

# Oracle® Application Server 10g

Release Notes

10g (9.0.4) for Linux x86

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Oracle Application Server 10g Release Notes, 10g (9.0.4) for Linux x86

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## Oracle Application Server 10g Release Notes, 10g (9.0.4) for Linux x86

Part No. B12261-03

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# Preface

This preface includes the following topics:

- [Documentation Accessibility](#)
- [Related Documentation](#)
- [Conventions](#)

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## Conventions

This section describes the conventions used in the text and code examples of this documentation set. It describes:

- [Conventions in Text](#)
- [Conventions in Code Examples](#)

### Conventions in Text

We use various conventions in text to help you more quickly identify special terms. The following table describes those conventions and provides examples of their use.

Convention	Meaning	Example
<b>Bold</b>	Bold typeface indicates terms that are defined in the text or terms that appear in a glossary, or both.	When you specify this clause, you create an <b>index-organized table</b> .
<i>Italics</i>	Italic typeface indicates book titles or emphasis.	<i>Oracle9i Database Concepts</i> Ensure that the recovery catalog and target database do <i>not</i> reside on the same disk.

Convention	Meaning	Example
UPPERCASE monospace (fixed-width) font	Uppercase monospace typeface indicates elements supplied by the system. Such elements include parameters, privileges, datatypes, RMAN keywords, SQL keywords, SQL*Plus or utility commands, packages and methods, as well as system-supplied column names, database objects and structures, usernames, and roles.	You can specify this clause only for a NUMBER column.  You can back up the database by using the BACKUP command.  Query the TABLE_NAME column in the USER_TABLES data dictionary view.  Use the DBMS_STATS.GENERATE_STATS procedure.
lowercase monospace (fixed-width) font	Lowercase monospace typeface indicates executables, filenames, directory names, and sample user-supplied elements. Such elements include computer and database names, net service names, and connect identifiers, as well as user-supplied database objects and structures, column names, packages and classes, usernames and roles, program units, and parameter values.  <b>Note:</b> Some programmatic elements use a mixture of UPPERCASE and lowercase. Enter these elements as shown.	Enter sqlplus to open SQL*Plus.  The password is specified in the orapwd file.  Back up the datafiles and control files in the /disk1/oracle/dbs directory.  The department_id, department_name, and location_id columns are in the hr.departments table.  Set the QUERY_REWRITE_ENABLED initialization parameter to true.  Connect as oe user.  The JRepUtil class implements these methods.
lowercase italic monospace (fixed-width) font	Lowercase italic monospace font represents placeholders or variables.	You can specify the <i>parallel_clause</i> .  Run <i>Uold_release</i> .SQL where <i>old_release</i> refers to the release you installed prior to upgrading.

## Conventions in Code Examples

Code examples illustrate SQL, PL/SQL, SQL\*Plus, or other command-line statements. They are displayed in a monospace (fixed-width) font and separated from normal text as shown in this example:

```
SELECT username FROM dba_users WHERE username = 'MIGRATE';
```

The following table describes typographic conventions used in code examples and provides examples of their use.

Convention	Meaning	Example
[ ]	Brackets enclose one or more optional items. Do not enter the brackets.	DECIMAL ( <i>digits</i> [ , <i>precision</i> ])
{ }	Braces enclose two or more items, one of which is required. Do not enter the braces.	{ENABLE   DISABLE}
	A vertical bar represents a choice of two or more options within brackets or braces. Enter one of the options. Do not enter the vertical bar.	{ENABLE   DISABLE} [COMPRESS   NOCOMPRESS]
...	Horizontal ellipsis points indicate either: <ul style="list-style-type: none"> <li>That we have omitted parts of the code that are not directly related to the example</li> <li>That you can repeat a portion of the code</li> </ul>	CREATE TABLE ... AS <i>subquery</i> ;  SELECT <i>col1, col2, ... , coln</i> FROM employees;
.	Vertical ellipsis points indicate that we have omitted several lines of code not directly related to the example.	
Other notation	You must enter symbols other than brackets, braces, vertical bars, and ellipsis points as shown.	acctbal NUMBER(11,2); acct CONSTANT NUMBER(4) := 3;
<i>Italics</i>	Italicized text indicates placeholders or variables for which you must supply particular values.	CONNECT SYSTEM/ <i>system_password</i> DB_NAME = <i>database_name</i>
UPPERCASE	Uppercase typeface indicates elements supplied by the system. We show these terms in uppercase in order to distinguish them from terms you define. Unless terms appear in brackets, enter them in the order and with the spelling shown. However, because these terms are not case sensitive, you can enter them in lowercase.	SELECT last_name, employee_id FROM employees; SELECT * FROM USER_TABLES; DROP TABLE hr.employees;

---

<b>Convention</b>	<b>Meaning</b>	<b>Example</b>
lowercase	Lowercase typeface indicates programmatic elements that you supply. For example, lowercase indicates names of tables, columns, or files.  <b>Note:</b> Some programmatic elements use a mixture of UPPERCASE and lowercase. Enter these elements as shown.	<pre>SELECT last_name, employee_id FROM employees;  sqlplus hr/hr  CREATE USER mjones IDENTIFIED BY ty3MU9;</pre>

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## Introduction

This chapter introduces Oracle Application Server 10g (9.0.4) Release Notes. 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, "Certification Information"](#)
- [Section 1.5, "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://otn.oracle.com/docs/products/ias/content.html>

## 1.2 Purpose of this Document

This document contains the release information for Oracle Application Server 10g (9.0.4). It describes differences between Oracle Application Server 10g (9.0.4) and its documented functionality.

It includes the following parts:

- [General Oracle Application Server Issues](#)
- [J2EE, Web Services, and Internet Applications Issues](#)
- [OracleAS Portal Issues](#)
- [OracleAS Wireless Issues](#)
- [Caching Issues](#)
- [Business Intelligence Issues](#)
- [E-Business Integration Issues](#)
- [Security and Identity Management Issues](#)

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

## 1.3 Operating System Requirements

Oracle Application Server installation and configuration will not complete successfully unless users meet the hardware and software pre-requisite requirements before installation. See *Oracle Application Server 10g Installation Guide* for a complete list of operating system requirements.

## 1.4 Certification Information

The latest certification information for Oracle Application Server 10g (9.0.4) is available at:

<http://metalink.oracle.com>

## 1.5 Licensing Information

Licensing information for Oracle Application Server 10g (9.0.4) is available at:

<http://oraclestore.oracle.com>

Detailed information regarding license compliance for Oracle Application Server 10g (9.0.4) is available at:

<http://otn.oracle.com/products/ias/content.html>

## 1.6 Best Practices

Oracle provides a Best Practices white paper. This document describes common practices around development and deployment of Oracle Application Server, common errors, and scenarios for using the product.

You can find the white paper on OTN at

<http://otn.oracle.com/documentation/index.html>



# Part I

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## General Oracle Application Server Issues

This part describes general Oracle Application Server issues, including issues that are common to multiple components. It contains the following chapters:

- [Chapter 2, "Installation Issues"](#)
- [Chapter 3, "Management and Security"](#)
- [Chapter 4, "Core Documentation"](#)



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## Installation Issues

This chapter describes installation issues and their workarounds associated with Oracle Application Server. It includes the following topics:

- [Section 2.1, "Preinstallation Issues"](#)
- [Section 2.2, "Installation Issues"](#)
- [Section 2.3, "Post Installation Issues"](#)

## 2.1 Preinstallation Issues

This section describes preinstallation issues. It includes the following topic:

- [Section 2.1.1, "Incompatibility with Oracle9i Application Server Release 1 \(1.0.2.2.x\)"](#)
- [Section 2.1.2, "Host Name Restrictions"](#)
- [Section 2.1.3, "Prevent Hangs When Installing Identity Management to Use a RepCA Metadata Repository"](#)
- [Section 2.1.4, "All OracleAS Active Failover Cluster Nodes Must Be Up When Installing Middle Tiers"](#)
- [Section 2.1.5, "ORACLE\\_HOME and ORACLE\\_SID Environment Variables"](#)

### 2.1.1 Incompatibility with Oracle9i Application Server Release 1 (1.0.2.2.x)

Oracle Application Server 10g (9.0.4) and Oracle9i Application Server Release 1 (1.0.2.2.x) cannot coexist on the same machine

### 2.1.2 Host Name Restrictions

You cannot use a host for your installation of Oracle Application Server that contains either the terms "web" or "portal" in the host name.

Additionally, your host name cannot exceed 255 characters.

### 2.1.3 Prevent Hangs When Installing Identity Management to Use a RepCA Metadata Repository

If you create a Metadata Repository by running OracleAS RepCA on an Oracle9i Release 1 (9.0.1.5) database, then install Identity Management and configure it to use that Metadata Repository, some configuration assistants may hang. The problem most commonly occurs with the Oracle Ultra Search Configuration Assistant and the `mod_osso` Configuration Assistant, at times of high system load.

To prevent this problem, disable the Resource Manager in the Metadata Repository before you start the Identity Management installation. You can accomplish this by commenting out the `resource_manager_plan` entry in the `init.ora` file in `ORACLE_HOME/admin/SID/pfile`.



## 2.1.4 All OracleAS Active Failover Cluster Nodes Must Be Up When Installing Middle Tiers

If you use OracleAS Active Failover Cluster for your Metadata Repository, registered with Identity Management, make sure the database and Net listener are running on all AFC nodes before you install a middle-tier instance to use the Identity Management and AFC Metadata Repository. Otherwise, the middle-tier installation will fail with the error: Invalid Database or Database Not Running.

## 2.1.5 ORACLE\_HOME and ORACLE\_SID Environment Variables

Although the Oracle Universal Installer unsets the ORACLE\_HOME and ORACLE\_SID environment variables as described in the *Installation Guide*, the installer cannot unset an environment variable for a child process. To workaroud this issue, unset the ORACLE\_HOME and ORACLE\_SID environment variables before installation.

## 2.2 Installation Issues

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

- [Section 2.2.1, "Instance Name Restriction"](#)
- [Section 2.2.2, "Incorrect Host Name Value during OracleAS Infrastructure 10g Installation in an Active Failover Cluster"](#)
- [Section 2.2.3, "emracutil Script Contains Incorrect Value for Host Name"](#)
- [Section 2.2.4, "targets.xml on Remote Hosts contain Incorrect ConnectDescriptor Information"](#)
- [Section 2.2.5, "DAS Enabled Only on Installation Host"](#)
- [Section 2.2.6, "Net Listener Version for OracleAS Infrastructure 10g"](#)
- [Section 2.2.7, "Command Line Variable Values Issue"](#)
- [Section 2.2.8, "OPMN Configuration Assistant - Start Oracle Certificate Authority Failure"](#)
- [Section 2.2.9, "Oracle Net Listener Cross Registration Should Be Disabled for Active Failover Cluster"](#)
- [Section 2.2.10, "Stack Trace in repca.log File"](#)
- [Section 2.2.11, "Remove Registration Entries from Oracle Internet Directory"](#)
- [Section 2.2.12, "Problem Using OracleAS RepCA on Existing Database"](#)
- [Section 2.2.13, "Installation Failure Due to Unavailable Ports"](#)
- [Section 2.2.14, "Avoid Using the Back Button During Installation"](#)
- [Section 2.2.15, "query\\_rewrite\\_integrity Must be Set to trusted or enforced for Running RepCA"](#)

## 2.2.1 Instance Name Restriction

Your Oracle Application Server instance name cannot use the "#" character.

## 2.2.2 Incorrect Host Name Value during OracleAS Infrastructure 10g Installation in an Active Failover Cluster

This only affects the OracleAS Infrastructure 10g installation in an Active Failover Cluster (AFC) environment.

An incorrect hostname value is entered in the `EMD_URL` entry in `$ORACLE_HOME/sysman/config/emd.properties` file on remote nodes of the AFC. To workaround this issue, run the `ORACLE_HOME/bin/emracutil` command to update the hostname in the `emd.properties` file on all hosts in the cluster. You run the command on the host where you ran the installer.

```
prompt> cd $ORACLE_HOME/bin
prompt> emracutil synchronize $ORACLE_HOME/sysman/config/emd.properties
```

This command uses the local host `emd.properties` file as a template and substitutes the names of the hosts in the cluster in the file and copies the file to the respective hosts. After copying the file to all the hosts in the cluster, it reloads the agent on the remote hosts so that the agent reads the updated file.

## 2.2.3 emracutil Script Contains Incorrect Value for Host Name

This issue only affects the OracleAS Infrastructure installation in an AFC environment.

The `$ORACLE_HOME/bin/emracutil` script contains an incorrect value for the `HOST_NAME` variable on the remote hosts of the AFC.

Update the `HOST_NAME` variable in the `$ORACLE_HOME/bin/emracutil` script to the current host name.

## 2.2.4 targets.xml on Remote Hosts contain Incorrect ConnectDescriptor Information

This issue only affect the OracleAS Infrastructure installation in an AFC environment.

The `$ORACLE_HOME/sysman/emd/targets.xml` on remote hosts of the AFC contains incorrect ConnectDescriptor information for the `oracle_ldap` target in the `$ORACLE_HOME/sysman/emd/targets.xml` file. The `ADDRESS_LIST` of the ConnectDescriptor contains ADDRESSES that point to the remote host.

To workaround this issue the ConnectDescriptor must reference all hosts of the AFC.

Update the `$ORACLE_HOME/sysman/emd/targets.xml` on remote hosts of the AFC with correct `HOST` information for the `ADDRESS_LIST` attribute.

## 2.2.5 DAS Enabled Only on Installation Host

In an AFC infrastructure installation, delegated administration service (DAS) will be enabled only on the installation host.

In order to configure DAS on other hosts, perform the following workaround on each additional host:

1. Create an ldif (`das_enable.ldif`) file with the following entry:

```
--- BEGIN LDIF file contents---
dn: cn=Associated Mid-tiers,orclApplicationCommonName=DASApp, cn=DAS,
cn=Products,cn=OracleContext
changetype: modify
add: uniquemember
uniquemember: orclApplicationCommonName=<InstanceName>.<node>,cn=IAS
Instances, cn=IAS,cn=Products, cn=OracleContext
---END LDIF file contents-----
```

2. Run the `ldapmodify` command as follows:

```
ldapmodify -p <OIDPort> -h <Load Balancer Name> -D cn=orcladmin -w
Instance Password> -v -f das_enable.ldif
```

DAS should now be configured on the additional hosts.

## 2.2.6 Net Listener Version for OracleAS Infrastructure 10g

If you wish to configure the OracleAS Infrastructure 10g to use the Net listener from the 64-bit release of the Oracle database, the listener must be version 9.0.1.4 or higher (for the 9.0.1.x release of the database) or 9.2.0.3 or higher (for the 9.2.0.x release of the database).

## 2.2.7 Command Line Variable Values Issue

If you declare a value for a variable at the command line when launching Oracle Universal Installer, the variable's value will not be retained if you subsequently back out of an install session.

For example, if you provide a filename and location for the public variable `s_staticPorts`, this value will be reset to null if you go back to the **Select Products screen** and either select the same or another install type to install.

Oracle Universal Installer will reset all command line variables to null in anticipation of your redirection to another product where that variable's value may be incorrect or irrelevant. If you wish to retain these values, cancel your Oracle Universal Installer session and launch the session again with the appropriate command line parameters.

## 2.2.8 OPMN Configuration Assistant - Start Oracle Certificate Authority Failure

If you re-run the OPMN Configuration Assistant - start Oracle Certificate Authority may fail if your Oracle Certificate Authority instance is running.

To prevent this from happening, stop the Oracle Certificate Authority instance with the following command:

```
ORACLE_HOME/opmnctl/bin/opmnctl stopproc ias-component=OC4J instancename=oca
```

Then rerun OPMN Configuration Assistant - start Oracle Certificate Authority.

## 2.2.9 Oracle Net Listener Cross Registration Should Be Disabled for Active Failover Cluster

Turning Oracle Net Listener Cross registration on between instances of the AFC turns server side load balancing on. However, this breaks in OracleAS Metadata Repository and load balancing of new connections across the Oracle Application Server instances in the cluster is not even.

Alternatively, client side load balancing is sufficient for the kind of traffic anticipated for the AFC infrastructure.

Since listener cross registration is enabled by default in the OracleAS Metadata Repository, we must turn it off following installation.

To disable listener cross registration for the OracleAS Metadata Repository active failover instance execute the following commands:

1. Login into `sqlplus` as `sysdba` to any one of the infrastructure database instances deployed as part of the AFC installation.
2. Execute the following SQL command:  

```
SQL> alter system set remote_listener='' scope=spfile;
```
3. Restart all Oracle Application Server instances.

