now also be outbound; previously they were only inbound.

Lifecycle Callback Methods for Adapters

Spring tags for adapters now include attributes for setting lifecycle callback methods via the EPN assembly file.

Runnable Adapters

For adapters that want to run in a thread, their Java class should now implement `com.bea.wlevs.ede.api.RunnableBean`.

Adapter Factories

Programmers are no longer required to create an adapter factory when creating adapters. You only need to create an adapter factory if you want to share adapters among applications.

Publishing Adapter Providers

Adapter providers are factories for adapters that are published through the OSGi service registry.

Previously, the only way of advertising adapter providers was to use Spring-DM only, like this:

```
<osgi:service interface="com.bea.wlevs.ede.api.AdapterFactory" ref="myBean">
    <osgi:service-properties>
        <entry key="type" value="SocketAdapterType"/>
    </osgi:service-properties>
</osgi:service>
```

However, Spring-DM does not support exporting and importing an OSGi service in the same application so the above approach is deprecated.

Now, you should declare providers with the `wlevs:factory` tag like this:

```
<wlevs:factory provider-name="SocketAdapterType" ref="myBean">
```

This will work whether the adapters are in the same application or not.

Note that if your adapters and providers are collocated (both in the same application) using a provider is optional; you could just instantiate the adapter directly.

Failure to make this change may result in an application that fails to start and eventually times out.

StockTick Event Type Replaced by OracleStockTick

When using the loadgen adapter, note that the `StockTick` event is now named `OracleStockTick`.

25.1.3 New and Deprecated Options in the Deployer Tool

The `-start` and `-stop` commands of the Deployer tool have been deprecated.

When using the `-install` command to install an application, Oracle CEP automatically starts it after all internal initialization tasks have completed. Subsequently, if you stop and start the Oracle CEP server instance, the application is automatically stopped and started, respectively.

The Deployer tool has two new options: `-suspend` and `-resume`. Users should use `-suspend` to suspend a currently running application, and `-resume` for it to resume running.

"Deployer Command-Line Reference" in the *Oracle CEP Administrator's Guide*.

25.1.4 Changes in Management, Monitoring, and JMX

The management framework of Oracle CEP has been overhauled in this release.

Oracle CEP no longer supports the JRMP protocol. Instead, JMX clients must use the more secure MSA protocol for both local and remote access to the Oracle CEP JMX server. When you connect to the Oracle CEP JMX server that is running on `localhost` or on a remote host, you must always use the JMX URL `service:jmx:msarmi://HOST-NAME:PORT/jndi/jmxconnector` so that you are always using the MSA connector (where *HOST-NAME* is either `localhost` or the name of the remote host and *PORT* is the Oracle CEP server JNDI port).

For more information, see:

- "Accessing the Oracle CEP JMX Server" in the *Oracle CEP Administrator's Guide*
- "Configuring JMX" in the *Oracle CEP Administrator's Guide*

25.1.5 Using stopwlevs.sh With Multiple Servers on the Same Host

Consider a scenario where you start two servers on the same host, for example, with server 1 listening on port 9002 and server 2 listening on port 9022. If you then use `stopwlevs.sh` in the server 1 domain directory, the server listening on port 9002 is stopped. If you then use `stopwlevs.sh` in the server 2 domain directory, the stop operation fails due to connection reset error.

Workaround: use the `stopwlevs.sh` command line argument `-url` or `-listenPort` to specify a port other than 9002.

25.1.6 Monitor Service may Underestimate Latency For Application-Timestamped Channels

The monitor service may underestimate the latency time of events that are being processed through the CQL processor when application-timestamped channels are being used and is-totally-ordered is not enabled.

25.1.7 Connecting to Oracle CEP Server Using JConsole may Throw Benign Null Pointer Exceptions

When you connect to Oracle CEP server using JConsole (with or without the `wlevsjconsole.sh` script), JConsole may throw a `java.lang.NullPointerException`.

Workaround: click **OK** in the exception dialog box and proceed. The exception does not affect the JMX connection or Oracle CEP server.

25.1.8 Variable Duration Non-Event Detection is not Supported in This Release

Fixed duration non-event pattern detection *is* supported in 11g Release 1 (11.1.1). When you create a query for fixed duration non-event detection, you may use the `DURATION` clause with constant value and time unit, such as `DURATION 5 SECONDS`, or just a constant value such as `DURATION 5`.

Variable duration non-event pattern detection is *not* supported in 11g Release 1 (11.1.1). That is, you may *not* use the `DURATION` clause with an arbitrary arithmetic expression, such as `DURATION c1+4`.

Recurring non-event pattern detection *is* supported in 11g Release 1 (11.1.1) but only for the fixed duration case. That is, you may use a DURATION clause with a MULTIPLES OF clause but only for a duration that is a constant value.

25.1.9 JMSAdapterMBean Getter Methods for New Connection and User and Password

The following methods have been added to com.bea.wlevs.management.configuration.JMSAdapterMBean:

- getConnectionUser
- getConnectionPassword
- getConnectionEncryptedPassword

The following attributes have been added to the wlevs_application_config.xsd element jms-adapter:

- connection-user
- connection-password
- connection-encrypted-password

When Oracle CEP acquires the JNDI InitialContext, it uses the user and password (or encrypted-password) settings.

When Oracle CEP calls the createConnection method on the javax.jms.ConnectionFactory to create a connection to the JMS destination (JMS queue or topic), it uses the connection-user and connection-password (or connection-encrypted-password) settings, if configured. Otherwise, Oracle CEP uses the user and password (or encrypted-password) settings.

You can use the connection-user and connection-password (or connection-encrypted-password) settings in applications where one security provider is used for JNDI access and a separate security provider is used for JMS access.

25.2 Configuration Issues and Workarounds

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

25.2.1 Accessing Signal Generation Dashboard With Firefox Version 3.0 on Windows

When accessing the signal generation example dashboard (at URL `http://localhost:9002/signalgeneration/dashboard.html`) using the Firefox browser version 3.0 on Windows, you will get an error when you click **Start**.

Workaround: use Internet Explorer version 7 to access the signal generation example dashboard.

25.2.2 VPN Software and Multicast Traffic

Active VPN software is known to have unpredictable behavior on multicast traffic. Additionally, having both Cisco VPN and Nortel VPN installed breaks multicast traffic.

25.2.3 Starting Oracle CEP Visualizer With Firefox

When using Oracle CEP Visualizer with the Firefox browser (version 3.0, SSL, and JDK 1.6), the first time you access a Oracle CEP Visualizer page it will render slowly, sometimes up to 30 seconds.

25.2.4 Uploading Files Using Oracle CEP Visualizer With Firefox and SSL

When using Oracle CEP Visualizer, you may get an error if you try to upload a file using the Firefox browser and SSL.

This is a known problem (`http://bugs.adobe.com/jira/browse/FP-226`) with Adobe Flex that affects Oracle CEP Visualizer.

25.2.5 A Channel Cannot be a Foreign Stage When Connected to an Oracle CQL Processor

If a channel is connected to an Oracle CQL processor, it cannot be a foreign stage.

25.2.6 Exceptions Thrown When Using Oracle CEP Visualizer with FireFox

When using Oracle CEP Visualizer with FireFox:

- Do not set the Jetty scratch directory to a path with a space in it. Doing so will cause `FileNotFoundException`.

- Ignore `EOFException` thrown on the server side; these exceptions will not cause client side failure.

25.2.7 Oracle CEP IDE for Eclipse is Incompatible With Required FireFox 3 Libraries on Linux

The Oracle CEP IDE for Eclipse uses Eclipse 3.3, which is incompatible with required FireFox 3 libraries on Linux. In this case, Eclipse will crash on startup with a JVM core dump and error message like this:

```
# An unexpected error has been detected by Java Runtime Environment:
#
#  SIGSEGV (0xb) at pc=0x00bc80ac, pid=18044, tid=3086637584
#
# Java VM: Java HotSpot(TM) Client VM (11.3-b02 mixed mode, sharing
linux-x86)
# Problematic frame:
# C  [libc.so.6+0x710ac]  memcpy+0x1c
#
# An error report file with more information is saved as:
# /usr/local/bt/workspace/testruntime/eclipse/hs_err_pid18044.log
```

Workaround: perform the following procedure.

1. Change to the root user on your Linux machine.

2. Prevent Eclipse from loading the `libc.so` library noted in the core dump error message:

   ```
   mv libc.so libc.so.orig
   ```

   Note: This will disable FireFox 3 on this machine. To use FireFox 3, you must change the name of this library back to `libc.so`.

   ---

3. Follow the instructions outlined in the Eclipse Linux crash support Wiki page:

   http://wiki.eclipse.org/IRC_FAQ#I_just_installed_Eclipse_on_
   Linux.2C_but_it_does_not_start._What_is_the_problem.3F

   In particular, ensure that the JVM you are using with Eclipse is:

   - explicitly pointed to in the `eclipse.ini` file, and
   - JDK 1.6 or higher

25.2.8 Configuring Oracle CEP Native Clustering Using IPv6 on Linux

When using Oracle CEP native clustering on Linux with IPv6, you may see an error like the one shown in Example 25–1 after restarting a member of a cluster.

Example 25–1   Oracle CEP Server Log evs4j Error

```
<Error> <evs4j> <BEA-2049005> <The cluster member 3 is considered to have failed>
```

Workaround: perform the following procedure:

1. Using the editor of your choice, open the `startwlevs.sh` script for the affected Oracle CEP sever.

   The `startwlevs.sh` server start script is located in the server directory under the main domain directory. For example, the default server directory of the HelloWorld domain is located in *ORACLE_CEP_HOME*/ocep_
   11.1/samples/domains/helloworld_domain/defaultserver, where

ORACLE_CEP_HOME refers to the main Oracle CEP installation directory, such as `/oracle_cep`.

2. Edit the `startwlevs.sh` script to add the `-Djava.net.preferIPv4Stack=true` property to the `java` command line:

```
"$JAVA_HOME/bin/java" $JVM_ARGS $DEBUG_ARGS -Djava.net.preferIPv4Stack=true
-Dwlevs.home="$USER_INSTALL_DIR" -Dbea.home="$BEA_HOME" -jar
"${USER_INSTALL_DIR}/bin/wlevs.jar" $ARGS
```

3. Save and close the `startwlevs.sh` script.

4. Start the affected Oracle CEP server using the modified `startwlevs.sh` script.

25.2.9 Multi-Byte Characters are not Supported by loadgen

The loadgen utility supports only ASCII characters. It does not support multi-byte character sets.

25.2.10 Oracle CEP Server Will not Start if the Keystore and Private Key Passwords are Different

The passwords for the keystore and the alias for the SSL private key must be the same. If they are not, the Oracle CEP Server will not start.

25.2.11 Configuring Oracle CEP Server to use the Sun JVM

Typically, when you install Oracle CEP server, you configure Oracle CEP server to use the bundled JRockit SDK 1.6.0_05. Alternatively, you can configure Oracle CEP server to use a supported Sun Microsystems JDK.

How to configure Oracle CEP Server for use with the Sun JVM:

1. Install the appropriate Sun JDK.

   For more information, see:

   - http://www.oracle.com/technology/software/products/ias/files /oracle%20fusion%20middleware%2011gr1%20%2811%201%201%201% 200%29%20certification%20matrix.xls

   - http://java.sun.com/javase/downloads/index.jsp.

2. Using the editor of your choice, open the `setDomainEnv.sh` or `setDomainEnv.cmd` script for the affected Oracle CEP sever.

   This script is located in the server directory under the main domain directory. For example, the default server directory of the `HelloWorld` domain is located in *ORACLE_CEP_HOME*`/ocep_11.1/samples/domains/helloworld_ domain/defaultserver`, where *ORACLE_CEP_HOME* refers to the main Oracle CEP installation directory, such as `/oracle_cep`.

3. Edit this script to set the `JAVA_HOME` variable to your JDK 1.6.0_11 installation:

   ```
   JAVA_HOME=/scratch/jdk/jdk_1.6.0_11
   ```

4. Save and close the script.

5. Using the editor of your choice, open the `startwlevs.sh` or `startwlevs.cmd` script for the affected Oracle CEP sever.

This server start script is located in the server directory under the main domain directory. For example, the default server directory of the `HelloWorld` domain is located in *ORACLE_CEP_HOME*/ocep_11.1/samples/domains/helloworld_domain/defaultserver, where *ORACLE_CEP_HOME* refers to the main Oracle CEP installation directory, such as /oracle_cep.

6. Edit this script to add the following properties to the `JVM_ARGS` variable:

```
...
JVM_ARGS=-XX:+UnlockDiagnosticVMOptions -XX:+UnsyncloadClass -Xms512m
...
```

7. Save and close the script.

8. Start the affected Oracle CEP server using the modified `startwlevs.sh` or `startwlevs.cmd` script.

25.2.12 java.net.SocketException on IBM AIX (64-Bit) Using IPv6

When executing the Oracle CEP server using the IBM JVM on IBM AIX (64-Bit) with IPv6, the server throws `java.net.SocketException`.

To work around this issue:

1. Excute the following commands (using super user privileges or `sudo`) to modify the AIX network options:

```
no -o rfc1323=1
no -o sb_max=4194304
```

For more information, see "Socket Buffer Size" in the *Oracle Coherence Developer's Guide*.

2. Go to the domain directory.

For example, *ORACLE_CEP_HOME*/user_projects/domains/ocep_domain/defaultserver

3. Edit the `setDomainEnv.sh` script and add the following line:

```
export IBM_JAVA_OPTIONS="-Djava.net.preferIPv4Stack=true
-Djava.net.preferIPv6Addresses=false"
```

For more information, see "Multicast and IPv6" in the *Oracle Coherence Developer's Guide*.

25.2.13 Oracle CEP Applications as Web Service Provider Requires JDK 1.6.0_14 or Higher

To configure an Oracle CEP application as a Web service provider, you must use JDK 1.6.0_14 or above.

25.3 Documentation Errata

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

- Section 25.3.1, "Colt Aggregate Function Example Output Incomplete"
- Section 25.3.2, "Installing Oracle CEP for Use With a Sun JVM"
- Section 25.3.3, "Configuring Oracle CEP for the Sun JDK on Linux"

- Section 25.3.4, "Oracle CEP IDE for Eclipse Support for Eclipse 3.5.0 (Galileo)"
- Section 25.3.5, "Connecting to the Oracle CEP Server Using Oracle JRockit Mission Control"
- Section 25.3.6, "Connecting to the Oracle CEP Server Using JConsole"
- Section 25.3.7, "How to Implement a User-Defined Single-Row Function"

25.3.1 Colt Aggregate Function Example Output Incomplete

"Functions: Colt Aggregate" in the *Oracle CEP CQL Language Reference* contains incomplete example output for the following functions:

- `AUTOCORRELATION`
- `HARMONICMEAN`
- `TRIMMEDMEAN`

25.3.2 Installing Oracle CEP for Use With a Sun JVM

You can use Oracle CEP server with a supported Sun JVM. To do so:

1. Install a supported Sun JVM.

   For more information, see:

   - Section 1.6, "Supported Platforms" in the *Oracle CEP Getting Started*.
   - `http://java.sun.com/javase/downloads/index.jsp`.

2. Install Oracle CEP as a custom install and select the supported Sun JVM:

   - Section 25.3.2.1, "Installing Oracle CEP in Graphical Mode"
   - Section 25.3.2.2, "Installing Oracle CEP in Console Mode"
   - Section 25.3.2.3, "Installing Oracle CEP in Silent Mode"

3. In each Oracle CEP domain directory, update the `setDomainEnv` and `startwlevs` scripts.

   For more information, see Section 25.3.3, "Configuring Oracle CEP for the Sun JDK on Linux".

25.3.2.1 Installing Oracle CEP in Graphical Mode

The Oracle CEP graphical installation program is self-explanatory, however, you can follow these steps for more information.

To install Oracle CEP in graphical mode:

1. Log in to the Windows or UNIX computer on which you want to install Oracle CEP.

   Be sure you log in to the computer as the user that will be the main administrator of the Oracle CEP installation.

2. Download the product distribution file for the platform on which you want to install Oracle CEP.

3. Launch the installation program in graphical mode using the commands listed in the following table appropriate for your platform.

Platform	Instructions
Windows	Using Windows Explorer, double-click the appropriate installation program file from its download directory.

Linux or Solaris	Open a command window, change to the download directory, and enter these commands:
	
	`prompt> chmod a+x filename`
	`prompt> ./filename`
	
	In the preceding commands, `filename` is the name of the installation program specific to your platform (for more informaton, see http://www.oracle.com/technology/software/products/middleware /htdocs/111110_fmw.html.)
	
	If you want to create an installation log, use the `-log=full_path_to_log_file` option; for example:
	
	`prompt> ./filename -log=C:\logs\server_install.log`

   After the installation program has finished loading, you will see the standard Welcome window.

4. Click **Next**.

5. In the Choose Middleware Home Directory window, you can specify either an existing *ORACLE_CEP_HOME* directory or create a new one:

   a. To install into an existing *ORACLE_CEP_HOME* directory:

      – Select **Use an Existing Middleware Home**.

      – Select an existing *ORACLE_CEP_HOME* directory from the list on the right.

   b. To install into a new *ORACLE_CEP_HOME* directory:

      – Select **Create a New Middleware Home**.

      – Click the **Browse** button to browse your computer to select an existing directory or use the **New Folder** button to create a new directory and then select it.

      – Click **Open**.

   The *ORACLE_CEP_HOME* directory is the main installation directory for Oracle CEP, such as `c:\oracle_cep`. You can have one or many *ORACLE_CEP_HOME* directories on your computer, whichever suits your development and production environments best.

6. Click **Next**.

7. In the Choose Install Type window, you can choose one of the following options:

   a. To install all Oracle CEP components *except* the samples and use the Oracle JRockit JVM included with Oracle CEP:

      * Select **Typical**.

      * Click **Next**.

      * Proceed to step 10.

   The installer program checks to see if the *ORACLE_CEP_HOME* directory contains the version of JRockit required by this release of Oracle CEP:

      – If it finds the required JRockit installation, it does not install a new one.

      – If it does not find an appropriate JRockit installation, then the installer installs its own version in the *ORACLE_CEP_HOME* directory.

   b. To install all Oracle CEP components *including* the samples and select a previously installed Sun or platform-specific JVM (or use the Oracle JRockit JVM included with Oracle CEP):

     * Select **Custom**.

     * In the Choose Products and Components window, check the components you want to install, such as the product samples.

     * Click **Next**.

> **Note:** By default, the complete installation does not include the product samples. If you want to install the samples (recommended), choose the **Custom** option.
>
> If you want to use a Sun or platform-specific JVM, you must choose the **Custom** option.

    The installer program allows you to choose the JDK to use and to decide whether or not to install the Oracle JRockit JVM included with Oracle CEP.

8. In the JDK Selection window, you can choose the JDK for the Oracle CEP server.

Use the **Browse** button to select the Sun or platform-specific JDK you installed previously.

If you do not want the installer to install the Oracle JRockit JVM included with Oracle CEP, uncheck this item.

9. Click **Next**.

10. In the Choose Product Installation Directories window, you can change the default name of the home directory of Oracle CEP, `ocep_11.1`.

Although you can name this directory anything you want, Oracle recommends that you use the default name for clarity and standardization. For example, the documentation assumes that you install into the `ocep_11.1` directory.

11. Click **Next**.

12. If you are installing on Windows, and you logged in as a user with Administrator privileges, then you will see the Choose Shortcut Location window where you can choose where you want the Start Menu folder to appear. The following table describes the options available:

If you select . . .	The following occurs . . .
All Users	Recommended. All users registered on the machine are provided with access to the installed software. Subsequently, if users without Administrator privileges use the Configuration Wizard from this installation to create domains, Start menu shortcuts to the domains are not created. In this case, users can manually create shortcuts in their local Start menu folders, if desired.
Local user	Other users registered on this machine will not have access to the Start menu entries for this installation.

If you logged in as a user without Administrator privileges, the Start menu entries are created in your user's local Start menu folder.

13. Click **Next**.

14. The Installation Summary window shows the products and components you are about to install, along with the approximate size in MB. This window is for your information only; to change the components to be installed, use the **Previous** button to return to the appropriate window.

15. Click **Next**.

    The installer program installs Oracle CEP. The Installation Complete window indicates that the product was installed successfully.

16. Click **Done** to exit the program.

17. Review the post-installation steps that Section 2.7, "Post-Installation Steps" in the *Oracle CEP Getting Started* describes.

25.3.2.2 Installing Oracle CEP in Console Mode

Console-mode installation is an interactive, text-based method for installing your software from the command line, on either a UNIX or Windows system.

When installing in console-mode, respond to the prompts in each section by entering the number associated with your choice or by pressing Enter to accept the default. To exit the installation process, enter `exit` (or `x`, for short) in response to any prompt. To review or change your selection, enter `previous` (or `p`, for short) at the prompt. To proceed to the following window, enter `next` (or `n`, for short).

Note: In the following procedure, Windows conventions (such as back-slashes in pathnames) are used, for example, `C:\oracle_cep\ocep_11.1`. When entering pathnames on a UNIX system, be sure to use UNIX conventions, instead. For example, use forward slashes in pathnames, such as `/oracle_cep/ocep_11.1`.

To install Oracle CEP in graphical mode:

1. Log in to the Windows or UNIX computer on which you want to install Oracle CEP.

   Be sure you log in to the computer as the user that will be the main administrator of the Oracle CEP installation.

2. Download the product distribution file for the platform on which you want to install Oracle CEP.

3. Launch the installation program in console mode using the commands listed in the following table appropriate for your platform.

Platform	Instructions

Windows	Open a command window, change to the download directory, and enter the following command:
	
	`prompt> filename -mode=console`
	
	In the preceding command, `filename` is the name of the installation program specific to your platform (for more information, see http://www.oracle.com/technology/software/products/middleware/htdocs/111110_fmw.html).
	
	If you want to create an installation log, use the `-log=full_path_to_log_file` option; for example:
	
	`prompt> filename -mode=console -log=C:\logs\server_install.log`

Platform	Instructions
Linux or Solaris	Open a command window, change to the download directory, and enter these commands:

```
prompt> chmod a+x filename
prompt> ./filename -mode=console
```

In the preceding commands, `filename` is the name of the installation program specific to your platform (for more information, see http://www.oracle.com/technology/software/products/middleware/htdocs/111110_fmw.html).

If you want to create an installation log, use the `-log=full_path_to_log_file` option; for example:

```
prompt> ./filename -mode=console -log=C:\logs\server_install.log
```

4. At the Welcome prompt, type `next` (or `n` for short) or press **Enter** to continue with the installation process.

5. In the Choose Middleware Home Directory window, you can specify either an existing `ORACLE_CEP_HOME` directory or create a new one:

   a. To install into an existing `ORACLE_CEP_HOME` directory:

      – Type the number of the existing `ORACLE_CEP_HOME` directory.

   b. To install into a new `ORACLE_CEP_HOME` directory:

      – Type `1` to create a new `ORACLE_CEP_HOME` directory.

      – The installation program guides you through the required steps to create the new `ORACLE_CEP_HOME`.

        Be sure to enter the full path of the `ORACLE_CEP_HOME` directory, for example `C:\oracle_cep2`.

        If you specify a directory that does not exist, the installation program creates it for you.

   The `ORACLE_CEP_HOME` directory is the main installation directory for Oracle CEP, such as `c:\oracle_cep`. You can have one or many `ORACLE_CEP_HOME` directories on your computer, whichever suits your development and production environments best.

6. Confirm your choice for `ORACLE_CEP_HOME` directory and enter `next` (or `n`).

7. In the Choose Install Type window, you can choose one of the following options:

   a. To install all Oracle CEP components *except* the samples and use the Oracle JRockit JVM included with Oracle CEP:

      * Type `1` to choose a **Typical** install.

      * Proceed to step 9.

      The installer program checks to see if the `ORACLE_CEP_HOME` directory contains the version of JRockit required by this release of Oracle CEP:

      – If it finds the required JRockit installation, it does not install a new one.

      – If it does not find an appropriate JRockit installation, then the installer installs its own version in the `ORACLE_CEP_HOME` directory.

   b. To install all Oracle CEP components *including* the samples and select a previously installed Sun or platform-specific JVM (or use the Oracle JRockit JVM included with Oracle CEP):

* Type 2 to choose a **Custom** install.

* In the Choose Components to Install window, enter the numbers in brackets to toggle the components you want to install, such as the samples. To toggle a selection in the list, types its number. When a check mark appears next to the option, the option is selected. To unselect the option, enter its number again to remove the check mark

* Enter next (or n) when you have chosen the components.

Note: By default, the complete installation does not include the product samples. If you want to install the samples (recommended), choose the **Custom** option.

If you want to use a Sun or platform-specific JVM, you must choose the **Custom** option.

The installer program allows you to choose the JDK to use and to decide whether or not to install the Oracle JRockit JVM included with Oracle CEP.

8. In the JDK Selection window, you can choose the JDK for the Oracle CEP server:

■ To add a local JDK, select the Add Local JDK option (1).

The installation program guides you through the required steps to add a local JDK.

Be sure to enter the full path to the JDK directory, for example:

```
C:\Program Files\Java\jdk1.6.0_14
```

To add additional JDKs, select 1 again.

■ In the JDK Selection window, enter the numbers in brackets to toggle the JDKs you want. To toggle a selection in the list, types its number. When a check mark appears next to the option, the option is selected. To unselect the option, enter its number again to remove the check mark.

If you do not want the installer to install the Oracle JRockit JVM included with Oracle CEP, uncheck this item.

■ Enter next (or n) when you have selected the local JDK.

9. In the Choose Product Installation Directories window, you can change the default name of the home directory of Oracle CEP, ocep_11.1, by entering a new value.

Although you can name this directory anything you want, Oracle recommends that you use the default name for clarity and standardization. For example, the documentation assumes that you install into the ocep_11.1 directory.

Enter next (or n) when you are done.

10. If you are installing on Windows, and you logged in as a user with Administrator privileges, then you will see the Choose Shortcut Location window where you can choose where you want the Start Menu folder to appear. The following table describes the options available:

If you select . . .	The following occurs . . .
1 "All Users"	Recommended. All users registered on the machine are provided with access to the installed software. Subsequently, if users without Administrator privileges use the Configuration Wizard from this installation to create domains, Start menu shortcuts to the domains are not created. In this case, users can manually create shortcuts in their local Start menu folders, if desired.
2 "Local user"	Other users registered on this machine will not have access to the Start menu entries for this installation.

If you logged in as a user without Administrator privileges, the Start menu entries are created in your user's local Start menu folder.

Enter the appropriate number.

11. Enter `next` (or `n`) when you are done.

12. The Installation Summary window shows the products and components you are about to install, along with the approximate size in MB. This window is for your information only; to change the components to be installed, type `Previous` to return to the appropriate window.

13. Enter `next` (or `n`).

The installer program installs Oracle CEP. The Installation Complete window indicates that the product was installed successfully.

14. Type `exit` to exit the program.

15. Review the post-installation steps that Section 2.7, "Post-Installation Steps" in the *Oracle CEP Getting Started* describes.

25.3.2.3 Installing Oracle CEP in Silent Mode

Silent-mode installation is a non-interactive method of installing your software that requires the use of an XML properties file for selecting installation options.

To install Oracle CEP in silent mode:

1. Log in to the Windows or UNIX computer on which you want to install Oracle CEP.

Be sure you log in to the computer as the user that will be the main administrator of the Oracle CEP installation.

2. Download the product distribution file for the platform on which you want to install Oracle CEP.

3. Create a `silent.xml` file that defines the configuration settings normally entered by a user during an interactive installation process.

See Section 25.3.2.3.1, "Creating a silent.xml File for Silent-Mode Installation."

> **Note:** Incorrect entries in the `silent.xml` file can cause installation failures. To help you determine the cause of a failure, we recommend that you create a log file when you launch the installation program.

4. Launch the installation program in silent mode using the commands in the following table appropriate for your platform.

Platform	Instructions
Windows	Open a command window, change to the download directory, and enter the following command: `prompt> `*`filename`*` -mode=silent -silent_xml=`*`path_to_xml_file`* In the preceding command, *`filename`* is the name of the installation program specific to your platform (for more information, see http://www.oracle.com/technology/software/products/middleware/htdocs/111110_fmw.html) and *`path_to_xml_file`* is the full pathname of the `silent.xml` template file you created in the preceding step. If you want to create an installation log, use the `-log=`*`full_path_to_log_file`* option; for example: `prompt> `*`filename`*` -mode=silent -silent_xml=`*`path_to_xml_file`*`  -log=C:\logs\server_install.log`
Linux or Solaris	Open a command window, change to the download directory, and enter these commands: `prompt> chmod a+x `*`filename`* `prompt> ./`*`filename`*` -mode=silent -silent_xml=`*`path_to_xml_file`* In the preceding commands, *`filename`* is the name of the installation program specific to your platform (for more information, see http://www.oracle.com/technology/software/products/middleware/htdocs/111110_fmw.html) and *`path_to_xml_file`* is the full pathname of the `silent.xml` template file you created in the preceding step. If you want to create an installation log, use the `-log=full_path_to_log_file` option; for example: `prompt> ./`*`filename`*` -mode=silent -silent_xml=`*`path_to_xml_file`*`  -log=C:\logs\server_install.log`

An Oracle Installer window is displayed, indicating that the files are being extracted. No other prompt or text is displayed.

The installation is complete when the Oracle Installer window disappears.

See Section 25.3.2.3.3, "Returning Exit Codes to the Command Window" for getting information about the success or failure of the silent installation.

5. Review the post-installation steps that Section 2.7, "Post-Installation Steps" in the *Oracle CEP Getting Started* describes.

25.3.2.3.1 Creating a silent.xml File for Silent-Mode Installation When you install Oracle CEP in silent mode, the installation program uses an XML file (`silent.xml`) to determine which installation options should be implemented.

To create a silent.xml file for silent-mode installation:

1. Using your favorite text editor, create an empty file called `silent.xml` on the computer on which you want to install Oracle CEP in silent mode.

2. Copy the contents of the sample XML file, shown in Example 25–2, into your own `silent.xml` file.

Example 25–2   Sample silent.xml File for Silent-Mode Installation

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- Silent installer option: -mode=silent -silent_xml=C:\oracle\silent.xml -->
<bea-installer>
    <input-fields>
        <data-value name="BEAHOME"            value="C:\oracle_cep" />
        <data-value name="USER_INSTALL_DIR"   value="C:\oracle_cep\ocep_11.1" />
```

```
            <data-value name="INSTALL_SHORTCUT_IN_ALL_USERS_FOLDER"   value="yes"/>
            <data-value name="COMPONENT_PATHS" value="Oracle Complex Event Processing" />
        </input-fields>
</bea-installer>
```

3. In the `silent.xml` file you just created, edit the values for the keywords shown in Table 25–3 to reflect your configuration.

   For example, if you want to install into the ORACLE_CEP_HOME directory `e:\oracle_cep`, update the corresponding `<data-value>` element as follows

   ```
   <data-value name="BEAHOME" value="e:\oracle_cep" />
   ```

Table 25–3   Values for the silent.xml File

For this data-value name...	Enter the following value...
BEAHOME	The full pathname for the *ORACLE_CEP_HOME* directory of your choice.
USER_INSTALL_DIR	The full pathname for the directory where you want to install your Oracle CEP software.
INSTALL_SHORTCUT_IN_ALL_USERS_FOLDER	Windows only. Specify: ■ `true`, or `yes`, to create the shortcuts in the All Users folder. ■ `false`, or `no`, to create the shortcuts in the local users folder. The user performing the installation must have Administrator privileges to install the Start menu shortcuts in the All Users folder. The default value for this parameter, if you do not specify it, is `true`.
COMPONENT_PATHS	Specify the components and subcomponents of Oracle CEP you want to install on your system. Use the following values: ■ `Oracle Complex Event Processing` ■ `Oracle Complex Event Processing/Event Server` ■ `Oracle Complex Event Processing/Event Server Samples` For additional information about entering these values, see Section 25.3.2.3.2, "Guidelines for Component Selection." If you do not include the COMPONENT_PATHS data-value name in the `silent.xml` file, the complete Oracle CEP product is installed.
LOCAL_JVMS	Specify the local JDKs to be installed. Enter the full path of the JDKs to be installed, separated by the pipe symbol (|). Do not leave a space before or after the bar. Use this option to install Oracle CEP for use with a previously installed Sun or platform-specific JDK.
BEA_BUNDLED_JVMS	Specify the BEA-supplied JDKs to be installed. Enter the full path of the JDKs to be installed, separated by the pipe symbol (|). Do not leave a space before or after the bar. Use this option to install Oracle CEP for use with the Oracle JRockit JDK included in the Oracle CEP installer.

4. Save the file in the directory of your choice.

25.3.2.3.2   Guidelines for Component Selection   Use the following guidelines when you specify values for the COMPONENT_PATHS data-value name:

- When you specify a product component to be installed, all subcomponents that are installed by default in a complete installation are also installed. For example, the following entry installs both Oracle CEP and the samples:

  ```
  <data-value name="COMPONENT_PATHS" value="Oracle Complex Event Processing" />
  ```

- To install multiple components or subcomponents, separate the components with a bar (|). Do not leave a space before or after the bar.

- To specify subcomponents, you must specify a component/subcomponent combination for each entry. For example, to explicitly install Oracle CEP and the samples, enter the following line in the file:

  ```
  <data-value name="COMPONENT_PATHS" value="Oracle Complex Event Processing/Event
  Server|Oracle Complex Event Processing/Event Server Samples" />
  ```

> **Note:** Because this release of Oracle CEP includes only the server itself and samples, the preceding example is equivalent to the example in the first bullet.

25.3.2.3.3 Returning Exit Codes to the Command Window When run in silent mode, the installation program generates exit codes that indicate the success or failure of the installation. These exit codes are shown in Table 25–4.

Table 25–4   Exit Codes

Code	Description
0	Installation completed successfully
-1	Installation failed due to a fatal error
-2	Installation failed due to an internal XML parsing error

Example 25–3 provides a sample Windows command file that invokes the installation program in silent mode and echoes the exit codes to the command window from which the script is executed.

Example 25–3   Sample Windows Command File Displaying Silent-Mode Exit Codes

```
rem Execute the installer in silent mode
@echo off
ofm_ocep_generic_11.1.1.1.0_32_disk1_1of1.exe -mode=silent -silent_
xml=C:\downloads\silent.xml -log=C:\logs\products_silent.log

@rem Return an exit code to indicate success or failure of installation
set exit_code=%ERRORLEVEL%

@echo.
@echo Exitcode=%exit_code%
@echo.
@echo Exit Code Key
@echo ---------------
@echo  0=Installation completed successfully
@echo -1=Installation failed due to a fatal error
@echo -2=Installation failed due to an internal XML parsing error
@echo.
```

25.3.3 Configuring Oracle CEP for the Sun JDK on Linux

If you installed Oracle CEP for use with the Sun JDK on Linux, you must make changes to the `setDomainEnv.sh` and `startwlevs.sh` scripts in each Oracle CEP domain directory:

1. Go to the domain directory.

   For example, *ORACLE_CEP_HOME*/user_projects/domains/ocep_domain/defaultserver

2. Edit the `setDomainEnv.sh` script and add the following line:

   ```
   export DISPLAY=:0.0
   ```

3. Edit the `startwlevs.sh` script and add `-Djava.awt.headless=true` to the `java` command line:

   ```
   "$JAVA_HOME/bin/java" $JVM_ARGS $DEBUG_ARGS -Djava.awt.headless=true
   -Dwlevs.home="$USER_INSTALL_DIR" -Dbea.home="$BEA_HOME"  -jar
   "${USER_INSTALL_DIR}/bin/wlevs.jar" $ARGS
   ```

25.3.4 Oracle CEP IDE for Eclipse Support for Eclipse 3.5.0 (Galileo)

In this release, Oracle CEP IDE for Eclipse provides a plugin for Eclipse 3.5.0 (Galileo) as well as Eclipse 3.3.x (Europa). You may see minor differences between the Eclipse 3.5.0 user interface and screen captures in the *Oracle CEP IDE Developer's Guide for Eclipse*.

25.3.5 Connecting to the Oracle CEP Server Using Oracle JRockit Mission Control

Currently, Oracle JRockit Mission Control does not support the MSA RMI protocol. You cannot connect Oracle JRockit Mission Control to the Oracle CEP server using this protocol as "How to Connect to a Local or Remote Oracle CEP JMX Server Using JRockit Mission Control" in the *Oracle CEP Administrator's Guide* erroneously describes.

25.3.6 Connecting to the Oracle CEP Server Using JConsole

The *Oracle CEP Administrator's Guide* describes how to connect to a local or remote Oracle CEP server using JConsole. This description should read as follows:

- Section 25.3.6.1, "How to Connect to a Local or Remote Oracle CEP JMX Server Using JConsole With Security Enabled"

- Section 25.3.6.2, "How to Connect to a Local or Remote Oracle CEP JMX Server Using JConsole With Security Disabled"

25.3.6.1 How to Connect to a Local or Remote Oracle CEP JMX Server Using JConsole With Security Enabled

You can use the `wlevsjconsole` script to connect to an Oracle CEP JMX server running on your local host or on a remote host to browse and manage Oracle CEP MBeans with the JDK `jconsole`.

This procedure describes how to use JConsole when the Oracle CEP server has security enabled. This is the default configuration and is recommended for production servers. Alternatively, you can connect to the JMX server with security disabled (see Section 25.3.6.2, "How to Connect to a Local or Remote Oracle CEP JMX Server Using JConsole With Security Disabled").

To connect to a local or remote Oracle CEP JMX server using JConsole with security enabled:

1. Ensure that the local or remote Oracle CEP server is running.

2. Open a command window and set your environment as described in "Setting Your Development Environment" in the *Oracle CEP Getting Started*.

3. Launch `jconsole` using the `wlevsjconsole.sh` script located in the *ORACLE_CEP_HOME*/`ocep_11.1/bin` directory, where *ORACLE_CEP_HOME* refers to the directory in which you installed Oracle CEP (such as /oracle_home).

   a. To connect to a local Oracle CEP server, enter:

      ```
      prompt> wlevsjconsole.sh
      ```

   b. To connect to a remote Oracle CEP server, enter:

      ```
      prompt> wlevsjconsole.sh HOST-NAME:PORT
      ```

      Where *HOST-NAME* is the name of the remote host and *PORT* is the NetIO port as configured in the remote host's *ORACLE_CEP_HOME*/`user_projects/domains/`*DOMAIN-NAME*`/defaultserver/config/config.xml` file.

   The jconsole browser attempts to log into the JMX server and initially fails It displays a "Connection Failed: Retry?" dialog with a Connect and Cancel button.

4. Click **Cancel**.

   The `Jconsole` New Connection dialog appears.

5. Configure the New Connection dialog as Table 25–5 describes.

Table 25–5   JConsole New Connection Attributes

Attribute	Description
Remote Process	Enter the following URL:
	`service:jmx:msarmi://`*HOST-NAME*`:`*PORT*`/jndi/jmxconnector`
	Where *HOST-NAME* is the name of the local or remote host and *PORT* is the NetIO port as configured in the remote host's *ORACLE_CEP_HOME*/`user_projects/domains/`*DOMAIN-NAME*`/defaultserver/config/config.xml` file (defualt `9002`).
Username	Enter an Oracle CEP administration password.
	Default: **wlevs**.
Password	Enter the password for the Oracle CEP administration password you chose.
	Default: **wlevs**.
Remote Process	Enter the following URL:
	`service:jmx:msarmi://`*HOST-NAME*`:`*PORT*`/jndi/jmxconnector`
	Where *HOST-NAME* is the name of the local or remote host and *PORT* is the NetIO port as configured in the remote host's *ORACLE_CEP_HOME*/`user_projects/domains/`*DOMAIN-NAME*`/defaultserver/config/config.xml` file (defualt `9002`).

6. Click **Connect**.

   The `jconsole` browser opens and provides access to Oracle CEP MBeans.

25.3.6.2 How to Connect to a Local or Remote Oracle CEP JMX Server Using JConsole With Security Disabled

You can use the `wlevsjconsole` script to connect to an Oracle CEP JMX server running on your local host or on a remote host to browse and manage Oracle CEP MBeans with the JDK `jconsole`.

This procedure describes how to use JConsole when the Oracle CEP server has security disabled. This is a common development configuration and is not recommended for production servers. Alternatively, you can connect to the JMX server with security enabled (see Section 25.3.6.1, "How to Connect to a Local or Remote Oracle CEP JMX Server Using JConsole With Security Enabled").

To connect to a local or remote Oracle CEP JMX server using JConsole with security disabled:

1. Ensure that the local or remote Oracle CEP server is running with security disabled.

    For more information, see "Disabling Security" in the *Oracle CEP Administrator's Guide*.

2. Open a command window and set your environment as described in "Setting Your Development Environment" in the *Oracle CEP Getting Started*.

3. Launch `jconsole` using the `wlevsjconsole.sh` script located in the *ORACLE_CEP_HOME*`/ocep_11.1/bin` directory, where *ORACLE_CEP_HOME* refers to the directory in which you installed Oracle CEP (such as `/oracle_home`).

    a. To connect to a local Oracle CEP server, enter:

    ```
    prompt> wlevsjconsole.sg
    ```

    b. To connect to a remote Oracle CEP server, enter:

    ```
    prompt> wlevsjconsole.sh HOST-NAME:PORT
    ```

    Where *HOST-NAME* is the name of the remote host and *PORT* is the `NetIO` port as configured in the remote host's *ORACLE_CEP_HOME*`/user_projects/domains/`*DOMAIN-NAME*`/defaultserver/config/config.xml` file.

    The script automatically connects to the JMX server and the `jconsole` browser opens and provides access to Oracle CEP MBeans.

25.3.7 How to Implement a User-Defined Single-Row Function

Example 13-1, "MyMod.java User-Defined Single-Row Function", in the *Oracle CEP CQL Language Reference*, is incorrect. Currently, it reads as follows:

```
package com.bea.wlevs.example.function;

public class MyMod {
    public Object execute(Object[] args) {
        int arg0 = ((Integer)args[0]).intValue();
        int arg1 = ((Integer)args[1]).intValue();
        return new Integer(arg0 % arg1);
    }
}
```

It should read as follows:

```
package com.bea.wlevs.example.function;
```

```
public class MyMod {
    public Object execute(int arg0, int arg1) {
        return new Integer(arg0 % arg1);
    }
}
```

26

Oracle User Messaging Service

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

- Section 26.1, "General Issues and Workarounds"
- Section 26.2, "Configuration Issues and Workarounds"
- Section 26.3, "Documentation Errata"

26.1 General Issues and Workarounds

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

- Section 26.1.1, "XML File Handle Left Open after Upload Fails"
- Section 26.1.2, "Messages Metrics Rendered as Unavailable in the Performance Page for User Messaging Server"
- Section 26.1.3, "UMS URLs Unavailable After Restart"
- Section 26.1.4, "User Preferences User Interface Renders Improperly"

26.1.1 XML File Handle Left Open after Upload Fails

If an error occurs when uploading a user messaging preferences XML file using the WLST `manageUserMessagingPrefs` command, the XML file handle is left open. On the Microsoft Windows platform, this file cannot be deleted until you exit the WLST shell.

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

When no metric data is found, for example when no messages have been sent or received after server setup, the Metrics Performance page will display *Unavailable*. This is not a problem with the software, and the Performance reporting is operating properly. As soon as *Send* and *Receive* traffic exists, the Performance page will display results normally.

26.1.3 UMS URLs Unavailable After Restart

Upon restarting the UMS server (*usermessagingserver*) from Oracle Enterprise Manager Fusion Middleware Control or through Oracle WebLogic Console, you may get an error: `Error 503--Service Unavailable` when attempting to access any URLs served by the UMS server, such as the User Preferences UI (*/sdpmessaging/userprefs-ui*) or the various Web Services endpoints. This error occurs intermittently in cases when

the Oracle WebLogic Server is heavily loaded (such as with a SOA instance). To work around this issue:

- Restart the UMS server again (two or more restarts may be required).

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

26.1.4 User Preferences User Interface Renders Improperly

Intermittent UI rendering errors have been reported in some languages, due to the generation of a corrupted .css file. If you experience problems, follow these steps to work around the issue:

1. Delete the cached, auto-generated .css file for the affected locale (or simply, all locales) on the server located at `DOMAIN_HOME/servers/<server_name>/tmp/_WL_user/usermessagingserver/<random_name>/public/adf/styles/cache` and restart the *usermessagingserver* application using Oracle Enterprise Manager Fusion Middleware Control. Have all users clear their browser caches.

    The next time the UI is accessed from a browser, a new .css file will be generated for the desired locale, and it is very likely that it will be a valid .css file. If not, repeat this process a couple of times.

2. If the previous solution does not work, disable content compression in the `web.xml` file of the User Preferences Web Module located at `DOMAIN_HOME/servers/<server_name>/tmp/_WL_user/usermessagingserver/<random_name>/sdpmessaginguserprefs-ui-web.war`. In particular, extract `web.xml`, add the following `<context-param/>` to it:

```
<context-param>
  <param-name>org.apache.myfaces.trinidad.DISABLE_CONTENT_
COMPRESSION</param-name>
  <param-value>true</param-value>
</context-param>
```

    Then, re-archive it to the war module.

    Finally, restart the *usermessagingserver* application using Oracle Enterprise Manager Fusion Middleware Control.

26.2 Configuration Issues and Workarounds

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

- Section 26.2.1, "Use Correct SSL Trust Store When Configuring Drivers"

- Section 26.2.2, "deployUserMessagingDriver Default Staging Mode Change"

- Section 26.2.3, "Configure VoiceXML Driver Receive URLs Correctly"

- Section 26.2.4, "UMS Driver Configuration Changes Not Immediately Effective"

- Section 26.2.5, "Email Notifications Sent Even if You Do Not Change Default Parameters in driverconfig.xml"

26.2.1 Use Correct SSL Trust Store When Configuring Drivers

Before configuring any User Messaging Service Driver (such as the Email Driver) to connect to a remote gateway using SSL, ensure that the correct SSL Trust Store is used:

Update the value of the JVM system property (*javax.net.ssl.trustStore*) set in `$DOMAIN_HOME/bin/setDomainEnv.sh` (or Windows equivalent).

26.2.2 deployUserMessagingDriver Default Staging Mode Change

In this release, the default staging mode used by this WLST command is `nostage` (previously it was `stage`).

26.2.3 Configure VoiceXML Driver Receive URLs Correctly

In a clustered (high-availability) environment with Oracle HTTP Server (OHS) configured, do not use the OHS port to configure the VoiceXML Driver Receive URLs. Using the OHS port to configure the VoiceXML Driver Receive URLs will cause a conflict with the drivers.

Each Voice XML Driver must be configured with its own WLS server's port (as described in the parameters' documentation).

26.2.4 UMS Driver Configuration Changes Not Immediately Effective

When you change a driver's configuration and then restart the driver, the changes will not take effect until all managed connections in the pool are destroyed (900 seconds [15 minutes] by default). Take one of these actions to ensure that the connections are destroyed:

- When performing driver configuration changes, stop the driver application and wait for 15 minutes. Then re-start the driver application.

    > **Note:** If you follow this recommendation and the wait time of 900 seconds (15 minutes) is too long, you can reduce the time using the Oracle WebLogic Server Administration Console as follows:
    >
    > 1. Click **Deployments**.
    > 2. Select the desired UMS Driver deployment.
    > 3. Click the **Resource Adapter Type** module.
    > 4. Click **Configuration > Outbound Connection Pools**.
    > 5. Click the **DriverConnectionFactory** group.
    > 6. Click **Connection Pool**.
    > 7. Edit the value of *Shrink Frequency Seconds* (for example, set to *120 seconds*).
    > 8. Click **Save**, and save the changes to a deployment plan file when prompted.
    > 9. Restart the UMS driver deployment to include the new plan.
    >
    > Remember that if *Shrink Frequency* is reduced to a short interval, it may eventually have a negative impact on the performance of the driver as idle connections will be recycled frequently.

    OR

- Restart the entire Oracle WebLogic Server after performing driver configuration changes. The new changes will take effect immediately upon server re-start.

26.2.5 Email Notifications Sent Even if You Do Not Change Default Parameters in driverconfig.xml

Instructions for notification configuration include setting your outgoing server parameters. Please note that if you do not change the parameters (that is, if you leave the default setting unchanged), notifications may still be sent. This is expected behavior, but you should not rely on the default settings without verifying them. You should set your parameters to ensure that they are correct.

26.3 Documentation Errata

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

- Section 26.3.1, "Test-to-Production Scenario with LDAP Configuration"
- Section 26.3.2, "Additional UMS Information for Patch Assistant Document (E16154-01)"
- Section 26.3.3, "Finding User Messaging Preferences URL"

26.3.1 Test-to-Production Scenario with LDAP Configuration

While moving Oracle User Messaging Service to an existing production environment configured against an LDAP Store, only use the *Userprefs-UI* option to change User Preferences.

> **Note:** Using the WLST command (`manageUserMessagingPrefs`) is not recommended as it may not correctly migrate identity-store backed device preferences that have been removed from the test instance.

26.3.2 Additional UMS Information for Patch Assistant Document (E16154-01)

In Section 3.3.8.2: "Migrating Configuration for User Messaging Service Worklist Driver", the text has been expanded for clarity as follows:

If your Oracle Fusion Middleware 11g Release 1 (11.1.1.1.0) domain has the User Messaging Service Worklist Driver installed and configured, the configuration of the Worklist Driver is automatically migrated by the Patch Assistant. But the tool does not *install* this additional driver. You must re-install it in the Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0) domain. For more information, see "Install the Worklist Driver" section in the Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite.

26.3.3 Finding User Messaging Preferences URL

The User Messaging Service documentation (in both the Developer's and Administrator's guides) did not list the location of the User Messaging Preferences UI. The standalone user interface is available at:

```
http://<host>:<port>/sdpmessaging/userprefs-ui
```

The User Messaging Preferences UI is also embedded in the SOA Worklist application. You can access it from the Worklist application by choosing **Preferences > Notification**.

Part VIII

Oracle Identity Management

Part VIII contains the following chapters:

27

Oracle Directory Integration Platform

This chapter describes issues associated with Oracle Directory Integration Platform. It includes the following topics:

- Section 27.1, "General Issues and Workarounds"
- Section 27.2, "Configuration Issues and Workarounds"
- Section 27.3, "Documentation Errata"

27.1 General Issues and Workarounds

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

- Some Changes May Not Get Synchronized Due to Race Condition in Heavily-Loaded Source Directory
- Inconsistent Levels of Information Appear in the Oracle Directory Integration Platform Application's Logs
- Synchronization Continues After Stopping Oracle Directory Integration Platform
- Synchronization Profile Initialization Fails if Change Log is Not Enabled in Third-Party Directory Server
- syncProfileBootstrap Not Supported for SSL Mode 2 Server-Only Authentication
- DIP Tester Utility Not Currently Supported for 11g Release 1 (11.1.1)

27.1.1 Some Changes May Not Get Synchronized Due to Race Condition in Heavily-Loaded Source Directory

If the source directory is heavily-loaded, a race condition may occur where database commits cannot keep pace with updates to the lastchangenumber. If this race condition occurs, Oracle Directory Integration Platform may not be able to synchronize some of the changes.

To work around this issue, perform the following steps to enable database commits to keep pace with the lastchangenumber:

1. Increase the value of the synchronization profile's Scheduling Interval.

2. Control the number of times the search is performed on the source directory during a synchronization cycle by setting the searchDeltaSize parameter in the profile. Oracle suggests starting with a value of 10, then adjusting the value as needed.

27.1.2 Inconsistent Levels of Information Appear in the Oracle Directory Integration Platform Application's Logs

When a synchronization profile is initialized, the debugging log level for the Oracle Directory Integration Platform application is set to the debugging log level configured for that synchronization profile. If you have synchronization profiles configured with different debugging log levels, you may see various levels of information in the Oracle Directory Integration Platform application's logs.

To work around this issue, set the debugging log level in all synchronization profiles to the same level.

27.1.3 Synchronization Continues After Stopping Oracle Directory Integration Platform

If you stop the Oracle Directory Integration Platform application during synchronization, the synchronization process that the Quartz scheduler started will continue to run.

To work around this issue, restart the Oracle WebLogic Managed Server hosting Oracle Directory Integration Platform or redeploy the Oracle Directory Integration Platform application.

27.1.4 Synchronization Profile Initialization Fails if Change Log is Not Enabled in Third-Party Directory Server

When synchronizing from Sun Java System Directory Server (iPlanet) or IBM Tivoli Directory Server, if the change log is not enabled in these third-party directory servers, the manageSyncProfiles utility may fail to register synchronization profiles and the `Profile Initialization Failure` message may appear.

If you encounter this issue while attempting to update or register synchronization profiles for Sun Java System Directory Server (iPlanet) or IBM Tivoli Directory Server, ensure the change log is enabled in the third-party directory server.

27.1.5 syncProfileBootstrap Not Supported for SSL Mode 2 Server-Only Authentication

The `syncProfileBootstrap` utility, which performs the initial migration of data between a connected target directory and Oracle Internet Directory based on a synchronization profile or LDIF file, is *not* supported for SSL mode 2 (Server-Only Authentication).

The `syncProfileBootstrap` utility is supported only for SSL mode 0 (No SSL) and SSL mode 1 (No Authentication).

27.1.6 DIP Tester Utility Not Currently Supported for 11g Release 1 (11.1.1)

At the time of publication of these Release Notes, the DIP Tester utility is not supported for Oracle Directory Integration Platform 11g Release 1 (11.1.1).

Monitor My Oracle Support (formerly MetaLink) for updates regarding DIP Tester support for Oracle Directory Integration Platform 11g Release 1 (11.1.1). You can access My Oracle Support at http://metalink.oracle.com.

While the DIP Tester utility is not currently supported for Oracle Directory Integration Platform 11g Release 1 (11.1.1), you can use the manageSyncProfiles command and its testProfile operation to test a disabled synchronization profile to ensure it will successfully perform synchronization. Refer to the "Managing Synchronization Profiles Using manageSyncProfiles" section in the *Oracle Fusion Middleware Integration*

Guide for Oracle Identity Management for more information about the testProfile operation.

27.2 Configuration Issues and Workarounds

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

- Do Not Use localhost as Oracle Internet Directory Hostname When Configuring Oracle Directory Integration Platform
- Foreign Security Principal File for Microsoft Active Directory Not Included

27.2.1 Do Not Use localhost as Oracle Internet Directory Hostname When Configuring Oracle Directory Integration Platform

When configuring Oracle Directory Integration Platform against an existing Oracle Internet Directory—using either the installer's Install and Configure installation option or the Oracle Identity Management 11g Release 1 (11.1.1) Configuration Wizard—you must specify the hostname for Oracle Internet Directory using only its fully qualified domain name (such as myhost.example.com). *Do not* use `localhost` as the Oracle Internet Directory hostname even if Oracle Directory Integration Platform and Oracle Internet Directory are collocated on the same host.

If you use `localhost` as the Oracle Internet Directory hostname, you will not be able to start the Oracle WebLogic Managed Server hosting Oracle Directory Integration Platform.

27.2.2 Foreign Security Principal File for Microsoft Active Directory Not Included

The foreign security principal file for Microsoft Active Directory, activeimp.cfg.fsp, that was included in Oracle Directory Integration Platform Release 10*g*, is not included in 11*g* Release 1 (11.1.1). This file is required if you are synchronizing entries from multiple domain controllers and also global groups involving foreign security principals as members. The activeimp.cfg.fsp should be in the $*ORACLE_HOME*/ldap/odi/conf/ directory.

To work around this issue, create the activeimp.cfg.fsp file by opening a text file and entering the following information

> **Note:** In the following example, *DOMAIN_B* and *DOMAIN_C* represent the trusted domains for *DOMAIN_A*. *PROFILE_NAME_FOR_DOMAIN_B* and *PROFILE_NAME_FOR_DOMAIN_C* represent the profiles used to synchronized domains B and C respectively.

```
[INTERFACEDETAILS]
Reader: oracle.ldap.odip.gsi.ActiveReader
[TRUSTEDPROFILES]
prof1: PROFILE_NAME_FOR_DOMAIN_B
prof2: PROFILE_NAME_FOR_DOMAIN_C
[FSPMAXSIZE]
val: 1000
*
```

27.3 Documentation Errata

There are no known documentation issues at this time.

28

Oracle Identity Federation

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

- Section 28.1, "General Issues and Workarounds"
- Section 28.2, "Configuration Issues and Workarounds"
- Section 28.3, "Documentation Errata"

28.1 General Issues and Workarounds

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

- Section 28.1.1, "Database Table for Authentication Engine must be in Base64 Format"
- Section 28.1.2, "Considerations for Oracle Identity Federation HA in SSL mode"

28.1.1 Database Table for Authentication Engine must be in Base64 Format

When using a database table as the authentication engine, and the password is stored hashed as either MD5 or SHA, it must be in base64 format.

The hashed password can be either in the base64-encoded format or with a prefix of {SHA} or {MD5}. For example:

```
{SHA}qUqP5cyxm6YcTAhz05Hph5gvu9M=
```

28.1.2 Considerations for Oracle Identity Federation HA in SSL mode

In a high availability environment with two (or more) Oracle Identity Federation servers mirroring one another and a load balancer at the front-end, there are two ways to set up SSL:

- Configure SSL on the load balancer, so that the SSL connection is between the user and the load balancer. In that case, the keystore/certificate used by the load balancer has a CN referencing the address of the load balancer.

  The communication between the load balancer and the WLS/Oracle Identity Federation can be clear or SSL (and in the latter case, Oracle WebLogic Server can use any keystore/certificates, as long as these are trusted by the load balancer).

- SSL is configured on the Oracle Identity Federation servers, so that the SSL connection is between the user and the Oracle Identity Federation server. In this case, the CN of the keystore/certificate from the Oracle WebLogic Server/Oracle

Identity Federation installation needs to reference the address of the load balancer, as the user will connect using the hostname of the load balancer, and the Certificate CN needs to match the load balancer's address.

In short, the keystore/certificate of the SSL endpoint connected to the user (load balancer or Oracle WebLogic Server/Oracle Identity Federation) needs to have its CN set to the hostname of the load balancer, since it is the address that the user will use to connect to Oracle Identity Federation.

28.2 Configuration Issues and Workarounds

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

- Section 28.2.1, "WLST Environment Setup when SOA and OIF are in Same Domain"

- Section 28.2.2, "Oracle Virtual Directory Requires LSA Adapter"

- Section 28.2.3, "Settings for Remote WS-Fed SP Must be Changed Dynamically"

- Section 28.2.4, "Required Property when Creating a WS-Fed Trusted Service Provider"

- Section 28.2.5, "Federated Identities Table not Refreshed After Record Deletion"

- Section 28.2.6, "Default Authentication Scheme is not Saved"

- Section 28.2.7, "Configuring 10g to Work with 11g Oracle Identity Federation using Artifact Profile"

- Section 28.2.8, "Errors Accessing Oracle Identity Federation (OIF) URLs Post OIF Basic Configuration on IBM AIX"

- Section 28.2.9, "Access Control Exception After Expanding Cluster Against an Extended Domain"

28.2.1 WLST Environment Setup when SOA and OIF are in Same Domain

If your site contains Oracle SOA Suite and Oracle Identity Federation in the same domain, the `WLST` setup instructions in the *Oracle Fusion Middleware Administrator's Guide for Oracle Identity Federation* are insufficient for `WLST` to correctly execute Oracle Identity Federation commands.

This can happen if you install an IdM domain, then extend it with an Oracle SOA install; the SOA installer changes the `ORACLE_HOME` environment variable. This breaks the Oracle Identity Federation `WLST` environment, as it relies on the IdM value for `ORACLE_HOME`.

Take these steps to enable the use of `WLST` commands:

1. Execute the instructions described in Section 9.1.1, Setting up the WLST Environment, in the *Oracle Fusion Middleware Administrator's Guide for Oracle Identity Federation*.

2. Copy `OIF-ORACLE_HOME/fed/script/*.py` to `WL_HOME/common/wlst`.

3. Append the `CLASSPATH` environment variable with `OIF-ORACLE_ HOME/fed/scripts`.

28.2.2 Oracle Virtual Directory Requires LSA Adapter

To use Oracle Virtual Directory as an Oracle Identity Federation user store or an authentication engine, you must configure a Local Storage Adapter, and the context root must be created as required at installation or post-install configuration time.

For details about this task, see the chapter Creating and Configuring Oracle Virtual Directory Adapters in the *Oracle Fusion Middleware Administrator's Guide for Oracle Virtual Directory*.

28.2.3 Settings for Remote WS-Fed SP Must be Changed Dynamically

On the Edit Federations page, the Oracle Identity Federation (OIF) settings for remote WS-Fed service provider contain a property called **SSO Token Type**; you can choose to either inherit the value from the IdP Common Settings page or override it here. The number of properties shown in 'OIF Settings' depends on the value of **SSO Token Type**.

If you choose to override **SSO Token Type** with a different value (for example, by changing from SAML2.0 to SAML1.1), the number of properties shown in 'OIF Settings' does not change until you click the **Apply** button.

Also, if you have overridden the value for **Default NameID Format** to 'Persistent Identifier' or 'Transient/One-Time Identifier', then changed the **SSO Token Type** value from 'SAML2.0' to 'SAML1.1' or 'SAML1.0', you will notice that the value for **Default NameID Format** is now blank. To proceed, you must reset this property to a valid value from the list.

28.2.4 Required Property when Creating a WS-Fed Trusted Service Provider

When you create a WS-Fed Trusted Service Provider, you must set the value for the 'Use Microsoft Web Browser Federated Sign-On' property with these steps:

1. In Fusion Middleware Control, navigate to **Federations**, then **Edit Federations**.

2. Choose the newly create WS-Fed Trusted Service Provider and click **Edit**.

3. In the 'Trusted Provider Settings' section, set the value for Use Microsoft Web Browser Federated Sign-On by checking or unchecking the check-box.

4. Click **Apply**.

28.2.5 Federated Identities Table not Refreshed After Record Deletion

When the federation store is XML-based, a record continues to be displayed in the federated identities table after it is deleted.

The following scenario illustrates the issue:

1. The federation data store is XML.

2. Perform federated SSO, using "map user via federated identity".

3. In Fusion Middleware Control, locate the Oracle Identity Federation instance, and navigate to **Administration**, then **Identities**, then **Federated Identities**.

4. Click on the created federation record and delete it.

After deletion, the federated record is still in the table. Further attempts at deleting the record result in an error.

The workaround is to manually refresh the table by clicking **Search**.

28.2.6 Default Authentication Scheme is not Saved

Problem

This problem is seen when you configure Oracle Access Manager in Fusion Middleware Control as a Service Provider Integration Module. It is not possible to set a default authentication scheme since the default is set to a certain scheme (say `OIF-password-protected`) but the radio button is disabled.

Solution

Take these steps to set the preferred default authentication scheme:

1. Check the **Create** check-box for the scheme that is currently set as the default but disabled.

2. Check the **Create** check-box(es) for the authentication scheme(s) that you would like to create.

3. Click the radio button of the scheme that you wish to set as the default.

4. Uncheck the **Create** check-box of the scheme in Step 1 only if you do not want to create the scheme.

5. Provide all the required properties in the page.

6. Click the **Configure Oracle Access Manager** button to apply the changes.

The default authentication scheme is now set to the one that you selected.

> **Note:** In addition, when trying to remove any authentication scheme, ensure that you do not remove the default scheme; if you must remove the scheme, change the default to another authentication scheme before you remove the scheme.

28.2.7 Configuring 10g to Work with 11g Oracle Identity Federation using Artifact Profile

In the SAML 1.x protocol, for a 10g Oracle Identity Federation server to work with an 11g Oracle Identity Federation server using the Artifact profile, you need to set up either basic authentication or client cert authentication between the two servers.

For instructions, see:

- Section 6.9 Protecting the SOAP Endpoint, in the *Oracle Fusion Middleware Administrator's Guide for Oracle Identity Federation*, 11g Release 1 (11.1.1)

- Section 6.5.13.2 When Oracle Identity Federation is an SP, in the *Oracle Identity Federation Administrator's Guide*, 10g (10.1.4.0.1)

28.2.8 Errors Accessing Oracle Identity Federation (OIF) URLs Post OIF Basic Configuration on IBM AIX

Post Oracle Identity Management (IdM) installation and Oracle Identity Federation (OIF) basic configuration on IBM AIX, the following error is seen while accessing the OIF URLs:

```
Error 500--Internal Server Error
```

This error is seen while accessing the OIF URLs only. This is due to the IBM JDK 1.6.0 SR6 issue, tracked by IBM PMR 57532, 756.

28.2.9 Access Control Exception After Expanding Cluster Against an Extended Domain

The Oracle Identity Federation server has been observed to fail due to access control exceptions under the following circumstances:

1. You create a domain with no Identity Management components on `host1`.

2. On `host2`, you extend that domain in clustered mode, select all Identity Management components, and select `Create Schema`.

3. On `host1`, you expand the cluster and select all components.

Due to a bug, the file *DOMAIN_HOME*`/config/fmwconfig` `system-jazn-data.xml` on `host1` is overwritten so that the `<grant>` element is removed, which causes the access control exceptions when the Oracle Identity Federation server is started.

To restore the `<grant>` element, you use the WLST `grantPermission` command.

On Linux, enter the following three commands at the bash prompt. Type each command on one line.

When typing the commands, replace *ORACLE_COMMON_HOME* with the path to the Oracle Common Home folder, located in the Middleware Home. When prompted for information to connect to WebLogic, enter the WLS Administrator Credentials and the location of the WebLogic Administration Server.