## 2.2.10 Stack Trace in repca.log File

OracleAS Metadata Repository registration with Oracle Internet Directory, using the `runRepca -Register` option during installation by OracleAS RepCA creates a stack trace in the `repca.log` file.

The generated stack trace is benign and can be ignored.

## 2.2.11 Remove Registration Entries from Oracle Internet Directory

If you use the OracleAS RepCA to register an OracleAS Metadata Repository and the database repository is subsequently deleted, the registration entries must be removed from the Oracle Internet Directory associated with the database repository.

Subsequent attempt to run the OracleAS RepCA against a database repository having the same name and using the same Oracle Internet Directory will fail.

After you have removed the registration entries from Oracle Internet Directory, re-run the OracleAS RepCA with the `-REGISTER` option.

## 2.2.12 Problem Using OracleAS RepCA on Existing Database

When using OracleAS RepCA on an existing database, you will encounter the **Register with Oracle Internet Directory** screen during installation. The registration validation will hang if you either:

- check the SSL check box and provide a non-SSL port for registration.
- uncheck the SSL check box and provide a SSL port for registration.

To workaroud this issues, when the busy bar dialog appears, press the Cancel button. You must then rectify the problem by either:

- checking the SSL check box and providing a SSL port for registration.
- unchecking the SSL check box and providing a non-SSL port for registration.

## 2.2.13 Installation Failure Due to Unavailable Ports

If you are installing Oracle Application Server on a computer that has ports unavailable in the specified port range, the installation will fail during the configuration phase of the install.

Before you install Oracle Application Server, confirm that at least one port in the recommend range for each Oracle Application Server component is available.

Please refer to the *Oracle Application Server 10g Administrator's Guide* for more port information.

## 2.2.14 Avoid Using the Back Button During Installation

During the interview phase of Oracle Application Server installation, if you click on the **Back** button on the Oracle Universal Installer in order to return to a previous screen, and then proceed again with the installation, some of your previous selections will not be reset to the new values you have entered. You may experience problems with your installation.

Oracle recommends exiting from the installation session and starting over.

## 2.2.15 query\_rewrite\_integrity Must be Set to trusted or enforced for Running RepCA

If `query_rewrite_integrity` is not set properly in the database initialization parameters, OracleAS RepCA will give an error that this parameter must be set to "trusted". However, OracleAS RepCA will function properly if this parameter is set to either "trusted" or "enforced".

## 2.3 Post Installation Issues

This section describe post installation issues. It includes the following topic:

- [Section 2.3.1, "PATH Environment Variable for Linux Installations"](#)
- [Section 2.3.2, "Error Messages Following Configuration"](#)
- [Section 2.3.3, "Unable to Start OracleAS Reports Services if Oracle9i Application Server Release 1 \(1.0.2.x\) is on the Same Computer"](#)
- [Section 2.3.4, "Tuning Performance on Linux Systems"](#)

### 2.3.1 PATH Environment Variable for Linux Installations

If you installed Oracle Application Server on a Linux system, include the `/usr/bin` directory as the first entry of the PATH environment variable. This is a requirement for relinking executables.

### 2.3.2 Error Messages Following Configuration

After you configure Oracle Application Server components using Oracle Enterprise Manager, upon executing a start or stop command from the Oracle Application Server component page an error message is displayed.

To avoid this problem, start, and then stop the Application Server Control following configuration of the Oracle Application Server component using the following commands:

```
emctl stop iasconsole
emctl start iasconsole
```

### 2.3.3 Unable to Start OracleAS Reports Services if Oracle9i Application Server Release 1 (1.0.2.x) is on the Same Computer

If you have Oracle9i Application Server Release 1 (1.0.2.x) and Oracle Application Server installed on the same computer, you will not be able to start OracleAS Reports Services if the Release 1 instance is running.

To start OracleAS Reports Services:

1. Stop Oracle9iAS Discoverer 1.0.2.x.
2. Start OracleAS Reports Services.
3. Start Oracle9iAS Discoverer 1.0.2.x.



Oracle9iAS Discoverer 1.0.2.x uses `vbroker 3.4` which conflicts with `vbroker 4.5` used by OracleAS Reports Services.

### 2.3.4 Tuning Performance on Linux Systems

If you have an OracleAS Infrastructure 10g installation on a UnitedLinux system, set the `LD_ASSUME_KERNEL` environment variable to `2.2.5` to improve the performance of OracleAS Infrastructure 10g.

Example (C shell):

```
% setenv LD_ASSUME_KERNEL 2.2.5
```

Example (Bourne or Korn shell):

```
$ LD_ASSUME_KERNEL=2.2.5; export LD_ASSUME_KERNEL
```



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# Management and Security

This chapter describes management and security issues associated with Oracle Application Server. It includes the following topics:

- [Section 3.1, "Supported Network Features"](#)
- [Section 3.2, "OPMN Issues"](#)
- [Section 3.3, "DCM Issues"](#)
- [Section 3.4, "Other Management Issues"](#)
- [Section 3.5, "Documentation Errata"](#)

## 3.1 Supported Network Features

Table 3–1 shows the networking features that are supported for Linux Systems:

**Table 3–1 Supported Networking Procedures**

<b>Feature</b>	<b>Supported?</b>
Installing Oracle Application Server on a host using DHCP.	Yes
Installing Oracle Application Server on a host off of the network.	Yes
Changing the hostname of a host containing an Oracle Application Server middle-tier instance.	Yes Refer to the <i>Oracle Application Server 10g Administrator's Guide</i> .
Changing the IP address of a host containing an Oracle Application Server middle-tier instance.	Yes Refer to the <i>Oracle Application Server 10g Administrator's Guide</i> .
Changing the hostname of a host containing an Oracle Application Server Infrastructure.	No
Changing the IP address of a host containing an Oracle Application Server Infrastructure.	Yes Refer to the <i>Oracle Application Server 10g Administrator's Guide</i> .

## 3.2 OPMN Issues

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

- [Section 3.2.1, "opmnctl Scoped Commands do not Work Against Oracle9iAS 9.0.2 and 9.0.3 instances."](#)
- [Section 3.2.2, "Error Message When Executing opmnctl Commands"](#)
- [Section 3.2.3, "Problem with Application Server Control Ports Page"](#)
- [Section 3.2.4, "OPMN Reports Incorrect Shared Memory Value"](#)

### 3.2.1 opmnctl Scoped Commands do not Work Against Oracle9iAS 9.0.2 and 9.0.3 instances.

`opmnctl` scoped commands do not work against Oracle9iAS 9.0.2 and 9.0.3 instances. A scoped command that is for a single Oracle Application Server instance and sent to either an Oracle9iAS 9.0.2 or 9.0.3 instance will return an error.

### 3.2.2 Error Message When Executing opmnctl Commands

When you execute either an `opmnctl stopall` or `opmnctl startall` command, the `oidctl` log file contains the following error message:

```
*** Instance Number already in use. ***  
*** Please try a different Instance number. ***
```

This error message is benign and can be ignored.

This error message typically appears for OracleAS Infrastructure 10g installations with Oracle Internet Directory.

### 3.2.3 Problem with Application Server Control Ports Page

When you go to the Application Server Control ports page, the Oracle HTTP Server Diagnostic Port is displayed for Oracle HTTP Server Listener. After you restart OPMN, the diagnostic port will no longer be displayed.

### 3.2.4 OPMN Reports Incorrect Shared Memory Value

In some circumstances, Linux systems incorrectly record negative values in the `/proc` file system. As a result of this Linux issue, OPMN incorrectly reports the

shared memory value as a positive value and incorrectly reports the value for shared memory and private memory combined to be greater than the total memory.

Typically, this issue only occurs with the Oracle HTTP Server process. To work around this issue, restart the associated component. For example, if you find this issue with Oracle HTTP Server, restart Oracle HTTP Server.

## 3.3 DCM Issues

This section describes DCM issues. It includes the following topic:

- [Section 3.3.1, "Tune the DCM Auto-archiving Feature to Improve System Performance"](#)

### 3.3.1 Tune the DCM Auto-archiving Feature to Improve System Performance

When you install Oracle Application Server, the DCM auto-archiving feature is configured to maintain fifteen backup archives. You can improve system performance by reducing the number of archives, or turning off auto-archiving.

To reduce the number of archives, for example, to 5:

```
ORACLE_HOME/dcm/bin/dcmctl set -arch 5
```

To turn off auto-archiving:

```
ORACLE_HOME/dcm/bin/dcmctl set -arch 0
```

Refer to *Distributed Configuration Management Reference Guide* for more information about DCM auto-archiving.

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**Note:** Limiting or disabling DCM auto-archiving may affect your ability to recover from system failures.

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## 3.4 Other Management Issues

This section describes other management issues. It includes the following topics:

- [Section 3.4.1, "Online Help for Oracle Wallet Manager is Not Available"](#)
- [Section 3.4.2, "Open Wallet Failed Message on STDOUT"](#)
- [Section 3.4.3, "Alter Database Open Resetlogs Fails With ORA-01194"](#)
- [Section 3.4.4, "Ignore Warnings in warn.log File When Running chgiphost.sh Script"](#)
- [Section 3.4.5, "chgiphost.sh Script Returns Benign Error Messages in Standalone J2EE and Web Cache Installation"](#)
- [Section 3.4.6, "Error Message Using OracleAS Backup and Recovery Tool"](#)

### 3.4.1 Online Help for Oracle Wallet Manager is Not Available

The online help for Oracle Wallet Manager is not available. If you try to use the online help, an error code will be displayed.

Refer to *Oracle Application Server 10g Security Guide* for Oracle Wallet Manager information.

### 3.4.2 Open Wallet Failed Message on STDOUT

When registering OracleAS Metadata Repository with Oracle Internet Directory the DBCA output will feature a message "OPEN WALLET FAILED". This error message can be seen from in the DBCA output to Oracle Universal Installer screen or in the `ORACLE_HOME/oraInventory/logs/installActions<time.stamp>.log` file .

This message is benign and has no affect on the registration process.

### 3.4.3 Alter Database Open Resetlogs Fails With ORA-01194

The Backup and Recovery section in the *Oracle Application Server 10g Administrator's Guide* contains instructions for using the OracleAS Backup and Recovery Tool to perform point-in-time recovery when restoring the OracleAS Metadata Repository to a new host. The instructions advise you to use "alter database open resetlogs" if you get an error while performing the recovery.

In rare cases, the "alter database open resetlogs" command may fail with error ORA-01194. If this happens, check the restore log generated by the OracleAS

Backup and Recovery Tool. You should find that one or more data files were not restored. If this is the case, rerun the OracleAS Backup and Recovery Tool using the same options as the first time you ran it. Then use the "alter database open resetlogs" and it should work without error.

### 3.4.4 Ignore Warnings in warn.log File When Running chgiphost.sh Script

When running the `chgiphost.sh` script following installation of any Oracle Application Server install type, warning messages are generated in the `warn.log` file. The warning messages are benign and can be ignored.

### 3.4.5 chgiphost.sh Script Returns Benign Error Messages in Standalone J2EE and Web Cache Installation

When you run the `chgiphost.sh` script on a J2EE and Web Cache installation that does not use OracleAS Infrastructure 10g services, the following types of error messages may be logged in the `actions.log` and `error.log` files:

- `actions.log` file:

```
main::ias_instance_oid::372**      Error while executing
main::update_modosso::372**      Error while executing
```

- `error.log` file:

```
Exception: Unable to establish connection to the Oracle Internet Directory @
Server ldap:///. Base Exception : javax.naming.CommunicationException:
@ localhost:389 [Root exception is java.net.ConnectException: Connection
refused]
```

```
oracle.ias.repository.schema.SchemaException: Unable to establish connection
to the Oracle Internet Directory Server ldap:///. Base Exception : @
javax.naming.CommunicationException: localhost:389 [Root exception is @
java.net.ConnectException: Connection refused]
main::ias_instance_oid::371**      Error while executing ....
main::update_modosso::371**      Error while executing ....
```

These error messages are benign and can be ignored.



### 3.4.6 Error Message Using OracleAS Backup and Recovery Tool

If you perform a backup of the OracleAS Metadata Repository using the OracleAS Backup and Recovery Tool, RMAN returns error message RMAN-06089, which indicates that an archived log is out of sync with the catalog. This occurs if any of the archived logs are lost.

Before you retry the OracleAS Backup and Recovery Tool, execute the following command in RMAN:

```
change archivelog all validate;
```

Then rerun the OracleAS Backup and Recovery Tool to perform the OracleAS Metadata Repository backup.

## 3.5 Documentation Errata

This section describes known errors in management and security documentation. It contains the following topic:

- [Section 3.5.1, "Changing OPMN Ports \(ONS Local, Request, and Remote\)"](#)
- [Section 3.5.2, "Querying the Runtime JServ Port"](#)
- [Section 3.5.3, "Restart Infrastructure Processes After Restoring a Metadata Repository"](#)

### 3.5.1 Changing OPMN Ports (ONS Local, Request, and Remote)

The procedure for changing the ONS local, request, and remote ports in *Oracle Application Server 10g Administrator's Guide* is incorrect as follows:

- It states that you can use Application Server Control to change the ONS local, request, and remote port numbers. This is not correct—do not use Application Server Control to change these ports.
- The procedure for changing the ports manually is incorrect. Use the following procedure:

1. Shut down all processes:

```
emctl stop iasconsole
emctl stop agent
opmnctl stopall
```

2. Under the `<notification-server>` element, modify the `local`, `remote`, and `request` parameters, as desired, in the `<port>` element. For example:

```
<port local="6101" remote="6201" request="6004"/>
```

3. Save and close the file.

4. Reload OPMN:

```
opmnctl reload
```

5. Start OPMN:

```
opmnctl start
```

6. If this is an Infrastructure with Oracle Internet Directory, start Oracle Internet Directory:

```
opmnctl startproc ias-component=OID
```

7. Start the rest of your processes:

```
opmnctl startall
```

8. Update DCM:

```
dcmctl updateConfig -ct opmn
```

### 3.5.2 Querying the Runtime JServ Port

The procedure for querying the runtime JServ port in *Oracle Application Server 10g Administrator's Guide* is incorrect.

You can query the runtime JServ port numbers as follows:

- If you use `mod_oprocmgr` to manage JServ, make sure the `oprocmgr-status` handler is activated in `ORACLE_HOME/Apache/Apache/conf/httpd.conf` with the following directive:

```
<ifModule mod_oprocmgr.c>  
  <Location /oprocmgr-service>  
    SetHandler oprocmgr-service  
  </Location>  
</ifModule>
```

Enter the following URL in your browser, and you will see the status of all processes currently managed by your process manager, including JServ:

```
http://hostname:http_port/oprocmgr-status
```

- If you are not using `mod_oprocmgr`, but instead use a traditional JServ configuration, you can query the runtime ports with the following URL:

```
http://hostname:http_port/jserv
```

Note that the "jserv" portion of the preceding URL is protected to only be viewed from `localhost`. This is configured in `ORACLE_HOME/Apache/Jserv/etc/jserv.conf`. You can expand permissions to view from other hosts, or provide the following URL from the same host:

```
http://localhost:port/jserv
```

### 3.5.3 Restart Infrastructure Processes After Restoring a Metadata Repository

The procedures in *Oracle Application Server 10g Administrator's Guide* for restoring a Metadata Repository are incomplete. You should restart all Infrastructure processes after restoring a Metadata Repository.



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## Core Documentation

This chapter describes issues associated with Oracle Application Server Core Documentation. It includes the following topics:

- [Section 4.1, "General Issues and Workarounds"](#)

## 4.1 General Issues and Workarounds

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

- [Section 4.1.1, "Recommended Character Set"](#)
- [Section 4.1.2, "Do Not Replace the ORACLE\\_HOME Value in the httpd.conf File"](#)
- [Section 4.1.3, "Installer and Graphical Components Cannot Properly Display Korean or Chinese Fonts"](#)

### 4.1.1 Recommended Character Set

When choosing component identification names in Oracle Enterprise Manager or for `dcmctl`, you should choose from the following character set:

*ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz\_.*

### 4.1.2 Do Not Replace the ORACLE\_HOME Value in the httpd.conf File

If you have an Oracle Application Server installation in `/home/your_directory/orahome` and it contains a link to `/private/your_directory`, the files in `ORACLE_HOME` are accessible from either `/home/your_directory/orahome` or `/private/your_directory/orahome`. Following installation, the `ORACLE_HOME` is located in `/home/your_directory/orahome` and the `httpd.conf` file contains the following line of code:

```
include /home/your_directory/orahome/Apache/Apache/conf/dms.conf
```

Do not replace the `ORACLE_HOME` indicated with another link or absolute path.