```
ORACLE_COMMON_HOME/common/bin/wlst.sh
ORACLE_COMMON_HOME/modules/oracle.jps_11.1.1/common/wlstscripts/grantPermissi
on.py -codeBaseURL
file:\${domain.home}/servers/\${weblogic.Name}/tmp/_WL_user/OIF_11.1.1.2.0/-
-permClass oracle.security.jps.service.credstore.CredentialAccessPermission
-permTarget context=SYSTEM,mapName=OIF,keyName=* -permActions read

ORACLE_COMMON_HOME/common/bin/wlst.sh
ORACLE_COMMON_HOME/modules/oracle.jps_11.1.1/common/wlstscripts/grantPermissi
on.py -codeBaseURL
file:\${domain.home}/servers/\${weblogic.Name}/tmp/_WL_user/OIF_11.1.1.2.0/-
-permClass oracle.security.jps.service.credstore.CredentialAccessPermission
-permTarget credstoressp.credstore -permActions read

ORACLE_COMMON_HOME/common/bin/wlst.sh
ORACLE_COMMON_HOME/modules/oracle.jps_11.1.1/common/wlstscripts/grantPermissi
on.py -codeBaseURL
file:\${domain.home}/servers/\${weblogic.Name}/tmp/_WL_user/OIF_11.1.1.2.0/-
-permClass oracle.security.jps.service.credstore.CredentialAccessPermission
-permTarget credstoressp.credstore.OIF.* -permActions read
```

On Windows, enter the following three commands at the command prompt. Type each command on one line.

When typing the commands, replace *ORACLE_COMMON_HOME* with the path to the Oracle Common Home folder, located in the Middleware Home. When prompted for information to connect to WebLogic, enter the WLS Administrator Credentials and the location of the WebLogic Administration Server.

```
ORACLE_COMMON_HOME\common\bin\wlst.cmd
ORACLE_COMMON_HOME\modules\oracle.jps_11.1.1\common\wlstscripts\grantPermiss
ion.py -codeBaseURL
file:${domain.home}/servers/\${weblogic.Name}/tmp/_WL_user/OIF_11.1.1.2.0/-
-permClass oracle.security.jps.service.credstore.CredentialAccessPermission
-permTarget context=SYSTEM,mapName=OIF,keyName=* -permActions read
```

```
ORACLE_COMMON_HOME\common\bin\wlst.cmd
ORACLE_COMMON_HOME\modules\oracle.jps_11.1.1\common\wlstscripts\grantPermiss
ion.py -codeBaseURL
file:${domain.home}/servers/${weblogic.Name}/tmp/_WL_user/OIF_11.1.1.2.0/-
-permClass oracle.security.jps.service.credstore.CredentialAccessPermission
-permTarget credstoressp.credstore -permActions read

ORACLE_COMMON_HOME\common\bin\wlst.cmd
ORACLE_COMMON_HOME\modules\oracle.jps_11.1.1\common\wlstscripts\grantPermiss
ion.py -codeBaseURL
file:${domain.home}/servers/${weblogic.Name}/tmp/_WL_user/OIF_11.1.1.2.0/-
-permClass oracle.security.jps.service.credstore.CredentialAccessPermission
-permTarget credstoressp.credstore.OIF.* -permActions read
```

28.3 Documentation Errata

This section describes documentation errata for the *Oracle Fusion Middleware Administrator's Guide for Oracle Identity Federation*, part number E13400-01. It includes the following topics:

- Section 28.3.1, "Different Passwords for Keystore and Private Key not Supported"
- Section 28.3.2, "Documentation Erratum for Deploying Oracle Identity Federation"
- Section 28.3.3, "Documentation Erratum for Configuring Security and Trust"

28.3.1 Different Passwords for Keystore and Private Key not Supported

Oracle Identity Federation only supports configuring one password for signing and encryption keystores, and uses that password to open both the keystore and the private key. This means that if a keystore is configured with different store password and key password, an error will occur when Oracle Identity Federation tries to access the private key.

To avoid this error, ensure that the private key password for the configured key alias is the same as the keystore password.

> **Note:** In Oracle Identity Federation 11g Release 1 (11.1.1), if you change the key password to match the keystore password, you must remove the old keystore/wallet from the configuration.

28.3.2 Documentation Erratum for Deploying Oracle Identity Federation

In Section 3.2.2.2, "Integrate Oracle Single Sign-On with OHS", replace the following set of instructions:

Copy `$AS_INST/config/OHS/$OHS_NAME/disabled/mod_osso.conf` to `$AS_INST/config/OHS/$OHS_NAME/moduleconf`. All files in the `moduleconf` directory are read when OHS is started.

Open the `$AS_INST/config/OHS/$OHS_NAME/moduleconf/mod_osso.conf` file and set the `OssoConfigFile` directive to reference the Oracle Single Sign-On configuration file that was created and then copied to the OHS `config` directory:

```
OssoConfigFile ${ORACLE_INSTANCE}/config/${COMPONENT_TYPE}/${COMPONENT_
NAME}/oif.server.com.osso.conf
```

with the following text:

Copy `$AS_INST/config/OHS/$OHS_NAME/disabled/mod_osso.conf` to `$AS_ INST/config/OHS/$OHS_NAME/moduleconf`. All files in the `moduleconf` directory are read when OHS is started.

Open the `$AS_INST/config/OHS/$OHS_NAME/moduleconf/mod_osso.conf` file. Set the `OssoConfigFile` directive to reference the Oracle Single Sign-On configuration file that was created and then copied to the OHS `config` directory:

```
OssoConfigFile ${ORACLE_INSTANCE}/config/${COMPONENT_TYPE}/ ${COMPONENT_
NAME}/oif.server.com.osso.conf
```

Add the `/fed/user/authnosso` URL to be protected by Oracle SSO Server, through the `Location` element.

Then the `mod_osso.conf` example would look like this:

```
LoadModule osso_module ${ORACLE_HOME}/ohs/modules/mod_osso.so

<IfModule mod_osso.c>
    OssoIpCheck off
    OssoIdleTimeout off
    OssoConfigFile ${ORACLE_INSTANCE}/config/${COMPONENT_TYPE}/
    ${COMPONENT_NAME}/oif.server.com.osso.conf

    <Location /fed/user/authnosso>
       require valid-user
       AuthType Osso
    </Location>
</IfModule>
```

28.3.3 Documentation Erratum for Configuring Security and Trust

In Section 5.10.3, "Security and Trust - Trusted CAs and CRLs", change the following sentence:

"When the certificate validation store is enabled, Oracle Identity Federation uses it to validate the certificates needed to verify the signatures on incoming messages."

to read:

"When the certificate validation store is enabled, Oracle Identity Federation uses it to validate the certificates needed to verify the signatures on incoming SAML/WS-Federation messages."

29

Oracle Internet Directory

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

- Section 29.1, "General Issues and Workarounds"
- Section 29.2, "Documentation Errata"

29.1 General Issues and Workarounds

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

- Section 29.1.1, "ODSM Browser Window Becomes Unusable"
- Section 29.1.2, "In ldapdelete Command -V Should Be The Last Parameter"
- Section 29.1.3, "Button on ODSM Login Page Might be Hidden"
- Section 29.1.4, "Bulkmodify Might Generate Errors"
- Section 29.1.5, "Do Not Use ldapmodify to Add or Replace a Hashed Attribute's Value in an Entry when a Salted Crypto Scheme is Set"
- Section 29.1.6, "Upgrading from 10.1.2.0.2 Infrastructure to Application Server 11g Infrastructure"
- Section 29.1.7, "Turkish Dotted I Character is Not Handled Correctly"
- Section 29.1.8, "OIDCMPREC Might Modify Operational Attributes"
- Section 29.1.9, "Non-ASCII Characters in Log Files are Displayed Incorrectly"
- Section 29.1.10, "Data Manipulation at Database Level is Not Supported"

29.1.1 ODSM Browser Window Becomes Unusable

Under certain circumstances, after you launch ODSM from Fusion Middleware Control, then select a new ODSM task, the browser window might become unusable. For example, the window might refresh repeatedly, appear as a blank page, fail to accept user input, or display a null pointer error.

As a workaround, go to the URL: `http://host:port/odsm`, where *host* and *port* specify the location where ODSM is running, for example, `http://myserver.example.com:7005/odsm`. You can then use the ODSM window to log in to a server.

29.1.2 In ldapdelete Command -V Should Be The Last Parameter

For certain platforms command ldapdelete considers everything after `-v`, as parameter. A typical ldapdelete command looks like this:

```
ldapdelete -h hostname  -p portname  -v 's' -D cn=orcladmin -w welcome1
```

For Linux x86-64 and Microsoft Windows x64 the command mentioned here works fine. However, for Solaris Operating System (SPARC 64-Bit), AIX Based Systems (64-Bit), HP-UX PA-RISC (64-Bit), HP-UX Itanium platforms the above command fails.

Workaround

Use the flag `-v` as the last parameter when running the ldapdelete command. For example:

```
ldapdelete -h hostname  -p portname -D cn=orcladmin -w welcome1   -v 's'
```

29.1.3 Button on ODSM Login Page Might be Hidden

When you invoke Oracle Directory Services Manager using Internet Explorer 7, if the browser window is not maximized, the following buttons might be hidden:

- Connect to a Server

- Accessibility Mode

To make either button visible, click the Overflow icon, **>>**, or make the window larger.

This problem does not occur with Internet Explorer 8 or with other browsers, such as FireFox.

29.1.4 Bulkmodify Might Generate Errors

If Oracle Internet Directory is using Oracle Database 11*g* Release 1 (11.1.0.7.0), you might see `ORA-600` errors while performing `bulkmodify` operations. To correct this problem, apply the fixes for Bug 7019313 and Bug 7614692 to the Oracle Database.

29.1.5 Do Not Use ldapmodify to Add or Replace a Hashed Attribute's Value in an Entry when a Salted Crypto Scheme is Set

If the `orclcryptoscheme` attribute in the root DSE is set to a salted crypto scheme, such as `SSHA`, and you use `ldapmodify` to add or replace a value of an attribute of type `orclhashedattributes` in an entry, the value will no longer be hashed.

Use Oracle Directory Services Manager whenever you need to add or replace a value of a hashed attribute in an entry.

29.1.6 Upgrading from 10.1.2.0.2 Infrastructure to Application Server 11*g* Infrastructure

If Application Server 10.1.2.0.2 LDAP port number is less then 1024, then perform the following steps before running Upgrade Assistant:

1. Change the permission of the following files:

```
cd $ORACLE_HOME/bin "AS11G ORACLE_HOME"
chmod 0710 oidmon          # only owner and group has execute permission
chmod u+s  oidmon
chown root oidldapd        # make oidldapd setuid root for security
chmod 4710 oidldapd        # only owner and group has execute permission
```

2. Upgrade infrastructure by deselecting the "retain ports from source Oracle Home" option in Upgrade Assistant.

3. If required, re-configure the necessary 10*g* configset properties in 11*g* Oracle Internet Directory (OID) instance, by following the instructions mentioned in Chapter 9 "Managing System Configuration Attributes" of *Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory*.

4. Restart OPMN processes.

29.1.7 Turkish Dotted I Character is Not Handled Correctly

Due to a bug, Oracle Internet Directory cannot handle the upper-case dotted I character in the Turkish character set correctly. This can cause problems in Oracle Directory Services Manager and in command-line utilities.

29.1.8 OIDCMPREC Might Modify Operational Attributes

By default, the `oidcmprec` tool excludes operational attributes during comparison. That is, `oidcmprec` does not compare the operational attributes values in source and destination directory entries. During reconciliation of user defined attributes however, operational attributes might be changed.

29.1.9 Non-ASCII Characters in Log Files are Displayed Incorrectly

Log messages containing non-ASCII characters may be displayed incorrectly by Fusion Middleware Control or command-line tools.

29.1.10 Data Manipulation at Database Level is Not Supported

Use only the documented tools, such as command-line tools, Oracle Directory Services Manager, Fusion Middleware Control, and WLST, to modify data in Oracle Internet Directory. Do not attempt to change Oracle Internet Directory data directly in the Oracle Database.

29.2 Documentation Errata

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

- Section 29.2.1, "Function Return Codes for DBMS_LDAP_UTL Functions are Incorrect"

- Section 29.2.2, "DSML is not Deprecated"

- Section 29.2.3, "Option to ldifwrite is Incorrect"

- Section 29.2.4, "Use Bulk Tools or LDAP Tools with Replication"

- Section 29.2.5, "You Can Start WebLogic Server in the Background"

29.2.1 Function Return Codes for DBMS_LDAP_UTL Functions are Incorrect

In Table 11-61, Function Return Codes, in Chapter 11 of *Oracle Fusion Middleware Application Developer's Guide for Oracle Identity Management*, some of the codes are incorrect and some are missing. The following codes should be removed:

Table 29–1   Function Return Codes

Name	Return Code	Description
ACCT_TOTALLY_LOCKED_EXCEPTION	-14	Returned by DBMS_LDAP_UTL.authenticate_user() function when a user account is locked. This error is based on the password policy set in the subscriber oracle context.
AUTH_PASSWD_CHANGE_WARN	-15	This return code is deprecated.

The following codes should be added:

Table 29–2   Function Return Codes

Name	Return Code	Description
ACCT_TOTALLY_LOCKED_EXCEPTION	9001	Returned by DBMS_LDAP_UTL.authenticate_user() function when a user account is locked.
PWD_EXPIRED_EXCEPTION	9000	Returned by DBMS_LDAP_UTL.authenticate_user() function when a user's password has expired.
PWD_EXPIRE_WARN	9002	Returned by DBMS_LDAP_UTL.authenticate_user() function when the user's password is about to expire.
PWD_MINLENGTH_ERROR	9003	Returned by DBMS_LDAP_UTL.authenticate_user() function when the user's password is less than pwdMinLength.
PWD_NUMERIC_ERROR	9004	Returned by DBMS_LDAP_UTL.authenticate_user() function when
PWD_NULL_ERROR	9005	Returned by DBMS_LDAP_UTL.authenticate_user() function when
PWD_INHISTORY_ERROR	9006	Returned by DBMS_LDAP_UTL.authenticate_user() function when the password has previously been used and the password policy does not allow password reuse.
PWD_ILLEGALVALUE_ERROR	9007	Returned by DBMS_LDAP_UTL.authenticate_user() function when the password is illegal.
PWD_GRACELOGIN_WARN	9008	Returned by DBMS_LDAP_UTL.authenticate_user() function during a grace login period.
PWD_MUSTCHANGE_ERROR	9009	Returned by DBMS_LDAP_UTL.authenticate_user() function when the user is required to reset the password upon login.
USER_ACCT_DISABLED_ERROR	9050	Returned by DBMS_LDAP_UTL.authenticate_user() function when the user's account has been disabled.

29.2.2 DSML is not Deprecated

The following statement appears at the beginning of the "DSML Syntax" appendix in the *Oracle Fusion Middleware Application Developer's Guide for Oracle Identity Management*:

Directory Services Mark-up Language (DSML) is deprecated in Oracle Fusion Middleware 11g Release 1 (11.1.1) and might not be supported in future releases.

The statement is incorrect. Please ignore it.

29.2.3 Option to ldifwrite is Incorrect

In the `ldifwrite` section of the "Oracle Internet Directory Data Management Tools" chapter in *Oracle Fusion Middleware User Reference for Oracle Identity Management*, several examples use the option `file`. This is incorrect. The option is actually `ldiffile`. For example:

```
ldifwrite connect="nldap" basedn="ou=Europe, o=imc, c=us" ldiffile="output1.ldif"

ldifwrite connect="nldap" basedn="cn=includednamingcontext000001, \
          cn=replication namecontext,orclagreementid=000001, \
          orclreplicaid=node replica identifier,cn=replication configuration" \
          ldiffile="output2.ldif"
```

29.2.4 Use Bulk Tools or LDAP Tools with Replication

The following note appears in the `bulkload` sections of *Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory* and *Oracle Fusion Middleware User Reference for Oracle Identity Management*:

"NOTE: If a directory server instance is participating in a replication agreement, do not use the `bulkload` tool to add data into the node. Instead, use `ldapadd`."

This note is incorrect. You can use either bulk tools or LDAP tools, depending on the circumstances. The following rules apply when you add data to a node that is part of a DRG.

- When you add new entries to all nodes in the DRG, you can use either bulk tools or LDAP tools. For more than 20K entries, bulk tools are significantly faster. If you use LDAP tools, add the entries to only one node in the DRG and let replication propagate the entries. If you use bulk tools, generate the intermediate file only once from the LDIF file and use that intermediate file to load the entries onto all the nodes in the DRG.

- When you copy existing entries from one node to another in the same replication group, use bulk tools. Use the `bulkload` option `restore=true` when you upload the data.

- If the LDIF file contains operational attributes, which it does when created with `ldifwrite`, use `bulkload` to add the entries.

- If the replication agreement is a partial replication agreement, use `ldifwrite` with the base DN as the replication agreement DN to write the entries to the LDIF file. Then use `bulkload` with the `restore=true` option to load the data.

29.2.5 You Can Start WebLogic Server in the Background

Bug 9284503

The "Starting and Stopping the Oracle Stack" appendix to *Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory* includes the following command for starting the WebLogic Administration Server:

```
MW_HOME/user_projects/domains/DOMAIN_NAME/bin/startWebLogic.sh \
SERVER_NAME {ADMIN_URL}
```

If you start the Oracle WebLogic Administration Server from the command line as shown, it runs in the foreground and prints output to the screen. You can, however, run the server in the background by using `nohup` at the beginning of the command line. This sends all output to the file `nohup.out` and prevents the script from

prompting you for *USER_NAME* and *PASSWORD*. To pass parameters to `StartWebLogic.sh` when using `nohup`, you can use a boot identity file, as described in the "Starting and Stopping Servers" chapter of *Oracle Fusion Middleware Managing Server Startup and Shutdown for Oracle WebLogic Server*.

30

Oracle Platform Security Services

This chapter describes notes on topics associated with Oracle Platform Security Services (OPSS), in the following sections:

- Section 30.1, "General Issues and Workarounds"
- Section 30.2, "Configuration Issues and Workarounds"
- Section 30.3, "Documentation Errata"

The following documents are relevant to topics included in this chapter:

- *Oracle Fusion Middleware Security Guide*
- *Oracle Fusion Middleware Security Overview*
- *Oracle Fusion Middleware Administrator's Guide*

30.1 General Issues and Workarounds

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

- Section 30.1.1, "Issues with Audit Reports"

30.1.1 Issues with Audit Reports

The following issue has been observed with the Common Audit Framework reports available in Oracle Business Intelligence Publisher.

Issue with % sign embedded in Hyperlinks in Audit Reports

Navigate to **Common Reports**, then **User Activities**, then **Dashboard**. The following issue is observed:

- For hyperlinks corresponding to certain data strings, the event is not displayed correctly. For example, if the data consists of a string containing a percent sign, such as `cn=%host%.us.oracle.com`, when you click on the corresponding event hyperlink, the event is not correctly displayed on the resulting report since the percent sign is not processed correctly. A similar issue may be seen if there are embedded spaces in the string.

Solution

Apply the one-off patch for Bug 8524140.

EventDetails Report Requires the PS1 Schema

The Event Details report requires the PS1 (Release 11.1.1.2.0) schema.

30.2 Configuration Issues and Workarounds

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

- Section 30.2.1, "Oracle Fusion Middleware Audit Framework"
- Section 30.2.2, "User and Role API Customization"
- Section 30.2.3, "Trailing '\n' Character in Bootstrap Key"
- Section 30.2.4, "Unable to Connect to LDAP Authenticator"

30.2.1 Oracle Fusion Middleware Audit Framework

This section describes configuration issues for the Oracle Fusion Middleware Audit Framework. It contains these topics:

- Section 30.2.1.1, "Configuring Auditing for Oracle Access Manager"
- Section 30.2.1.2, "Audit Reports do not Display Translated Text in Certain Locales"
- Section 30.2.1.3, "Audit Reports Always Display in English"

30.2.1.1 Configuring Auditing for Oracle Access Manager

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

30.2.1.2 Audit Reports do not Display Translated Text in Certain Locales

The standard audit reports packaged with Oracle Business Intelligence Publisher support a number of languages for administrators. Oracle Business Intelligence Publisher can start in different locales; at start-up, the administrator can specify the language of choice by setting the preferred locale in Preferences.

Due to this bug, if Oracle Business Intelligence Publisher is started on any of these 3 locales:

- zh_CN (simplified chinese)
- zh_TW (traditional chinese)
- pt_BR (portuguese brazilian)

then users cannot see the report in that locale (the entire report including labels, headers, titles and so on appears in English), while the other locales display the translated text as expected. For example, when Oracle Business Intelligence Publisher is started in zh_CN, the text cannot be seen in zh_CN even though the preferred locale is set to zh_CN; information is displayed in English.

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

30.2.1.3 Audit Reports Always Display in English

The standard audit reports packaged with Oracle Business Intelligence Publisher support a number of languages.

Due to this bug, report titles and descriptions are displayed in English even when they have been translated.

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

30.2.2 User and Role API Customization

Oracle Fusion Middleware supports providers that enable the User and Role API to interact with custom identity stores.

For details about creating a custom User and Role provider, see the OPSS page in Oracle Technology Network at:

http://www.oracle.com/technology/products/id_
mgmt/opss/index.html

30.2.3 Trailing '\n' Character in Bootstrap Key

In 11gR1, the process that reassociates XML to LDAP stores creates a bootstrap key with the trailing new line character '\n', or its equivalent code '&#xA'. This key value is written in the file `jps-config.xml` and stored in the wallet. In both places, the key value contains the trailing character '\n'.

When reusing that same wallet in 11gR1 PS1, upon retrieving the bootstrap key, the system trims out the trailing '\n' character; but the key value in the wallet, however, still contains the trailing character, a situation that leads to errors since the requested and stored key values no longer match.

To resolve this issue, proceed as follows:

1. Use the WLST command `modifyBootStrapCredential` to reprovision wallet credentials without trailing '\n'. For details on the command usage, see section 9.5.2.5 in the *Oracle Fusion Middleware Security Guide*.

2. Manually edit the file `jps-config.xml` and remove the trailing characters '&#xA' from any bootstrap key.

This problem arises only in the scenario above, namely, when an 11gR1 wallet is reused in 11gR1 PS1; in particular, when reassociating in an 11gR1 PS1 environment, the above trailing character is not an issue.

30.2.4 Unable to Connect to LDAP Authenticator

The connections that client applications use to request queries to an LDAP authenticator, via the User and Role API, are stored and maintained in a connection pool. By default, and out-of-the-box, this pool is the JNDI pool, as specified in the file `jps-config.xml`.

If the number of current connections in the pool exceeds the maximum allowed by the LDAP service, client applications will not be able to connect to the service or, even when they are already connected, receive a "socket closed" exception. The server log would indicate, in this case, that the number of concurrent connections allowed has been exceeded.

To avoid going over this limit, one needs to adjust the maximum number of concurrent connections allowed by the LDAP service as appropriate to the application's needs. This threshold needs to be finely tuned up: a too small maximum may not be sufficient (and cause the exception mentioned above); a too large maximum may risk a denial of service (DOS) attack. The correct maximum depends on your application and the particular LDAP service the application uses.

There are two alternative workarounds that resolve this issue:

■   Increase the maximum number of concurrent connections allowed by the authenticator:

- – If the authenticator your application is using is the WebLogic Embedded
    LDAP authenticator, then edit the file
    DomainName/servers/*MyServerName*/data/ldap/conf/vde.prop, and increase
    the value of the property vde.quota.max.conpersubject from the
    default 100 to, for example, 200, or any other larger value.

- – Otherwise, if your application is using any other authenticator, consult the
    authenticator's documentation to learn how to modify the maximum.

- ■ Edit the file *DomainName*/config/fmwconfig/jps-config.xml and remove the
  property CONNECTION_POOL_CLASS from the authenticator server instance (by
  default, this property has the value
  oracle.security.idm.providers.stdldap.JNDIPool).

Note that (a) these workarounds do not exclude each other, that is, you can carry out
both of them; and (b) in any case, you must restart the server for the changes to take
effect.

30.3 Documentation Errata

This section describes documentation errata. It contains these topics:

- ■ Section 30.3.1, "Developing with the Credential Store Framework"
- ■ Section 30.3.2, "Developing with the User and Role API"

30.3.1 Developing with the Credential Store Framework

This section specifies corrections to Chapter 17, Developing with the Credential Store
Framework, of the *Oracle Fusion Middleware Security Guide*.

- ■ Section 30.3.1.1, "Updates to Example 1: JavaSE Application with Wallet Store"
- ■ Section 30.3.1.2, "Updates to Example 2: JavaEE Application with Wallet Store"

30.3.1.1 Updates to Example 1: JavaSE Application with Wallet Store

In section 17.7.2, "Example 1: JavaSE Application with Wallet Store", in the example
jazn-data.xml, change the name elements as follows:

Change:

```
<name>*context=SYSTEM,mapName=pc_map,keyName=**</name>
```

to:

```
<name>context=SYSTEM,mapName=pc_map,keyName=*</name>
```

Change:

```
<name>*context=SYSTEM,mapName=gc_map,keyName=gc_key*</name>
```

to:

```
<name>context=SYSTEM,mapName=gc_map,keyName=gc_key</name>
```

30.3.1.2 Updates to Example 2: JavaEE Application with Wallet Store

In section 17.7.3, "Example 2: JavaEE Application with Wallet Store", in the example
jazn-data.xml, change the codesource element to include the deployed application
name as follows:

Change:

```
<codesource>   <url>file:${domain.home}/servers/${weblogic.Name}/tmp/_WL_
user/-</url></codesource>
```

to:

```
<codesource>
   <url>file:${domain.home}/servers/${weblogic.Name}
   /tmp/_WL_user/myTestApp/-</url>
</codesource>
```

30.3.2 Developing with the User and Role API

This section specifies corrections to Chapter 19, Developing with the User and Role API, of the *Oracle Fusion Middleware Security Guide*.

- Section 30.3.2.1, "ECID Propagation"

30.3.2.1 ECID Propagation

By default, ECID support is disabled in the User and Role API.

When initializing the API, set the `ST_ECID_ENABLED` property to true for ECID support. For example:

```
factEnv.put(OVDIdentityStoreFactory.ST_ECID_ENABLED, "true");
```

> **Note:** This action is necessary only if either Oracle Internet Directory or Oracle Virtual Directory is used as the back-end identity store. It is not necessary if you use other repositories like Microsoft Active Directory or Novell eDirectory.

31

SSL Configuration in Oracle Fusion Middleware

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

- Section 31.1, "General Issues and Workarounds"
- Section 31.2, "Configuration Issues and Workarounds"
- Section 31.3, "Documentation Errata"

31.1 General Issues and Workarounds

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

- Section 31.1.1, "orapki Command-line Tool in Oracle SOA Suite and Oracle WebCenter Environments"
- Section 31.1.2, "Replacement User Certificates for Oracle Wallets"
- Section 31.1.3, "Incorrect Message or Error when Importing a Wallet"

31.1.1 orapki Command-line Tool in Oracle SOA Suite and Oracle WebCenter Environments

The `orapki` PKI command-line tool does not work in Oracle SOA Suite and Oracle WebCenter installations.

Take these steps to resolve this issue:

- Apply the one-off patch for this problem.
- Set the environment variable `JRE_HOME` to point to the Java runtime environment.

  The `JRE_HOME` variable must be set so that the `orapki` tool can find the java executable.

31.1.2 Replacement User Certificates for Oracle Wallets

The Oracle wallets used by Oracle HTTP Server, Oracle Web Cache, and Oracle Internet Directory, as well as the keystore used by Oracle Virtual Directory, include a Verisign root key (Serial#: 02:ad:66:7e:4e:45:fe:5e:57:6f:3c:98:19:5e:dd:c0) that expires Jan 07, 2010 15:59:59 PST.

Customers using the user certificate signed by this root key will need to obtain a replacement user certificate signed by their Certificate Authority (CA), and import that CA's root key into the Oracle wallet.

See the *Oracle Fusion Middleware Administrator's Guide* for steps to import a root key into an Oracle wallet.

31.1.3 Incorrect Message or Error when Importing a Wallet

Problem 1

Fusion Middleware Control displays an incorrect message when you specify an invalid wallet password while attempting to import a wallet. The issued message "Cannot create p12 without password." is incorrect. Instead, it should notify the user that the password is incorrect and request a valid password.

Problem 2

Fusion Middleware Control displays an incorrect message when you attempt to import a password-protected wallet as an autologin wallet. The issued message "Cannot create p12 without password." does not provide complete information. Instead, it should notify the user that importing a password-protected wallet requires a password.

Problem 3

If you attempt to import an autologin wallet as a password-protected wallet using either Fusion Middleware Control or WLST, a NullPointerException error is displayed.

31.2 Configuration Issues and Workarounds

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

- Section 31.2.1, "Tools for Importing DER-encoded Certificates"
- Section 31.2.2, "Using a Keystore Not Created with WLST or Fusion Middleware Control"
- Section 31.2.3, "Components May Enable All Supported Ciphers"

31.2.1 Tools for Importing DER-encoded Certificates

You cannot use Oracle Enterprise Manager Fusion Middleware Control or the `WLST` command-line tool to import DER-encoded certificates or trusted certificates into an Oracle wallet or a JKS keystore.

Instead, use other tools that are available for this purpose.

- To import DER-encoded certificates or trusted certificates into an Oracle wallet, use:
  - Oracle Wallet Manager or
  - `orapki` command-line tool
- To import DER-encoded certificates or trusted certificates into a JKS keystore, use the `keytool` utility.

31.2.2 Using a Keystore Not Created with WLST or Fusion Middleware Control

If an Oracle wallet or JKS keystore was created with tools such as `orapki` or `keytool`, it must be imported prior to use. Specifically:

- For Oracle HTTP Server, Oracle Webcache, and Oracle Internet Directory, if a wallet was created using `orapki` or Oracle Wallet Manager, in order to view or manage it in Fusion Middleware Control you must first import it with either Fusion Middleware Control or the WLST `importWallet` command.

- For Oracle Virtual Directory, if a keystore was created using `keytool`, in order to view or manage it in Fusion Middleware Control you must first import it with either Fusion Middleware Control or the WLST `importKeyStore` command.

31.2.3 Components May Enable All Supported Ciphers

Customers should be aware that when no cipher is explicitly configured, some 11g Release 1 (11.1.1) components enable all supported SSL ciphers including `DH_Anon` (Diffie-Hellman Anonymous) ciphers.

At this time, Oracle HTTP Server is the only component known to set ciphers like this.

Configure the components with the desired cipher(s) if `DH_Anon` is not wanted.

31.3 Documentation Errata

This section contains SSL documentation errata:

- Section 31.3.1, "Oracle Wallet Manager in 11g Release 1 (11.1.1)"

31.3.1 Oracle Wallet Manager in 11g Release 1 (11.1.1)

The section titled What's New in This Guide? incorrectly states that Oracle Wallet Manager is discontinued.

11g Release 1 (11.1.1) introduces a new web-based interface known as Fusion Middleware Control. WLST is the new command-line tool. You can use both these tools to manage not just Oracle wallets, but also JKS keystore files.

While Oracle Wallet Manager is still available, its usage should be limited to PKCS#11 wallets (that is, Hardware Security Module integration).

32

Oracle Virtual Directory

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

- Section 32.1, "General Issues and Workarounds"
- Section 32.2, "Configuration Issues and Workarounds"
- Section 32.3, "Documentation Errata"

32.1 General Issues and Workarounds

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

- Oracle Directory Services Manager Browser Window is Not Usable
- Oracle Directory Services Manager's Data Browser Does Not Properly Import LDIF Files Containing Non-English Data
- Button on Oracle Directory Services Manager Login Page Might be Hidden
- Exceptions May Occur in Oracle Directory Services Manager When Managing Multiple Oracle Virtual Directory Components and One is Stopped
- Identifying the DN Associated with an Access Control Point in Oracle Directory Services Manager
- Issues With Oracle Virtual Directory Metrics in Fusion Middleware Control

32.1.1 Oracle Directory Services Manager Browser Window is Not Usable

In some circumstances, after you launch Oracle Directory Services Manager from Fusion Middleware Control, then select a new Oracle Directory Services Manager task, the browser window might become unusable. For example, the window might refresh repeatedly, appear as a blank page, fail to accept user input, or display a null pointer error.

As a work around, go to the URL: http://*host*:*port*/odsm, where *host* and *port* specify the location where Oracle Directory Services Manager is running, for example, http://myserver.example.com:7005/odsm. You can then use the Oracle Directory Services Manager window to log in to a server.

32.1.2 Oracle Directory Services Manager's Data Browser Does Not Properly Import LDIF Files Containing Non-English Data

Data errors or failure may occur when importing LDIF files containing non-English data using Oracle Directory Services Manager's Data Browser.

To workaround this issue, import LDIF files containing non-English data using the ldapadd tool from the command line.

32.1.3 Button on Oracle Directory Services Manager Login Page Might be Hidden

When you invoke Oracle Directory Services Manager using Internet Explorer 7, if the browser window is not maximized, the following buttons might be hidden:

- Connect to a Server

- Accessibility Mode

To make either button visible, click the Overflow icon, **>>**, or make the window larger.

This problem does not occur with Internet Explorer 8 or with other browsers, such as FireFox.

32.1.4 Exceptions May Occur in Oracle Directory Services Manager When Managing Multiple Oracle Virtual Directory Components and One is Stopped

Under certain circumstances, when managing multiple Oracle Virtual Directory components from the same Oracle Directory Services Manager session, exception or error messages may appear if you stop one of the Oracle Virtual Directory components. For example, you are managing Oracle Virtual Directory components named ovd1 and ovd2 from the same Oracle Directory Services Manager session. Both ovd1 and ovd2 are configured and running. If you stop ovd1, an exception or Target Unreachable message may appear when you try to navigate Oracle Directory Services Manager.

To work around this issue, exit the current Oracle Directory Services Manager session, close the web browser, and then reconnect to Oracle Virtual Directory components in a new Oracle Directory Services Manager session.

32.1.5 Identifying the DN Associated with an Access Control Point in Oracle Directory Services Manager

When you create an Access Control Point (ACP) using Oracle Directory Services Manager, the Relative Distinguished Name (RDN) of the DN where you created the ACP appears in the navigation tree on the left side of the screen. For example, if you create an ACP at the DN of **cn=ForExample,dc=us,dc=sales,dc=west**, then **cn=ForExample** appears in the navigation tree. After clicking an ACP in the navigation tree, its settings appear in the right side of the screen and the RDN it is associated with appears at the top of the page.

To identify the DN associated with an ACP, move the cursor over ("mouse-over") the ACP entry in the navigation tree. The full DN associated with the ACP will be displayed in a tool-tip dialog box.

Mousing-over ACPs in the navigation tree is useful when you have multiple ACPs associated with DNs that have identical RDNs, such as:

ACP 1 = cn=ForExample,dc=us,dc=sales,dc=west

ACP 2 = cn=ForExample,dc=us,dc=sales,dc=east

32.1.6 Issues With Oracle Virtual Directory Metrics in Fusion Middleware Control

This topic describes issues with Oracle Virtual Directory metrics in Fusion Middleware Control, including:

- Configuring Operation-Specific Plug-Ins to Allow Performance Metric Reporting in Fusion Middleware Control After Upgrading to 11g Release 1 (11.1.1)

32.1.6.1 Configuring Operation-Specific Plug-Ins to Allow Performance Metric Reporting in Fusion Middleware Control After Upgrading to 11g Release 1 (11.1.1)

If you upgraded an Oracle Virtual Directory Release 10g installation with plug-ins configured to execute on specific operations, such as add, bind, get, and so on, to 11*g* Release 1 (11.1.1), you may have to update those operation-specific plug-ins before you can use Fusion Middleware Control to view performance metrics.

After upgrading to 11*g* Release 1 (11.1.1) and performing some initial operations to verify the upgrade was successful, check the Oracle Virtual Directory home page in Fusion Middleware Control. You should see data for the Current Load and Average Response Time and Operations metrics.

If you do not see any data for these metrics, you must update the plug-ins configured to execute on specific operations. The work-around is to add the Performance Monitor plug-in to the operation-specific plug-in's configuration chain.

Perform the following steps to add the Performance Monitor plug-in to the operation-specific plug-in's configuration chain:

1. If the operation-specific plug-in is a Global-level plug-in, edit the server.os_xml file located in the *ORACLE_INSTANCE*/config/OVD/*NAME_OF_OVD_COMPONENT*/ directory.

   If the operation-specific plug-in is an adapter-level plug-in, edit the adapters.os_xml file located in the *ORACLE_INSTANCE*/config/OVD/*NAME_OF_OVD_COMPONENT*/ directory.

   > **Note:** If multiple adapters are configured, you must perform steps 2 and 3 for every adapter configuration in the adapters.os_xml file.

2. Locate the `pluginChains` element in the file. For example, if the Dump Transactions plug-in is configured to execute on the get operation, you will see something similar to the following:

Example 32–1   Dump Transactions Plug-In Configured for get Operation

```
<pluginChains xmlns="http://xmlns.oracle.com/iam/management/ovd/config/plugins">
 <plugins>
    <plugin>
      <name>Dump Transactions</name>

<class>com.octetstring.vde.chain.plugins.DumpTransactions.DumpTransactions</class>
      <initParams>
        <param name="loglevel" value="info"/>
      </initParams>
    </plugin>
    <plugin>
      <name>Performance Monitor</name>

<class>com.octetstring.vde.chain.plugins.performance.MonitorPerformance</class>
```

```
            <initParams/>
        </plugin>
    </plugins>
    <default>
        <plugin name="Performance Monitor"/>
    </default>
    <get>
        <plugin name="Dump Transactions">
          <namespace>ou=DB,dc=oracle,dc=com </namespace>
        </plugin>
    </get>
  </pluginChains>
```

3. Add the following Performance Monitor plug-in element within the operation-specific configuration chain:

```
<plugin name="Performance Monitor"/>
```

For example:

Example 32–2   Adding the Performance Monitor to the Operation-Specific Plug-In Configuration Chain

```
 <pluginChains xmlns="http://xmlns.oracle.com/iam/management/ovd/config/plugins">
   <plugins>
      <plugin>
        <name>Dump Transactions</name>

<class>com.octetstring.vde.chain.plugins.DumpTransactions.DumpTransactions</class>
        <initParams>
          <param name="loglevel" value="info"/>
        </initParams>
      </plugin>
      <plugin>
        <name>Performance Monitor</name>

<class>com.octetstring.vde.chain.plugins.performance.MonitorPerformance</class>
        <initParams/>
      </plugin>
   </plugins>
   <default>
      <plugin name="Performance Monitor"/>
   </default>
   <get>
      <plugin name="Dump Transactions">
        <namespace>ou=DB,dc=oracle,dc=com </namespace>
      </plugin>
      <plugin name="Performance Monitor"/>
    </get>
  </pluginChains>
```

4. Save the file.

5. Restart Oracle Virtual Directory.

> **Note:** Refer to "Updating New Plug-Ins to Execute on Operations Which Have Existing Operation-Specific Plug-Ins Configured" for more information related to operation-specific plug-ins in Oracle Virtual Directory 11g Release 1 (11.1.1).

32.2 Configuration Issues and Workarounds

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

- Section 32.2.1, "Java Virtual Machine Dumps Core With OutOfMemory Error in Oracle Virtual Directory Database"

- Updating New Plug-Ins to Execute on Operations Which Have Existing Operation-Specific Plug-Ins Configured

- Deploying Enterprise User Security Plug-ins for Microsoft Active Directory and Sun Java System Directory Server

- Database Adapter Character Requirements for Oracle Database Table and Column Names

32.2.1 Java Virtual Machine Dumps Core With OutOfMemory Error in Oracle Virtual Directory Database

For certain operations, the out-of-box heap size of 512 MB is not sufficient for Oracle Virtual Directory (OVD) on AIX.

Workaround

Increase the heap size to over 1 GB for production environments. Complete the following steps to increase the heap size for Oracle Virtual Directory (OVD):

1. In *INSTANCE_HOME*/config/OPMN/opmn.xml, find the following XML fragment:

```
<process-type id="OVD" module-id="OVD">
        <environment>
                <variable id="TNS_ADMIN" value="$ORACLE_INSTANCE/config"/>
        </environment>
        <module-data>
                <category id="start-options">
                    <data id="java-bin" value="$ORACLE_HOME/jdk/bin/java"/>
                    <data id="java-options" value="-server -Xms512m -Xmx512m
-Dvde.soTimeoutBackend=0
-Doracle.security.jps.config=$ORACLE_INSTANCE/config/JPS/jps-config-jse.xml"/>
                    <data id="java-classpath"
value="$ORACLE_HOME/ovd/jlib/vde.jar$:$ORACLE_HOME/jdbc/lib/ojdbc6.jar"/>
                </category>
        </module-data>
        <stop timeout="120"/>
</process-type>
```

2. Modify the default *-Xmx512m* to an appropriate value. For example: *-Xmx2048m*.

3. Shutdown Oracle Virtual Directory.

4. Execute `opmnctl reload` command to refresh OPMN configuration.

5. Start Oracle Virtual Directory.

32.2.2 Updating New Plug-Ins to Execute on Operations Which Have Existing Operation-Specific Plug-Ins Configured

If you upgraded an Oracle Virtual Directory Release 10g installation with plug-ins configured to execute on specific operations, such as add, bind, get, and so on, to 11g Release 1 (11.1.1), then add new plug-ins using Oracle Directory Services Manager, the

new plug-ins will not execute on operations that have operation-specific plug-ins configured.

For example, if you upgraded to 11g Release 1 (11.1.1) with the Dump Transactions plug-in configured to execute on the get operation, then add a new plug-in named *NEW_PLUG-IN* using Oracle Directory Services Manager, the *NEW_PLUG-IN* will not execute for the get operation.

To work-around this issue, you must add the new plug-in configuration to the existing operation-specific plug-in chain by performing the following steps:

1. If the new plug-in created by Oracle Directory Services Manager is a Global-level plug-in, edit the server.os_xml file located in the *ORACLE_ INSTANCE*/config/OVD/*NAME_OF_OVD_COMPONENT*/ directory.

   If the new plug-in created by Oracle Directory Services Manager is an adapter-level plug-in, edit the adapters.os_xml file located in the *ORACLE_ INSTANCE*/config/OVD/*NAME_OF_OVD_COMPONENT*/ directory.

   > **Note:** If multiple adapters are configured, you must perform steps 2–4 for every adapter configuration in the adapters.os_xml file.

2. Locate the configuration for the new plug-in created by Oracle Directory Services Manager. It will be in the default section of the file. For example, if you added a new plug-in named *NEW_PLUG-IN* using Oracle Directory Services Manager:

Example 32–3   Locating New Plug-In Configuration Chain in Default Section of File

```
<default>
    <plugin name="Performance Monitor"/>
    <plugin name="NEW_PLUG-IN">
        <namespace>dc=my_ns,dc=com</namespace>
    </plugin>
    <plugin name="Dump Transactions"/>
</default>
<get>
    <plugin name="Performance Monitor"/>
    <plugin name="Dump Transactions"/>
</get>
```

3. Copy the configuration for the new plug-in.

4. Paste the configuration for the new plug-in into the configuration for the existing operation-specific plug-in chain. For example:

Example 32–4   Pasting New Plug-In Configuration into Existing Operation-Specific Configuration Chain

```
<default>
    <plugin name="Performance Monitor"/>
    <plugin name="NEW_PLUG-IN">
        <namespace>dc=my_ns,dc=com</namespace>
    </plugin>
    <plugin name="Dump Transactions"/>
</default>
<get>
    <plugin name="Performance Monitor"/>
    <plugin name="NEW_PLUG-IN">
        <namespace>dc=my_ns,dc=com</namespace>
```

```
        </plugin>
        <plugin name="Dump Transactions"/>
    </get>
```

5. Save the file.

6. Restart Oracle Virtual Directory.

32.2.3 Deploying Enterprise User Security Plug-ins for Microsoft Active Directory and Sun Java System Directory Server

In Oracle Virtual Directory Release 10*g* (10.1.4.2.0), the Enterprise User Security mappings for Microsoft Active Directory and Sun Java System Directory Server were deployed by default when you installed Oracle Virtual Directory. These mappings *are not* deployed by default in Oracle Virtual Directory 11*g* Release 1 (11.1.1).

You can deploy these mappings by referring to Chapter 14, "Managing Oracle Virtual Directory Mappings," in the *Oracle Fusion Middleware Administrator's Guide for Oracle Virtual Directory*.

32.2.4 Database Adapter Character Requirements for Oracle Database Table and Column Names

When creating Database Adapters for Oracle databases in Oracle Virtual Directory 11g Release 1 (11.1.1), use only alphanumeric characters or the following special characters in database table and column names: Dollar sign ($), underscore (_), and pound/hash (#).

When you create a Database Adapter for Oracle databases, be sure you:

- Do not use non-ASCII characters in database table and column names

- Do not surround database table and column names with double quotation marks ("), for example, do not use *"tablename"* or *"columnname"*

If you do not following these character requirements for database table and column names when you create Database Adapters for Oracle databases, you will encounter an ORA-00904 or LocalLDAPException error if you try to use Oracle Directory Services Manager's Data Browser to view the data in the database.

32.3 Documentation Errata

There are no known documentation issues at this time.

Part IX

Oracle Portal, Forms, Reports and Discoverer

Part IX contains the following chapters:

33

Oracle Business Intelligence Discoverer

This chapter describes issues associated with Oracle Business Intelligence Discoverer. It includes the following topics:

- Section 33.1, "General Issues"

- Section 33.2, "Issues Specific to Oracle BI Discoverer Plus Relational"

- Section 33.3, "Issues Specific to Oracle BI Discoverer Plus OLAP"

- Section 33.4, "Issues Specific to Oracle BI Discoverer Portlet Provider"

- Section 33.5, "Issues Specific to Oracle BI Discoverer Viewer"

- Section 33.6, "Issues Specific to Oracle BI Discoverer EUL Command Line for Java"

- Section 33.7, "Issues Specific to Oracle BI Discoverer Administrator"

- Section 33.8, "Documentation Errata"

33.1 General Issues

This section describes general issues that affect more than one Discoverer component. It includes the following topics:

- Section 33.1.1, "Issues with Metadata Repository and Oracle Database 10g Release 1"

- Section 33.1.2, "Compatibility Issues with Required Support Files"

- Section 33.1.3, "Serif Font Issue in Worksheets"

- Section 33.1.4, "Additional Fonts Required for Non-ASCII Data When Exporting to PDF"

- Section 33.1.5, "Query Prediction Requires the Majority of the Query Time"

- Section 33.1.6, "Word Wrapping Behavior with Oracle BI Discoverer Plus and Oracle BI Discoverer Viewer"

- Section 33.1.7, "Applet Appears Behind Browser Window"

- Section 33.1.8, "Issues with Mac OS X Browser and Oracle BI Discoverer Plus"

- Section 33.1.9, "Issues with Turkish Regional Settings"

- Section 33.1.10, "Multibyte Characters Rendered as Square Boxes in Exported PDF and Other Formats"

- Section 33.1.11, "Java Plug-in Not Downloaded Automatically on Firefox"

- Section 33.1.12, "HTTP 404 Error While Accessing Discoverer on a Remote Machine"

- Section 33.1.13, "Error While Launching Discoverer Plus Applet on an IPv6 Environment"

- Section 33.1.14, "Error While Updating the Discoverer Web Services Configuration Parameter"

- Section 33.1.15, "Exception Logged for Discoverer Web-Based Applications in an Extended Domain"

- Section 33.1.16, "Issue with Discoverer Application URL in Fusion Middleware Control after a Backup Recovery"

33.1.1 Issues with Metadata Repository and Oracle Database 10*g* Release 1

When using Oracle Database 10*g* Release 1 (10.1.*x*) for the Metadata Repository or after upgrading the Metadata Repository to Oracle Database 10*g* Release 1, you might see the following error on the Oracle BI Discoverer Plus Connection pages, the Oracle BI Discoverer Viewer Connection pages, and the Public Connection definition page in Fusion Middleware Control:

```
The connection list is currently unavailable.
ORA-06510: PL/SQL: unhandled user-defined exception
ORA-06512: at "ORASSO.WWSSO_API_PRIVATE," line 258
ORA-06510: PL/SQL: unhandled user-defined exception
ORA-06512: at "ORASSO.WWSSO_UTL" line 728
ORA-28231: no data passed to obfuscation toolkit
ORA-06512: at line 1 Unable to retrieve connection list
```

To resolve this issue, make the following changes in the Metadata Repository database:

1. Edit the init%ORACLE_SID%.ora file. This file exists either in the dbs folder or the database folder. For example, in Windows, this file is located in the DB_install_home/database/ folder.

2. Add the following line to this file:

   ```
   event="10946 trace name context forever, level 36"
   ```

3. If an spfile%ORACLE_SID%.ora exists in either the dbs folder or the database folder, rename the file to spfile%ORACLE_SID%.bak. Changes to init%ORACLE_SID%.ora are not loaded if the database server finds an spfile.

4. Log in as a sysadmin.

5. At the SQL prompt, shut down then start up the database server.

6. Restart the Oracle BI Discoverer server using the command opmnctl restartall.

33.1.2 Compatibility Issues with Required Support Files

The Oracle Database and other Oracle database client software (for example, SQL*Plus, the database export utility) use Oracle Required Support Files (RSF).

Oracle BI Discoverer also uses Oracle Required Support Files (RSF), specifically RSF version 11.1.0.7. This version of the Oracle Required Support Files is installed during Oracle BI Discoverer installation.

Note that the Required Support Files version 11.1.0.7 is incompatible with earlier versions of Oracle Database 10*g*. So if the machine on which you install Oracle BI Discoverer already has a version of Oracle Database 10*g* or database client software

that is earlier than 11.1.0.7, there will be compatibility issues. For example, if you install Oracle BI Discoverer and attempt to run a version of SQL*Plus earlier than 11.1.0.7, then the following error is displayed:

```
ORA-12557 TNS: protocol adapter not loadable
```

To avoid the compatibility issues, upgrade Oracle Database 10*g* or database client software on the machine to the same version (11.1.0.7) as the version of the Required Support Files that were installed with Oracle BI Discoverer.

This issue does not exist for Oracle9i Database Server.

33.1.3 Serif Font Issue in Worksheets

You might notice unsightly font issues when using a non-English locale such as Czech. For example, when a worksheet uses a serif font, text in that worksheet might be displayed incorrectly on the screen and in printouts.

To work around this issue, update the file that maps the serif fonts. The name of this file differs depending on the locale in use. When you use Oracle BI Discoverer Plus Relational or Plus OLAP in English, the file is named `file.properties`. If you use Oracle BI Discoverer in a non-English locale, then the file name includes the code for the locale, such as `file.properties.cs` for Czech.

Update the mapping file with the following information:

```
serif.0=Times New Roman,EASTEUROPE_CHARSET
serif.1=WingDings,SYMBOL_CHARSET,NEED_CONVERTED
serif.2=Symbol,SYMBOL_CHARSET,NEED_CONVERTED
```

Consult the following Sun Web site for additional information about fonts:

http://java.sun.com/j2se/1.3/docs/guide/intl/addingfonts.html

33.1.4 Additional Fonts Required for Non-ASCII Data When Exporting to PDF

If you are running Oracle BI Discoverer Plus Relational or Plus OLAP on a Macintosh or Linux client machine, you must add the appropriate font files to your client machine to allow exported PDF files to display non-ASCII data correctly.

These font files include Albany fonts with names such as `ALBANWTJ.TTF` and `ALBANWTK.TTF`. The files are stored in the `/utilities/fonts` directory on the CD-ROM or DVD for the Oracle Application Server Metadata Repository Upgrade Assistant.

To install the additional required fonts:

1. Navigate to the `/utilities/fonts` directory on the CD-ROM or DVD for the OracleAS Metadata Repository Upgrade Assistant.

2. Copy the appropriate Albany TTF file from the `/utilities/fonts` directory to the plug-in directory in the `$jdk`/jre/lib/fonts directory on the Macintosh or Linux client machine.

33.1.5 Query Prediction Requires the Majority of the Query Time

When using Oracle BI Discoverer with a relational data source, you can predict the time that is required to retrieve information by setting the value of the QPPEnable preference to 1. However, in some circumstances, the majority of the time taken to retrieve information is consumed by the prediction activity itself.

To work around this issue, set the value of the QPPObtainCostMethod preference to 0 (use the EXPLAIN PLAN statement to predict query times) rather than to 1 (use dynamic views to predict query times).

For more information about setting preferences, see the *Oracle Fusion Middleware Configuration Guide for Oracle Business Intelligence Discoverer*.

33.1.6 Word Wrapping Behavior with Oracle BI Discoverer Plus and Oracle BI Discoverer Viewer

To use word wrap settings correctly, you must understand how they are designed for Oracle BI Discoverer:

- **Oracle BI Discoverer Plus**: Word wrap settings that you make in Oracle BI Discoverer Plus are saved in the worksheet and affect the display of worksheets in Oracle BI Discoverer Plus and when printing to PDF.

- **Oracle BI Discoverer Viewer**: Word wrap settings that you see in the **Print Settings** dialog work as follows:

  - The word wrap settings do not affect the display of worksheets in Oracle BI Discoverer Viewer.

  - **For relational data**:

    * The word wrap settings do affect the printing of worksheets to PDF.

    * If the **Always wrap text when size exceeds column width** box is checked, then the print settings in Oracle BI Discoverer Viewer do override the settings made in a worksheet in Oracle BI Discoverer Plus Relational for printing to PDF.

    * If the **Always wrap text when size exceeds column width** box is not checked, then the print settings in Oracle BI Discoverer Viewer do not override the settings made in a worksheet in Oracle BI Discoverer Plus Relational for printing to PDF.

  - **For OLAP data**:

    * The word wrap settings do not affect the printing of worksheets to PDF.

    * Regardless of whether the **Always wrap text when size exceeds column width** check box is selected, the print settings in Oracle BI Discoverer Viewer never override the settings made in a worksheet in Oracle BI Discoverer Plus OLAP for printing to PDF.

33.1.7 Applet Appears Behind Browser Window

When you use Microsoft Internet Explorer, the Oracle BI Discoverer Plus Relational or Plus OLAP applet initialization and download dialog appears behind the browser window from which it was launched. After the applet is downloaded and initialized, it appears in front of the browser window from which it was launched.

To work around this issue:

- Use a browser other than Internet Explorer, such as Netscape Navigator or Mozilla Firefox.

- Use the Oracle BI Discoverer Plus URL parameter _plus_popup=false, which is documented in the *Oracle Fusion Middleware Configuration Guide for Oracle Business Intelligence Discoverer*.

33.1.8 Issues with Mac OS X Browser and Oracle BI Discoverer Plus

The following are issues that you might encounter when you use the Safari browser on Mac OS X with Oracle BI Discoverer Plus Relational or Plus OLAP:

- If you resize the browser window in the applet, then some parts of the content might be clipped. To work around this problem, always maximize the browser window for the applet when working with Mac OS X.

- Keyboard combinations (also known as mnemonics) do not work in Oracle BI Discoverer Plus Relational and Plus OLAP.

  For example, you cannot press Alt+F to access the `File` menu.

- In the **Share Workbooks** dialog of Oracle BI Discoverer Plus Relational, the leading characters of the "**Shared:**" list are clipped. In other words, the left edge of the list is truncated. For example, if you shared a workbook with `DISCODEV`, then you will only see `SCODEV` in the list. The title for the list is also truncated such that you see only the vertical line of the "**d**" in "**Shared**" and the colon (that is, "**l:**").

  The dialog continues to work as expected, but you might have difficulty reading the names in the "**Shared:**" list.

  This issue has no workaround.

33.1.9 Issues with Turkish Regional Settings

Because of Sun JRE 1.4 bug 4688797, you might encounter issues when connecting to a database schema from a computer that has Turkish regional settings. You will encounter the issue when you attempt to connect to a database schema with a user name that contains certain letters, such as the letter 'I' or 'i', for example, in "bibdemo". See the Sun JRE bug for information on the letters that are affected.

To work around this issue, either do not use Turkish regional settings or use a user name that does not contain the affected letters.

33.1.10 Multibyte Characters Rendered as Square Boxes in Exported PDF and Other Formats

When you export a workbook to PDF and other formats, multibyte characters (for example, Korean, Japanese, and Chinese characters) appear as square boxes.

To work around this issue, copy the following Albany fonts from *ORACLE_HOME*/jdk/jre/lib/fonts to the fonts folder of your JDK (Oracle JRockit or Sun) within the *MW_HOME* directory. For example, if you are using IBM JDK, you must copy the fonts to *MW_HOME*/jre/jdk160_11/lib/fonts.

- `AlbanWTJ.ttf`
- `AlbanWTK.ttf`
- `AlbanWTS.ttf`
- `AlbanWTT.ttf`
- `ALBANYWT.ttf`

33.1.11 Java Plug-in Not Downloaded Automatically on Firefox

When you attempt to connect to Discoverer Plus by using the Mozilla Firefox browser on a machine that does not have Java 1.6 installed, the browser does not download the JRE 1.6 plug-in automatically. Instead, the browser displays the following message:

```
Additional plugins are required to display this page...
```

You must download the JRE 1.6 plug-in (by clicking the **Install Missing Plugin** link) and install it manually.

33.1.12 HTTP 404 Error While Accessing Discoverer on a Remote Machine

When you attempt to connect to Discoverer Plus, occasionally, the browser returns an HTTP 404 (File Not Found) error.

The page loads correctly when you refresh the browser a few times.

33.1.13 Error While Launching Discoverer Plus Applet on an IPv6 Environment

If the Web tier is on an IPv6 machine, when you start Discoverer Plus, the following error message might be displayed:

```
Attempt1. RMI protocol over JRMP transport: Connection refused to host:
DiscoServerMahcineName;nested exception is:
@ java.net.ConnectionException: Connection timed out
```

To work around this issue, in the System MBean Browser of Fusion Middleware Control, change the TransportProtocols attribute of the Plus Config MBean to "jrmp,http" (or "jrmp,https" if Discoverer Plus is accessed by using secure HTTP).

33.1.14 Error While Updating the Discoverer Web Services Configuration Parameter

When you update the web services configuration parameter (Maximum Sessions) using the Discoverer Web Services Configuration page of Fusion Middleware Control and click **Apply**, the following error message is displayed:

```
Applying changes - Failed.
Exception caught:
```

You can ignore the error message because the changes are applied even if the exception is thrown. Alternatively, you can update the MaxSessions attribute of the WebServicesConfig MBean in the System MBean Browser of Fusion Middleware Control.

33.1.15 Exception Logged for Discoverer Web-Based Applications in an Extended Domain

When you extend a domain and add Discoverer application in a remote machine, you may see the following exception in the WebLogic Server log:

```
java.lang.IllegalArgumentException: ODL-52057: The handler 'disco-server-handler'
is not defined.
```

To work around this issue, modify the log_handlers and loggers elements in the logging.xml file located in the *DOMAIN_HOME*/config/fmwconfig/servers/*WLS_DISCO* folder of the machine where the domain exists.

In the log_handlers section, add the handlers as follows:

```
<log_handler name='discoverer-handler'
class='oracle.core.ojdl.logging.ODLHandlerFactory'>
   <property name='path'
value='${domain.home}/servers/${weblogic.Name}/logs/discoverer/diagnostic.log'
/>
<property name='maxFileSize' value='1048576'/>
```

```
 <property name='maxLogSize' value='10485760'/>
 <property name='format' value='ODL-Text'/>
 <property name='useSourceClassAndMethod' value='false'/>
</log_handler>

<log_handler name='disco-server-handler'
class='oracle.core.ojdl.logging.ODLHandlerFactory'>
  <property name='path'
value='${domain.home}/servers/${weblogic.Name}/logs/discoverer/server/diagnost
ic.log'/>
  <property name='maxFileSize' value='1048576'/>
  <property name='maxLogSize' value='10485760'/>
  <property name='format' value='ODL-Text'/>
</log_handler>
```

In the loggers sections, add the following elements:

```
<logger name='ORACLE.DISCOVERER.VIEWER' level='TRACE:32'
useParentHandlers='false'>
  <handler name='discoverer-handler'/>
  <handler name='odl-handler'/>
</logger>
 <logger name='ORACLE.DISCOVERER.PORTLET_PROVIDER' level='TRACE:32'
useParentHandlers='false'>
  <handler name='discoverer-handler'/>
  <handler name='odl-handler'/>
</logger>
 <logger name='ORACLE.DISCOVERER.MODEL' level='TRACE:32'
useParentHandlers='false'>
  <handler name='discoverer-handler'/>
  <handler name='odl-handler'/>
</logger>
 <logger name='ORACLE.DISCOVERER.WEB_SERVICES' level='TRACE:32'
useParentHandlers='false'>
  <handler name='discoverer-handler'/>
  <handler name='odl-handler'/>
</logger>
 <logger name='ORACLE.DISCOVERER.SERVER' level='TRACE:32'
useParentHandlers='false'>
  <handler name='disco-server-handler'/>
  <handler name='odl-handler'/>
</logger>
```

After adding these elements, save the logging.xml file, and restart the Administration Server and Discoverer Managed Servers.

33.1.16 Issue with Discoverer Application URL in Fusion Middleware Control after a Backup Recovery

When you recover the Oracle BI Discoverer middle tier from a backup, the Discoverer application URL in the Discoverer Home page of Fusion Middleware Control point to a wrong location.

You must configure the application URLs that appear on the Oracle BI Discoverer Home page in Fusion Middleware Control after recovering the Oracle BI Discoverer middle tier from a backup.

For more information, see "How to configure application URLs displayed on the Fusion Middleware Control Discoverer Home page" in the Oracle Business Intelligence Discoverer Configuration Guide.

33.2 Issues Specific to Oracle BI Discoverer Plus Relational

This section describes issues that are specific to Oracle BI Discoverer Plus Relational. It includes the following topics:

- Section 33.2.1, "Text Appearing Truncated or Clipped"

- Section 33.2.2, "Non-ASCII Characters Not Saved Correctly in Title or Text Area"

- Section 33.2.3, "Canceling Query Causes Discoverer to Hang"

- Section 33.2.4, "Nonaggregable Values Not Displayed for Scheduled Workbooks"

- Section 33.2.5, "Migrating Oracle BI Discoverer Plus Relational Worksheets from Oracle BI Discoverer Desktop"

33.2.1 Text Appearing Truncated or Clipped

When you run Oracle BI Discoverer Plus Relational with Sun Java Plug-in 1.4.2_06, the Browser Look and Feel, and an Asian language (such as Korean or Chinese), you might notice that static text and text in buttons in the user interface appears truncated or clipped. To work around this issue, do one of the following:

- Change the Look and Feel to either Plastic or System.

- Use JInitiator 1.3.1.17 instead of the Sun Java Plug-in.

- Install Sun Java Plug-in version 1.4.2_10 or higher.

33.2.2 Non-ASCII Characters Not Saved Correctly in Title or Text Area

When you save a new workbook in Oracle BI Discoverer Plus, any text characters beyond the standard ASCII characters are not saved correctly when all the conditions that are described in the following list are met:

- You are logged in as an Oracle e-Business Suite user.

- The language for the computer is not English.

- Oracle BI Discoverer Plus is running against an Oracle e-Business Suite database that does not have that non-English language installed.

This issue has no workaround.

33.2.3 Canceling Query Causes Discoverer to Hang

If you cancel a query that is running in Oracle BI Discoverer Plus Relational, then you are prompted to either choose YES to undo the changes or NO to show a blank sheet. If you choose YES, then Oracle BI Discoverer Plus Relational hangs and you must close the window and restart.

To work around this issue, choose NO to show a blank worksheet. You can then refresh the sheet and continue working.

33.2.4 Nonaggregable Values Not Displayed for Scheduled Workbooks

Oracle BI Discoverer Plus Relational does not display nonaggregable values for scheduled workbooks. In other words, Oracle BI Discoverer Plus Relational processes scheduled workbooks as if you selected the **Show values that cannot be aggregated as: <Non-aggregate label>** option in the **Worksheet Properties dialog: Aggregation** tab.

Nonaggregable values include those based on the following SQL functions:

- A CASE SQL statement

- A DECODE SQL statement

- A PL/SQL function

- A DISTINCT SQL statement

- An analytic function

33.2.5 Migrating Oracle BI Discoverer Plus Relational Worksheets from Oracle BI Discoverer Desktop

If you use Oracle BI Discoverer Plus Relational to open a worksheet that was created using Oracle BI Discoverer Desktop Version 9.0.4 (or earlier), the size of the title area for that worksheet defaults to two lines in height. A title height of two lines might be a problem if a worksheet title requires more than or less than two lines. If you want to change the size of the title area, you must resize the title area manually and save the worksheet.

To resize the title area for a worksheet, open the worksheet and drag the bar at the bottom of the title area pane up or down.

33.3 Issues Specific to Oracle BI Discoverer Plus OLAP

This section describes issues that are specific to Oracle BI Discoverer Plus OLAP. It includes the following topics:

- Section 33.3.1, "Issues with Applet Download"

- Section 33.3.2, "Disabled Netscape and Mozilla Browsers"

- Section 33.3.3, "Tabbing Fails to Synchronize Menus"

- Section 33.3.4, "Esc Key Fails to Close Certain Dialogs"

- Section 33.3.5, "Link Tool Works Incorrectly in Some Locales"

- Section 33.3.6, "Memory Issues when Exporting Extremely Large Graphs"

- Section 33.3.7, "Issue While Printing Worksheets with Large Data Values"

- Section 33.3.8, "Issues with Titles and Text Areas"

- Section 33.3.9, "Errors with JAWS and Format Dialogs"

33.3.1 Issues with Applet Download

There may be Oracle Business Intelligence Discoverer Plus applet download issues when caching has been enabled in the Sun Java Plug-In.

To avoid these issues, disable caching in the plug-in.

33.3.2 Disabled Netscape and Mozilla Browsers

When you are running Netscape 7.*x* or Mozilla browsers, the Netscape and Mozilla Mail clients and Web browser may become disabled when Oracle BI Discoverer Plus OLAP modal dialogs are displayed.

Dismissing the Oracle BI Discoverer Plus OLAP dialogs resumes normal operation for the Netscape and Mozilla tools.

33.3.3 Tabbing Fails to Synchronize Menus

When you use the `Tab` key to select items in a worksheet, the menus do not always synchronize to reflect the currently selected item.

This issue has no workaround.

33.3.4 Esc Key Fails to Close Certain Dialogs

The `Esc` key does not close the following dialogs: Totals, New Total, Parameter, and Manage Catalog.

Instead of using the **Esc** key, click the **Close** or **OK** button.

33.3.5 Link Tool Works Incorrectly in Some Locales

The **Link** tool, which enables users to drill out to external URLs from a crosstab cell, might not work correctly in all locales due to URL encoding issues.

This issue has no workaround.

33.3.6 Memory Issues when Exporting Extremely Large Graphs

Exporting extremely large graphs can cause memory issues, requiring a restart of the Oracle BI Discoverer Plus OLAP session.

This issue has no workaround.

33.3.7 Issue While Printing Worksheets with Large Data Values

When printing a worksheet that contains large numbers in the data cells, the string ####### may be printed instead of the actual numbers.

This issue has no workaround.

33.3.8 Issues with Titles and Text Areas

The following issues exist with titles and text areas:

- Nonempty titles and text areas are printed even if they are hidden in the worksheet.

  This issue has no workaround.

- When you set the title or text area background to green and export the worksheet to an HTML file, the background is incorrectly set to red in the exported file.

  This issue has no workaround.

33.3.9 Errors with JAWS and Format Dialogs

When you use JAWS, you will notice errors when you attempt to format graphs and crosstabs using the **Format** dialogs.

This issue has no workaround.

33.4 Issues Specific to Oracle BI Discoverer Portlet Provider

This section describes issues that are specific to Oracle BI Discoverer Portlet Provider. It includes the following topics:

33.4.1 Inability to Turn Off Display of Range Min and Max as Labels

In the **Display Options** of a gauge portlet, the **Minimum Value** and **Maximum Value** range labels are selected but are also disabled so that you cannot deselect the display of those values. The values for the minimum and the maximum appear at the ends of every gauge in the set except for those gauges where the value to be gauged is out of the range of the minimum and the maximum values. For those gauges where the value to be displayed exceeds the range of the minimum and the maximum values, the gauge will automatically adjust to accommodate the value.

This issue has no workaround.

33.4.2 Using Oracle BI Discoverer Portlet Provider with Oracle Single Sign-On and Secure Sockets Layer (SSL) Modes

If you configure Oracle BI Discoverer Portlet Provider to work with Oracle Single Sign-On and SSL, then UIX images might not display correctly in Oracle BI Discoverer. For example, on the Connect to OracleBI Discoverer page, the expand icon (that is, the blue + symbol) in the **Details** column of the Discoverer connections list might not display correctly.

To address this issue, you must add certain server startup properties.

1. Start Enterprise Manager Fusion Middleware Control. For more information, see "Managing and Configuring Discoverer" in *Oracle Fusion Middleware Configuration Guide for Oracle Business Intelligence Discoverer*.

2. Navigate to the WebLogic Server node (for example, **WLS_DISCO**) node, and click the WebLogic Server Administration Console link.

3. Select the **Server Start** tab on the **Configurations** page of the WebLogic Server Administration Console.

4. In the **Arguments** field, append the following lines, if they do not exist.

   - `-Doracle.discoverer.applications.protocol=https`

   - `-Doracle.discoverer.applications.port=port_no`

     Set `port_no` to the HTTPS port number that you want to use (for example, 4443).

5. Restart the server.

33.4.3 Issues with Discoverer Portlets in WebCenter

The following issues exist for Discoverer portlets displayed in Oracle WebCenter.

- When a Worksheet portlet is displayed in Oracle WebCenter, the links to navigate to the next set of records does not work.

- When a List of Worksheets portlet is displayed in Oracle WebCenter, the Expand All Icons link does not work.

To work around these issues, set the `RenderPortletInIFrame` attribute of the portlet tag to `TRUE`. For more information, see "Setting Attribute Values for the Portlet Tag" in *Oracle Fusion Middleware Developer's Guide for Oracle WebCenter*.

33.4.4 Issue while Publishing Discoverer WSRP Portlets in Portals Other than Oracle Portal and Oracle WebCenter

When you publish Discoverer WSRP Portlets in portals other than Oracle Portal and Oracle WebCenter (such as Oracle WebLogic Portal and IBM WebSphere Portal), the pop-up windows for input selection will have the same page layout as the portal page with all navigation options. If you select any of these navigation options, the current portlet state will be lost. You might need to start publishing the portlet from the beginnng.

The issue has no workaround.

33.4.5 Issue with Portlet Titles in Discoverer WSRP Portlets Published on IBM WebSphere

You cannot dynamically change the portlet title of a Discoverer WSRP portlet in IBM WebSphere after it is published. Static title is rendered in the portal for each portlet instance.

To work around this issue, set a meaningful title for the portlet by editing the title using the Set Title or Description option in the WebSphere portal. For more information about changing the title of a portlet, see WebSphere documentation.

33.4.6 Issue with Color and Date Pickers in Discoverer WSRP Portlets

The Color and Date pickers in Discoverer WSRP Portlets do not work on portals other than Oracle WebCenter.

On portals such as Oracle Portal, Oracle WebLogic Portal and IBM WebSphere, to workaround this issue, set the value of the configuration parameter `useInlineUIXPicker` to true. The default value of this parameter is false. When you set the `useInlineUIXPicker` parameter to true, set the color and date as follows:

- Inline color pickers are enabled in the Gauges Selection page and you can select a color from the palette.

- You cannot select the color using the Format option of the Personalize menu of the worksheet. Use the Analyze option in the portlet window to change the color.

- The Date picker in the Refresh option will not be available. Enter the date manually.

33.4.7 Worksheet Parameter LOV is not Displayed in Discoverer WSRP Portlets on IBM WebSphere Portal

The Worksheet Parameter LOV icon is not displayed when you publish Discoverer WSRP portlets in IBM WebSphere portal.To work around this issue, enter parameter values manually.

33.4.8 Issue with Worksheet Parameter LOV Pop-Up Window in Discoverer WSRP Portlets

In Oracle Portal and Oracle WebLogic Portal, when you select values from the parameter LOV from a worksheet portlet published by using the Discoverer WSRP Portlet producer, the pop-up window is not getting closed on selection of values.You must explicitly close the pop-up window after selection of values.

33.5 Issues Specific to Oracle BI Discoverer Viewer

This section describes issues that are specific to Oracle BI Discoverer Viewer. It includes the following topics:

- Section 33.5.1, "Drill Icons Cannot Be Hidden in Oracle BI Discoverer Viewer"
- Section 33.5.2, "Error Displaying Page for Multiple SSO Users"
- Section 33.5.3, "Inability to Disable the Display of Row Numbers"
- Section 33.5.4, "Issues with Oracle BI Discoverer Viewer Embedded in Frames"
- Section 33.5.5, "Issue Exporting to PDF Under Certain Circumstances"
- Section 33.5.6, "Issue When Changing Colors for Oracle BI Discoverer Viewer in Fusion Middleware Control on Mac OS X"
- Section 33.5.7, "Discoverer Catalog Items Not Visible From UNIX Servers"
- Section 33.5.8, "Known Bug with JAWS Prevents Drilling Using the Enter Key"
- Section 33.5.9, "JAWS Does Not Read Asterisks that Precede Fields"
- Section 33.5.10, "Oracle BI Discoverer Viewer Pages are not Cached by Oracle Web Cache"

33.5.1 Drill Icons Cannot Be Hidden in Oracle BI Discoverer Viewer

The `pref.txt` file contains a setting called `ShowDrillIcon`, which is not functioning properly. If you set `ShowDrillIcon` to `False`, then drill icons are still displayed in Oracle BI Discoverer Viewer.

The issue has no workaround.

33.5.2 Error Displaying Page for Multiple SSO Users

When an Oracle Single Sign-On (SSO) user tries to view a worksheet from a List of Worksheets Portlet by using the same browser window that is already being used by an SSO user to view that worksheet, the second user sees the following error message: `"The page cannot be displayed"`.

To work around this issue, start a new browser session and view the worksheet.

33.5.3 Inability to Disable the Display of Row Numbers

Oracle BI Discoverer Viewer no longer offers the ability to disable the display of row numbers in a tabular worksheet.

33.5.4 Issues with Oracle BI Discoverer Viewer Embedded in Frames

Users might see JavaScript errors such as "`Access Denied`" or other unexpected behavior when both of the following conditions are met:

- When Oracle BI Discoverer Viewer is embedded in an IFRAME tag.

- When the domain of the server that hosts the HTML page with the IFRAME tag is different from the domain of the Oracle BI Discoverer server that is running Oracle BI Discoverer Viewer.

Use one of the following workarounds for this issue:

- Run the Oracle BI Discoverer server and the server that hosts the HTML page with the IFRAME tag in the same domain.

- Alter the `Common2_2_20.js` file on the Oracle BI Discoverer server using the following steps:

  1. Use Fusion Middleware Control to stop all services on the middle tier for Oracle Business Intelligence.

  2. Make a backup copy of the `Common2_2_20.js` file from the following directory:

     `domain\servers\managed_server\stage\discoverer\release\discoverer\discoverer.war\cabo\jsLib`

     `domain` is the path of directory that contains the domain.

     `managed_server` is the name of the managed server on which the Discoverer application is deployed.

     `release` is the release number of Discoverer. For example, `11.1.1.1.0`.

  3. Edit the `Common2_2_20.js` file and replace all occurrences of "parent._pprSomeAction" with "window._pprSomeAction".

  4. Use Fusion Middleware Control to start all services on the middle tier for Oracle Business Intelligence.

  5. Clear the browser cache on the client machine so that the new `Common2_2_20.js` file will be used.

33.5.5 Issue Exporting to PDF Under Certain Circumstances

If you are using Oracle BI Discoverer Viewer with Microsoft Internet Explorer, you might encounter an error message when you try to export to PDF a worksheet that is named with non-ASCII characters, a space, and a number. The export fails and you will see a message similar to the following one:

`No %PDF- in a file header`

Use one of the following methods to work around this issue:

- Use a browser other than Internet Explorer, such as one from Netscape or Mozilla.

- Remove the space between the non-ASCII characters and the number, or remove the number altogether.

- Continue to use Internet Explorer and leave the space in the worksheet name, but follow these steps:

  1. Start the Adobe Reader.

  2. From the **Edit** menu, choose **Preferences**, then click **Internet**.

  3. Clear the **Display PDF in browser** box.

33.5.6 Issue When Changing Colors for Oracle BI Discoverer Viewer in Fusion Middleware Control on Mac OS X

You can use Fusion Middleware Control to change the look and feel of Oracle BI Discoverer Viewer. That page contains a color chooser, or palette. If you use Fusion Middleware Control on Mac OS X with the Safari browser, then the page does not correctly enter the color code when you select a color from the palette.

To work around this issue, you can either use the Firefox browser or you can enter a color code directly.

The color codes are standard HTML hexadecimal color codes. You can enter one of the 49 colors that are available in the color palette, or you can enter any valid HTML hexadecimal color code.

The following list provides examples of colors with their codes:

white #FFFFFF
grey #CCCCCC
black #000000
pink #FFCCCC
red #FF0000
light yellow #FFFFCC
yellow #FFFF00
light green #99FF99
dark green #00CC00
light blue #66FFFF
dark blue #3333FF
lavender #FF99FF
purple #CC33CC

33.5.7 Discoverer Catalog Items Not Visible From UNIX Servers

You might encounter issues when trying to see items in the Discoverer Catalog when using Oracle BI Discoverer Viewer with OLAP data on UNIX servers.

You can resolve this issue on the middle-tier machine where Oracle BI Discoverer runs by performing the following steps.

To check whether the time zone variable is set:

1. Open a shell prompt.

2. Type `echo $TZ` to display the time zone setting.

If no value is displayed, then the time zone has not been set.

To set the time zone variable:

1. Open a shell prompt.

> **Note:** The UNIX user that sets the TZ variable must be the same UNIX user that installed Oracle Business Intelligence.

2. If you do not know which shell you are using, type `$echo $SHELL` to display the name of the current shell.

3. Set the time zone as appropriate.

    For example, to set the time zone variable for US/Pacific time:

    - For the Bourne, Bash, or Korn shell, type `export TZ=US/Pacific`

    - For the C shell, type `setenv TZ US/Pacific`

    > **Note:** Consult the shell documentation for the appropriate values.

33.5.8 Known Bug with JAWS Prevents Drilling Using the Enter Key

Oracle BI Discoverer can be used in conjunction with assistive technologies such as the JAWS screen reader. However, a bug in JAWS prevents the drilling feature from working correctly in Oracle BI Discoverer Viewer when querying a relational data source.

Assume that you use the keyboard to navigate to the drill icon beside an item in the worksheet header. When you press the `Enter` key to drill on that header item, the **Drill** page should be displayed as described in the "Worksheet Display page: (Page level tools and controls)" topic in the Help system and the *Oracle Fusion Middleware User's Guide for Oracle Business Intelligence Discoverer Viewer*).

However, when JAWS is running, the **Drill** page is not displayed. Instead, the **Drill** popup menu is displayed. It is not possible to select items from this popup menu by using the keyboard, and JAWS does not read the items on the popup menu.

This issue has no workaround.

33.5.9 JAWS Does Not Read Asterisks that Precede Fields

In Oracle BI Discoverer Viewer, an asterisk that precedes a text field indicates that the user is required to enter a value into that text field. The JAWS screen reader does not read an asterisk that precedes a required text field and does not otherwise indicate that the field is required.

This issue has no workaround.

33.5.10 Oracle BI Discoverer Viewer Pages are not Cached by Oracle Web Cache

When using Oracle BI Discoverer with Oracle Web Cache, note the following:

- When Oracle Single Sign-On is enabled, Oracle Web Cache does not cache Oracle BI Discoverer Viewer pages, regardless of whether they are accessed using a public connection or a private connection.

- If an Oracle BI Discoverer Viewer page is accessed directly through a URL and the URL contains URL parameters that specify login details (for example, user name, database name), then Oracle Web Cache does not cache the page. For example, Oracle Web Cache does not cache worksheet "Sheet 1" in workbook "Workbook 2" that is displayed by using the following URL:

```
http://<host.domain>:<port>/discoverer/viewer?us=video5&db=db
1&eul=VIDEO5&wbk=Workbook+2&ws=Sheet+1
```

> **Note:** In the example above, `us=` specifies the database user name, and `db=` specifies the database name.

However, Oracle Web Cache does cache worksheet "Sheet 1" in workbook "Workbook 2" if a user logs in manually to Oracle BI Discoverer Viewer by using the same login details, and navigates to the worksheet.

- You must increase the delays for Oracle BI Discoverer Viewer by at least 60 seconds for Oracle BI Discoverer Viewer to properly cache workbooks with Oracle Web Cache.

  For more information, see "How to configure Discoverer Viewer to enable maximum caching" in the *Oracle Fusion Middleware Configuration Guide for Oracle Business Intelligence Discoverer*.

33.6 Issues Specific to Oracle BI Discoverer EUL Command Line for Java

This section describes issues that are specific to Oracle BI Discoverer EUL Command Line for Java. It includes the following topics:

- Section 33.6.1, "Issue with Exported Non-ASCII Data"
- Section 33.6.2, "JVM Crashes When Connecting to EUL"
- Section 33.6.3, "Issue with the eulapi Utility"

33.6.1 Issue with Exported Non-ASCII Data

When you export multibyte or Eastern European data (such as the names of items and business areas in Japanese or Russian characters) from Oracle BI Discoverer EUL Command Line for Java on a platform other than Windows, the exported data is corrupted.

To work around this issue, edit the `discwb.sh` file that is located in the `ORACLE_HOME/discoverer` directory before exporting. Change the character set value in the NLS_LANG variable to UTF8.

For example, if the original setting of the variable is:

`NLS_LANG="GERMAN_GERMANY.WE8ISO8859P1"`

Change the setting to:

`NLS_LANG="GERMAN_GERMANY.UTF8"`

33.6.2 JVM Crashes When Connecting to EUL

When you use the `java -jar eulbuilder.jar -connect` command to connect to an EUL, the JVM crashes if the NLS_LANG environment variable is not initialized.

This problem does not occur when you connect by using the `eulapi.sh` command.

To work around this issue, set the NLS_LANG environment variable to `AMERICAN_AMERICA.UTF8`.

33.6.3 Issue with the eulapi Utility

The `eulapi` command does not run properly because of incorrect `ORACLE_HOME` location in the script.

To work around this issue, you must manually set the environment variable `ORACLE_HOME` before running the eulapi utility.

33.7 Issues Specific to Oracle BI Discoverer Administrator

This section describes issues that are specific to Oracle BI Discoverer Administrator. It includes the following topic:

- Section 33.7.1, "Issue with Installation of Video Stores Tutorial"

33.7.1 Issue with Installation of Video Stores Tutorial

Before installing the video stores tutorial in Oracle Database 10*g* Enterprise Edition Release 2 (version 10.2.0.1 and higher), you must manually create the VIDEO5 user. If you attempt to install the video stores tutorial in Oracle Database 10*g* Enterprise Edition Release 2, then the installation will fail if the VIDEO5 user does not already exist. To work around this issue:

1. Create the VIDEO5 user manually by completing these steps:

   a. Access Oracle Database 10*g* with SQL*Plus, Enterprise Manager, or any SQL command line tool.

   b. Create the VIDEO5 user.

   c. Grant CONNECT and RESOURCE privileges to the VIDEO5 user.

   For more information about creating users and granting privileges, see the *Oracle Database SQL Reference* or your DBA

2. Connect to Discoverer Administrator as the EUL owner and install the tutorial. You must enter the VIDEO5 user password during installation.

   For information about installing the video stores tutorial, see the *Oracle Fusion Middleware Administrator's Guide for Oracle Business Intelligence Discoverer*.

33.8 Documentation Errata

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

- Section 33.8.1, "Incorrect Information about Discoverer Desktop and Application Server"

- Section 33.8.2, "Additional Step When you Create Cascading Parameters in Discoverer Plus"

- Section 33.8.3, "Incorrect Information about Databases Supported for Discoverer"

33.8.1 Incorrect Information about Discoverer Desktop and Application Server

Section 1.6.2 "How does Discoverer work?" of the *Oracle Fusion Middleware Administrator's Guide for Oracle Business Intelligence Discoverer* states: "In the case of Discoverer Plus, Discoverer Desktop and Discoverer Viewer, the SQL statements are routed to the database through Discoverer processes running on an application server machine." This sentence contains an error.

Discoverer Desktop does not require an application server. When you use Discoverer Desktop, SQL statements are sent directly to the database.

Corrected sentence: "In the case of Discoverer Plus and Discoverer Viewer, the SQL statements are routed to the database through Discoverer processes running on an application server machine."

33.8.2 Additional Step When you Create Cascading Parameters in Discoverer Plus

In the "About filtering lists of parameter values based on selected conditions (cascading parameters)" section of *Oracle Fusion Middleware User's Guide for Oracle Business Intelligence Discoverer Plus*, the following information is missing:

When you create cascading parameters from worksheet items of two simple folders, which are based on different tables, ensure that a join condition is defined between the two folders. For example, you might want to create a cascading parameter relationship between Region and City items. If the Region and City are items of two folders, these folders must be related using a join condition.

If you create a cascading parameter relationship between items in a custom SQL folder and if no simple folders exist (based on the tables used in the custom SQL folder), you must do the following:

- Create simple folders for each of the tables used in the view
- Define a join relationship between the folders used for the cascading parameters

For more information about creating joins, see the "Creating and Maintaining Joins" section in *Oracle Fusion Middleware Administrator's Guide for Oracle Business Intelligence Discoverer*.

33.8.3 Incorrect Information about Databases Supported for Discoverer

Section 1.3.3 "About Discoverer installations and the Oracle11g Database" of the *Oracle Fusion Middleware Configuration Guide for Oracle Business Intelligence Discoverer* does not contain complete and correct information about the databases supported for Discoverer.

Ignore the content in that section; instead, see *System Requirements and Supported Platforms for Oracle Fusion Middleware 11gR1* on OTN.

34

Oracle Forms

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

- Section 34.1, "General Issues and Workarounds"
- Section 34.2, "Configuration Issues and Workarounds"
- Section 34.3, "Documentation Errata"

34.1 General Issues and Workarounds

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

- Section 34.1.1, "Backwards Compatibility with Earlier Releases"
- Section 34.1.2, "Linux/UNIX Issues and Workarounds"

34.1.1 Backwards Compatibility with Earlier Releases

For information about upgrading from Forms 6*i*, see the "Upgrading to Oracle Forms Services 11*g*" chapter in *Oracle Fusion Middleware Forms Services Deployment Guide*. For information about changed or obsolete features, see the *Oracle Forms Upgrading Oracle Forms 6i to Oracle Forms 11g Guide*.

For upgrading from Oracle Forms 10*g* and prior releases, you can use the Upgrade Assistant. For more information, see the *Oracle Fusion Middleware Upgrade Planning Guide* and *Oracle Fusion Middleware Upgrade Guide for Oracle Portal, Forms, Reports, and Discoverer*.

Additional information about backwards compatibility is included in My Oracle Support Note 113987.1 at: `http://myoraclesupport.oracle.com`

Regardless from which version of Oracle Forms you are upgrading, you will need to recompile your applications and restart Oracle Forms.

34.1.2 Linux/UNIX Issues and Workarounds

This section describes issues related to Oracle Forms and Linux/UNIX. It includes the following topics:

- Section 34.1.2.1, "LD_PRELOAD Setting Required for Signal Chaining Facility"
- Section 34.1.2.2, "Check the Reports Engine Logs for FRM-41214"
- Section 34.1.2.3, "Changing User Permissions"

34.1.2.1 LD_PRELOAD Setting Required for Signal Chaining Facility

The `LD_PRELOAD` setting in `default.env` is required for the working of signal chaining facility in JVM version 1.5 and later. If you are creating or using other environment files, the setting in the environment file for `LD_LIBRARY_PATH` and `LD_PRELOAD` must be the same as in `default.env`.

34.1.2.2 Check the Reports Engine Logs for FRM-41214

If you encounter the Forms error FRM-41214:Unable to run report when trying to run Reports from a Forms session, check the Reports engine logs for more details on the error.

34.1.2.3 Changing User Permissions

The 11*g* installation sets the permissions of the files so that only the user who installed 11*g* can run the executables. Refer to the document *Setting Developer Tools Permissions on Unix* at http://www.oracle.com/technology/products/forms for instructions on changing permissions for other users to allow execution of the Forms development tools.

34.2 Configuration Issues and Workarounds

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

- Section 34.2.1, "Non-Internet Explorer Browser Proxy Settings when Using One-Button-Run"

- Section 34.2.2, "WebUtil Client Files Allow Configuration of Destination Directory"

- Section 34.2.3, "webutil.properties Files Renamed for Different Libraries"

- Section 34.2.4, "Forms does not Work with JDK 1.6.0_12 on Client with WinRunner"

- Section 34.2.5, "JavaScript Communication Does not Work in IE7 for Framed HTML File"

- Section 34.2.6, "Error in Conversion of .xml file to .fmb file"

- Section 34.2.7, "Modification of Forms J2EE Application Deployment Descriptors"

34.2.1 Non-Internet Explorer Browser Proxy Settings when Using One-Button-Run

If you encounter a FORBIDDEN error when using One-Button-Run with any of the supported browsers other than Internet Explorer, verify if 127.0.0.1 (localhost) is in the proxy settings for your browser. If 127.0.0.1 is not in the exceptions list, then add it. This ensures that the browser will bypass the proxy server.

34.2.2 WebUtil Client Files Allow Configuration of Destination Directory

WebUtil downloads `install.syslib` libraries into the bin directory of the JRE or JVM on Windows and into the lib directory of JRE on Linux. This location can be specified in the parameter `install.syslib.location.client.<OS> = <Path on client machine>` (where `<Path on client machine>` represents the path to the location where libraries used on the client by WebUtil are stored and is either absolute or relative to client user home) in `webutil.cfg`.

34.2.3 webutil.properties Files Renamed for Different Libraries

When `install.syslib` libraries are downloaded, WebUtil creates the `webutil.properties` file which is located in the client user home. Different webutil.properties files are maintained on client side to allow different servers to download and manage their libraries on client. The files are named `webutil.<HOST>.<CONFIG>.properties` on the client, where `HOST` is the server computer name and `CONFIG` is the name of configuration section in `formsweb.cfg`.

34.2.4 Forms does not Work with JDK 1.6.0_12 on Client with WinRunner

Forms does not run when using JDK 1.6.0_12 and later versions on a client that also has WinRunner installed.

As a workaround, rename the two environment variables `_JAVA_OPTIONS` and `JAVA_TOOLS_OPTIONS`. For example, rename them to `test_JAVA_OPTIONS` and `test_JAVA_TOOLS_OPTIONS`. This will disable WinRunner but allows Forms to run.

34.2.5 JavaScript Communication Does not Work in IE7 for Framed HTML File

JavaScript communication does not work in framed HTML file that is opened in Internet Explorer 7 with file:// protocol.

As a workaround, use the IP address instead of the machine name in the URL for the frame. For example in testform.htm, change:

```
<frame noresize="noresize"
 src="http://testform.us.oracle.com:8888/forms/java/js2frm1.html" name="fr2"
 frameborder="0">
   <frame noresize="noresize"
 src="http://testform.us.oracle.com:8888/forms/frmservlet?play=&record=forms&
 form=js2frm1&userid=scott/tiger@adt10220" name="fr1" frameborder="0">
```

to

```
<frame noresize="noresize"
 src="http://10.229.147.186:8888/forms/java/js2frm1.html" name="fr2"
 frameborder="0">
   <frame noresize="noresize"
 src="http://10.229.147.186:8888/forms/frmservlet?play=&record=forms&form=js2fr
 m1&userid=scott/tiger@adt10220" name="fr1" frameborder="0">
```

34.2.6 Error in Conversion of .xml file to .fmb file

Connecting to Oracle Database 11.2 while attempting to convert .xml file to .fmb file will cause the following error message to be displayed:

```
Oracle Forms 11.1 XML to Forms Tool
```

```
Copyright(c) 2001, 2009, Oracle and/or its affiliates. All
rights reserved.
```

```
Error connecting to database _jni_connect failed
```

```
Continuing with no DB connection (Record Group Queries will be
lost)
```

As a workaround, convert the .xml file to .fmb file while connected to an earlier database version.

34.2.7 Modification of Forms J2EE Application Deployment Descriptors

Post-deployment, Forms J2EE application deployment descriptors (`weblogic.xml`, `web.xml`, `application.xml` and `weblogic-application.xml`) cannot be modified in Oracle WebLogic Server.

As a workaround, perform the following steps to customize the Forms J2EE application deployment descriptors and redeploy the application:

1. Back up the default formsapp deployment plan, `$DOMAIN_HOME/deploymentplans/formsapp/11.1.1/plan.xml`.

2. Add the deployment descriptors customizations to the Forms J2EE application's deployment plan.

3. Using the WebLogic Administration Console, update the forms application (redeploy) and select the option **Update this application in place with new deployment plan changes**.

4. Restart the Forms J2EE application using the WebLogic Administration Console.

> **Note:** For more information on updating the deployment plan, refer to the *Oracle Fusion Middleware Deploying Applications to Oracle WebLogic Server 11g Release 1 (10.3.1)*.

For example, to override the Forms Servlet `testMode` parameter and set it to true, perform the following steps:

1. Enter the following commands:

```
Mkdir –p $CLASSIC_ORACLE_HOME/forms/j2ee/backup
cd $CLASSIC_ORACLE_HOME/forms/j2ee
cp $DOMAIN_HOME/deploymentplans/formsapp/11.1.1/plan.xml backup/
Vi $DOMAIN_HOME/deploymentplans/formsapp/11.1.1/plan.xml
```

2. Add the modifications to the deployment plan. The following is a sample of the deployment plan with the added entries highlighted in bold:

```
<?xml version='1.0' encoding='UTF-8'?>
<deployment-plan xmlns="http://xmlns.oracle.com/weblogic/deployment-plan"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://xmlns.oracle.com/weblogic/deployment-plan
 http://xmlns.oracle.com/weblogic/deployment-plan/1.0/deployment-plan.xsd"
global-variables="false">
  <application-name>formsapp</application-name>
  <variable-definition>
    <variable>
      <name>vd-/scratch/t_work/Oracle/Middleware/as_1/forms</name>
      <value>/scratch/t_work/Oracle/Middleware/as_1/forms</value>
    </variable>
    <variable>
      <name>vd-/scratch/t_work/Oracle/Middleware/user_projects
/domains/ClassicDomain/config/fmwconfig/servers/WLS_
FORMS/applications/formsapp_11.1.1/config/forms</name>
      <value>/scratch/t_work/Oracle/Middleware/user_projects
/domains/ClassicDomain/config/fmwconfig/servers/WLS_
FORMS/applications/formsapp_11.1.1/config/forms</value>
    </variable>
    <variable>
      <name>FormsServlet_InitParam_testMode</name>
      <value>true</value>
    </variable>
```

```
      </variable-definition>
      <module-override>
        <module-name>formsapp.ear</module-name>
        <module-type>ear</module-type>
        <module-descriptor external="false">
          <root-element>weblogic-application</root-element>
          <uri>META-INF/weblogic-application.xml</uri>
        </module-descriptor>
        <module-descriptor external="false">
          <root-element>application</root-element>
          <uri>META-INF/application.xml</uri>
        </module-descriptor>
        <module-descriptor external="true">
          <root-element>wldf-resource</root-element>
          <uri>META-INF/weblogic-diagnostics.xml</uri>
        </module-descriptor>
      </module-override>
      <module-override>
        <module-name>formsweb.war</module-name>
        <module-type>war</module-type>
        <module-descriptor external="false">
          <root-element>weblogic-web-app</root-element>
          <uri>WEB-INF/weblogic.xml</uri>
          <variable-assignment>
            <name>vd-/scratch/t_work/Oracle/Middleware/as_1/forms</name>
<xpath>/weblogic-web-app/virtual-directory-mapping/[url-pattern="java/*"]/local
-path</xpath>
          </variable-assignment>
          <variable-assignment>
            <name>vd-/scratch/t_work/Oracle/Middleware/as_1/forms</name>
<xpath>/weblogic-web-app/virtual-directory-mapping/[url-pattern="webutil/*"]/lo
cal-path</xpath>
          </variable-assignment>
          <variable-assignment>
            <name>vd-/scratch/t_work/Oracle/Middleware/user_projects
/domains/ClassicDomain/config/fmwconfig/servers/WLS_
FORMS/applications/formsapp_11.1.1/config/forms</name>
<xpath>/weblogic-web-app/virtual-directory-mapping/[url-pattern="registry/*"]/l
ocal-path</xpath>
          </variable-assignment>
        </module-descriptor>
        <module-descriptor external="false">
          <root-element>web-app</root-element>
          <uri>WEB-INF/web.xml</uri>
          <variable-assignment>
            <name>FormsServlet_InitParam_testMode</name>
<xpath>/web-app/servlet/[servlet-name="frmservlet"]/init-param/[param-name="tes
tMode"]/param-value</xpath>
          </variable-assignment>
        </module-descriptor>
      </module-override>
  </deployment-plan>
```

3. Using the WebLogic Administration Console, update the Forms J2EE application deployment (formsapp (11.1.1)).

4. Restart the Forms J2EE application using the WebLogic Administration Console.

34.3 Documentation Errata

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

-
-
-

34.3.1 Expanding Forms Managed Server Clusters

To improve the scalability and performance of Forms deployments on high-end machines (multiprocessor and high-memory configuration machines), expand the Forms Managed Server cluster (`cluster_forms`). Perform the following manual steps to expand the Forms Managed Server cluster:

1. Perform the following steps to add a new Managed Server to the cluster (`cluster_forms`):

   a. Using the Oracle WebLogic Server Administration Console, you can choose to either clone the default Forms Managed Server (`WLS_FORMS`) or create a new Managed Server (for example, `WLS_FORMS_1`, with port number 9010).

   b. In the Server Properties page, add the newly created Managed Server to the Forms cluster `cluster_forms`.

   c. In the General Tab, assign a port number to the Managed Server.

   d. Assign a machine to the Managed Server.

2. Perform the following steps to edit the configuration of the new managed server:

   a. Using the Oracle WebLogic Server Administration Console, in the Server Start Tab, set the following Server Start properties.

   b. Add the following system properties to the Arguments:

   ```
   -Dclassic.oracle.home=<ORACLE_HOME location>

   -Doracle.instance=<ORACLE_INSTANCE location>

   -Doracle.instance.name=<ORACLE_INSTANCE Name>

   -Doracle.forms.weblogic=1
   ```

   c. Add the following to the CLASSPATH: `<ORACLE_HOME>/opmn/lib/optic.jar`

3. Activate the changes and start the new Managed Server.

4. Add the new Managed Server's host and port information to the WeblogicCluster entry in `forms.conf`.

   ```
   <Location /forms>

   SetHandler weblogic-handler

   WebLogicCluster <HostName>:9001 <HostName>:9010

   DynamicServerList OFF

   </Location>
   ```

5. Restart OHS.

34.3.2 Path Reference to weblogic.xml

In step 1 of the Section 14.3, "Web Cache and Forms Integration" of the *Oracle Fusion Middleware Forms Services Deployment Guide*, the correct path of the `weblogic.xml` file

is $DOMAIN_HOME/servers/WLS_FORMS/tmp/_WL_user/formsapp_
11.1.1/<random_string>/war/WEB-INF.

34.3.3 Virtual Mapping Entries in Default forms.conf file

In Section C.7.1, "Default forms.conf" of the *Oracle Fusion Middleware Forms Services Deployment Guide,* the default file should also contain virtual mapping entries such as:

```
#
# virtual mapping for the /forms/html mapping.
#
RewriteEngine on
RewriteRule ^/forms/html/(..*) /workaroundhtml/$1 [PT]
AliasMatch ^/workaroundhtml/(..*)
"/scratch/fmw/ps1/rc3/asinst_2/config/FormsComponent/forms/html/$1"
```

35

Oracle Portal

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

35.1 Before You Begin

In addition to the known problems and workarounds described in this document, Oracle recommends that you read the My Oracle Support note 834615.1 - *Oracle Fusion Middleware 11g Portal (11.1.1) Support Status and Alerts*. This article contains known issues that were discovered after the release of Oracle Portal 11g Release 1 (11.1.1).

35.2 General Issues and Workarounds

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

- Section 35.2.8, "Creating Readable URLs"

- Section 35.2.9, "Encrypting a Password in MOD_ORADAV.CONF"

- Section 35.2.10, "Migrating an External Application"

- Section 35.2.11, "Portal Throws Discoverer Provider is Busy Error Message"

- Section 35.2.12, "Error When Creating RCU Portal Schema"

- Section 35.2.13, "Error When Adding Sample RSS Portlets to a Page"

- Section 35.2.14, "Internal Error when Using Portal Search With Oracle Text Enabled to Search for Pages"

- Section 35.2.15, "IPv6 Support in Oracle Portal 11g Release 1 (11.1.1)"

35.2.1 Oracle Portal 11g Release 1 (11.1.1) with Oracle Application Server Wireless

Integrating Oracle Application Server Wireless 10*g* with Oracle Portal 11*g* Release 1 (11.1.1) requires you to complete a set of manual steps, as described in the My Oracle Support note 837837.1 (*Oracle Portal 11g Release 1 (11.1.1) with Oracle Application Server Wireless*). In addition, see the following My Oracle Support notes for information about deprecated features in 10*g*:

- Deprecated Features in Oracle Application Server 10*g* Release 2 (10.1.2)

- Deprecated Features in Oracle Application Server 10*g* Release 3 (10.1.3)

35.2.2 Editing a Database Link Requires Password

If the database where the portal schema is installed is version 10.2 or later, then users must re-enter the remote user's password when they rename or edit a database link from the Portal Navigator's Database Objects tab. This is applicable only for those database links that are created with the **Specific User** option.

35.2.3 Moving Content When Approval Is Enabled Does Not Require Approval

Moving content between pages or between regions of the same page does not trigger approvals. For example, when a target page is configured with an approval process and a contributor moves content from a source page to the target page, the moved content does not trigger the approval process on the target page, even when approval is required for all users.

35.2.4 Firefox and Safari Browsers Do Not Display Tooltips on Oracle Portal Screens

Firefox and Safari browsers do not support the display of tooltip text, which is set using the ALT attribute for image descriptions.

As a workaround, you can download and install browser-specific add-ons, such as Popup ALT Attribute for Firefox (see https://addons.mozilla.org/en-US/firefox/addon/1933).

35.2.5 Non-ASCII URLs Cannot be Decoded in Some Scenarios

If the JVM default character encoding is set to ISO8859-1, the Portal repository database character set must match with the JVM default character encoding. If this condition is not satisfied, non-ASCII URLs may become inaccessible.

35.2.6 Adding a Zip File with a Non-ASCII Character Name

If you are adding a zip file to a page under a pagegroup using non-ascii character name, and when you unzip the file, it throws the following exception:

```
IllegalArgumentException: null and unzip will be failed.
```

To avoid this exception, you must use ascii character as the zip file name.

35.2.7 Manual Changes to Oracle Portal Default Schema Objects

Any manual changes to Oracle Portal default objects, such as tables, views, packages, or indexes are not supported. Such changes may render Oracle Portal unusable. Note that the internal structure of Portal objects can change between versions.

For more information, see the 403179.1 My Oracle Support note.

35.2.8 Creating Readable URLs

If you are using Secure Enterprise Search (SES), then by default, the search result of your Portal displays durable URL format for an item or a page. To display your URL as a readable format, perform the following steps:

1. Run `sbrsrxml.sql`, located at `ORACLE_HOME\upgrade\portal\admin\plsql\wws` in Windows and `ORACLE_HOME/upgrade/portal/admin/plsql/wws`, in UNIX, using your Portal schema password.

2. Enter the value `0`, for example `@wws\sbrsrxml.sql 0` in Windows.

After you run a full SES crawl, your URL is displayed in a readable format. And if you want your URL to display the durable URL format, then run `sbrsrxml.sql` and enter the value `1`.

35.2.9 Encrypting a Password in MOD_ORADAV.CONF

This section describes how to encrypt a password in the `mod_oradav.conf` file. Perform the following tasks:

Editing the DAV Password

To edit the password in the `mod_oradav.conf` file, do the following:

1. Open your `mod_oradav.conf` file, located at `ORACLE_INSTANCE/config/OHS/ohs1/moduleconf` (UNIX).

2. Locate the `DAV` entry for which you wish to change the password. In a default portal instance, you can find the `DAV` configuration entry in the following directive:

```
<Location /dav_portal/portal>
```

3. In the `DAV` entry, remove the directive `ORACRYPTPASSWORD` (For example, `DAVParam ORACRYPTPASSWORD BS50NfrosVZOjfgc9hUQ9wcbFFxLSYT/BA==`), and replace with the clear text password using the following syntax:

```
DAVParam ORAPASSWORD <your_password_here>
```

For example:

If you want to have a password of `passwd123`, add a line as follows: `DAVParam ORAPASSWORD passwd123`.

4. Save the file.

Obfuscate the Password

After editing the DAV password, it is recommended that the DAV password be obfuscated by running the `oradavTool.pl` script located at `ORACLE_HOME/bin` in UNIX and `ORACLE_HOME\bin` in Windows. To do so, perform the following steps:

1. If necessary, change the user to the Oracle software owner user, typically oracle, using the following command:

   ```
   su - oracle
   ```

2. Set the `ORACLE_HOME` environment variable to specify the path to the Oracle home directory for the current release, and set the PATH environment variable to include the directory containing the Perl executable and the location of the `oradavTool.pl` script (Located at `ORACLE_HOME/ohs/bin` in UNIX and `ORACLE_HOME\ohs\bin` in Windows).

   Bourne, Bash, or Korn shell:

   ```
   $ ORACLE_HOME=new_ORACLE_HOME_path;export ORACLE_HOME
   PATH=$ORACLE_HOME/bin:$ORACLE_HOME/perl/bin:$PATH;export PATH
   ```

   C or tcsh shell:

   ```
   % setenv ORACLE_HOME new_ORACLE_HOME_PATH
   % setenv PATH ORACLE_HOME/bin:$ORACLE_HOME/perl/bin:PATH
   ```

   On Microsoft Windows, set the PATH and PERL5LIB environment variable:

   ```
   set PATH=ORACLE_HOME\bin;%ORACLE_HOME%\perl\bin;%PATH%
   set PERL5LIB=ORACLE_HOME\perl\lib
   ```

3. On UNIX platforms, set the shared library path environment variable

   Include the `ORACLE_HOME/lib` or `lib32` directory in your shared library path. Table 35–1 shows the appropriate directory and environment variable for each platform.

Table 35–1   Shared Library Path Environment Variable

Platform	Environment Variable	Include Directory
AIX Based Systems	LIBPATH	ORACLE_HOME/lib
HP-UX PA-RISC	SHLIB_PATH	ORACLE_HOME/lib
Solaris Operating System	LD_LIBRARY_PATH	ORACLE_HOME/lib32
Other UNIX platforms, including Linux and HP Tru64 UNIX	LD_LIBRARY_PATH	ORACLE_HOME/lib

   For example, on HP-UX PA-RISC systems, set the SHLIB_PATH environment to include the `ORACLE_HOME/lib` directory:

   ```
   $SHLIB_PATH=$ORACLE_HOME/lib:$SHLIB_PATH;export SHLIB_PATH
   ```

4. Change directory to the `ORACLE_HOME/bin` (UNIX) directory, as this is the location of the `oradavTool.pl` script.

5. Invoke the following Perl script to encrypt the `mod_oradav.conf` password:

```
perl oradavTool.pl -f mod_oradav.conffilename
```

Where *mod_oradav.conffilename* is the filename for `mod_oradav.conf`, which includes the full path to the `mod_oradav.conf` file.

For example, in UNIX:

```
perl oradavTool.pl -f /u01/app/oracle/as11gr1/ORACLE_INSTANCE/config/OHS/<ohs_
name>/moduleconf/mod_oradav.conf
```

6. The directive `ORAPASSWORD` is updated with the new directive `ORACRYPTPASSWORD`, and your password is obfuscated.

7. Restart your Oracle HTTP Server.

35.2.10 Migrating an External Application

When migrating an external application during the cloning process, you must run the `ssomig` utility after the import is completed as follows:

1. Open the `tnsnames.ora` file, and enter connect string entries to the sso database in `tnsnames.ora` file.

2. Set the `TNS_ADMIN` environment variable to the `tnsnames.ora` file location.

3. Run the `ssomig` utilty (Located at `INFRA_HOME/sso/bin`):

```
$INFRA_HOME/sso/bin/ssomig -import -overwrite -s orasso -p <<ORASSO_SCHEMA_
PASSWORD>> -c <<TNS_ALIAS>> -d ssomig.dmp -log_d
<<ABSOLUTE_PATH_FOR_MREXPDIR>> -discoforce
```

35.2.11 Portal Throws Discoverer Provider is Busy Error Message

Portal throws an error message `The Discoverer Provider is busy, please try again later`. This occurs when you perform the following steps:

1. Click **Edit Portlet** defaults

2. Click **Update for Database** section

3. Change selection for **User not logged** sub-section

4. Click **Next** to fetch worksheet list

Workaround

To workaround this issue perform the following steps:

1. Add `stall` timeout to $DOMAIN_HOME/servers/WLS_PORTAL/

    stage/portal/portal/configuration/appConfig.xml

    For example: `<stall>`*200*`</stall>`

2. Restart WebLogic Server Portal

35.2.12 Error When Creating RCU Portal Schema

If RCU portal schema creation fails with the error message ORA-24246: empty access control list (ACL) not allowed, do the following:

1. Connect to the database as a SYS user.

2. At the SQL prompt, run the following command:

```
BEGIN
```

```
DBMS_NETWORK_ACL_ADMIN.drop_acl (
    acl          => '/sys/acls/portal-permissions.xml');
COMMIT;
END;
/
```

35.2.13 Error When Adding Sample RSS Portlets to a Page

When you try to add the sample Scrolling RSS Portlet or the sample Simple RSS portlet to a Portal page, an error message is displayed.

The error occurs because the RSS used by the sample portlets are no longer available.

Currently, there is no workaround for this problem.

35.2.14 Internal Error when Using Portal Search With Oracle Text Enabled to Search for Pages

If you have Oracle Text enabled, the following internal server error may occur when you are searching for Pages:

```
Internal error (WWC-00006)
An unexpected error has occurred (WWS-32100)
Unknown Exception (WWC-45131)
User-Defined Exception (WWV-11230)
Unexpected error - ORA-00600: internal error code, arguments:
[qkeIsExprReferenced1], [], [], [], [], [], [], [] (WWC-35000)
```

If this error occurs, you must download and install database updates from http://updates.oracle.com/download/7041059.html.

35.2.15 IPv6 Support in Oracle Portal 11g Release 1 (11.1.1)

Oracle Portal 11g Release 1 (11.1.1) is not directly supported on Internet Protocol Version 6 (IPv6). The supported configuration comprises the following:

- An IPv4/IPv6 reverse proxy setup on an IPv4/IPv6 dual stack machine.

- The Portal mid-tier and the backend database on IPv4 machines, and clients accessing the Portal server through the proxy.

35.3 Upgrade Issues and Workarounds

This section describes the upgrade issues and workarounds. It discusses the following topics:

- Section 35.3.1, "Upgrading Portal 10g SSL Environment to Oracle Portal 11g Release 1 (11.1.1)"

35.3.1 Upgrading Portal 10*g* SSL Environment to Oracle Portal 11*g* Release 1 (11.1.1)

When you upgrade SSL environment from Oracle Portal 10*g* to Oracle Portal 11g Release 1 (11.1.1), you will not able to login to Oracle Portal, when you have SSO and Portal Midtier on the same hostname. Internet Explorer has a problem redirecting back and forth on the same hostname between two different ports under SSL mode. As a workaround, you can use Mozilla Firefox.

35.4 Interoperability Issues and Workarounds

This section describes the interoperability issues and workarounds. It discusses the following topics:

- Section 35.4.1, "Interoperability Between Oracle Portal 11g Release 1 (11.1.1) with Secured Enterprise Search (SES) 10.1.8.3"

- Section 35.4.2, "Interoperability Between Oracle Portal 11g Release 1 (11.1.1) with Secured Enterprise Search (SES) 10.1.8.4"

- Section 35.4.3, "Creating Webproviders in the Oracle Portal 11g Release 1 (11.1.1) Midtier Interoperability with Oracle Portal Repository 10g Release"

35.4.1 Interoperability Between Oracle Portal 11*g* Release 1 (11.1.1) with Secured Enterprise Search (SES) 10.1.8.3

For this interoperability scenario to work, you must download and install updates from `http://updates.oracle.com/download/7685124.html` and see note 816929.1 in My Oracle Support.

35.4.2 Interoperability Between Oracle Portal 11*g* Release 1 (11.1.1) with Secured Enterprise Search (SES) 10.1.8.4

For this interoperability scenario to work, you must download and install updates from `http://updates.oracle.com/download/7971335.html`.

35.4.3 Creating Webproviders in the Oracle Portal 11g Release 1 (11.1.1) Midtier Interoperability with Oracle Portal Repository 10*g* Release

In Portal 11*g* 1 (11.1.1), you cannot create webproviders when you are using 11*g* midtier with 10*g* portal repository.

35.5 User Interface Issue and Workaround

This section describes issue and workaround related to the Oracle Portal user interface. It includes the following topic:

Cannot Set Privileges Using List View on Pages Inheriting Privileges from Parent or Template

If you use the List View to set access privileges for one or more pages, then privileges will *not* be set on pages inheriting privileges from a parent page or template. As a workaround, change the privileges for such pages individually, that is, using the Access tab for the subpage.

35.6 Export and Import Issues and Workarounds

This section describes issues and workarounds related to export and import in Oracle Portal. This section includes the following topics:

- Section 35.6.1, "Export and Import Does Not Support Reports Server Components"

- Section 35.6.2, "Saving the Transport Set"

- Section 35.6.3, "Error when importing a page group"

35.6.1 Export and Import Does Not Support Reports Server Components

If you include Reports Server Components within a transport set, then they are deleted on export and import. In addition, do not configure the Oracle Reports item type in any page groups intended for export and import. If you do, then the following error is displayed when you try to configure item types in the imported page group (by clicking the Content Type and Classifications **Edit** link on the Configure tab for the page group):

```
Internal error (WWC-00006)
Unexpected error - User-Defined Exception (WWC-35000)
Unexpected error - ORA-01403: no data found (WWC-35000)
```

35.6.2 Saving the Transport Set

After you complete the transport set transfer, click **Display Manifest** to display the transport set manifest. Ensure that you save the transport set before performing the precheck of the transferred data. This step takes the manifest changes.

35.6.3 Error when importing a page group

Importing a page group may fail with the following error message:

```
[Error:  (WWU-80338)] context = Schema Validation user =
ORCLADMIN There were some inconsistencies found and hence import process is
aborted.Check the debug log for further details.
Fix those inconsistencies, by running schema validation in cleanup mode to proceed
```

This problem might occur after deleting a page group containing shared portlets. You must run SVU in cleanup mode to ensure a smooth export or import process.

35.7 Portlet and Provider Issues and Workarounds

This section describes issues and workarounds related to OmniPortlet, Web Clipping, Simple Parameter Form, Page portlet, and WSRP providers. This section includes the following topics:

- Section 35.7.1, "Registering WSRP Producers in Enterprise Configurations"

- Section 35.7.2, "Setting up the WSRP and JPDK Applications in Oracle Portal"

- Section 35.7.3, "Issue When Accessing Page Portlet Using Federated Portal Adapter"

- Section 35.7.4, "Error in JPS Portlet After Redeployment"

- Section 35.7.5, "SSL Support for Oracle Portal Integration Solutions (Microsoft Exchange)"

35.7.1 Registering WSRP Producers in Enterprise Configurations

When you register a WSRP producer in an Enterprise configuration, you must create a Web Services Definition Language (WSDL) document manually, then register the WSRP producer using that WSDL. This is because the dynamically generated WSDL creates URLs using the HTTPS protocol and the HTTPS port while WSRP producers use HTTP.

> **Note:** A *producer* for WSRP portlets is analogous to a *provider* for PDK-Java portlets.

To create a WSDL document manually, perform the following tasks:

1. View the dynamically generated WSDL through your browser (preferably Internet Explorer).

   To view the WSDL for our WSRP samples, go to:

   `http://`*host*`:`*external http port*`/portletapp/portlets?WSDL`

2. Save the file from the browser to any externally available location.

   For our WSRP Samples, save the file from the browser into the following directory:

   `ORACLE_HOME/j2ee/home/applications/portletapp/wsrp-samples`

   Save the file as `wsrpsamples.wsdl`.

3. Edit the file, replacing `https` with `http` and correcting the ports to be the external http ports.

4. View the file through a browser.

   For example, for our WSRP Samples use the following URL:

   `http://`*host*`:`*external http port*`/portletapp/wsrpsamples.wsdl`

5. Use the URL to your `*.wsdl` file (such as the URL under Step 4) when you register the WSRP producer.

For more information about Enterprise configurations, see the *Oracle Fusion Middleware Enterprise Deployment Guide for Java EE*.

35.7.2 Setting up the WSRP and JPDK Applications in Oracle Portal

This section describes steps to manually configure the WSRP and JPDK application and deploying them on the Oracle WebLogic Server. This section includes:

- Configuring and Deploying the WSRP
- Configuring and Deploying the JPDK

35.7.2.1 Configuring and Deploying the WSRP

To configure the WSRP, complete the following steps:

- Creating WSRP Managed Server
- Adding the Required Libraries to the WSRP Managed Server
- Starting the WSRP Managed Server
- Configuring the Datasource
- Extending the Existing WebLogic Domain
- Adding wsrp-pm to the WSRP Managed Server
- Deploying the Sample EAR File
- Configuring Oracle Web Cache
- Registering and Viewing Your Portlet

Creating WSRP Managed Server

You can create a WebLogic Managed Server on an existing domain using the Oracle WebLogic Server Administration Console to create the managed server instance and provision the shared libraries required to run a custom Oracle Portal application. To create the WSRP Managed Server, complete the following steps:

1. Log on to the Oracle WebLogic Server Administration Console.

2. If you have not already done so, in the Change Center of the Administration Console, click **Lock & Edit**.

3. In the Domain Structure tree, expand **Environment,** and then select **Servers**.

    The **Summary of Servers** page is displayed.

4. Click **New**.

    The **Create a New Server** page is displayed.

5. In the Create a New Server page enter the following information:

    ■   **Server Name**: Enter the name of the server, for example **WLS_WSRP**.

    ■   **Server Listen Port**: Enter the port number from which you want to access the server instance. For example, 9003.

    ■   Select the **No, this is a stand-alone server** radio button.

6. Click **Finish**.

7. In the **Summary of Servers page**, click on the Server (**WLS_WSRP**) you have created.

8. Select your machine name from the **Machine** drop-down list and click **Save**.

9. Click **Activate Changes**.

Adding the Required Libraries to the WSRP Managed Server

For a portlet producer application, you must deploy the following libraries to the new Managed Server or cluster:

■   oracle.portlet-producer.wsrp(11.1.1,11.1.1)

■   oracle.portlet-producer.jpdk(11.1.1,11.1.1)

■   DMS Application (11.1.1.1.0)

■   oracle.jrf.system.filter

■   oracle.jsp.next(11.1.1,11.1.1)

■   oracle.wsm.seedpolicies(11.1.1,11.1.1)

■   wsil-wls

To add the libraries, complete the following steps:

1. Click **Lock & Edit**.

2. In the Domain Structure tree, select **Deployments**.

    The **Summary of Deployments** page is displayed.

3. Select **oracle.portlet-producer.wsrp(11.1.1,11.1.1)** from the Deployments table.

    The **Settings for oracle.portlet-producer.wsrp(11.1.1,11.1.1)** page is displayed.

> **Note:** If the oracle.portlet-producer.wsrp(11.1.1,11.1.1) does not appear in the Deployment table, then click **Customize this table**, and disable the **Exclude libraries when displaying deployments** check box. Click **Apply**.

4. Click the **Targets** tab, and select **AdminServer** and **WLS_WSRP** from the Servers section.

5. Click **Save**.

6. Go to your **Summary of Deployments** page, and for each shared library, click the **Targets** tab, and then check **AdminServer** and **WLS_WSRP** from the Servers section.

7. To add the wsil-wls library, complete the following steps:

   a. Select **wsil-wls** from the Deployments table.

   b. Click the **Targets** tab, and select **wsil-wls** from the Component table.

   c. Click **Change Targets**, and then check **AdminServer** and **WLS_WSRP** from the Servers section.

   d. Click **Yes**.

8. Click **Activate Changes**.

Starting the WSRP Managed Server

To start the managed server, complete the following steps:

1. Click **Lock & Edit**.

2. In the Domain Structure tree, expand **Environment**, and then select **Servers**.

   The **Summary of Servers** page is displayed.

3. Click the **Control** tab, and check your created server (**WLS_WSRP**).

4. Click **Start**.

   The **Server Life Cycle Assistant page** is displayed.

5. Click **Yes**, to start the managed server.

Configuring the Datasource

To map the portletPrefs datasource targets to the managed server (**WLS_WSRP**), do the following:

1. In the Domain Structure tree, expand **Services**, and then select and expand **JDBC** and click **Data Sources**.

   The **Summary of JDBC Data Sources** page is displayed.

2. Click the Name associated with the `jdbc/portletPrefs` JNDI.

3. Click the **Targets** tab, and check **WLS_WSRP** from the Servers section.

4. Click **Save**.

5. Click **Activate Changes**.

Extending the Existing WebLogic Domain

To extend your existing Oracle WebLogic Server domain with the Oracle WSM Policy Manager, complete the following steps:

> **Note:** You must stop all the servers running in the Oracle Portal domain.

1. Go to the `oracle_common\common\bin` directory and run the `config.sh`.

    The **Welcome** window is displayed.

2. Select **Extend an existing WebLogic Domain** and click **Next**.

    The **Select a WebLogic Domain Directory** screen is displayed.

3. Select your valid domain directory and click **Next**.

    The **Select Extension Source** screen is displayed.

4. Select **Oracle WSM Policy Manager - 11.1.1.0 [Orhome]** (Select the one associated with your Oracle Portal) check box from the **Extend my domain automatically to support the following added products** option and click **Next**.

    The **Configure JDBC Data Sources** screen is displayed.

5. Click **Next**.

    The **Test JDBC Data Sources** screen is displayed.

6. Click **Next**.

    The **Configure JDBC Component Schema** screen is displayed.

7. Check the **OWSM MDS Schema** and enter the Host Name, Port, DBMS/ Service, Schema Password for the MDS schema. Click **Next**.

    > **Note:** This is the schema created for MDS when you run the Repository Configuration Utility (RCU) at install time. If you did not created this schema already then you need to create this schema first using RCU.

    The **Test Component Schema** screen is displayed.

8. Confirm the test is successful and click **Next**.

    The **Select Optional Configuration** screen is displayed.

9. Select **Deployments and Service**s.

10. Click **Next**.

    The **Target Deployments to Clusters or Servers** screen is displayed.

11. Ensure **wsrp-pm** is targeted to servers including **WLS_WSRP** and **AdminServer**.

12. Click **Next**.

    The **Target Services to Cluster or Servers** screen is displayed

13. Click **Next**.

14. Review your settings in the **Configuration Summary** screen, and click **Extend**.

15. Click **Done**.

Start the Oracle WebLogic Administration Server, the managed server, and the WLS_ WSRP managed server.

Adding wsrp-pm to the WSRP Managed Server

You must add the wsrp-pm to the WLS_WSRP managed server, by completing the following steps:

1. In the Domain Structure tree, select **Deployments**.

   The **Summary of Deployments** page is displayed.

2. Select **wsm-pm** from the Deployments table.

3. Click the **Targets** tab, and select **wsm-pm** from the Component table.

4. Click **Change Targets**, and then check **AdminServer** and **WLS_WSRP** from the Servers section.

5. Click **Yes**.

Deploying the Sample EAR File

To deploy the EAR file, download the **wsrp-samples.ear** file, from http://www.oracle.com/technology/products/ias/portal/pdk.html and do the following:

1. Click **Lock & Edit**.

2. In the Domain Structure tree, select **Deployments**.

   The **Summary of Deployments** page is displayed.

3. Click **Install**.

4. Select **wsrp-samples.ear** from your directory, click **Next**.

5. Select **Install this deployment as an application**, and click **Next**.

6. Check **WLS_WSRP** from the Servers section, and click **Next**.

7. Enter a name for the deployment, and click **Finish**.

8. Click **Activate Changes**.

9. Now that you have deployed the sample EAR file, you need to test its WSDL URL by entering it into a browser. The WSDL URL is of the form:

   ```
   http://host:port/portletapp/portlets?WSDL
   ```

   You should see a page similar to the one shown in Example 35–1.

Example 35–1 WSRP Producer WSDL Page

```
<?xml version="1.0" encoding="UTF-8" ?>
- <definitions targetNamespace="urn:oasis:names:tc:wsrp:v1:wsdl"
 xmlns="http://schemas.xmlsoap.org/wsdl/"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"
 xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
xmlns:bind="urn:oasis:names:tc:wsrp:v1:bind">
  <import namespace="urn:oasis:names:tc:wsrp:v1:bind" location=
"http://stamf10.us.abc.com:8090/wsrp-tools/portlets/wsrp1?WSDL=wsrp_v1_
bindings.wsdl" />
- <service name="WSRP_v1_Service">
+ <port name="WSRPServiceDescriptionService" binding="bind:WSRP_v1_
ServiceDescription_Binding_SOAP">
  <soap:address
```

```
location="http://stamf10.us.oracle.com:8090/wsrp-tools/portlets/WSRPServiceDescrip
tionService" />
  </port>
- <port name="WSRPBaseService" binding="bind:WSRP_v1_Markup_Binding_SOAP">
  <soap:address
location="http://stamf10.us.oracle.com:8090/wsrp-tools/portlets/WSRPBaseService"
/>
  </port>
- <port name="WSRPPortletManagementService" binding="bind:WSRP_v1_
PortletManagement_Binding_SOAP">
  <soap:address
location="http://stamf10.us.abc.com:8090/wsrp-tools/portlets/WSRPPortletManagement
Service" />
  </port>
- <port name="WSRPRegistrationService" binding="bind:WSRP_v1_Registration_Binding_
SOAP">
  <soap:address
location="http://stamf10.us.abc.com:8090/wsrp-tools/portlets/WSRPRegistrationServi
ce" />
  </port>
  </service>
  </definitions>
```

Configuring Oracle Web Cache

To view the WSDL URL using the Oracle Web Cache port, edit the `portal.conf` file (Loacated at `ORACLE_INSTANCE\config\OHS\ohs1\moduleconf` (Windows) as follows:

```
<Location /portletapp>
    SetHandler weblogic-handler
    WebLogicHost servername.domain.com
    WebLogicPort 9003
</Location>
```

Save your file and now you should be able to access the WSDL URL through the Oracle Portal port (The default port is `8090`).

Registering and Viewing Your Portlet

After you've created and deployed the provider and its portlets, you should register the provider with Oracle Portal. For more information, see Registering and Viewing Your JSR 168 Portlet in the "*Oracle Fusion Middleware Developer's Guide for Oracle Portal*."

35.7.2.2 Configuring and Deploying the JPDK

To configure and deploying the JPDK, perform the following:

- Creating the JPDK Managed Server
- Adding the Required Libraries to the JPDK Managed Server
- Starting the JPDK Managed Server
- Configuring the Datasource
- Deploying the EAR File

Creating the JPDK Managed Server

You can create a WebLogic Managed Server on an existing domain using the Oracle WebLogic Server Administration Console to create the managed server instance and provision the shared libraries required to run a custom Oracle Portal application. To create the JPDK Managed Server, do the following:

1. Log on to the WebLogic Server Administration Console.

2. If you have not already done so, in the Change Center of the Administration Console, click **Lock & Edit**.

3. In the Domain Structure tree, expand **Environment** and then select **Servers**.

   The **Summary of Servers** page is displayed.

4. Click **New**.

   The **Create a New Server** page is displayed.

5. In the Create a New Server page enter the following information:

   - **Server Name**: Enter the name of the server. For this step use **WLS_JPDK** as an example.

   - **Server Listen Port**: Enter the port number from which you want to access the server instance. For this step use **9004** as an example.

   - Select the **No, this is a stand-alone server** radio button.

6. Click **Finish**.

7. In the **Summary of Servers page**, click on the Server (**WLS_JPDK**) you have created.

8. Select your machine name from the **Machine** drop-down list and click **Save**.

9. Click **Activate Changes**.

Adding the Required Libraries to the JPDK Managed Server

For a portlet producer application, you must deploy the following libraries to the new Managed Server or cluster:

- oracle.portlet-producer.jpdk(11.1.1,11.1.1)

- DMS Application (11.1.1.1.0)

- oracle.jsp.next(11.1.1,11.1.1)

To add the libraries, do the following:

1. Click **Lock & Edit**.

2. In the Domain Structure tree, select **Deployments**.

   The **Summary of Deployments** page is displayed.

3. Select **oracle.portlet-producer.jpdk(11.1.1,11.1.1)** from the Deployments table.

   The **Settings for oracle.portlet-producer.jpdk(11.1.1,11.1.1)** page is displayed.

   > **Note:** If the oracle.portlet-producer.jpdk(11.1.1,11.1.1) does not appear in the Deployment table, then click **Customize this table**, and disable the **Exclude libraries when displaying deployments** check box. Click **Apply**.

4. Click the **Targets** tab, and select **AdminServer** and **WLS_JPDK** from the Servers section.

5. Click **Save**.

6. Go to your **Summary of Deployments** page, and for each shared library, click the **Targets** tab, and then check **AdminServer** and **WLS_JPDK** from the Servers section.

7. Click **Activate Changes**.

Starting the JPDK Managed Server

To start the managed server do the following:

1. Click **Lock & Edit**.

2. In the Domain Structure tree, expand **Environment** and then select **Servers**.

   The **Summary of Servers** page is displayed.

3. Click the **Control** tab, and select your created server (**WLS_JPDK**).

4. Click **Start**.

   The **Server Life Cycle Assistant page** is displayed.

5. Click **Yes**, to start the managed server.

Configuring the Datasource

To map the `portletPrefs` datasource targets to the managed server (WLS_JPDK), do the following:

1. In the Domain Structure tree, expand **Services**, and then select and expand **JDBC** and click **Data Sources**.

   The **Summary of JDBC Data Sources** page is displayed.

2. Click the Name associated with the **jdbc/portletPrefs** JNDI.

3. Click the **Targets** tab, and check **WLS_JPDK** from the Servers section.

4. Click **Save**.

5. Click **Activate Changes**.

Deploying the EAR File

To deploy the JPDk, do the following:

1. Click **Lock & Edit**.

2. In the Domain Structure tree, select **Deployments**.

   The **Summary of Deployments** page is displayed.

3. Click **Install**.

   The **Install Application Assistant** page is displayed.

4. In the **Path** field, enter the location of the jpdk.ear file (Located at `ORACLE_HOME/archives/applications` for Windows and `ORACLE_HOME\archives\applications` for UNIX).

5. Select **jpdk.ear**, and click **Next**.

6. Select **Install this deployment as an application**, and click **Next**.

7. Check **WLS_JPDK** from the Servers section, and click **Next**.

8. In the **Name** field, enter a name for the deployment.

9. Click **Finish**.

10. Click **Activate Changes**.

11. Click **Lock & Edit**.

12. From the **Summary of Deployments** page, select the application and click **Start** and then, Servicing all requests.

13. From the **Start Application Assistant**, click **Yes**.

14. Now that you have deployed the sample EAR file, you need to test its URL by entering it into a browser. The URL is of the form:

```
http://host:port/jpdk/providers/sample/
```

For more information, see Creating Java Portlets in the *Oracle Fusion Middleware Developer's Guide for Oracle Portal*.

35.7.3 Issue When Accessing Page Portlet Using Federated Portal Adapter

The Federated Portal Adapter enables you to display remote portal pages in your portal. However, if both portal instances do not share the same Oracle Single Sign-On server, then you cannot display a remote portal page as a page portlet, even if the remote page is public. A message is displayed instead of the page portlet, as shown in the following example:

```
Portlet 257,75057 responded with content-type text/plain when the client was
requesting content-type text/html
```

As a workaround, configure both portal instances to use the same Oracle Single Sign-On server.

35.7.4 Error in JPS Portlet After Redeployment

When you redeploy your portlets to the portlet container, all existing sessions between the producer and all of its consumers are lost. If a consumer tries to reuse an existing producer session, then it may receive an error message the first time it tries to contact the producer after redeployment, as shown in the following example:

```
Error: Could not get markup. The cookie or session is invalid or there is a
runtime exception.
```

To reestablish the producer's session, refresh the portal page. You will not see this error message if you are reaccessing the portlet from a new browser session because it automatically establishes a new producer session.

35.7.5 SSL Support for Oracle Portal Integration Solutions (Microsoft Exchange)

SSL support is not available for Oracle Portal Integration Solutions (Microsoft Exchange). This is a known limitation.

35.8 PDK Issue and Workaround

Oracle Portal Developer Kit (PDK) version 10.1.2 is included with the Portal and Wireless installation. Release notes for the PDK-Java and PDK-PL/SQL can be found at the following middle-tier *ORACLE_HOME* locations:

- **PDK-Java:** *ORACLE_
  HOME*/portal/pdkjava/v2/pdkjava.v2.releasenotes.html

- **PDK-PL/SQL:** *ORACLE_
  HOME*/portal/pdkjava/v2/pdkplsql.release.notes.html

Latest Version of Oracle PDK

New versions of the Oracle PDK are released periodically providing new features, new APIs, and additional documentation. To take advantage of all the latest features, download the latest PDK from the PDK downloads page on the Oracle Technology Network (OTN) at
http://www.oracle.com/technology/products/ias/portal/pdk.html.

Release notes for the latest Oracle PDK version are available on Oracle Portal on OTN and also in these PDK download locations:

- pdk\plsql\pdkplsql.release.notes.html

- pdk\jpdk\v2\pdkjava.v2.release.notes.html

35.9 Globalization Support Issues and Workarounds

This section describes issues and workarounds related to Globalization Support in Oracle Portal. It includes the following topics:

- Section 35.9.1, "Text Entry Always Right to Left in BiDi Languages"

- Section 35.9.2, "Non-ASCII Character Limitations in Oracle Portal"

- Section 35.9.3, "Multibyte Characters in Log Files"

35.9.1 Text Entry Always Right to Left in BiDi Languages

The direction of all text areas and fields is right to left (RTL). However, you may want some text areas to work left to right (LTR). Internet Explorer users can change this by pressing the left hand side Ctrl and Shift keys.

35.9.2 Non-ASCII Character Limitations in Oracle Portal

When you copy and paste an item URL containing non-ASCII characters from one browser Location or Address field into another, you may not be able to access the item if your login credentials have not been authenticated through OracleAS Single Sign-On.

As a workaround, log in to the portal before you access the item and copy the item URL.

35.9.3 Multibyte Characters in Log Files

In some scenarios, multibyte characters in log files may get corrupted.

For example, when the WLS_PORTAL managed server is started from the Oracle WebLogic Server Administration Console, multibyte characters, such as `username`, `password`, and `is starting`, may get corrupted.

Workarounds:

- Change `-Dfile.encoding=iso-8859-1` to `-Dfile.encoding=utf8` in the WLS_PORTAL start-up parameter through the Oracle WebLogic Server Administration Console.

- Change `-Dfile.encoding=iso-8859-1` to `-Dfile.encoding=utf8` in the `setDomainEnv.sh` file (Located at `MW_HOME/user_projects/domains/DomainName/bin`).

For more information, see the 403179.1 Metalink note.

36

Oracle Reports

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

36.1 General Issues and Workarounds

This section describes the general issues and their workarounds.

36.1.1 Using KDE and GNOME Desktop Managers

If you have installed Oracle Fusion Middleware 11*g* Release 1 (11.1.1.2.0) and your VNC has KDE and GNOME desktop managers, a Null pointer exception is displayed when you invoke the graph wizard.

You must use other desktop managers like fvwm to overcome this problem.

36.1.2 Assigning Reports Target to an Agent in Multi-Agent Case

When a Farm has multiple Enterprise Manager agents, Reports target in a particular Instance may not be assigned to an agent automatically. This may lead to some data loss in Reports Enterprise Manager pages.

Perform the following steps to fix this issue:

1. Log in to Enterprise Manager.

2. From the **Farm** menu, select **Agent Monitored Targets**.

3. Click the **Configure** icon for the target that does not have any agent assigned to it.

   The **Configure Target** page is displayed.

4. Click **Change Agent**.

5. From the **Agent Host** drop-down list, select the appropriate agent.

   6. Click **OK**.

36.1.3 Mapping Users and Roles to Reports Application

In Oracle Fusion Middleware 11*g* Release 1 (11.1.1.2.0) installation, roles and users are not added to the Reports application, by default. To run a report using JPS security, you must add roles and users to the Reports application.

For more information, see:

- "Managing Application Roles" in the *Oracle Fusion Middleware Security Guide*.

- "Managing Users and Security Policies" in the *Oracle Fusion Middleware Publishing Reports to the Web with Oracle Reports Services* manual.

36.1.4 Viewing Your Report in Adobe Reader 9

If you pass the argument `pdfuser=xxxx&pdfsecurity=NOCOPY` and try to open the report in Adobe Acrobat reader 9, the PDF Security option does not work.

To workaround this problem and to view your report in Adobe Reader 9, You must:

- Pass the argument in the order, `pdfsecurity=NOCOPY&pdfuser=xyz`

  OR

- Add the property `pdfowner=abc` to the current string.

36.2 Interoperability Issues and Workarounds

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

Section 36.2.1, "Interoperability between Reports 11g Server and Reports 10.1.2.3 Client"

36.2.1 Interoperability between Reports 11g Server and Reports 10.1.2.3 Client

This interoperability scenario requires the patch 7597820 to be installed. You can download this patch from `http://updates.oracle.com/download/7597820.html`. This patch is required to address the CORBA IDL changes between the two releases for the Job Status information. If you want to use `rwservlet` of Reports 10g Release 2 (10.1.2.3) with the Reports 11g Release 1 (11.1.1) Server, ensure that you install this patch on 10.1.2.3 installation. You can download this patch from `http://metalink.oracle.com`.

36.3 Documentation Errata

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

Section 36.3.1, "Searching Application Policies and Roles in Enterprise Manager"

36.3.1 Searching Application Policies and Roles in Enterprise Manager

Information about searching application policies and application roles by using Oracle Enterprise Manager is not included in the *Publishing Reports to the Web with Oracle Reports Services* manual.

To search Application Policies using Enterprise Manager, perform the following steps:

1. Log in to Oracle Enterprise Manager.

2. Navigate to the **WebLogic Domain** menu.

3. From the **WebLogic Domain** menu, select **Security** > **Application Policies**.

   The **Application Policies** page is displayed.

4. From the **Search** content pane, select the **Select Application Stripe to Search** radio button and select **reports** from the drop-down list.

   You can enter the name of the principal and permission in the **Principal** and **Permission** fields respectively to refine your search.

   > **Note:** If you click **Select Application Name to Search** and select **WLS_REPORTS/reports(11.1.1.2.0)** from the drop-down list, none of the application policies will be displayed.

5. Click the search icon.

To search Application Roles using Enterprise Manager, perform the following steps:

1. Log in to Oracle Enterprise Manger.

2. Navigate to the **WebLogic Domain** menu.

3. From the **WebLogic Domain** menu, select **Security** > **Application Roles**.

   The **Application Roles** page is displayed.

4. From the **Search** content pane, click the **Select Application Stripe to Search** radio button and select **reports** from the drop-down list.

   You can enter the role name in the **Role Name** field to refine your search.

   > **Note:** If you click **Select Application Name to Search** and select **WLS_REPORTS/reports(11.1.1.2.0)** from the drop-down list, none of the application roles will be displayed.

5. Click the search icon.

Part X

Oracle Enterprise Content Manager

Part X contains the following chapters:

- Chapter 37, "Oracle Enterprise Content Management Suite Installation and Configuration"

- Chapter 38, "Oracle Imaging and Process Management"

- Chapter 39, "Oracle Information Rights Manager"

37

Oracle Enterprise Content Management Suite Installation and Configuration

This chapter describes installation and configuration issues associated with Oracle Enterprise Content Management Suite (Oracle ECM). It includes the following topics:

- Section 37.1, "Installation and Configuration Issues"
- Section 37.2, "Documentation Errata"

The documents referred to in this chapter are in the Oracle Fusion Middleware 11*g* Release 1 (11.1.1) Documentation Library on Oracle Technology Network (OTN) at

http://download.oracle.com/docs/cd/E15523_01/index.htm

37.1 Installation and Configuration Issues

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

- Section 37.1.1, "Downloading Software for Installing and Configuring Oracle ECM"

37.1.1 Downloading Software for Installing and Configuring Oracle ECM

You can download the software required for installing and configuring Oracle ECM from either of two Web sites:

- Oracle E-Delivery
- Oracle Technology Network (OTN)

37.1.1.1 Downloading Software from Oracle E-Delivery for Installing and Configuring Oracle ECM

You can use the Oracle E-Delivery Web site to download products for which you have purchased a license.

To download software from Oracle E-Delivery for installing and configuring Oracle ECM

1. Go to the Oracle E-Delivery Web site at

   http://edelivery.oracle.com

2. On the Welcome page, click **Continue**.

3. Enter your user information, and click **Continue**.

4. Select the Oracle Fusion Middleware product pack and your installation platform, and then click **Go**.

5. From the list of media packs, select the one for Release 11.1.1.2.1, which includes Oracle ECM.

   For example, for a Microsoft Windows 32-bit platform, the description of the Release 11.1.1.2.1 media pack is `Oracle Fusion Middleware 11g Media Pack for Microsoft Windows (32-bit)`. The part number is `B55383-12`.

6. Click the Description link to display a list of downloadable ZIP files for the media pack.

   Each ZIP file has a unique part number.

7. Click the **Readme** button at the top of the list for instructions on which files to download for your product licenses.

   For Oracle ECM, you need to download files for either or both of these products:

   - Oracle Imaging and Process Management

     * **Oracle Imaging and Process Management and Information Rights Management Servers 11g (11.1.1.2.1)**, part number V19377-01

     * **Oracle Content Server 10gR3 (10.1.3.3.3) for Microsoft Windows (32-bit)**, part number V13682-01

     * **Content Server 10g Update Bundle for Imaging and Process Management 11g**, part number V19379-01

   - Oracle Information Rights Management

     * **Oracle Imaging and Process Management and Information Rights Management Servers 11g (11.1.1.2.1)**, part number V19377-01

     * **Oracle Information Rights Management Desktop 11g (11.1.1.2.1) for Microsoft Windows (32-bit)**, part number V19378-01

You also need to download the following products for installing and configuring Oracle ECM:

- **Oracle WebLogic Server 11gR1 (10.3.2) for Microsoft Windows (32-bit)**, part number V18591-01

- **Oracle Fusion Middleware Repository Creation Utility 11g (11.1.1.2.1) for Microsoft Windows (32-bit)**, part number V19381-01

If you are using Oracle I/PM with BPEL and AXF, preinstallation requirements include installing the following products:

- **Oracle SOA Suite 11g (11.1.1.2.0)**, part number V18622-01

  For the installation instructions, see Oracle Fusion Middleware Installation Guide for Oracle SOA Suite, 11*g* Release 1 (11.1.1), or Oracle Fusion Middleware Quick Installation Guide for Oracle SOA Suite, 11*g* Release 1 (11.1.1).

- **Oracle JDeveloper 11g and Oracle Application Development Framework 11g (11.1.1.2.0)**, part number V18633-01

  After JDeveloper is installed, you must install the Oracle SOA Suite Design-Time Components. Oracle SOA Suite is not automatically installed with Oracle JDeveloper. Before you can create a SOA application and project, you must install the SOA Suite extension for JDeveloper. For installation instructions, see *Oracle Fusion Middleware Installation Guide for Oracle JDeveloper*.

37.1.1.2 Downloading Software from OTN for Installing and Configuring Oracle ECM

You can download Oracle WebLogic Server 11gR1 (10.3.2), Oracle Database, Repository Creation Utility, and Oracle ECM software from Oracle Technology Network (OTN).

To download software from OTN for installing and configuring Oracle ECM

1. If you do not have Oracle WebLogic Server 11gR1 (10.3.2) on your system, you can download it from the Oracle Fusion Middleware 11*g* Software Downloads page on OTN at

   `http://www.oracle.com/technology/software/products/middleware/htdoc`
   `s/fmw_11_download.html`

   a. Under Runtime Software, click **All available platforms** next to **WebLogic Server 10.3.2** to go to the Oracle WebLogic Server Downloads page.

   Or you can go directly to this page at

   `http://www.oracle.com/technology/software/products/ias/htdocs/wl`
   `s_main.html`

   b. Download Oracle WebLogic Server 11gR1 (10.3.2) for your platform.

2. If you need a database, you can download Oracle database from Oracle Fusion Middleware 11*g* Software Downloads page on OTN at

   `http://www.oracle.com/technology/software/products/middleware/htdoc`
   `s/fmw_11_download.html`

   a. Under Required Additional Software, click **All available platforms** next to **Oracle Database** to go to the Oracle Database Software Downloads page.

   b. Download Oracle Database 11*g* for your platform.

   Instead of Oracle Database, you can use SQL Server or DB2. For information about database versions supported by Repository Creation Utility and Oracle ECM, see the Oracle Fusion Middleware Supported System Configurations page on Oracle Technology Network at

   `http://www.oracle.com/technology/software/products/ias/files/fus`
   `ion_certification.html`

   Refer to the Oracle Fusion Middleware 11g Release 1 (11.1.1.*x*) Product Area, **System Requirements and Supported Platforms for Oracle Imaging and Process Management and Oracle Information Rights Management 11gR1 (xls)**.

3. For the Oracle ECM media and the corresponding version of Repository Creation Utility, go to one of the following pages on OTN:

   - Oracle Imaging and Process Management Downloads page at

     `http://www.oracle.com/technology/software/products/content-manag`
     `ement/index_ipm.html`

     Download the media under Oracle Imaging and Process Management 11g:

     – **Oracle Imaging and Process Management and Information Rights Management Servers 11g**

     – **Oracle Fusion Middleware Repository Creation Utility 11g**

     – **Oracle Content Server 10g**

–   **Content Server 10g Update Bundle for Imaging and Process Management 11g**

■   Oracle Information Rights Management Downloads page at

http://www.oracle.com/technology/software/products/content-manag
ement/index_irm.html

*   For Oracle IRM Server, click **Get Oracle IRM 11g Server Components** to go to the Oracle Information Rights Management 11g Server Downloads, where you can download **Oracle Information Rights Management and Imaging and Process Management Servers 11g** and **Oracle Fusion Middleware Repository Creation Utility 11g**

*   For Oracle IRM Desktop, click **Get Oracle IRM Desktop (for 11g and 10g)** to go to the Oracle Information Rights Management Desktop Downloads page, where you can download **Oracle Information Rights Management Desktop (For 11g and 10g - All Languages)**, for Microsoft Windows (32-bit).

If you are using Oracle I/PM with Oracle BPEL Process Manager and Oracle Application Extension Framework (AXF), preinstallation requirements include installing Oracle SOA Suite 11*g* as well as Oracle JDeveloper and Oracle Application Development Framework 11*g*. You can download these products from the Oracle Fusion Middleware 11gR1 Software Downloads page on OTN at

http://www.oracle.com/technology/software/products/middleware/htdocs/fm
w_11_download.html

On this page, download the following software:

■   **SOA Suite (11.1.1.2.0)** under Runtime Software

For the installation instructions, see *Oracle Fusion Middleware Installation Guide for Oracle SOA Suite*, 11*g* Release 1 (11.1.1), or *Oracle Fusion Middleware Quick Installation Guide for Oracle SOA Suite*, 11*g* Release 1 (11.1.1).

■   **JDeveloper and Application Development Framework (11.1.1.2.0)** under Required Additional Software

After Oracle JDeveloper is installed, you must install the Oracle SOA Suite Design-Time Components. Oracle SOA Suite is not automatically installed with Oracle JDeveloper. Before you can create a SOA application and project, you must install the Oracle SOA Suite Extension for JDeveloper. For installation instructions, see *Oracle Fusion Middleware Installation Guide for Oracle JDeveloper*.

37.2 Documentation Errata

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

■   Section 37.2.1, "Oracle Universal Content Management 10g for Oracle I/PM Repository"

■   Section 37.2.2, "Location of setNMProps Script for Node Manager Configuration"

■   Section 37.2.3, "Correction to Instructions for Setting AES Key Store Password on a UNIX System"

37.2.1 Oracle Universal Content Management 10g for Oracle I/PM Repository

The location of the Content Server 10*g* Update Bundle for Imaging and Process Management 11g was not included in *Oracle Fusion Middleware Installation Guide for Oracle Enterprise Content Management Suite*, Section 1.3.5, Oracle Universal Content Management 10g for Oracle I/PM Repository, on page 1-6.

If you are installing Oracle Imaging and Process Management (Oracle I/PM), it requires Oracle Universal Content Management (Oracle UCM) 10*g*R3 (10.1.3.3.3)), also referred to as Oracle Content Server 10*g*R3, to be installed as the Oracle I/PM Repository. After installing Oracle Content Server 10*g*R3, you need to update the system with the Content Server 10*g* Update Bundle. Both are required for Oracle UCM 10*g* to work with Oracle I/PM 11*g*.

You can download both Oracle Content Server 10gR3 and the Content Server 10g Update Bundle from Oracle E-Delivery or Oracle Technology Network (OTN). For more information about the software locations, see Section 37.1.1, "Downloading Software for Installing and Configuring Oracle ECM."

For information about installing Oracle Content Server 10*g*R3, see the Getting Started section of the Oracle Content Server page on Oracle Technology Network at