### 4.1.3 Installer and Graphical Components Cannot Properly Display Korean or Chinese Fonts

The installer and graphical components of Oracle Application Server 10g (9.0.4) on Linux cannot properly display Korean or Chinese fonts.

For the installer and Application Server components display Korean and Chinese fonts properly, you must install J2SE 1.4.2\_04 (or higher) when it becomes available. Application Server components will need to be configured to use the J2SE 1.4.2\_04 installation in place of the existing copy of J2SE included with Application Server.

To set up the installer to use J2SE 1.4.2\_04:

1. Copy the `install/linux/oraparam.ini` file from the Application Server installation media to a directory on your system. In this procedure it is assumed that you have copied the `oraparam.ini` file to the `/home/oracle` directory.
2. Make the `oraparam.ini` file writable:

```
$ chmod +w oraparam.ini
```

3. Edit the `oraparam.ini` file using a text editor.
  - a. Locate the following line:

```
JRE_LOCATION=../../stage/Components/oracle.swd.jre/1.4.1.5.0/1/DataFiles/Expanded
```

- b. Modify this line to refer to the location where you have installed J2SE 1.4.2\_04, for example:

```
JRE_LOCATION=/home/oracle/j2re1.4.2_04
```

4. Start the installer from the Application Server installation media using the `-paramFile` option followed by the full directory path to the modified `oraparam.ini` file, for example to run the installer from CD-ROM, enter:

```
$ /mount_point/runInstaller -paramFile /home/oracle/oraparam.ini
```

There is no available workaround or fix for this issue for UnitedLinux at this time.





# Part II

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## J2EE, Web Services, and Internet Applications Issues

This part describes issues associated with the J2EE, Web Services, and Internet Applications components. It contains the following chapters:

- [Chapter 5, "Oracle HTTP Server"](#)
- [Chapter 6, "OracleAS Web Services"](#)
- [Chapter 7, "OracleAS Forms Services"](#)
- [Chapter 8, "OC4J"](#)
- [Chapter 9, "OracleAS TopLink"](#)



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# Oracle HTTP Server

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

- [Section 5.1, "General Issues and Workarounds"](#)
- [Section 5.2, "Configuration Issues and Workarounds"](#)
- [Section 5.3, "Documentation Errata"](#)

## 5.1 General Issues and Workarounds

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

- [Section 5.1.1, "OC4J Plug-in Usage with Standalone and Core Installation"](#)
- [Section 5.1.2, "Limited Concurrent Use of mod\\_oc4j and mod\\_jserv"](#)
- [Section 5.1.3, "Limitation of C/tcsh Shell"](#)

### 5.1.1 OC4J Plug-in Usage with Standalone and Core Installation

To use the OC4J plug-in with the OC4J standalone product without OPMN, only static routing to specific hosts and ports is allowed within the OC4J plug-in, and OC4J must be configured to use AJP. Using static routing with hosts and ports means that only `Oc4jMount` directives such as the following are supported:

```
Oc4jMount /j2ee/* ajp13://localhost:6001,localhost:6002
```

To enable AJP in the OC4J configuration, a line such as the following must be present in the `default-web-site.xml` file in the OC4J configuration:

```
<web-site port="3000" protocol="ajp13" display-name="OracleAS Java Web Site">
```

where the port value specifies the port that this OC4J process will listen on for incoming AJP requests.

### 5.1.2 Limited Concurrent Use of mod\_oc4j and mod\_jserv

Since both `mod_oc4j` and `mod_jserv` route requests for servlet containers, care must be taken when configuring both to run within a single Oracle HTTP Server instance. In particular, avoid using the `mod_jserv` directive `ApjServAction` as it might create routing issues. For example, if the use of this directive involves mapping all requests ending in `.jsp`, then requests that were meant to be serviced by OC4J through an `Oc4jMount` directive might be routed unsuccessfully to `mod_jserv`.

### 5.1.3 Limitation of C/tcsh Shell

If the default shell is C (csh) or tcsh, the `opmnctl stopall` command will not work as expected. Change the default shell to the Korn (ksh), Bourne (sh) or Bash (bsh) shell to work around this issue. This problem is caused by a known limitation of the C and tcsh shell on Linux systems.

## 5.2 Configuration Issues and Workarounds

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

- [Section 5.2.1, "Oracle HTTP Server \(1.0.2.2.x\) Cannot Be Used with Oracle Application Server \(9.0.4.x\)"](#)
- [Section 5.2.2, "Manually Editing mod\\_plsql Configuration Files"](#)
- [Section 5.2.3, "Invalid mod\\_plsql Configuration Files Do Not Appear in Oracle Enterprise Manager Interface"](#)
- [Section 5.2.4, "FastCGI Sockets Path Length Error"](#)
- [Section 5.2.5, "Oracle HTTP Server Does Not Start After Enabling Port Tunneling or SSL in mod\\_oc4j"](#)
- [Section 5.2.6, "ApJServManual setting Information for Enabling mod\\_jserv"](#)

### 5.2.1 Oracle HTTP Server (1.0.2.2.x) Cannot Be Used with Oracle Application Server (9.0.4.x)

Oracle does not support using Oracle HTTP Server that is supplied with Oracle9iAS Release 1 (1.0.2.2.x) as a front end to OC4J supplied with Oracle Application Server 10g (9.0.4.x). You must not use `mod_proxy` to route data between these two components.

Always use `mod_oc4j` to route data to and from OC4J supplied with Oracle Application Server 10g (9.0.4.x). Use `mod_proxy` to route data between Oracle HTTP Server component supplied with Oracle9iAS Release 1 (1.0.2.2.x) and OC4J supplied with Oracle9iAS Release 1 (1.0.2.2.x).

## 5.2.2 Manually Editing mod\_plsql Configuration Files

If you edit the `mod_plsql` configuration files

`ORACLE_HOME/Apache/modplsql/conf/dads.conf` or

`ORACLE_HOME/Apache/modplsql/conf/cache.conf` then you must follow these steps to synchronize DCM and Oracle Enterprise Manager:

- Run the `$ORACLE_HOME/dcm/bin/dcmctl -updateConfig -co HTTP_Server` on the command line.
- Restart Application Server Control, so that the `mod_plsql` administration in Oracle Enterprise Manager can pick up the changes.
- Restart Oracle HTTP Server to pick up the changes to the configuration files.

## 5.2.3 Invalid mod\_plsql Configuration Files Do Not Appear in Oracle Enterprise Manager Interface

If you are using Application Server Control to configure `mod_plsql` files and upon further examination the files are corrupt or contain invalid syntax, there will be no configuration data displayed in Oracle Enterprise Manager. No configuration operations are performed.

## 5.2.4 FastCGI Sockets Path Length Error

On most platforms, the path for sockets used by FastCGI is limited to 108 characters. If an error such as the following is encountered, use the `FastCgiIpcDir` directive to specify a path name that is significantly shorter than 108 characters, such as `/tmp`:

```
Thu Oct 16 12:55:06 2003] [error] [client 123.123.123.123] [ecid: 82608810576,1]
FastCGI: failed to connect to (dynamic) server
"/opt/oracle/inst/Apache/Apache/fcgi-bin/echo": path
"/opt/oracle/inst/Apache/Apache/logs/fastcgi/dymanic/aac1cec5416b961cf002c5526b4
159" is too long for a Domain socket
```

## 5.2.5 Oracle HTTP Server Does Not Start After Enabling Port Tunneling or SSL in mod\_oc4j

Oracle HTTP Server might not start if you modify its configuration to enable port tunneling (iASPT), or SSL in `mod_oc4j`. Following are the possible solutions for this issue:

- **Recommended solution:** if `mod_perl` is not needed, disable it by commenting out the `LoadModule perl_module libexec/libperl.so` line from `httpd.conf`.
- If `mod_perl` is needed, ensure that you are running the latest patch set from Sun, and move the `LoadModule` line for `mod_perl` until after the include of `mod_oc4j.conf` in `httpd.conf`.

## 5.2.6 ApJServManual setting Information for Enabling mod\_jserv

When enabling `mod_jserv`, the `ApJServManual` directive works in “off” mode only when Apache is started using `apachectl start`, and not `opmnctl`.

## 5.3 Documentation Errata

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

- [Section 5.3.1, "Additional Metric-based Load Balancing Information"](#)

### 5.3.1 Additional Metric-based Load Balancing Information

The “Oracle HTTP Server Modules” chapter of the *Oracle HTTP Server Administrator’s Guide* contains information about metric-based load balancing. For additional information on the topic, refer to [Chapter 8](#) and the *Oracle Application Server Containers for J2EE User’s Guide*.



# 6

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## OracleAS Web Services

This chapter describes issues with OracleAS Web Services. It includes the following topics:

- [Section 6.1, "General Issues and Workarounds"](#)
- [Section 6.2, "Documentation Errata"](#)

## 6.1 General Issues and Workarounds

This section describes general issues and their workarounds for Oracle Application Server Web Services (OracleAS Web Services). It includes the following topic:

- [Section 6.1.1, "Running the HTML XML Wizard"](#)

### 6.1.1 Running the HTML XML Wizard

The `WebServicesHtmlXmlWizard.jar` file is not distributed with Oracle Application Server 10g (9.0.4). To use the HTML XML Wizard, you need to download the file from the Oracle Technology Network (OTN) Web Services Center under the Downloads section,

`http://otn.oracle.com/tech/webservices/index.html`

After downloading the `WebServicesHtmlXmlWizard.jar` file, place it into the directory, `$ORACLE_HOME/webservices/lib`.

## 6.2 Documentation Errata

This section describes known errors in the documentation. It includes the following topic:

- [Section 6.2.1, "Consuming XML or HTML Streams in J2EE Applications - HTML XML Wizard"](#)

### 6.2.1 Consuming XML or HTML Streams in J2EE Applications - HTML XML Wizard

The `WebServicesHtmlXmlWizard.jar` file is not distributed with Oracle Application Server 10g (9.0.4). Chapter 11, "Consuming Web Services in J2EE Applications" in the Web Services Developer's Guide includes a section that describes using the HTML XML Wizard. This description only applies after you download and install the `WebServicesHtmlXmlWizard.jar` file from OTN, as described in the section, [Section 6.1.1, "Running the HTML XML Wizard"](#).



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# OracleAS Forms Services

This chapter describes issues with OracleAS Forms Services. It includes the following topics:

- [Section 7.1, "General Issues and Workarounds"](#)
- [Section 7.2, "Documentation Errata"](#)

## 7.1 General Issues and Workarounds

This section describes general issues and their workarounds for Oracle Application Server Forms Services. It includes the following topics:

- [Section 7.1.1, "Known issues with Enterprise Manager When Using Pre-Started Forms Processes"](#)
- [Section 7.1.2, "SSO Dynamic Resource Creation Fails When 904 BI-Forms Uses 902 Infrastructure on the Same Machine"](#)
- [Section 7.1.3, "Graphics Fails Against Database 9.0.1.4.0 \(64bit\)"](#)
- [Section 7.1.4, "Restarting OPMN In-process Reports Server Raises Error"](#)

For information regarding Oracle Forms Developer, see *Oracle Developer Suite 10g (9.0.4) Release Notes for Windows and UNIX*.

### 7.1.1 Known issues with Enterprise Manager When Using Pre-Started Forms Processes

Enterprise Manager displays pre-started processes when `em_mode` is set to 1. However, there are some known issues in this area.

When a process exists, but has no client attached to it, the IP address is blank on the User Sessions page. Once the process is attached, it shows as 'null' rather than showing the real IP address of the connected client.

The other columns, such as Connect Time and User ID, already update properly.

If there are pre-started processes that have no client attached, then the Search functionality on the User Sessions page will not work properly, and all searches will fail to find any processes. If you stop these non-attached processes, Search will once again function properly.

Sorting by clicking on the column headers still works properly even if there are non-attached processes, so this may also be used as an alternate workaround for finding specific processes.

## 7.1.2 SSO Dynamic Resource Creation Fails When 904 BI-Forms Uses 902 Infrastructure on the Same Machine

When you install BI-Forms and Infrastructure on the same computer, URL rewriting doesn't work once Forms has re-directed to DAS. You'll see "FRM-92102: A network error has occurred. The Forms Client has attempted to reestablish its connection to the Server 5 time(s) without success." This only happens if you're running 9.0.4 Forms against a 9.0.2 infrastructure (installed on the same machine) and using Internet Explorer.

This can affect SSO support in Forms. If a user tries to run Forms with SSO enabled, and connects using an existing Forms configuration, there is no issue.

However, when a user attempts to run Forms without providing an existing Forms configuration, Forms redirects to DAS to allow the user to dynamically create a resource for this configuration. When this happens, the resource is created properly by DAS but Forms fails to connect after DAS redirects back to the Forms Servlet. If the user copies the same URL at that point and runs it in a different browser, there is no issue. This is a one-time issue, and if administrators have correctly created DAS resources, users will never experience this issue.

Similarly, if you don't have DAS (part of an Infrastructure installation) and BI-Forms installed on the same machine, you won't encounter this issue.

## 7.1.3 Graphics Fails Against Database 9.0.1.4.0 (64bit)

Due to a limitation in the 8.0.6 RSF, Oracle Graphics 6i on Windows cannot connect to a 64-bit database. Thus, if you are using Oracle Forms 10g (9.0.4) to connect to a 64-bit database, and want to integrate with Oracle Graphics, you will need to upgrade your Oracle 6i Home (where Graphics is installed) to include an RSF version that contains a fix to bug 3088708. Please contact Oracle Support regarding availability of such an RSF.

## 7.1.4 Restarting OPMN In-process Reports Server Raises Error

Perform the following to correctly setup Reports/Graphics for Forms/Reports/Graphics integration:

1. In the `g90runm.sh` script enter the following:

```
ORACLE_GRAPHICS6I_HOME=<location forms6i>  
export ORACLE_GRAPHICS6I_HOME  
TK_PRINTER=<real printer>
```

2. In the `reports.sh` script enter the following:

```
ORACLE_GRAPHICS6I_HOME=<location forms6i>; export ORACLE_GRAPHICS6I_HOME  
REPORTS_DEFAULT_DESPLAY=NO; export REPORTS_DEFAULT_DESPLAY  
DISPLAY=<machine name>:0.0; export DISPLAY
```



## 7.2 Documentation Errata

This section describes known errors in the OracleAS Forms Services documentation. It includes the following topic:

- [Section 7.2.1, "Oracle Forms Services Deployment Guide"](#)
- [Section 7.2.2, "Enterprise Manager Online Help"](#)

### 7.2.1 Oracle Forms Services Deployment Guide

**P60: 4.3.4.1**

connectionDisallowedURL required

**Should Read:**

connectionDisallowedURL optional

**P60: 4.3.4.1**

HTML delimiter

**Should Read:**

HTMLdelimiter

**P75: 4.9.1**

Registry.dat file in the forms90/java/oracle/forms/registry directory.

**Should Read:**

Registry.dat file in the forms90/java/oracle/forms/registry directory.

**P87: 5.3.0.2**

MaxClient

**Should Read:**

MaxClients

**P119: 7.2.2**

<ORACLE\_HOME>/j2ee/OC4J\_BI\_FORMS/application-deployments/forms90/1\_default\_island/application.log

**Should Read:**

<ORACLE\_HOME>/j2ee/OC4J\_BI\_FORMS/application-deployments/forms90app/OC4J\_BI\_Forms\_default\_island\_1/application.log

**P119: 7.2.2**

<ORACLE\_HOME>/j2ee/OracleDS/application-deployments/forms90/application.log

**Should Read:**

<ORACLE\_HOME>/j2ee/DevSuite/application-deployments/forms/application.log

**P140: 8.4**

2. In the navigator pane, select "General Configuration" | "Session Management" | "Session Binding".
3. In the "Session Binding Configuration" screen, select "Default Session Binding" and then select "Edit".
4. The "Change/Add Session Binding" dialog box appears.
5. ... select "Administration" | "Monitoring" | "Health Monitor".

**Should Read:**

2. In the navigator pane, select "Origin Servers, Sites, and Load Balancing" | "Session Binding".
3. In the "Session Binding" screen, select "Default Session Binding" and then select "Edit Selected".
4. The "Edit Session Binding" dialog box appears.
5. ... select "Monitoring" | "Health Monitor".

**P143, A.1.4.0.1**

Netscape Navigator 4.7.3

Netscape Navigator 4.7.8

**Should Read:**

Netscape Navigator 4.7.x

Netscape Navigator 7.0.x

**Page 149: 3.5.2**

Internet Explorer 5.x or 6\* native VM\*\* baseie.htm

Internet Explorer 5.x or 6\* jinitiator basejini.htm

**Should Read:**

Internet Explorer 5.x or 6\* native\*\* baseie.htm

Internet Explorer 5.x or 6 jinitiator basejini.htm

**P150: B.1**

```
jinit_classid=clsid:CAFECAFE-0013-0001-0009-ABCDEFABCDEF
# Parameter related to the version of JInitiator
jinit_exename=jinit.exe#Version=1,3,1,9
# Parameter related to the version of JInitiator
jinit_mimetype=application/x-jinit-applet;version=1.3.1.9
```

**Should Read:**

```
jinit_classid=clsid:CAFECAFE-0013-0001-0013-ABCDEFABCDEF
# Parameter related to the version of JInitiator
jinit_exename=jinit.exe#Version=1,3,1,13
# Parameter related to the version of JInitiator
jinit_mimetype=application/x-jinit-applet;version=1.3.1.13
```

**Page153: B.2.1:**

```
# 1/ The Forms installation process should replace all occurrences of
# <percent>FORMS_<ORACLE_HOME><percent> with the correct <ORACLE_HOME>
# setting, and all occurrences of <percent>O_JDK_HOME<percent> with
# the location of the JDK (usually $<ORACLE_HOME>/jdk).
```

**Should Read:**

```
# 1/ The Forms installation process should replace all occurrences of
# <percent>FORMS_ORACLE_HOME<percent> with the correct ORACLE_HOME
# setting, and all occurrences of <percent>O_JDK_HOME<percent> with
# the location of the JDK (usually $ORACLE_HOME/jdk).
```

**Page155: B.2.2**

```
# 1/ The Forms installation process should replace all occurrences of
# <percent>FORMS_<ORACLE_HOME><percent> with the correct <ORACLE_HOME>
# setting, and all occurrences of <percent>O_JDK_HOME<percent> with
# the location of the JDK (usually $<ORACLE_HOME>/jdk).
```

**Should read:**

```
# 1/ The Forms installation process should replace all occurrences of
# <percent>FORMS_ORACLE_HOME<percent> with the correct ORACLE_HOME
# setting, and all occurrences of <percent>O_JDK_HOME<percent> with
# the location of the JDK (usually $ORACLE_HOME/jdk).
```

**P157: B.2.2**

```
# (/cdm/solaris/o_jdk/1_2_2_0_0/jre/lib/sparc)
# - Forms needs two paths to the jre, for libjvm.so and libhpi.so
# - In ojdk 1.3.1 the location of libjvm.so is lib/sparc (there is no
```

**Should Read:**

```
# (.../jre/lib/sparc)
# - Forms needs two paths to the jre, for libjvm.so and libhpi.so
# - In JDK 1.4.1 the location of libjvm.so is lib/sparc (there is no
```

**P169: B.5**

```
<ORACLE_HOME>/forms90/html
```

**Should Read:**

```
<ORACLE_HOME>/tools/web90/html
```

## 7.2.2 Enterprise Manager Online Help

The Enterprise Manager online help for the topics "Configuring Forms Services" and "Configuring Multiple Environment Files" indicate that the middle tier processes should be brought down as follows:

```
emctl stop agent
emctl stop em
dcmctl stop
opmnctl stopall
opmnctl startall
dcmctl start
emctl start agent
emctl start em
```

**The correct sequence is:**

```
emctl stop em (Stops em and the agent)
opmnctl stopall
opmnctl startall
emctl start em
```



This chapter describes issues with OC4J. It includes the following topics:

- [Section 8.1, "Configuration Issues and Workarounds"](#)
- [Section 8.2, "Release Notes for JSP, Tag Libraries, and Related Demos"](#)
- [Section 8.3, "Release Notes for Servlets"](#)
- [Section 8.4, "Release Notes for EJB"](#)
- [Section 8.5, "Release Notes for OC4J Services"](#)
- [Section 8.6, "Documentation Errata"](#)

## 8.1 Configuration Issues and Workarounds

This section describes configuration issues and their workarounds for Oracle Application Server Containers for J2EE (OC4J). It includes the following topics:

- [Section 8.1.1, "OPMN Does Not Properly Assign CORBA SSL Client Ports for Default"](#)
- [Section 8.1.2, "Sharing and Using Libraries"](#)
- [Section 8.1.3, "Considerations for Startup and Shutdown Classes"](#)
- [Section 8.1.4, "Using JDK with OC4J"](#)
- [Section 8.1.5, "OC4J Demo Downloads"](#)
- [Section 8.1.6, "Warning Messages Displayed After Edit of OC4J Configuration Files"](#)
- [Section 8.1.7, "OC4J Object Names Can Contain Only Single-byte Alphanumeric Characters"](#)

### 8.1.1 OPMN Does Not Properly Assign CORBA SSL Client Ports for Default

In the Oracle Application Server environment, you must explicitly specify the port ranges for `iiops1` and `iiops2` in the `opmn.xml` file. (bug 3111089)

### 8.1.2 Sharing and Using Libraries

This section describes issues with sharing and using libraries. It includes the following topics:

- [Section 8.1.2.1, "Sharing Libraries"](#)
- [Section 8.1.2.2, "Invalid or Unneeded Library Elements Degrade Performance"](#)
- [Section 8.1.2.3, "Custom User Managers Deployed Within EJB JAR Files"](#)

#### 8.1.2.1 Sharing Libraries

In Oracle Application Server 10g (9.0.4), we recommend creating specific `<library>` elements in the global `application.xml` file to load any libraries required by your application. We recommend this as a way to ensure efficient loading and desired loading order. (Libraries are loaded in the order in which the `<library>` elements are encountered.)



Note that in previous releases, you could put libraries into the `j2ee/home/lib` directory, which by default had a `<library>` element in `application.xml`. This directory is now reserved for OC4J system libraries, and the `<library>` element that points to it is no longer present in `application.xml` by default. If you want to use a general library location, use `j2ee/home/applib`. By default, there is now a `<library>` element pointing to that location in `application.xml`. (bug 2975455)

For general information about sharing libraries, refer to the *Oracle Application Server Containers for J2EE User's Guide*.

### 8.1.2.2 Invalid or Unneeded Library Elements Degrade Performance

Out of Memory During Execution (bug 3090617)

If the OC4J process memory is growing consistently during program execution, then you may have references to invalid symbolic links in your global `application.xml` file. This problem is usually characterized by a growth in the C heap and not a growth in Java object memory, as one would see with a more traditional Java object memory leak. OC4J loads all resources using the links in the `application.xml` file. If these links are invalid, then the C heap continues to grow, causing OC4J to run out of memory. Ensure that all symbolic links are valid, and restart OC4J.

In addition, keep to a minimum the number of JAR files OC4J is configured to load. Eliminate all unused JAR files from the configuration and from the directories OC4J is configured to search. OC4J searches all JAR files for classes and resources, thereby causing the file cache to use extra memory and processor time.

You can control the loading more precisely if your `<library>` elements in the `application.xml` file point to the individual JAR and ZIP files that are needed, instead of to the directories where they reside.

### 8.1.2.3 Custom User Managers Deployed Within EJB JAR Files

Custom user manager classes deployed within Enterprise Java Beans (EJB) JAR files cannot be loaded by OC4J unless an explicit `<library>` element exists in the `orion-application.xml` file for the application. The `<library>` element must point to the JAR file containing the custom user manager classes. To allow the custom user manager to be resolved and instantiated, create the necessary `<library>` element, such as in the following example:

```
<orion-application ....>
  ...
  <library path="d:\oc4j904\j2ee\home\applications\XmlnewsEar\XmlnewsEjb.jar" />
  ...
</orion-application>
```

### 8.1.3 Considerations for Startup and Shutdown Classes

- You must use the JNDI context that is passed in as an argument to your startup and shutdown methods. You cannot create your own.
- You should separate your shutdown class from any archive files (WAR and EAR) that will be undeployed before shutdown.
- OC4J creates an instance of your startup class and an instance of your shutdown class. These are separate instances. If you implement the startup and shutdown interfaces in the same class, OC4J creates two instances of that class. In this case, you cannot share non static fields between your startup class and your shutdown class.

### 8.1.4 Using JDK with OC4J

This section describes issues with using JDK with OC4J. It includes the following topics:

- [Section 8.1.4.1, "Supported JDK Versions"](#)
- [Section 8.1.4.2, "Migrating Source Code from JDK 1.4 to JDK 1.3"](#)
- [Section 8.1.4.3, "Migrating Source Code from JDK 1.3 to JDK 1.4"](#)

### 8.1.4.1 Supported JDK Versions

You must have only one Java Developer's Kit (JDK) installed on your system. Make sure that it is a version that OC4J supports:

- JDK 1.4.1

OC4J Standalone does not include a JDK. If you are using OC4J Standalone, then you must provide your own JDK installation.

Some suppliers bundle a JDK with their products. If necessary, remove any old version(s), replace them with a supported version, and update the appropriate environment variables. Make sure that your `PATH`, `CLASSPATH`, and `LD_LIBRARY_PATH` (or `LIB` on Windows) variables are all set to the officially supported version of JDK.

### 8.1.4.2 Migrating Source Code from JDK 1.4 to JDK 1.3

Java does not support compiling Java code under JDK 1.4 and running it under JDK 1.3 (bug 2811379). If you try anyway, Java may throw one of the following error messages at runtime:

- `Unsupported major.minor version 48.0.`
- `The major.minor version '48.0' is too recent for this tool to understand.`

However, if you must generate class files using JDK 1.4 and run them using JDK 1.3, then you can use the following command to force a JDK 1.4 compiler to generate a class file that is compatible with JDK 1.3:

```
% javac -target 1.3 hello.java
```

### 8.1.4.3 Migrating Source Code from JDK 1.3 to JDK 1.4

When you upgrade from JDK 1.3 to JDK 1.4, put all classes into packages.

The JDK 1.4 specification explicitly prohibits a class within a package from invoking a class not within a package. For this reason, some Java source code that compiles in JDK 1.3 will not compile in JDK 1.4. This error is identified by the following compiler message:

```
'.' expected import myClass
```

This message means that the Java compiler expects to find a package and class name and cannot parse a line that contains only a class name.

For details, see the Sun Microsystems compatibility document supplied with the JDK.

## 8.1.5 OC4J Demo Downloads

Oracle Application Server 10g (9.0.4) includes one demo per component. Additional demos are available for download from OTN at the following URL:

<http://otn.oracle.com/tech/java/oc4j/demos/>

Drill down from this index page to the component areas that contain the additional demos that you need.

## 8.1.6 Warning Messages Displayed After Edit of OC4J Configuration Files

You may receive a warning message about an automatic restart in the Advanced Server Properties page after you edit the following OC4J configuration files:

- `server.xml`
- `global-web-application.xml`
- `jms.xml`
- `rmi.xml`
- `default-web-site.xml`

OC4J is only restarted when the `server.xml` file is modified. The other OC4J configuration files do not trigger a restart.

Oracle recommends manually restarting the OC4J server every time the following OC4J configuration files are modified:

- `global-web-application.xml`
- `jms.xml`
- `rmi.xml`
- `default-web-site.xml`

## 8.1.7 OC4J Object Names Can Contain Only Single-byte Alphanumeric Characters

The following object names can contain only single-byte alphanumeric characters:

- OC4J instance name
- OC4J application name
- OC4J island name
- Farm name
- OracleAS Cluster Name

## 8.2 Release Notes for JSP, Tag Libraries, and Related Demos

This section describes issues for Java Server Pages (JSP), tag libraries, and related demos. It includes the following topics:

- [Section 8.2.1, "Cannot Invoke Classes That Are Not in Packages"](#)
- [Section 8.2.2, "Set the SAX Driver When Starting OC4J"](#)
- [Section 8.2.3, "JSP ojspc Issues"](#)
- [Section 8.2.4, "JESI Tag Release Notes"](#)
- [Section 8.2.5, "Tag Library Descriptors Must Be Under WEB-INF"](#)
- [Section 8.2.6, "Adding Tag Library JAR Files to /WEB-INF/lib While OC4J Is Running"](#)
- [Section 8.2.7, "Search Local Classes First"](#)
- [Section 8.2.8, "java.lang.ClassFormatError: \(Truncated Class File\)"](#)

### 8.2.1 Cannot Invoke Classes That Are Not in Packages

Among the considerations in migrating to a Sun Microsystems JDK 1.4 environment, shipped with Oracle Application Server 10g (9.0.4), one is particularly important to servlet and JSP developers.

Sun Microsystems states, "The compiler now rejects import statements that import a type from the unnamed namespace." This change addresses security concerns and ambiguities with previous JDK versions. This means that you cannot invoke a class (a method of a class) that is not within a package. Any attempt to do so results in a fatal error at compilation time.

This issue especially affects JSP developers who invoke JavaBeans from their JSP pages, because such beans are often outside any package (although the JSP 2.0 specification now requires beans to be within packages, to satisfy the new compiler requirements). When JavaBeans outside of packages are invoked, JSP applications that were built and executed in an OC4J 9.0.3 / JDK 1.3.1 environment no longer work in an OC4J 9.0.4 / JDK 1.4 environment.

Until you update your application so that all JavaBeans and other invoked classes are within packages, you can revert to a JDK 1.3.1 environment to avoid this issue.

---

**Notes:**

- The `javac -source` compiler option allows JDK 1.3.1 code to be processed seamlessly by the JDK 1.4 compiler, but classes must still be in packages in order to be invoked.
  - Only the JDK 1.3.1 and JDK 1.4 compilers are supported and certified by OC4J. It is possible to specify an alternative compiler by adding a `<java-compiler>` element to the `server.xml` file. This might provide a workaround for the "classes not in packages" issue, but other compilers are not certified or supported by Oracle for use with OC4J. Furthermore, do *not* update the `server.xml` file directly in an Oracle Application Server environment. Use the Oracle Enterprise Manager.
- 

This issue is also discussed in the following release note: [Section 8.1.4.3, "Migrating Source Code from JDK 1.3 to JDK 1.4"](#). For more information about the "classes not in packages" issue and other JDK 1.4 compatibility issues, refer to the following Web site:

<http://java.sun.com/j2se/1.4/compatibility.html>

Click the link "Incompatibilities Between Java 2 Platform, Standard Edition, v1.4.0 and v1.3".

## 8.2.2 Set the SAX Driver When Starting OC4J

For the filter functionality of Java Server Pages Standard Tag Library (JSTL) XML tags to work in OC4J, you must set the SAX driver when starting OC4J.

When starting OC4J standalone, use the following option in the command line:

```
-Dorg.xml.sax.driver=oracle.xml.parser.v2.SAXParser
```

When starting the Oracle Application Server, you can specify this setting through the system properties. See the Oracle Application Server documentation for details on where and how to make this specification.

If you do not set the property, then the JSTL demo `Filter.jsp` gives the following exception:

```
javax.servlet.jsp.JspException: System property org.xml.sax.driver not specified
```

## 8.2.3 JSP ojspc Issues

This section describes issues with `ojspc`. It includes the following topics:

- [Section 8.2.3.1, "Debug Option Has No Effect on ojspc Output"](#)
- [Section 8.2.3.2, "The /WEB-INF/lib or /WEB-INF/classes Directories Should Not Contain .java Files"](#)

### 8.2.3.1 Debug Option Has No Effect on ojspc Output

The `ojspc -debug` option has no effect on `ojspc` output in Oracle Application Server 10g (9.0.4). If you specify `-debug`, the option is accepted but ignored.

### 8.2.3.2 The /WEB-INF/lib or /WEB-INF/classes Directories Should Not Contain .java Files

When using `ojspc`, do not put any `.java` files in or under the `/WEB-INF/lib` directory or the `/WEB-INF/classes` directory.

If the `/WEB-INF/lib` or `/WEB-INF/classes` directories contain any `.java` files, then `ojspc` occasionally creates one or more duplicate `.class` files at the top level of the archive during batch pretranslation.