```
http://www.oracle.com/technology/products/content-management/cdbs/cs.html
```

For information on how to install the Content Server 10g Update Bundle, see *Oracle Fusion Middleware Installation Guide for Oracle Enterprise Content Management Suite*, Section 5.1.2, "Configuring Oracle Content Server 10g to work with Oracle I/PM. "

After you deploy Oracle I/PM to an Oracle WebLogic Server Managed Server, by creating or extending a WebLogic Server domain, you need to upgrade the JDK version of your Oracle Content Server 10*g*R3 (Oracle UCM) installation to the same JDK 1.6 version that Oracle I/PM uses. This is the JDK version that you specified for the Oracle I/PM Managed Server on the Configure Server Start Mode and JDK screen of the Fusion Middleware Configuration Wizard. For information about the JDK version that Oracle I/PM supports, see the Oracle Fusion Middleware Supported System Configurations page on Oracle Technology Network at

```
http://www.oracle.com/technology/software/products/ias/files/fusion_
certification.html
```

Refer to the Oracle Fusion Middleware 11g Release 1 (11.1.1.*x*) Product Area, **System Requirements and Supported Platforms for Oracle Imaging and Process Management and Oracle Information Rights Management 11gR1 (xls)**.

For information about changing the JDK version that Oracle Content Server 10*g*R3 uses, see *Oracle Universal Content Management Content Server Installation Guide*, version 10*g*R3, for your operating system.

37.2.2 Location of setNMProps Script for Node Manager Configuration

The path name to the setNMProps script is incorrect in the "Starting Node Manager" section in *Oracle Fusion Middleware Installation Guide for Oracle Enterprise Content Management Suite* Section 7.3, on page 7-3, and in *Oracle Fusion Middleware Installation Guide for Oracle Enterprise Content Management Suite*, Section 1.7.5, on page 1-9. In both places, the text currently states this:

"On a UNIX operating system, run this script:

```
ECM_ORACLE_HOME/common/bin/setNMProps.sh
```

On a Windows operating system, run this script:

```
ECM_ORACLE_HOME\common\bin\setNMProps.cmd"
```

Instead, the text should state this:

"On a UNIX operating system, run this script:

```
MW_HOME/oracle_common/common/bin/setNMProps.sh
```

On a Windows operating system, run this script:

```
MW_HOME\oracle_common\common\bin\setNMProps.sh"
```

37.2.3 Correction to Instructions for Setting AES Key Store Password on a UNIX System

The instructions for setting the AES key store password on a UNIX system are incorrect in *Oracle Fusion Middleware Installation Guide for Oracle Enterprise Content Management Suite* Section 6.1.2.4, "Setting Passwords for the Key Store," on page 6-6. The text currently states this:

"On a UNIX operating system:

```
ECM_ORACLE_HOME/common/bin/wlst.sh
connect('username','password','t3://adminServerHost:adminServerPort')
createCred("IRM","keystore:irm.jks","dummy","password")
createCred("IRM","key:irm.jceks:oracle.irm.wrap","dummy","password")"
```

In the text, the first `createCred` command should be as follows, with `jceks` instead of `jks`:

```
createCred("IRM","keystore:irm.jceks","dummy","password")
```

38

Oracle Imaging and Process Management

This chapter describes issues associated with Oracle Imaging and Process Management. It includes the following topics:

- Section 38.1, "General Issues"
- Section 38.2, "Browser Compatibility Issues"
- Section 38.3, "Accessibility Issues"
- Section 38.4, "Document Errata"

38.1 General Issues

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

- Section 38.1.1, "I/PM Session Time Out When Using OSSO Requires Browser Refresh"
- Section 38.1.2, "Mixed Translations On Page"
- Section 38.1.3, "Deleting More Than 100 Documents Can Cause Http 404 Errors"
- Section 38.1.4, "Time Zone Option Removed from Preferences Page"
- Section 38.1.5, "I/PM Documents May Be Visible Natively Within WebCenter"
- Section 38.1.6, "Removing Full-Text Search Capabilities From Defined Applications"
- Section 38.1.7, "Application Field Limitations When Using Oracle Text Search"

38.1.1 I/PM Session Time Out When Using OSSO Requires Browser Refresh

When using Oracle Single Sign On and an I/PM session expires, WebLogic Server will return an internal server error. Refreshing the page returns to the I/PM log in page for reauthentication to start a new session.

38.1.2 Mixed Translations On Page

Oracle products support 10 standard languages for administrative tasks and 27 standard languages for user tasks. This means that in instances when a selected language is supported for user but not administrative tasks and an administrative task is performed, multiple languages may be displayed in the user interface.

38.1.3 Deleting More Than 100 Documents Can Cause Http 404 Errors

There is a known issue with Microsoft Internet Explorer if attempting to delete more than 100 documents using a search results table. Doing so can cause Internet Explorer to return a 404 Page Not Found error or potentially lock. This is due to Internet Explorer limiting URL strings to a maximum of 2083 characters. If it is necessary to delete over 100 documents using a search results table, Mozilla Firefox supports URLs up to 65,000 characters.

38.1.4 Time Zone Option Removed from Preferences Page

The option to specify a local time zone has been removed from the Personal Information section of the Preferences page. All time information is now based on the time zone of the I/PM server. This means that any date metadata generated by the Oracle I/PM system, such as document creation date, modify date, or other audit events, is governed by the time zone of the I/PM server, and not the user time zone. This can cause date data to be displayed differently to what may be expected on some documents because the time zone may cross midnight.

For example, if the I/PM server is in the Greenwich Mean Time (GMT) time zone and a document is created in the GMT+6 time zone on January 10th at 2:00 AM local time, the creation date that will be displayed in the user interface will be January 9th at 8:00 PM. This can have implications when searching for content based on creation and modification dates of documents.

38.1.5 I/PM Documents May Be Visible Natively Within WebCenter

If an I/PM is viewed through WebCenter, then the document is cached in WebCenter. This means that if a document is viewed in WebCenter prior to being annotated, the non-annotated document is viewable until such time as the WebCenter cache is refreshed. Redacting a document after it has been cached in WebCenter does not cause the original document to be purged from the WebCenter cache, and so redacted content may be compromised. To help protect redacted content when I/PM is integrated with WebCenter, use the Viewer on the Upload page to redact documents prior to uploading to I/PM.

38.1.6 Removing Full-Text Search Capabilities From Defined Applications

Removing full-text search capabilities from a defined application can cause an error in any defined search against that application if the Document Content condition is not also removed from the search. When modifying an existing application to remove full-text indexing capabilities, ensure that you also remove all Document Content conditions from any defined searches against that application.

38.1.7 Application Field Limitations When Using Oracle Text Search

When Oracle I/PM is configured to use OracleTextSearch and an application is defined to do full-text indexing, a maximum limit of 20 SDATA fields for the Content Server repository is imposed on I/PM. SDATA fields are defined as optimized fields by the Oracle Text Search component and are typically non-text, non-memo fields, although other criteria can exist to define text fields as optimized SDATA fields.

When defining an application, Oracle I/PM queries the repository DOCMETA table for the number of available SDATA fields and does not allow the creation of any non-text fields within the application beyond the available number. However, additional components installed on the Content Server repository, such as Folders or Discussions, may reduce the total number of available SDATA fields. Because other

configurations may consume SDATA outside of the DOCMETA table, you may be able to add fields to an application but get an error when trying to rebuild the search index in Content Server. If this occurs, you must redefine the application with fewer non-text fields until you are able to successfully rebuild the search index.

38.2 Browser Compatibility Issues

This section describes browser compatibility issues. It includes the following topics:

- Section 38.2.1, "Safari: No Keyboard Access To Reorder Columns Select Order Buttons"

- Section 38.2.2, "Safari: Unexpected Tab Order In Search Results Toolbar and Viewer Menus"

- Section 38.2.3, "Safari: Viewer Menus and Dialog Boxes Hidden Beneath Main Page Region"

- Section 38.2.4, "Safari: Unable to Use Keyboard to Select Panels In Viewer"

- Section 38.2.5, "Safari: Cannot Get Out Of The Applet Using Keyboard"Section 38.2.1, "Safari: No Keyboard Access To Reorder Columns Select Order Buttons"

- Section 38.2.6, "IE: Non-ASCII Characters Not Supported in Internet Explorer for ExecuteSearch"

38.2.1 Safari: No Keyboard Access To Reorder Columns Select Order Buttons

On the Reorder Columns page in Safari, the buttons to move a selected item up or down the page are not accessible when using keyboard commands to access the page elements. The Reorder Columns page is displayed when selecting **View**, then **Reorder Columns** on a search results page. To work around this issue, you must either use a different browser that supports these keyboard commands, such as Microsoft Internet Explorer or Mozilla Firefox, or navigate the Reorder Columns page with a mouse in Safari.

38.2.2 Safari: Unexpected Tab Order In Search Results Toolbar and Viewer Menus

When using the keyboard tab button to select functions on the Toolbar of a Search results page, the expected behavior is to focus on the first option (View) and then move to the next (Email). Instead, the tab button causes focus to move through the hidden View submenus before moving the focus to Email. Similarly, when using the tab button to select menus on the Viewer, the expected behavior is to move focus from the first Viewer menu (File) to the next (View). Instead, the tab button causes the focus to move through the hidden submenus of each top-level menu before moving focus to the next menu.

38.2.3 Safari: Viewer Menus and Dialog Boxes Hidden Beneath Main Page Region

There is a problem with how Safari handles layer order of page items in the Viewer. This causes the main page region where documents are displayed to hide all or parts of Viewer menus and dialog boxes when a document is viewed using Safari. To work around this issue, expand the Properties, History, or Sticky Notes panel into the main page region enough to allow the obscured items to be displayed, prior to accessing the menus or any dialog boxes. This is not an issue when using either Microsoft Internet Explorer or Mozilla Firefox, and an alternate workaround would be to use either of these browsers to view documents.

38.2.4 Safari: Unable to Use Keyboard to Select Panels In Viewer

When using the keyboard tab button to select items on the Viewer, none of the panels (History, Sticky Notes, or Properties) can be selected. This is a known issue with Safari. If you need to use the keyboard to select a panel in the Viewer, you must use either Microsoft Internet Explorer or Mozilla Firefox to view documents.

38.2.5 Safari: Cannot Get Out Of The Applet Using Keyboard

When using the keyboard tab button to select items on the Viewer, keyboard commands cannot focus outside of the Viewer applet and tabbing will stay within the Viewer. This is a known issue with Safari. If you need to use the keyboard to select one of these options, you must use either Microsoft Internet Explorer or Mozilla Firefox.

38.2.6 IE: Non-ASCII Characters Not Supported in Internet Explorer for ExecuteSearch

The Search URL Tool (ExecuteSearch) does not work in Microsoft Internet Explorer if non-ascii characters are used in the search name. If it is necessary for your search name to have non-ascii characters, you must use Mozilla Firefox version 3.5 or higher and set the following parameters:

- prefs.converted-to-utf8=true

- network.standard-url.escape-utf8=true

- network.standard-url.encode-utf8=true

- network.standard-url.encode-query-utf8=true

38.3 Accessibility Issues

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

38.3.1 Firefox: Focus Issue With Upload Button Using Keyboard

With Firefox, when creating an input using Manage Inputs options, an issue occurs with keyboard focus for the Upload button. When attempting to tab to the Upload button, the focus changes to the browser banner instead. Use Shift+Tab to return to the

dialog window and the focus should stay in the dialog window, or use a different supported browser.

38.3.2 Focus Issue Adding Document Security Using Keyboard

On the Document Security page of the Application Creation Wizard, clicking Search incorrectly changes the focus away from the dialog box. This issue occurs in Internet Explorer and Safari. This issue does not occur in screen reader mode.

38.3.3 Name of File Selected For Import Not Displayed in Screen Reader Mode

When in screen reader mode and selecting a file to import, the file is loaded and the Next button becomes available, but the name of the file to be imported is not displayed.

38.3.4 Issues Selecting From Calendar Using Keyboard

In Internet Explorer 7, when selecting dates from a calendar using the keyboard, you cannot select a day. This is not an issue in Firefox, Internet Explorer 8 or Safari 4. In addition, the following buttons are skipped when tabbing: Previous month, Previous year, Month increase/decrease, and Year increase/decrease. An alternative to selecting the date with the keyboard is to manually enter the date with the number keys.

38.3.5 Focus Issue in Create Searches Wizard Using Keyboard

After completing fields in the Create New Search Wizard, the keyboard focus changes to the browser URL and you must tab through the banner and navigation before you can edit the current page.

38.3.6 Annotations Not Recognized By JAWS

When viewing a document with annotations while running JAWS, you can tab to an annotation, but no description is read by JAWS.

38.3.7 403 Link Error Returned For Collapse Pane Link

When viewing a document using screen reader mode and Advanced Viewer mode, JAWS reaches the Close Tab options in the Viewer and reads a collapse pane link that is not visible after More options. If you click when JAWS reads *link*, a 403 Forbidden Page error is returned.

38.3.8 Internet Explorer: Focus Issue During Search Using Keyboard

When searching using Internet Explorer, expanding and collapsing the instructions tree using the keyboard incorrectly changes the focus to the **Skip to Content** link instead of the next row.

38.3.9 Date Selected From Calendar Lost Using Keyboard

When using the keyboard to select a date from a calendar control, the selected date is not retained. The workaround is to enter the date into the date field using the number keys on the keyboard.

38.3.10 Viewer Keyboard Shortcuts Missing From Documentation

The shortcuts listed in Table 38–1 are available in the viewer. All shortcuts except the first one listed (M) apply to the Advanced Viewer when the applet has focus.

Table 38–1   Image Viewer Keyboard Shortcuts

Keyboard Shortcut	Description
M	Exits the applet and changes the focus to the menus at the top of the viewer page.
H	Adds a highlight.
R	Adds a redaction.
L	Adds a line.
S	Adds a sticky note.
T	Opens a new text annotation.
X	Places a stamp annotation.
Tab	Tabs forward through the toolbar and annotations.
Shift + Tab	Tabs backward through the toolbar and annotations.
N	Selects the next annotation.
P	Selects the previous annotation.
Arrows (or number pad arrows)	Moves the selected annotation.
Shift + Arrows (or Shift + number pad arrows)	Sizes the selected annotation.
C	Copies the selected annotation.
V	Pastes the copied annotation.
Del	Deletes the selected annotation.
Z	Undoes the last deletion.
W	Rotates the document clockwise.
Q	Rotates the document counterclockwise.
E	Changes the magnification to fit the document's height.
F	Changes the magnification to fit the document's width.
1,2,3,4	Zooms to a quadrant on the document.
G	Opens the GoTo Page dialog box.

38.3.11 Some Annotation Buttons Incorrectly Read by JAWS

When you first open a document in Advanced Viewer mode using screen reader mode, JAWS incorrectly adds the phrase *Insert F1 Help Text* after each button name.

38.3.12 Internet Explorer: Long Panels Not Visible In Screen Reader

When using Microsoft Internet Explorer and **I use a screen reader** is enabled on the user preferences page, some panels in the Navigation pane may not display, although the text of the panel title is still read. This is caused when the panel name is too long. Depending on the user interface language, this could happen to one or multiple

panels. If you expand the panel above the hidden panel, the hidden panel is then displayed.

38.4 Document Errata

This section has the following topic:

38.4.1 Incorrect Date Specified in User Interface Section of Administrator Guide

The *Oracle® Fusion Middleware Administrator's Guide for Imaging and Process Management* has incorrectly specified a date in section A.34.1 on page A-38. The example in the Format Values element description for formatting a date field currently states:

". . . if the Format Value field were populated with *yyMMMdd - HH:mm:ss*, the Sample Date would display *10Jan01 - 15:16:59* for a date and time of January 10th, 2010 . . ."

Instead, the statement should correctly read:

". . . if the Format Value field was populated with *yyMMMdd - HH:mm:ss*, the Sample Date would display *10Jan01 - 15:16:59* for a date and time of January 1st, 2010 . . ."

39

Oracle Information Rights Manager

This chapter describes issues associated with Oracle Information Rights Manager. It includes the following topics:

- Section 39.1, "General Issues and Workarounds"
- Section 39.2, "Configuration Issues and Workarounds"
- Section 39.3, "Documentation Errata"

39.1 General Issues and Workarounds

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

- Section 39.1.1, "Unreadable Error Message Text When Client and Server Locales are Different"
- Section 39.1.2, "Changes Lost if Tab Changed Before Applying the Apply Button"
- Section 39.1.3, "Some File Formats are Not Supported When Using the Microsoft Office 2007 Compatibility Pack with Microsoft Office 2003"
- Section 39.1.4, "Microsoft Word May Hang if a Sealed Email is Open During Manual Rights Check-In"
- Section 39.1.5, "Sealed Emails in Lotus Notes will Sometimes Show a Temporary File Name"
- Section 39.1.6, "AutoRecover Fails for Some Microsoft Office Applications"
- Section 39.1.7, "No Support for Sealing Files of 2GB or Larger in Size in Oracle IRM Desktop"
- Section 39.1.8, "Inappropriate Authentication Options After Failed Login on Legacy Servers When Setting Up Search"
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- Section 39.1.10, "Opening Legacy Sealed Documents in Microsoft Office 2007 May Fail on First Attempt"
- Section 39.1.11, "Languages Drop-Down Lists in Oracle IRM Consoles"
- Section 39.1.12, "Log Out Link Inoperative When Using OAM 11g for SSO"
- Section 39.1.13, "Double-byte Languages Cannot be Used for Entering Data with Legacy Servers"
- Section 39.1.14, "The Ability to Watermark PDF Files Has Been Removed"
- Section 39.1.15, "Support for Novell GroupWise Email Has Been Removed"

- Section 39.1.16, "Use of SPACE Key Instead of Return Key in Oracle IRM Server"
- Section 39.1.17, "Calendar Controls in Oracle IRM Server Not Accessible Via the Keyboard"

39.1.1 Unreadable Error Message Text When Client and Server Locales are Different

Error messages are sent to the client (Oracle IRM Desktop) in the language of the server (Oracle IRM Server). Therefore, if the locale of the server is different to the locale of the client, the error code may be rendered in garbage characters. The error code remains readable, and can be provided to support as necessary.

39.1.2 Changes Lost if Tab Changed Before Applying the Apply Button

On the Oracle IRM Server Management Console, if you make changes on a tabbed page that has an Apply button, and then move to another tab without using the Apply button, the changes will be lost. You will not be prompted to save the changes that you made.

39.1.3 Some File Formats are Not Supported When Using the Microsoft Office 2007 Compatibility Pack with Microsoft Office 2003

These include The following Microsoft PowerPoint and Microsoft Excel formats are not supported for sealing when using the Office 2007 Compatibility Pack with Office 2003 and earlier: SPOTM, SPOTX, SPPTM, SPPTX, SXLSX, and SXLTX. For these applications, use other file formats that are supported for sealing.

39.1.4 Microsoft Word May Hang if a Sealed Email is Open During Manual Rights Check-In

In Oracle IRM Desktop, if you attempt to check in your rights while a sealed email is open in Microsoft Word, Microsoft Word may hang. It is recommended that you do not check in your rights while a sealed email is open.

39.1.5 Sealed Emails in Lotus Notes will Sometimes Show a Temporary File Name

In Lotus Notes, if a sealed email has a communication thread with multiple messages or replies, the title bar may show a temporary file name instead of the correct subject name. You may also be prompted to save changes when you have not made any. No harm should arise from these anomalies.

39.1.6 AutoRecover Fails for Some Microsoft Office Applications

This problem affects the following Office 2007 applications in Microsoft Vista SP2: Microsoft PowerPoint, Microsoft PowerPoint Chinese (PPTX), and Microsoft Excel. This problem also affects Microsoft Word 2000. AutoRecover fails for these applications. It is recommended that you do not rely on AutoRecover. Instead, save your work frequently when using these applications.

39.1.7 No Support for Sealing Files of 2GB or Larger in Size in Oracle IRM Desktop

Sealing files of size 2GB or larger is not supported in the current release of Oracle IRM Desktop.

39.1.8 Inappropriate Authentication Options After Failed Login on Legacy Servers When Setting Up Search

When setting up indexed search, if you enter incorrect authentication credentials for a legacy server (for example, a 10*g* Oracle IRM Server) that has been set up for Windows NT authentication, the login retry dialog will show options for Windows basic authentication. You should not use Windows Authentication credentials to log in to legacy servers set up for Windows NT Authentication.

39.1.9 Opening Microsoft Excel files in Microsoft SharePoint

Sealed Microsoft Excel files cannot be opened from the Document Management pane in Microsoft SharePoint.

39.1.10 Opening Legacy Sealed Documents in Microsoft Office 2007 May Fail on First Attempt

If users attempt to open a legacy Microsoft Office 2007 document (a document sealed with an older version of Oracle IRM), and Oracle IRM Desktop has not been synchronized with the server against which the document was sealed, the attempt will fail. The sealed document will not be opened, and the user will not be prompted to authenticate against the server to which the document was sealed. A second attempt to open the sealed document should succeed, because the initial attempt should have synchronized Oracle IRM Desktop with the server. Alternatively, the user can synchronize to the server manually (using the Oracle IRM Desktop Options dialog) before opening a legacy sealed document.

39.1.11 Languages Drop-Down Lists in Oracle IRM Consoles

The language names used in drop-down lists on the Oracle IRM pages of the Oracle Fusion Middleware Control Console may not match the language names shown in the Oracle IRM Server Management Console. The names in the Management Console are the correct ones, and the names in the Control Console will be corrected in a later release to match them.

39.1.12 Log Out Link Inoperative When Using OAM 11*g* for SSO

When using OAM (Oracle Access Management) 11*g* for SSO, the Log Out link on the Oracle IRM Server Management Console does not log the user out.

39.1.13 Double-byte Languages Cannot be Used for Entering Data with Legacy Servers

This release of Oracle IRM Desktop is available in many more languages than previous releases, including some double-byte languages. However, for legacy (10*g*) servers, as previously, data (user names, etc.) must still be entered using the 7-bit ASCII range of characters.

39.1.14 The Ability to Watermark PDF Files Has Been Removed

In previous releases, you have been able to add Oracle IRM fields to PDF documents to create uneditable dynamic text that reveals information about a sealed document. This facility has been removed from this release. The use of Oracle IRM fields in Microsoft Word and Excel documents is not affected by this change.

39.1.15 Support for Novell GroupWise Email Has Been Removed

Oracle IRM Desktop no longer supports the Novell GroupWise email system.

39.1.16 Use of SPACE Key Instead of Return Key in Oracle IRM Server

In some dialogs in the Oracle IRM Server Management Console, the Return key does not execute buttons. When this occurs, use the SPACE key instead.

39.1.17 Calendar Controls in Oracle IRM Server Not Accessible Via the Keyboard

In the Oracle IRM Server Management Console, the calendar controls are not accessible via the keyboard, and do not appear if the console is in Screen Reader mode. To enter a date using the keyboard, the date should be typed in.

39.2 Configuration Issues and Workarounds

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

- Section 39.2.1, "Upgrading Oracle IRM Desktop From Versions Earlier Than 5.5"
- Section 39.2.2, "Synchronizing Servers After an Upgrade of Oracle IRM Desktop"
- Section 39.2.3, "Reapplying Lost Settings After an Upgrade of Oracle IRM Desktop"
- Section 39.2.4, "Changing Oracle IRM Account When Authenticated Using Username and Password"
- Section 39.2.5, "Post-Installation Steps Required for Oracle IRM Installation Against Oracle RAC"
- Section 39.2.6, "Correcting a `failed hostname verification check` Error"
- Section 39.2.7, "Enabling Search With Sharepoint 2007"
- Section 39.2.8, "Enabling the Oracle IRM Installation Help Page to Open in a Non-English Server Locale"

39.2.1 Upgrading Oracle IRM Desktop From Versions Earlier Than 5.5

You can upgrade to this release from Oracle IRM Desktop version 5.5 onwards, by running the installation wizard on the computer that has the older version.

For versions earlier than 5.5, or from any version of SealedMedia Unsealer or Desktop, you can upgrade to this release only by uninstalling the older version and installing this release.

When upgrading from an earlier version of Oracle IRM Desktop, you will lose the rights to use sealed documents that are stored locally (the rights that enable you to continue working when you are offline). When this happens, you will have to obtain new rights by going online and synchronizing with the server. For this reason, do not begin an upgrade unless you have online access to the server.

When upgrading on Windows Vista or Windows 7, you may encounter a file lock and be prompted to retry, ignore, or cancel. You can safely use the ignore option if this happens.

39.2.2 Synchronizing Servers After an Upgrade of Oracle IRM Desktop

If you are upgrading to this release of Oracle IRM Desktop from an earlier 10*g* release, you will not be synchronized to any servers (Oracle IRM Server). This will show as a blank list on the Servers tab of the Oracle IRM Desktop Options dialog. Servers are automatically added to the list when you open sealed documents for which you have access rights. The easiest way to repopulate your list of servers is to open documents that have been sealed against servers on which you have rights.

39.2.3 Reapplying Lost Settings After an Upgrade of Oracle IRM Desktop

If you are upgrading to this release of Oracle IRM Desktop from an earlier 10*g* release, your previous settings (as shown on the Oracle IRM Desktop Options dialog) are not applied to the new installation. These include support for email systems, so you should reset these before attempting to work with sealed emails in Microsoft Outlook and Lotus Notes.

39.2.4 Changing Oracle IRM Account When Authenticated Using Username and Password

Oracle IRM Desktop caches user rights in an offline database. In earlier releases, this database was shared by all users of a machine. In this release, there is one offline database per Windows user.

You are strongly advised to use only one Oracle IRM account with each Windows account.

If you authenticate to the server (Oracle IRM Server) with a username and password, you can change the account you use as follows:

1. On the Update Rights tab of the Oracle IRM Desktop Options dialog, check in rights for all servers by clicking Check in.

2. On the Servers tab of the Oracle IRM Desktop Options dialog, select the server to be updated and click **Clear Password**.

3. Restart Windows.

4. On the Update Rights tab of the Oracle IRM Desktop Options dialog, synchronize rights for all servers by clicking Synchronize.

Users who are automatically authenticated to the server using Windows authentication cannot change their Oracle IRM account.

Access to the offline database is protected by your Windows credentials. You are no longer required to additionally authenticate to Oracle IRM when working offline.

39.2.5 Post-Installation Steps Required for Oracle IRM Installation Against Oracle RAC

To use Oracle RAC with an Oracle IRM instance, the Oracle IRM data source needs to be altered using the WebLogic Administration Console and the following procedure:

1. From Services, select **JDBC**, then select **DataSources**.

2. Select the OracleIRM data source.

3. On the Transaction tab, check **Supports Global Transactions**, then check **Emulate Two-Phase Commit**.

4. Click **Save**.

This will set the `global-transactions-protocol` for Oracle IRM data-sources for Oracle RAC to `EmulateTwoPhaseCommit`.

39.2.6 Correcting a `failed hostname verification check` Error

When using the sealing server web services, a `WebServiceException` with a message similar to this may be seen:

```
javax.xml.ws.WebServiceException: @ javax.net.ssl.SSLKeyException:
[Security:090504]Certificate chain received from irm.example.com
- 192.168.0.1 failed hostname verification check. Certificate contained
irm.example.com but check expected irm.example.com.
```

Where this error is encountered:

1. Open the `startWebLogic.sh` file and append the following line to the JAVA OPTIONS:

   `-Dweblogic.security.SSL.ignoreHostnameVerification=true`

2. Save the `startWebLogic.sh` file.

3. Restart the managed server(s).

39.2.7 Enabling Search With Sharepoint 2007

To enable searching of files with Sharepoint 2007, change the configuration as follows:

1. Run DCOMCNFG.EXE (for example, by entering `dcomcnfg` into the Windows Run dialog and clicking OK).

2. Navigate to Component Services, Computers, My Computer, DCOM Config, OracleIRMServiceHost.

3. Right click and select **Properties** on OracleIRMServiceHost object.

4. Navigate to the Security tab in the OracleIRMServiceHost Properties dialog.

5. On the Security tab, in the Launch and Activation Permissions section, check the **Customize** check box and then click the **Edit** button

6. In the Launch and Activation Permission dialog, click the **Add** button to bring up the user selection dialog.

7. Add **Everyone** to the object names.

8. In the Launch and Activation Permission dialog, select the **Everyone** group name, then check the **Local Launch** and **Local Activation** check boxes.

9. On the Security tab, in the **Access Permissions** section, check the **Customize** check box, then click the **Edit** button.

10. In the Access Permission dialog, click the **Add** button to bring up the user selection dialog.

11. Add **Everyone** to the object names.

12. In the Access Permission dialog, select the **Everyone** group name, then check the **Local Access** check box.

Follow these steps to restart the `OracleIRMServiceHost` service with the new DCOM settings:

1. Start the service management console (for example, by entering `services.msc` into the Windows Run dialog and clicking OK).

2. Find the `OracleIRMServiceHost` service in the list of services.

3. Right-click `OracleIRMServiceHost` and select **Restart**.

39.2.8 Enabling the Oracle IRM Installation Help Page to Open in a Non-English Server Locale

Use the following procedure to enable the Oracle IRM installation help page to open in a non-English server locale:

1. Unzip the shiphome.

2. Extract all the non-HTM files (7 files in total) from `help\en` in the `ecminstallhelp.jar` file located in `Disk1\stage\ext\jlib\`

3. Put these 7 files into the folder jar for the locale in which you will install ECM.

4. Overwrite `ecminstallhelp.jar` with the modified version.

39.3 Documentation Errata

There are no known issues at this time.