## 8.2.4 JESI Tag Release Notes

This section describes changes and enhancements in the behavior of Java Edge Side Includes (JESI) tags in Oracle Application Server 10g (9.0.4). It includes the following topics:

- [Section 8.2.4.1, "JESI Tags No Longer Require Conditional Treatment"](#)
- [Section 8.2.4.2, "JESI personalize Tag Now Adds Single Quotes"](#)
- [Section 8.2.4.3, "A fragment Tag Can Be Inside an Included Page"](#)
- [Section 8.2.4.4, "Multiple control or template Tags Can Be Used"](#)
- [Section 8.2.4.5, "No Response Output Outside the Tags of a template Tag"](#)
- [Section 8.2.4.6, "Do Not Use Explicit ESI Markup With JESI Tags"](#)



### 8.2.4.1 JESI Tags No Longer Require Conditional Treatment

In prior versions of the JESI tag library, JESI tags always generated the same output regardless of whether the request was coming directly from a client, such as a browser, or from Oracle Web Cache. Therefore, in prior versions of the tag library, JESI tags required special conditional treatment if there was a possibility that the Oracle Web Cache might be down or unavailable at any time, because then the included pages and fragments would not have been inserted into the response.

In the OC4J 9.0.4 implementation, JESI tags correctly generate a full response, even without the presence of Oracle Web Cache, by falling back to the standard JSP "include" functionality for inclusion of fragments. For more information, see the *Oracle Application Server Containers for J2EE JSP Tag Libraries and Utilities Reference*.

### 8.2.4.2 JESI personalize Tag Now Adds Single Quotes

In the OC4J 9.0.4 implementation, the JESI `personalize` tag now puts single quotes around the string value of the `default` attribute (or, for backward compatibility, the `value` attribute). This behavior is more compliant with the ESI syntax. In versions prior to Oracle Application Server 10g (9.0.4), the user had to add single quotes as part of the attribute string value. You must edit pages containing `personalize` tags that used to work prior to the 9.0.4 implementation to remove extra single quotes.

### 8.2.4.3 A fragment Tag Can Be Inside an Included Page

You can now place a `fragment` tag inside a page included through a `jsp:include` standard action, if it is properly enclosed in a `template` tag (which can be in the including page).

### 8.2.4.4 Multiple control or template Tags Can Be Used

When OC4J encounters multiple `control` tags, instead of throwing an exception, it ignores additional `control` or `template` tags. OC4J executes only the first tag that it encounters. This feature allows placing `control` tags into JSP-included pages. If a page is included in another page with `control` or `template` tags of its own, then the second tag is ignored. At the same time, the included page can be executed independently.

The four permutations and their behavior are as follows:

- A control tag followed by a control tag is acceptable. The second Control tag is ignored.
- A control tag followed by a template tag is acceptable. The attributes of the template tag are ignored.
- A template tag followed by a control tag is acceptable. The control tag is ignored.
- A template tag followed by a template tag produces an error.

#### 8.2.4.5 No Response Output Outside the Tags of a template Tag

In the OC4J 9.0.4 and the OC4J 9.0.3 implementations, there must be no response output outside the start and end tags of a `template` tag. Additionally, you can now place `template` tags in an included page, if there is no content output into the response outside the start and end tags.

#### 8.2.4.6 Do Not Use Explicit ESI Markup With JESI Tags

The JESI tag library is not guaranteed to work correctly when explicit ESI markup is used together with JESI tags to generate an HTTP response.

## 8.2.5 Tag Library Descriptors Must Be Under WEB-INF

This release note warns developers to carefully observe the JSP specification with respect to tag library descriptors, despite leniency in previous OC4J implementations.

The existing specification allows tag library descriptors only under *application\_root*/WEB-INF/ for a given application.

In practice, in the OC4J 9.0.4 implementation (and previous implementations), tag library descriptors have been accepted anywhere under *application\_root*, despite the requirements of the specification.

In implementations under development, the specification is strictly enforced. Tag library descriptors are allowed only under WEB-INF.

This warning is provided so that you can make sure that code that you develop for this OC4J implementation does not have to be changed when you upgrade in the future.

## 8.2.6 Adding Tag Library JAR Files to /WEB-INF/lib While OC4J Is Running

If you are adding tag library JAR files to the `/WEB-INF/lib` directory while OC4J is running, then set `tags_reuse_default` to "none" or "completetime" to avoid a `ClassCastException`.

## 8.2.7 Search Local Classes First

If you are using tag library JAR files at the application level that are intended to supersede JAR files in the well-known tag library location (global level), then you must set the application loader to search local classes first. You can do this through the following setting in your application's `orion-web.xml` file:

```
<web-app-class-loader search-local-classes-first="true" />
```

## 8.2.8 java.lang.ClassFormatError: (Truncated Class File)

A JSP error message such as the example shown below indicates a truncated class file.

Some conditions in which this can occur include the following:

- You are using JSP in a portal environment.
- The system is heavily loaded.

Use one of the following techniques to repair the error:

- Touch the JSP file, causing the JSP to be recompiled.
- Remove the corrupted class file, as indicated by the `"/modules/location/bizdir/jsp/bizdir.jsp"` listing in the error message example.

### Truncated Class File Error Message Example

500 Internal Server Error

OracleJSP:

JSP Error:

```
-----  
Request URI:/modules/location/bizdir/jsp/bizdir.jsp  
Exception:  
java.lang.ClassFormatError: _location/_bizdir/_jsp/_bizdir (Truncated class  
file)  
at java.lang.ClassLoader.defineClass0(Native Method)  
at java.lang.ClassLoader.defineClass(ClassLoader.java:493)  
at java.security.SecureClassLoader.defineClass(SecureClassLoader.java:111)  
at oracle.jsp.app.JspClassLoader.loadClass(JspClassLoader.java:682)  
at java.lang.ClassLoader.loadClass(ClassLoader.java:255)  
...
```

## 8.3 Release Notes for Servlets

This section describes release notes for servlets. It includes the following topics:

- [Section 8.3.1, "Cannot Invoke Classes Not in Packages"](#)
- [Section 8.3.2, "Servlet Invocation by Class Name Is Available During Development"](#)
- [Section 8.3.3, "Do Not Use Certain <orion-web-app> Attributes"](#)

### 8.3.1 Cannot Invoke Classes Not in Packages

With JDK 1.4, you are not allowed to invoke a class if it is not in a package if you are calling it from a class that is not in a package. The JSP release notes, [Section 8.2.1, "Cannot Invoke Classes That Are Not in Packages"](#) describes this issue in detail.

### 8.3.2 Servlet Invocation by Class Name Is Available During Development

In OC4J, servlet invocation by class name is available as a convenience feature during development.

This feature is controlled through the `http.webdir.enable` system property or the `servlet-webdir` attribute of the `<orion-web-app>` element in either the `global-web-application.xml` file or the `orion-web.xml` file.

This feature is documented in the *Oracle Application Server Containers for J2EE Servlet Developer's Guide*.

In the OC4J 9.0.4 implementation, invocation by class name is enabled by default, through the default settings `http.webdir.enable=true` and `servlet-webdir="/servlet/"`.

In a production environment, you must disable this feature by setting either `http.webdir.enable=false` or `servlet-webdir=""` (empty quotes).

### 8.3.3 Do Not Use Certain <orion-web-app> Attributes

In the OC4J 9.0.4 implementation, the `<orion-web-app>` attributes `internationalize-resources` and `default-mime-type` appear in the `orion-web.dtd` file. However, these attributes are not documented and are not recommended for use.

## 8.4 Release Notes for EJB

This section describes release notes for EJBs. It includes the following topics:

- [Section 8.4.1, "Client Requests Must Include a Port Number"](#)
- [Section 8.4.2, "MDB Transaction Timeout"](#)
- [Section 8.4.3, "Create and Release JMS Connections for JMS in the MDB onMessage\(\) Method"](#)
- [Section 8.4.4, "Considerations When Modifying Your orion-ejb-jar.xml File"](#)
- [Section 8.4.5, "Static Block in an EJB"](#)
- [Section 8.4.6, "OC4J Instances Terminating due to ping Timeout"](#)
- [Section 8.4.7, "Miscellaneous EJB Release Notes"](#)

### 8.4.1 Client Requests Must Include a Port Number

When you are providing your URL on the client to access an EJB in the following form, you must always provide the port number.

```
opmn:ormi://host:port:oc4j_inst/application
```

If you do not provide the port number, then the `oc4j_inst` always defaults to the **home** instance. (bug 3234351)

### 8.4.2 MDB Transaction Timeout

The message-driven bean (MDB) transaction timeout, as defined in the `transaction-timeout` attribute in the `orion-ejb-jar.xml` file, is an optional parameter. This attribute controls the transaction timeout interval (in seconds) for any container-managed transactional MDB that uses Oracle JMS. The default is one day (86,400 seconds). The MDB `transaction-timeout` attribute applies only to CMT MDBs that use Oracle JMS as the JMS provider. This attribute setting has no effect on BMT MDBs or any MDBs that use OC4J JMS. (bug 3079322)

- **JMS behavior with Oracle Application Server** — If the transaction has not completed in this time frame, then the transaction is rolled back and the message is redelivered to the `Destination` object. After Oracle JMS attempts to redeliver the message (the default is five attempts), the message is moved to the exception queue. For more information, refer to the *Oracle9i Application Developer's Guide—Advanced Queuing for Release 2 (9.2)*.

- **JMS behavior with OC4J** — The `transaction-timeout` setting does not work for CMT MDBs that use OC4J JMS. The timeout is always one day and cannot be modified. When the timeout occurs, OC4J JMS redelivers the message indefinitely, until the delivery is successful. You cannot set a retry limit.

In addition, the global `transaction-timeout` attribute defined in the `server.xml` file does not have any effect on MDBs.

### 8.4.3 Create and Release JMS Connections for JMS in the MDB `onMessage()` Method

You must create and release the JMS connections for Oracle JMS in the MDB `onMessage()` method, and not in the `ejbCreate()` method. (bug 2967949)

### 8.4.4 Considerations When Modifying Your `orion-ejb-jar.xml` File

If, after deploying your application to OC4J, you modify the application's `orion-ejb-jar.xml` file using the Oracle Enterprise Manager GUI, then you must restart OC4J for these changes to be applied to your application.

If you deploy your application to a standalone OC4J, and you decide that you want to modify some elements in your application's `orion-ejb-jar.xml` file through a text editor, then you must repackage the application and redeploy it to the standalone OC4J without restarting. (bug 3001543)

### 8.4.5 Static Block in an EJB

During EJB deployment in OC4J, the Container loads the bean class to find out its methods and generate the EJB wrappers. Because the code in the static block is executed while the class is being loaded, the JNDI environment context is not yet set up. Even during runtime, the bean is in the "does not exist" stage. In this stage of the life cycle, the JNDI environment context is undefined, and the bean provider cannot rely on it to be available.

To make the context available, you should set up and cache the context either during the construction of the bean, in the `ejbCreate()` method, or in the `setSessionContext()` method.

### 8.4.6 OC4J Instances Terminating due to ping Timeout

Under some conditions, the OPMN process monitoring software in Oracle Application Server may lose contact with an OC4J process. This can occur because of unexpected delays in the heartbeat protocol used by OPMN and OC4J to verify the proper functioning of the OC4J instance.

If this problem occurs sporadically, you can try increasing the ping timeout parameters as described in the following instructions.

However, if this occurs regularly, due to a consistent resource shortage, then you must increase the available hardware resources to solve the problem.

The following conditions can cause this problem:

- An overloaded host processor.
- One or more computation-intensive applications running in the OC4J instance.
- Deployment of applications with large numbers (hundreds) of EJBs. Full garbage collections of large heaps can cause the OC4J process to become less responsive during the garbage collection phase. Although this should not occur during normal usage, deployment of large applications with many EJBs in a memory-constrained environment can trigger this behavior.

You can configure the behavior of the "ping protocol" between OPMN and OC4J in the `opmn.xml` configuration file.

When OC4J exceeds the timeout intervals specified for the ping protocol, the process monitoring software decides that the OC4J process has stopped responding and, therefore, terminates the OC4J process.

If you suspect this behavior in an Oracle Application Server installation, then use the following steps to troubleshoot and work around:

1. When OC4J instances are "mysteriously" terminating, first increase diagnostic logging to determine if ping failures are triggering the termination:

- a. Increase the OPMN logging level to 5 so that you can see the pings.

In `opmn/conf/opmn.xml`, edit the following line:

```
log-file path="$ORACLE_HOME/opmn/logs/ipm.log" level="5" ...
```

- b. Reload the daemon.

```
opmn/bin/opmnctl reload
```

2. Look in `opmn/logs/ipm.log` for the following line:

```
Process Ping Failed: OC4J~<instance name>~default_island~1 (opmnid)
```

3. The line above indicates that the memory and CPU resources of the current host are probably not sufficient to perform the operation within the currently specified ping timeout interval (used by OPMN to determine OC4J "responsiveness").



Change the settings as follows:

- a. Increase the timeout and interval.

Example:

```
<ping timeout="60" interval="60"/>
<data id="reverseping-failed-ping-limit" value="5" />
```

- b. Reload the daemon.

```
opmn/bin/opmnctl reload
```

- c. Restart the appropriate OC4J instance.

4. Repeat the top-level operation that caused the timeout failure.

## 8.4.7 Miscellaneous EJB Release Notes

The following are miscellaneous EJB release notes:

- You cannot mark a Container-Managed Persistence (CMP) entity bean as read-only if it has a Container-Managed Relationships (CMR) relationship to another entity bean that is not read-only.
- If you invoke any EJB from an application client outside the EJB container, then Java Authentication and Authorization Service (JAAS) is not supported for the EJB. However, if you call the EJB from a servlet within the OC4J instance, then JAAS is supported.
- The container may call the `EJBActivate()` method multiple times when the bean is associated with several wrappers. (bug 3107168)
- If you access an EJB in an application from an EJB in a different application, then you cannot use the `RMIInitialContextFactory` object. In this scenario, you must use a parent-child relationship between these applications, and you must use the default initial context factory object. (bug 2812150)
- The JTA two-phase commit (2pc) function does not work with Oracle Database version 9.2. Instead, use Oracle Database version 9.2.0.4 or higher to enable the 2pc functionality. (bug 2668460)
- Currently, inline SQL queries are not supported within the finder query string defined in the `orion-ejb-jar.xml` file. When modifying these queries, avoid inline SQL queries, such as:

```
SELECT * FROM
  (SELECT * FROM TEST1) A,
```

```
(SELECT * FROM TEST2) B WHERE A.ID =B.ID
```

## 8.5 Release Notes for OC4J Services

This section describes issues with OC4J Services. It includes the following topics:

- [Section 8.5.1, "Release Notes for JNDI"](#)
- [Section 8.5.2, "Release Notes for Java Object Cache \(JOC\)"](#)

### 8.5.1 Release Notes for JNDI

This section describes release notes for the Java Naming and Directory Interface (JNDI). It includes the following topics:

- [Section 8.5.1.1, "JNDI Clustering: Values Bound From the Client Not Supported"](#)
- [Section 8.5.1.2, "Do Not Mix JDK Versions for IIOP Interactions"](#)
- [Section 8.5.2.1, "Use javacache.xml for JOC Configuration"](#)

#### 8.5.1.1 JNDI Clustering: Values Bound From the Client Not Supported

JNDI clustering does not support clustering values bound from the client (for example, new InitialContext) unless both of the following conditions are met:

- The client binds the value to JNDI using a lookup URL.
- All of the servers are up.

#### 8.5.1.2 Do Not Mix JDK Versions for IIOP Interactions

This section describes release notes for the Internet Inter-ORB Protocol (IIOP).

Do not mix JDK versions for IIOP interactions. If OC4J is communicating with other J2EE servers using the Internet Inter-ORB Protocol (IIOP), then all of the servers must use the same version of the JDK.

### 8.5.2 Release Notes for Java Object Cache (JOC)

This section describes release notes for the Java Object Cache (JOC).

### 8.5.2.1 Use javacache.xml for JOC Configuration

The OC4J 9.0.4 implementation uses the file `javacache.xml` for JOC configuration. In previous versions of JOC, configuration was done through the file `javacache.properties`.

---

---

**Note:** If you install both a 9.0.4 release and a pre-9.0.4 release on the same host, you must ensure that the `javacache.xml` `discovery-port` attribute and the `javacache.properties` `discoveryAddress` attribute are not configured to the same port. If they are, you must manually change the value of one or the other to a different port number, in the range of 7000 - 7099.

---

---

## 8.6 Documentation Errata

This section describes known errors in the OC4J documentation in Oracle Application Server 10g (9.0.4). It includes the following topics:

- [Section 8.6.1, "Oracle Application Server Containers for J2EE Servlet Developer's Guide Errata"](#)
- [Section 8.6.2, "Oracle Application Server Containers for J2EE Support for JavaServer Pages Developer's Guide Errata"](#)
- [Section 8.6.3, "Oracle Application Server Containers for J2EE User's Guide Errata"](#)
- [Section 8.6.4, "Oracle Application Server Containers for J2EE Services Guide Errata"](#)

### 8.6.1 *Oracle Application Server Containers for J2EE Servlet Developer's Guide Errata*

The following note, which appears on page 6-6 of the 9.0.4 version of the *Oracle Application Server Containers for J2EE Servlet Developer's Guide*, is incorrect:

"Note: The OC4J JSP container does not currently support the `persistence-path` flag. It is for servlets only."

This flag actually is supported by the JSP container in the Oracle Application Server 10g (9.0.4) release.

### 8.6.2 *Oracle Application Server Containers for J2EE Support for JavaServer Pages Developer's Guide Errata*

The following item, which appears in the "Oracle HTTP Server and `mod_oc4j`" section in Chapter 2 of the *Oracle Application Server Containers for J2EE Support for JavaServer Pages Developer's Guide*, is incorrect:

"A `mod_oc4j` module can restart an OC4J instance automatically, if necessary."

In fact, OPMN, not `mod_oc4j`, restarts OC4J processes automatically when it detects that they are unavailable (for several reasons).

### 8.6.3 Oracle Application Server Containers for J2EE User's Guide Errata

The following information is missing in the *Oracle Application Server Containers for J2EE User's Guide*, Appendix A, "Additional Information". The section "Elements Contained Within <application-server> of the server.xml file" should include the following text describing the <metric-collector> element.

```
<metric-collector>
```

The <metric-collector> element specifies that OC4J sends a metric between 0 and 100, inclusive, to mod\_oc4j so that mod\_oc4j can make routing decisions to load-balance incoming requests to a list of available OC4J instances. The metric sent has a relative value only, where 0 means that the OC4J instance is very busy and 100 means that the OC4J instance is available (not busy). When configured for metric load balancing, mod\_oc4j routes first to the OC4J instance with the greater value.

The metric sent from OC4J to mod\_oc4j is used only when metric-based load balancing is specified for mod\_oc4j and when OC4J runs in an Oracle Application Server environment.

If you specify metric-based load balancing in mod\_oc4j and do not specify the <metric-collector> element in server.xml, then mod\_oc4j expects OC4J to send metrics, but OC4J does not send metrics. In this case, mod\_oc4j reports the following warning message:

```
No run time metrics for oc4j(opmnid=%s) in notification Oc4jSelectMethod is
configured to use run time metrics, please make sure OC4J side is configured
accordingly. Default to 50.
```

In this case, mod\_oc4j uses the value 50 for each of the OC4J processes and continues.

Likewise, if you specify the <metric-collector> element in server.xml, but do not specify metric-based load balancing in mod\_oc4j, then OC4J sends metrics but mod\_oc4j is not configured to receive metrics. In this case, mod\_oc4j ignores the metrics and uses whatever the configured method is for load balancing. Use Oc4jSelectMethod to specify the load balancing method. If no Oc4jSelectMethod is specified, then mod\_oc4j uses the default, which is roundrobin.

The <metric-collector> element takes the following attribute: classname.

The classname attribute defines an interface for gathering and calculating a server-wide metric. Use oracle.oc4j.server.DMSMetricCollector for the classname attribute when using a DMS-noun-based metric collector.

A `DMSMetricCollector` instance takes several parameters. Details for the values for these parameters are available in the *Oracle HTTP Server Administrator's Guide*.

For example:

```
<metric-collector classname="oracle.oc4j.server.DMSMetricCollector">
  <init-param>
    <param-name>
      dms-noun
    </param-name>
    <param-value>
      /oc4j/default/WEBs/processRequest.time
    </param-value>
  </init-param>
  <init-param>
    <param-name>
      history-proportion
    </param-name>
    <param-value>
      0.2
    </param-value>
  </init-param>
  <init-param>
    <param-name>
      debug
    </param-name>
    <param-value>
      false
    </param-value>
  </init-param>
</metric-collector>
```

For details on using the `<metric-collector>` element and using metric-based load balancing with `mod_oc4j`, see the *Oracle HTTP Server Administrator's Guide*.

### 8.6.4 Oracle Application Server Containers for J2EE Services Guide Errata

The following statement in the JNDI chapter of the *Oracle Application Server Containers for J2EE Services Guide* is incorrect:

"When JNDI clustering is enabled, you can bind a serializable value into an application context (via remote client, EJB, or servlet) on one server and read it on another server. You can also create and destroy subcontexts in this way."

In OC4J 10g (9.0.4), destroying subcontexts is not yet supported.

---

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# OracleAS TopLink

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

- [Section 9.1, "General Issues and Workarounds"](#)
- [Section 9.2, "Documentation Errata"](#)

## 9.1 General Issues and Workarounds

This section describes general issues and their workarounds for OracleAS TopLink. It includes the following topics:

- [Section 9.1.1, "New Package Names"](#)
- [Section 9.1.2, "API Modifications"](#)
- [Section 9.1.3, "OracleAS TopLink Examples"](#)
- [Section 9.1.4, "EJB QL Parsing and Running JSPs on BEA WebLogic 8.1 Service Pack 1"](#)
- [Section 9.1.5, "XML Parser Dependencies"](#)
- [Section 9.1.6, "UTF-8 Encoding Exceptions"](#)
- [Section 9.1.7, "SAXParseException Error Message"](#)
- [Section 9.1.8, "Using OracleAS TopLink - Web Client with Right-to-left Languages"](#)
- [Section 9.1.9, "Prepared Statements may Fail to Execute After a loss of Communication to the Database"](#)
- [Section 9.1.10, "OracleAS TopLink Mapping Workbench"](#)

### 9.1.1 New Package Names

Beginning with Release 2 (9.0.3), the base package for the entire structure became `oracle.toplink`. Use the **Package Rename** tool to upgrade any existing application source code and OracleAS TopLink Mapping Workbench project that refers to a pre-Release 2 (9.0.3) versions.

---

---

**Note:** If you are upgrading from a version previous to Release 2 (9.0.3), you must convert the package names before opening your project(s) in OracleAS TopLink 10g (9.0.4).

---

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For more information on the Package Rename tool, see the *Oracle Application Server TopLink Getting Started Guide*.



## 9.1.2 API Modifications

In 10g (9.0.4), OracleAS TopLink modified the API as follows:

- For `DatabasePlatform.initializePreallocatedSequences()`: use `DatabaseSession.getSequencingControl().initializePreallocated()` instead.
- `DatabasePlatform.setUsesNativeSequencing(boolean)` is now marked as **INTERNAL and should not be used by users**. Use `DatabaseSession.getSequencingControl().shouldUseNativeSequencing()` and `shouldUseTableSequencing()` instead.
- Changes to `oracle.toplink.tools.codegen`. To maintain existing code, use the following:
  - For `AttributeDefinition`, use `ReflectiveAttributeDefinition` instead.
  - For `MethodDefinition`, use `ReflectiveMethodDefinition` instead.

Additional code definition implementations include `NonreflectiveMethodDefinition` and `NonreflectiveAttributeDefinition`.

- Added `RemoteCORBAConnection.scrollableCursorPreviousObject`.
- Added `RemoteEJBConnection.scrollableCursorPreviousObject`.
- Added `RemoteJMSConnection.scrollableCursorPreviousObject`.
- Added `RemoteRMICConnection.scrollableCursorPreviousObject`.

## 9.1.3 OracleAS TopLink Examples

If you attempt to run the EJB 1.1 CMP Single Bean example with BEA Weblogic 6.1 on the Sybase SQL Server, Sybase throws a SQL error.

## 9.1.4 EJB QL Parsing and Running JSPs on BEA WebLogic 8.1 Service Pack 1

In OracleAS TopLink 10g (9.0.4), OracleAS TopLink builds and parses against ANTLR 2.70. BEA WebLogic 8.1 Service Pack 1 ships with ANTLR 2.72. Using OracleAS TopLink EJB QL parsing and running JSPs simultaneously in the same application with BEA WebLogic 8.1 SP1 causes parsing problems due to incompatibilities between the ANTLR versions. Consider the following:

- [Section 9.1.4.1, "EJB QL parsing"](#)
- [Section 9.1.4.2, "Running JSPs"](#)

### 9.1.4.1 EJB QL parsing

To use OracleAS TopLink EJB QL parsing with BEA WebLogic 8.1 SP1, without running JSPs simultaneously, place the `antlr.jar` file (version 2.70 provided with the OracleAS TopLink install), as the first item in the class path.

### 9.1.4.2 Running JSPs

To run JSPs with OracleAS TopLink with BEA WebLogic 8.1 SP1, without EJB QL simultaneously, remove the `antlr.jar` file (version 2.70) from the class path.

## 9.1.5 XML Parser Dependencies

Consider the following XML parser dependency issues:

- [Section 9.1.5.1, "OC4J XML Parser Dependency"](#)
- [Section 9.1.5.2, "Crimson XML Parser Issue"](#)

### 9.1.5.1 OC4J XML Parser Dependency

By default, both OC4J and OracleAS TopLink use the OracleAS XML Parser for Java v2. When using OC4J and OracleAS TopLink together, ensure that both use the same version of OracleAS XML Parser for Java v2. Failure to do so may result in XML parsing failures and application errors.

To determine what version of OracleAS XML Parser for Java v2 is used in your OracleAS TopLink installation:

1. Start WinZip
2. Configure WinZip to display comments: select `Options > Configuration`, select the **Miscellaneous** tab, and ensure that the "Show comments when opening Zip files" check box is checked.

3. Using WinZip, navigate to the `<ORACLE_HOME>\lib` directory (where `<ORACLE_HOME>` is the directory in which you installed OracleAS TopLink) and open the `xmlparserv2.jar` file.

A window opens with a comment that shows the build that this version of OracleAS XML Parser for Java v2 belongs to. For example: `Label: XDK_MAIN_SOLARIS_031006`.

4. Ensure that this build is the same as the build associated with the OracleAS XML Parser for Java v2 used in OC4J.

### 9.1.5.2 Crimson XML Parser Issue

Crimson (<http://xml.apache.org/crimson/>) is the XML parser supplied in the Java 2 Platform, Standard Edition (J2SE) and in some JAXP reference implementations.

If you use Crimson with the JAXP API to parse XML files whose system identifier is not a fully qualified URL, then XML parsing will fail with a "not valid URL" exception.

Other XML parsers defer validation of the system identifier URL until it is specifically referenced.

If you are experiencing this problem, consider one of the following alternatives:

- Ensure that your XML files use a fully qualified system identifier URL.
- Use another XML parser (such as the OracleAS XML Parser for Java v2).

## 9.1.6 UTF-8 Encoding Exceptions

In 10g (9.0.4), OracleAS TopLink only supports UTF-8 encoding. The `SAXParseException` with OracleAS TopLink Exception, **Error Code 9006** occurs if you attempt to read a non-UTF-8 formatted XML file.

## 9.1.7 SAXParseException Error Message

- *The markup in the document preceding the root element must be well-formed.*
- *Start of root element expected.*

If any of these exceptions occurs, assess the possibility that UTF-8 encoding is the issue.

### 9.1.8 Using OracleAS TopLink - Web Client with Right-to-left Languages

The OracleAS TopLink - Web Client does not correctly display text for some right-to-left languages.

### 9.1.9 Prepared Statements may Fail to Execute After a loss of Communication to the Database

If you configure a Login or Query to use statement caching and communication to the database is lost and then restored, previously cached statements may fail to execute.

For example, it is a common practice to define an exception handler and register it with a Session using `Session.setExceptionHandler()`. When the exception handler is invoked to handle a loss of communication and the handler reestablishes the connection to the database, any attempt to re-execute a previously cached statement will fail.

### 9.1.10 OracleAS TopLink Mapping Workbench

The following issues exist in OracleAS TopLink Mapping Workbench 10g (9.0.4):

- [Section 9.1.10.1, "Migrating Projects from Earlier Versions"](#)
- [Section 9.1.10.2, "JDK Issue with Microsoft Windows and ATI Video Cards"](#)
- [Section 9.1.10.3, "Using Mapped Network Drives with Windows XP"](#)
- [Section 9.1.10.4, "Using JAWS"](#)
- [Section 9.1.10.5, "Icon Size"](#)
- [Section 9.1.10.6, "Referencing Large Class paths"](#)
- [Section 9.1.10.6, "Referencing Large Class paths"](#)
- [Section 9.1.10.7, "Generating Source Code"](#)
- [Section 9.1.10.8, "Multiple Levels of Joining"](#)
- [Section 9.1.10.9, "Unsupported JREs"](#)
- [Section 9.1.10.10, "Invalid Warning Message"](#)
- [Section 9.1.10.11, "Improper Set Method for Array Type Attributes"](#)
- [Section 9.1.10.12, "Canceling in Expression Builder May Still Modify a Query"](#)

- [Section 9.1.10.13, "Multiple Mappings to Primary Key Field can Affect how the OracleAS TopLink Mapping Workbench Generates the ejb-jar.xml File"](#)
- [Section 9.1.10.14, "Code Generated Project Class Uses String Values for All Types in Expressions"](#)

#### **9.1.10.1 Migrating Projects from Earlier Versions**

If you are migrating an OracleAS TopLink Mapping Workbench project from a version prior to version 3.6, contact Oracle Support Services support for assistance at:

<http://metalink.oracle.com>

#### **9.1.10.2 JDK Issue with Microsoft Windows and ATI Video Cards**

On Microsoft Windows platforms, Java 2D functionality in J2SE 1.4.1 can cause a system crash (blue screen). Although the JDK 1.4.1\_02 release fixes this bug, some non-Java applications may trigger a system crash. If you still encounter this problem when you run the OracleAS TopLink Mapping Workbench, update your ATI driver.

The latest drivers for a particular card are usually available on the web site of your computer, video card, or video chip manufacturer. For more information, also see the J2SE 1.4.1 release documentation at:

<http://java.sun.com/j2se/1.4.1/relnotes.html>

#### **9.1.10.3 Using Mapped Network Drives with Windows XP**

On Microsoft Windows XP platforms with mapped network drives, the OracleAS TopLink Mapping Workbench File Chooser dialogs (such as Save File or Open File) may experience slow responses for opening and traversing directory trees. Unmapping the network drives to eliminate this behavior.

#### **9.1.10.4 Using JAWS**

Due to limitations in JAWS 4.5.1, input field labels in the OracleAS TopLink Mapping Workbench are not read properly. Oracle recommends using JAWS 3.7 and version 103 Access Bridge for maximum accessibility.

### 9.1.10.5 Icon Size

Changing the icon size of the OracleAS TopLink Mapping Workbench toolbar may cause the application to fail at the next startup. You must edit the `workbench.xml` file and change `small-icon="false"` to `"true"`.

### 9.1.10.6 Referencing Large Class paths

Referencing an extremely large directory (such as your root directory) or `.jar` file in your project's classpath may considerably slow the class chooser dialog and negatively impact performance.

### 9.1.10.7 Generating Source Code

If you attempt to generate source code for a descriptor but cancel the process before the OracleAS TopLink Mapping Workbench writes the new source code, a dialog indicates that the source code was successfully updated. However, if you canceled the process, the OracleAS TopLink Mapping Workbench did not overwrite any existing code.

In 10g (9.0.4), the OracleAS TopLink Mapping Workbench does not support generation of code for inner classes.

If you attempt to generate source code from a table with BLOBs, the generated Java code may contain errors in type the type definition and method parameters. You must edit the source code to eliminate the errors.

### 9.1.10.8 Multiple Levels of Joining

If you select **Use Joining** for a one-to-one mapping in the OracleAS TopLink Mapping Workbench, the generated SQL is incorrect and will return null instances.

#### **Example 9-1**

**Customer** has three objects linked by a 1:1 mapping: **Customer** has an **Address**; **Address** has a **Country**. Each class is mapped to a different table: **Customer** to **CUSTOMER**; **Address** to **ADDRESS**; **Country** to **COUNTRY**. With the Use Joining option, the OracleAS TopLink Mapping Workbench generates incorrect queries.

To join the relationships correctly, use the following syntax:

```
readAllByExample.addJoinedAttribute("address");  
readAllByExample.addJoinedAttribute(tpBuilder.get("address").get("country"));
```

#### 9.1.10.9 Unsupported JREs

Do not use the OracleAS TopLink Mapping Workbench with the Sun JRE 1.4. Refer to the *Oracle Application Server TopLink Getting Started Guide* for complete information on supported platforms.

#### 9.1.10.10 Invalid Warning Message

When creating a variable one-to-one mapping, the OracleAS TopLink Mapping Workbench may incorrectly show the following warning message in the status bar:

*The following specified Query Key Names are no longer valid: xxx*

where *xxx* is a name of query key specified in Query Key Associations tab of mapping. This warning may be safely ignored.

#### 9.1.10.11 Improper Set Method for Array Type Attributes

The OracleAS TopLink Mapping Workbench does not generate proper set method for array type attributes.

#### 9.1.10.12 Canceling in Expression Builder May Still Modify a Query

When using the OracleAS TopLink Mapping Workbench Expression Builder, it is possible to inadvertently modify a query even if you select cancel to discard your changes.

For example, if you create a nested compound query, edit the query to remove the compound component, and then press **Cancel** to discard the changes, the changes are still applied. If this occurs, you must edit the query again and replace the inadvertently removed compound component.

#### 9.1.10.13 Multiple Mappings to Primary Key Field can Affect how the OracleAS TopLink Mapping Workbench Generates the ejb-jar.xml File

When using the OracleAS TopLink Mapping Workbench to create EJB 2.0 CMP bean descriptors, avoid creating multiple mappings to the bean's primary key field. If such a descriptor contains multiple mappings to its primary key field, the required direct-to-field mapping must be the last primary key mapping in the descriptor. If it is not, the OracleAS TopLink Mapping Workbench will fail to write the primary-key-field element to the `ejb-jar.xml` file.

For example, if the descriptor contains a direct-to-field mapping for the primary key followed by a one-to-one mapping using the primary key as a foreign key, then the primary-key-field element is not written to the `ejb-jar.xml` file.

#### 9.1.10.14 Code Generated Project Class Uses String Values for All Types in Expressions

When you define an expression in the OracleAS TopLink Mapping Workbench, you can select the type of any literal value. If you export the project Java source, all literal values are written out as String type.

For example, if you define a query with a literal value (100000) of type Long and then export the project Java source, the literal value is written out as a String type.

##### **Example 9–2 Query in Exported Project Java Source**

```
ReadObjectQuery namedQuery0 = new
ReadObjectQuery(examples.sessions.threetier.model.Employee.class);
namedQuery0.setName("testQuery");
...
namedQuery0.setSelectionCriteria(expBuilder0.get("salary").equal("100000"));
descriptor.getQueryManager().addQuery("testQuery", namedQuery0);
```

## 9.2 Documentation Errata

This section describes known errors in the documentation. It includes the following topics:

- [Section 9.2.1, "Configuring the OracleAS TopLink Web Client"](#)
- [Section 9.2.2, "OracleAS TopLink Mapping Workbench Tutorial"](#)

### 9.2.1 Configuring the OracleAS TopLink Web Client

In the "Configuring the Web Client" section of the *Oracle Application Server TopLink Application Developer's Guide*, the correct path of the `web.xml` file should be:

```
<ORACLE_HOME>\toplink\config\toplinkwc.
```

When using the Web Client with Oracle Application Server Containers for J2EE, substitute your local `<J2EE_HOME>` directory in place of the `<ORACLE_HOME>\toplink\examples\oc4j\904\server\` indicated in the document.



To deploy to BEA WebLogic, you must also define a reference to this datasource in the `<ORACLE_HOME>\toplink\config\toplinkwc\weblogic.xml` file, as follows:

```
<reference-descriptor>
  <resource-description>
    <res-ref-name>jdbc/DataSourceName</res-ref-name>
    <jndi-name>jdbc/DataSourceName</jndi-name>
  </resource-description>
</reference-descriptor>
```

In the "Configuring the Application Server" section, the first step of the procedure (where you are instructed to copy the `toplinkwc.ear` file to an application server-specific directory) is not required. When you run the `assembleWebClient` script located in the `<ORACLE_HOME>\toplink\bin` directory, the system assembles and deploys the `toplinkwc.ear` file for you, as specified in the `build.properties` file.

## 9.2.2 OracleAS TopLink Mapping Workbench Tutorial

When completing the tutorials in the *Oracle Application Server TopLink Mapping Workbench User's Guide*, be aware of the following changes:

- To use sequencing, in addition to creating the sequence table from the OracleAS TopLink Mapping Workbench, you must also create the sequence table in the database.
- When creating the sequence table, use size **38** for both `SEQ_NAME` and `SEQ_COUNT`.
- When implementing inheritance for the `BaseProject` descriptor, ensure that the **Read Subclass On Query** option is selected.
- Figure B-49 incorrectly omits the `BaseProject` class indicator type. Although `BaseProject` is an abstract class and does not require an indicator value, it is listed on the Inheritance tab.



# Part III

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## OracleAS Portal Issues

This part describes issues associated with the Oracle Application Server Portal (OracleAS Portal). It contains the following chapters:

- [Chapter 10, "OracleAS Portal"](#)
- [Chapter 11, "Oracle Ultra Search"](#)
- [Chapter 12, "OracleAS Syndication Services"](#)



# 10

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## OracleAS Portal

This chapter describes with OracleAS Portal. It includes the following topics:

- [Section 10.1, "UI Issues and Workarounds"](#)
- [Section 10.2, "OmniPortlet, Simple Parameter Form, Web Clipping Portlet Issues and Workarounds"](#)
- [Section 10.3, "Search Issues and Workarounds"](#)
- [Section 10.4, "PDK Issues and Workarounds"](#)
- [Section 10.5, "NLS Issues and Workarounds"](#)
- [Section 10.6, "Administration Issues and Workarounds"](#)
- [Section 10.7, "Documentation Errata"](#)

## 10.1 UI Issues and Workarounds

This section describes UI related issues and their workarounds for OracleAS Portal:

- [Section 10.1.1, "Relative Links Converted to Absolute Links"](#)
- [Section 10.1.2, "Problems Adding Portlets to Pages - Provider Registration Failure"](#)
- [Section 10.1.3, "Extra Perspective Page Template if Upgrading from Oracle9iAS Portal 9.0.2.6"](#)
- [Section 10.1.4, "Custom Attributes Revert to Default Values When New Version Created"](#)

### 10.1.1 Relative Links Converted to Absolute Links

This problem occurs when using the Rich Text Editor in Internet Explorer only. If you create a Text item containing a relative link, it is converted to an absolute link. This causes problems if your content is to be exported to another site. For example:

1. Create a Text item.
2. Switch to HTML mode in the Rich Text Editor.
3. Enter: `<IMG SRC="/images/home.gif" ALT="Home" BORDER=0>`
4. Click OK.
5. Edit the Text item.

Note that the *base* has been added to the URL, e.g. `<IMG alt=Home src="http://webserver.us.abc.com:5000/images/home.gif" border=0>`.

One workaround is to disable the Rich Text Editor. For details, see *Oracle Application Server Portal User's Guide*. Alternatively, apply the patch to Bug 3009204 (available on the Oracle MetaLink Web site at <http://metalink.oracle.com>). This patch provides a script that parses text items and converts absolute URLs to relative URLs.

### 10.1.2 Problems Adding Portlets to Pages - Provider Registration Failure

If you are unable to add portlets to a page, it may be due to a provider registration issue. You will not receive an error message if you register a provider that has two portlets with the same portlet ID, portlets with no names, or portlets with no IDs. However, in all these cases you are not able to add portlets from that provider onto pages, and so on.

### 10.1.3 Extra Perspective Page Template if Upgrading from Oracle9iAS Portal 9.0.2.6

If you previously upgraded to Oracle9iAS Portal 9.0.2.6 using version 1, 2, or 3 of the Oracle9iAS Portal 9.0.2.6 repository upgrade patch #2981297, and then upgraded to OracleAS Portal 10g (9.0.4), you may encounter a problem where you have two perspective page templates. This problem occurs if you previously upgraded to Oracle9iAS Portal 9.0.2.6, and then created additional perspectives in a page group that contained upgraded perspectives.

If you find that one or more of your upgraded page groups contains two perspective page templates, follow these steps for each affected page group:

1. Display the perspective page of one of the perspectives that was created after the upgrade to Oracle9iAS Portal 9.0.2.6 (but before the upgrade to OracleAS Portal 10g (9.0.4)).
2. Switch to Edit mode.
3. In the page toolbar, click **Edit Template**.
4. In the template toolbar, click **Template: Properties** (make sure you click the Properties link for the template and not for the page group).
5. Edit the Display Name of the template to something like <template\_name>\_delete, and click **OK**.
6. Go to the Navigator and drill down to the templates area of the page group.
7. Delete the <template\_name>\_delete template.
8. Use the following scripts to delete all the perspective pages in the page group then recreate them using the correct perspective page template:
  - ORACLE\_HOME/portal/admin/plsql/wws/pstdefin.sql
  - ORACLE\_HOME/portal/admin/plsql/wws/pstpgshw.sql
  - ORACLE\_HOME/portal/admin/plsql/wws/pstundef.sql
  - ORACLE\_HOME/portal/admin/plsql/wws/pstpgcre.sql
  - ORACLE\_HOME/portal/admin/plsql/wws/pstprcpg.sql

For information about these scripts, refer to *Oracle Application Server Portal Configuration Guide*.

### 10.1.4 Custom Attributes Revert to Default Values When New Version Created

The values of custom attributes revert to their default values when a new version is created in the following situations:

- When the attribute is hidden in the Edit Item page, the item is edited and a new version is created. In this case, the custom attribute is no longer shown in the region display. Currently, the only workaround is to always show custom attributes in the Edit Item page when using versioning.
- When an item is edited through WebDAV and versioning is enabled on the page (either Simple or Audit versioning). When versioning is enabled, WebDAV always creates a new version, and the value of any custom attribute is set to the default value in the new version. Currently, the only workaround is to not use custom attributes in combination with versioning and WebDAV.

## 10.2 OmniPortlet, Simple Parameter Form, Web Clipping Portlet Issues and Workarounds

This section describes issues relating to OmniPortlet, Web Clipping and Simple Parameter Form. These portlets are located in the Portlet Repository as follows: *Portlet Repository: Portlet Builders*.

- [Section 10.2.1, "Browser Requirements"](#)
- [Section 10.2.2, "\(OmniPortlet\) Need to Refresh OmniPortlet Provider After Installation"](#)
- [Section 10.2.3, "\(OmniPortlet\) News Layout Scroll Type Not Supported in Netscape 4.79"](#)
- [Section 10.2.4, "\(OmniPortlet\) Chart Does Not Display Formatted Numeric Values"](#)

### 10.2.1 Browser Requirements

To edit OmniPortlet, Web Clipping or Simple Parameter Form portlets, that is, set properties in Edit Defaults mode, you must use the following browser versions:

- Netscape 7.0 or higher.
- Microsoft Internet Explorer 5.5 or higher for Windows NT and Windows 2000
- Microsoft Internet Explorer 6.0 for Windows XP

If you use browser versions older than these, you may encounter JavaScript errors.



## 10.2.2 (OmniPortlet) Need to Refresh OmniPortlet Provider After Installation

If you want to use parameters and events with OmniPortlet, you must first refresh the OmniPortlet provider. To do this, follow these steps:

1. Login to OracleAS Portal.
2. Click the **Navigator** link.
3. Select the **Providers** tab.
4. Select **Locally Built Providers**.
5. Locate OmniPortlet Provider and click its **Refresh** link.

## 10.2.3 (OmniPortlet) News Layout Scroll Type Not Supported in Netscape 4.79

The *News Layout Scroll* type in OmniPortlet is supported on Microsoft Internet Explorer and Netscape 7.0. It does not work with Netscape 4.79.

## 10.2.4 (OmniPortlet) Chart Does Not Display Formatted Numeric Values

If numeric values in a data source contain formatted strings, commas or currency (e.g. \$32,789.00), they are considered to be text and ignored when the chart is generated. As a workaround, remove formatting characters from numerical values.

## 10.3 Search Issues and Workarounds

This section describes issues relating to the search functionality in OracleAS Portal.

- [Section 10.3.1, "Search Error - Page Group ID Does Not Exist \(WWS-30641\)"](#)
- [Section 10.3.2, "Maximum Return Value Does Not Work"](#)
- [Section 10.3.3, "Problems Saving Searches using Netscape 4.79"](#)
- [Section 10.3.4, "Result Attributes Not Displayed"](#)
- [Section 10.3.5, "Enabling/Disabling Oracle Text Impacts Perspective Selection"](#)
- [Section 10.3.6, "Issues With Multiple Search Portlets Placed on Search Result Pages"](#)
- [Section 10.3.7, "Promoting Perspectives to Shared Objects Impacts Search Results"](#)
- [Section 10.3.8, "Problems If Too Many Page Groups or Search Attributes Selected"](#)

### 10.3.1 Search Error - Page Group ID Does Not Exist (WWS-30641)

These errors are displayed on pages containing search portlets or Basic Search Box items, if the page group of an associated search results page is deleted:

```
Error: An unexpected error has occurred (WWS-32100)
...
The Page Group ID does not exist. (WWS-30641)
```

Also, you are unable to access the **Search Settings** page to choose a new search results page. (The **Search Settings** page is accessible from the Services portlet which is on the Portal sub-tab of the Administer tab on the Portal Builder page.)

To resolve this issue, follow the instructions published in Bug 3263977 (available on the Oracle MetaLink Web site at <http://metalink.oracle.com>).

### 10.3.2 Maximum Return Value Does Not Work

You can build a custom search form (using the Custom Search portlet) that lets the user *Set the maximum number of results*. In this release, this option does not restrict the total number of results returned.

However, if you allow users to *Set the number of results per page* they can restrict how many results appear on each page.

### 10.3.3 Problems Saving Searches using Netscape 4.79

In Netscape 4.79 you may experience problems saving search results, if your search is based on more than one search term separated by spaces, for example, *sales targets*. This error is displayed: `The request had invalid syntax.`

### 10.3.4 Result Attributes Not Displayed

The Custom Search portlet allows you to choose which attributes are displayed with search results. However, some of the available attributes which are listed do not get displayed with search results as expected, that is Base Item Type, Display Parameter Form, Enable Item Check-Out, Link That Displays Item In New Browser Window, Oracle Reports Components, Rollover Image, Item Content, Portlet Content, Portlet Instance Global Unique Id, Provider Name, Updated Item Indicator, New Item Indicator.

### 10.3.5 Enabling/Disabling Oracle Text Impacts Perspective Selection

If Oracle Text is enabled you can restrict search results by one or more perspective. If Oracle Text is disabled you can restrict search results by a single perspective only. If you restrict your search results by perspective and then switch between Oracle Text being on then off (or off then on), perspective selection may not be as expected.

### 10.3.6 Issues With Multiple Search Portlets Placed on Search Result Pages

Search functionality is designed such that one search portlet maps to a single page. Therefore, if you choose to display search results on a page that contains multiple search portlets (Basic, Advanced, Custom or Ultra Search portlets) you will notice that all search portlets on the results page respond, i.e. search results are displayed in every search portlet. To avoid this behavior it is recommended that you display search results on pages that contain a single search portlet.

Similarly, when an Ultra Search portlet returns results, any other search portlets placed on the same page will respond. Therefore, do not place additional search portlets on a page that contain an Ultra Search portlet.

### 10.3.7 Promoting Perspectives to Shared Objects Impacts Search Results

(Oracle Text enabled only.) If you promote a perspective to Shared Objects and then search for items in that perspective, the items are not returned. As a workaround, drop and recreate your Oracle Text indexes after promoting the perspectives. For more information, refer to *Oracle Application Server Portal Configuration Guide*.

### 10.3.8 Problems If Too Many Page Groups or Search Attributes Selected

Search functionality can become inconsistent if the search criteria includes a large number of attributes and/or the user chooses a long list of page groups to search. This problem is due to URL size constraints. Here are examples of issues that can occur:

- Links do not work, for example, Saved Search, Bulk Action, Edit, etc. Note that these links do work when fewer attributes/page groups are selected.
- Search results page can lose search criteria when changing between tabs.
- Some search results can be lost whilst saving a search. Also, some attributes may be lost when the search is run again.

The workaround is to reduce the number of attributes and/or page groups available for user selection.

## 10.4 PDK Issues and Workarounds

Oracle Application Server Portal Developer Kit (PDK) version 9.0.4 is included with an OracleAS Portal & Wireless install. Release notes for the JPDK and PL/SQL PDK can be found at these mid-tier \$ORACLE\_HOME locations:

- **JPDK:** \$ORACLE\_HOME/portal/pdkjava/v2/pdkjava.v2.releasenotes.html
- **PL/SQL:** \$ORACLE\_HOME/portal/pdkjava/v2/pdkplsql.release.notes.html

### Latest Version of OracleAS PDK

New versions of the OracleAS PDK are released periodically providing new includes, new API's and additional documentation. To take advantage of all the latest includes, download the latest PDK from Portal Center, <http://portalcenter.oracle.com>.

Release notes for the latest OracleAS PDK version are available on Portal Center and also at these PDK download locations:

- `pdk\plsql\pdkplsql.release.notes.html`
- `pdk\jdk\v2\pdkjava.v2.release.notes.html`

## 10.5 NLS Issues and Workarounds

This section describes National Language Support (NLS) related issues in OracleAS Portal:

- [Section 10.5.1, "Oracle Text Searching Limitation \(Text Files and HTML Files\)"](#)
- [Section 10.5.2, "BiDi Alignment Issues Using Netscape 7.0"](#)
- [Section 10.5.3, "Problems Opening Excel/Sylk Formatted Reports in Microsoft Excel"](#)
- [Section 10.5.4, "Unable to Separate Search Keywords With Double Byte Space Key"](#)
- [Section 10.5.5, "Text Entry Always Right to Left in BiDi Languages"](#)
- [Section 10.5.6, "NON ISO-8859 Web Page Limitation for URL Items"](#)
- [Section 10.5.7, "Non-ASCII Character Limitations"](#)
- [Section 10.5.8, "Shared Type Objects Cannot Be Exposed in Non-English Page Group"](#)
- [Section 10.5.9, "Oracle Ultra Search Portlet Help Page Is Garbled"](#)

### 10.5.1 Oracle Text Searching Limitation (Text Files and HTML Files)

In *some* non-ASCII character set environments, you are unable to search non-ASCII character content of plain text files and HTML files.

You can search plain text and HTML files if the document character set is the same as the database character set and the database character set is one of the following:

- US7ASCII
- WE8ISO8859P1
- JA16SJIS
- KO16KSC5601
- ZHS16CGB231280
- ZHT16BIG5

If the database character set is none of those listed but the document is in the WE8ISO8859P1 character set, the search feature also works correctly. In any other non-ASCII character set environment you can encounter this problem.

Note that there are no issues when searching binary files like Word, PDF, and so on.

### 10.5.2 BiDi Alignment Issues Using Netscape 7.0

Header images and some buttons are not aligned properly, due to a Mozilla issue.

### 10.5.3 Problems Opening Excel/Sybk Formatted Reports in Microsoft Excel

When you create an Excel/sybk formatted report, the file encoding is always the same as the database character set. You may not be able to open the file in Microsoft Excel like this. As a workaround, convert the exported files into native encoding.

For example, if the database character set is UTF8, Excel can not open exported reports as they are encoded by the UTF8 database character set. On a Japanese Windows system, Excel can open Shift\_JIS encoded files only but to export files in Shift\_JIS, the database character set must be JA16SJIS. So, if the database character set is EUC (another Japanese standard character set) or UTF8, the files will not open. You can use Notepad to open and save files in different character sets.

### 10.5.4 Unable to Separate Search Keywords With Double Byte Space Key

You cannot use a double byte space character to separate two search keywords. You must use a single byte space character.

### 10.5.5 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.

### 10.5.6 NON ISO-8859 Web Page Limitation for URL Items

You may not be able to display a NON ISO-8859-1 Web page using a URL item. Other portlets offer this functionality, so you may want to use one of these instead, that is portlets such as NLS URL Service and Web Clipping.

### 10.5.7 Non-ASCII Character Limitations

- Non-ASCII XML data is not displayed correctly in the XML Portlet. To display non-ASCII XML data, use OmniPortlet which has this functionality.
- Non-ASCII data from a specified URL is not displayed correctly in the URL Portlet. To display such data in a portlet, use the Web Clipping portlet which has this functionality.
- If you use non-ASCII characters in Web Provider Display Names, they are not displayed correctly. Similarly non-ASCII characters used in Provider Group Display Names can not be displayed.
- You may not use non-ASCII characters in the Name for portlets of Database Providers. However, you can use such characters in the Display Name.
- If a portlet name contains non-ASCII characters, the name does not display correctly when the portlet is previewed.
- (Internet Explorer only.) If you use the NON-UTF8 database character set, labels of form components may display incorrectly. This is not a problem in Netscape.

### 10.5.8 Shared Type Objects Cannot Be Exposed in Non-English Page Group

Shared type objects (page types, item types) always have English as the default language. If you create a page group in a language other than English, a shared type cannot be made available to the page group unless a translation exists for the shared type in the default language of the page group.

To create the translation, follow these steps:

1. Enable the language for the Shared Objects page group.

For details, see *Oracle Application Server Portal User's Guide - Section 4.6.1 Creating a Translation*.

2. Switch to the language in the **Set Language** portlet.
3. Edit the page type or item type while the session language is set to the non-English language.

This automatically creates a translation of the type in that language.

You can now make the shared type available to the non-English page group.

### 10.5.9 Oracle Ultra Search Portlet Help Page Is Garbled

The Oracle Ultra Search portlet help page is garbled in all languages. To view this problem:

1. Create a page in Portal Builder.
2. In your created page, on Editing Views, click the "Add Portlet" icon on Region.
3. Click Portlet Staging Area.
4. Click Created Provider Name.
5. Click Ultra Search.
6. Click OK.
7. On the added Ultra Search portlet, click Help. The help page is garbled.

To work around the problem, change the encoding to UTF8 in the appropriate help file in:

`ORACLE_HOME/j2ee/OC4J_Portal/applications/UltrasearchPortlet/query/html`

## 10.6 Administration Issues and Workarounds

This section describes known administration issues for OracleAS Portal:

- [Section 10.6.1, "Portal Service Monitoring Link Errors If Instance Name Contains "\\_" Character"](#)

### 10.6.1 Portal Service Monitoring Link Errors If Instance Name Contains "\_" Character

If the instance name contains any characters other than alphanumeric characters, that is, if the instance name does not consist of letters and numbers only, the Portal Service Monitoring link from Portal Adminster page does not function properly.

From the Portal Administer page when you click on Portal Service Monitoring link, a new popup window is displayed with a null instance name and most of the instances are displayed with a status of down. This issue is applicable to Portal and Wireless or Business Intelligence and Forms installation types. To avoid this issue, make sure the instance name contains only alphanumeric characters. If an instance name with special characters is required, do not navigate to the Portal Monitoring section from the Portal Administer page. Instead, navigate to the middle tier Application Server Control page and access Portal from there.

## 10.7 Documentation Errata

This section describes known errors and omissions in OracleAS Portal documentation:

- [Section 10.7.1, "Documentation Errors"](#)
- [Section 10.7.2, "Additional Documentation"](#)

### 10.7.1 Documentation Errors

This section describes known errors in OracleAS Portal documentation. It includes the following topics:

- [Section 10.7.1.1, "Editing Item/Portlet Properties"](#)
- [Section 10.7.1.2, "Editing Pending Items"](#)
- [Section 10.7.1.3, "Referencing the Current Version of Images"](#)
- [Section 10.7.1.4, "Working in List View"](#)
- [Section 10.7.1.5, "Unpublished Items Section Documented Incorrectly"](#)
- [Section 10.7.1.6, "Item Level Security and Page Caching"](#)
- [Section 10.7.1.7, "User Profile Help Incorrect"](#)
- [Section 10.7.1.8, "Defining a Display Style for Results from a Custom Search"](#)
- [Section 10.7.1.9, "Applying Background Color or Image to Page Portlets"](#)
- [Section 10.7.1.10, "Error Message WWC-40018 Incorrectly Listed as WWC-40019"](#)



### 10.7.1.1 Editing Item/Portlet Properties

The online help states that clicking the **Edit** icon allows you to edit the properties of the item or portlet. While this is true for items, clicking this icon next to a portlet takes you to the Edit Defaults page. To edit the portlet instance attributes (such as display name), click the **Actions** icon, then click the Edit Portlet Instance link.

### 10.7.1.2 Editing Pending Items

Online help for Pending Items: Preview (cawkpend.htm) incorrectly states that the submitter can continue to edit a pending item if it hasn't yet been approved by the first approver in the approval process.

### 10.7.1.3 Referencing the Current Version of Images

Image attributes can reference an uploaded source image. The documentation currently states:

*To reuse an image that has been uploaded to OracleAS Portal, enter its internal name (not file name) without a path in this field, for example, enter 1645.GIF.*

If you are versioning the referenced image item, and you use the internal filename in the reference (e.g. 1645.gif), the reference does not use a new, current version of the image if one is created. The image reference continues to show the original version. For example:

1. In an image attribute, reference an image item by its internal file name, e.g. 1645.gif.
2. Update the image item and create a new version. The new version is given a new internal file name (e.g. 1705.gif).
3. The image attribute still refers to 1645.gif, it has not been updated to refer to the new version of the image.

Therefore, only use the internal filename if you are **not** using versioning, or if you want the reference to always point to the original version, even if it is no longer the current version.

If you are using versioning and you always want to show the current version, use the durable link to the image item instead of the internal filename. The durable link always picks up the latest version of the image. So, instead of entering 1645.gif, enter:

```
/pls/<DAD>/url/item/<GUID>
```

This is the relative URL format of a durable link. For example:

```
/pls/portal/url/ITEM/A47D41ECA23648A9E030007F0100118A
```

Relative URLs should always be used in case the host or domain name changes, or the content is exported to another site. For more information on durable URLs, refer to *Section 1.1.3.1 Understanding Page and Item URLs* in the *Oracle Application Server Portal User's Guide*.

#### 10.7.1.4 Working in List View

List View functionality is documented in the online help topic *Page Edit Mode: List View* (pobpglst.htm). Some information in this topic is incorrect:

**Button: Actions List** - Options *Enable ILS* and *Disable ILS* are not available.

**Button: Find** - The search is **not** case-sensitive.

**Sub-items** - The online Help states that the List view does not display sub-items. This is correct, however, sub items will be listed in search results if they meet the search criteria.

Also, note that in List View, pages based on templates do not show any tabs or items belonging to the template. You must click the **Edit Template** link to see tabs and items on a template. Therefore, when editing the page in List View, you can not add items to tabs that are inherited from the template. Likewise, if items are added to these tabs when editing the page using another edit view (e.g., Graphical View), you do not see these items in List View.

If you are using Netscape 4.8, you may notice that version information is incorrectly displayed under the Description column. This is not a problem in Internet Explorer.

#### 10.7.1.5 Unpublished Items Section Documented Incorrectly

Online help for the Edit Page Group Items tab (sbrsmit.htm) incorrectly refers to the **Expired** and **Deleted Items** section and the **Display Expired** and **Deleted Items and Retain Expired** and **Deleted Items** check boxes. These should be, respectively, the **Unpublished Items** section and the **Display Unpublished Items In Edit Mode** and **Retain Deleted Items** check boxes. Refer to the text on the page itself for details on how to use these check boxes.

#### 10.7.1.6 Item Level Security and Page Caching

The online help incorrectly states that when item level security (ILS) is enabled page caching is automatically disabled. Page caching is not disabled when ILS is enabled.

#### 10.7.1.7 User Profile Help Incorrect

Online help for the Edit Portal User Profile tabs, Preferences (secumed1.htm) and Privileges (secgmed3.htm) incorrectly states that there are **Reset to Defaults** buttons on these pages. This option is not available.

#### 10.7.1.8 Defining a Display Style for Results from a Custom Search

Online help for Edit Defaults: Custom Search - Results Display page (sbrsres.htm) incorrectly states that style and attribute settings apply only to *items* returned in search results. The **Style** and **Attribute** settings (section **Which style and attributes should be used to render the search results?**) apply to both items and pages.

#### 10.7.1.9 Applying Background Color or Image to Page Portlets

If you want page portlets (including navigation pages) to display a background color or background image, follow these steps:

1. Ensure that the navigation page uses its own style when published as a portlet, that is, do not select **Use Style Of Page On Which Portlet Is Placed** in the page properties.
2. In the style for the container page (the page containing the portlet), set **Portlet Body Color** to null (no value). This step is missing from the documentation.

#### 10.7.1.10 Error Message WWC-40018 Incorrectly Listed as WWC-40019

The Web Cache connection error message WWC-40018 was incorrectly listed as WWC-40019 in the *Oracle Application Server Portal Error Messages Guide*.

## 10.7.2 Additional Documentation

This section describes known omissions and additions to the OracleAS Portal documentation. It includes the following topics:

- [Section 10.7.2.1, "Public Users Cannot Search Pages with Item Level Security Enabled"](#)
- [Section 10.7.2.2, "Inaccurate Data in Log Registry Records"](#)
- [Section 10.7.2.3, "Granting Privileges to New Providers"](#)
- [Section 10.7.2.4, "Using Unique Names for Custom Attributes"](#)
- [Section 10.7.2.5, "Expired Items Remain Visible in WebDAV Clients"](#)
- [Section 10.7.2.6, "Portal Smart Text and Portal Smart Link Items"](#)

### 10.7.2.1 Public Users Cannot Search Pages with Item Level Security Enabled

PUBLIC users are unable to search for items on pages where item level security is enabled.

### 10.7.2.2 Inaccurate Data in Log Registry Records

Online help describing Log Registry records ([wvlogadm.htm](#)) lists the set of actions that are logged. Since the introduction of OracleAS Web Cache, some of the actions logged in OracleAS Portal Activity Log tables have become inaccurate. Specifically, these actions are *View*, *Execute*, *Show* and *Perform*. However, since all other actions logged are still accurate, the Activity Log tables and views still remain in the OracleAS Portal Metadata Repository.

### 10.7.2.3 Granting Privileges to New Providers

When you create/register a new provider, a page is created in the Portlet Repository under *Portlet Staging Area* to display portlets for that provider. This page is not visible to all logged in users. It is only visible to the user who published the provider and portal administrator. The publisher or portal administrator can change the provider page properties to grant privileges to appropriate users/groups, as required.

#### 10.7.2.4 Using Unique Names for Custom Attributes

It is recommended that you name custom attributes such that they are unique across page groups. For example, you could include the page group name as a prefix or suffix.

If custom attributes do not have unique names, they appear duplicated when choosing search result attributes. For example, if they are both named 'MyCustomAttribute1' they are listed as:

```
MyCustomAttribute1  
MyCustomAttribute1
```

This way, it is not possible to establish which attribute belongs to which page group. However, if you name them 'MyCustomAttribute\_PG1' and 'MyCustomAttribute\_PG2' they can be identified by their unique names:

```
MyCustomAttribute_PG1  
MyCustomAttribute_PG2
```

#### 10.7.2.5 Expired Items Remain Visible in WebDAV Clients

Expired items continue to be visible in WebDAV clients until they are permanently removed from the database during a system purge.

#### 10.7.2.6 Portal Smart Text and Portal Smart Link Items

You can embed a page containing Portal Smart Text or Portal Smart Link items (published as a portlet) in another page. When you do this, the Portal Smart Text/Portal Smart Link items work within the context of the containing page.

For example, if you add the **Edit** Portal Smart Link item to Page A, publish the page as Portlet A and then place Portlet A on Page B, the **Edit** link will allow the user to edit Page B.



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## Oracle Ultra Search

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

- [Section 11.1, "General Issues and Workarounds"](#)
- [Section 11.2, "Customer Database Install of the Oracle Ultra Search Backend"](#)
- [Section 11.3, "Documentation Errata"](#)

## 11.1 General Issues and Workarounds

This section describes general issues and their workarounds for Oracle Ultra Search. It includes the following topics:

- [Section 11.1.1, "Oracle Ultra Search URL Status Codes"](#)
- [Section 11.1.2, "Upgrading to Oracle Application Server 10g"](#)
- [Section 11.1.3, "Oracle Ultra Search and OracleAS Portal"](#)
- [Section 11.1.4, "Security Considerations When Using Restricting Access to a Data Source"](#)
- [Section 11.1.5, "Oracle Ultra Search Reconfiguration After Database Character Set Change"](#)
- [Section 11.1.6, "Data Returned to Oracle Ultra Search Must Be in UTF-8 Character Set"](#)
- [Section 11.1.7, "Crawl of Data Source with Multi-byte Name Fails"](#)
- [Section 11.1.8, "Oracle Ultra Search does not Support All Database Character Sets"](#)
- [Section 11.1.9, "Bugs"](#)

### 11.1.1 Oracle Ultra Search URL Status Codes

Oracle Ultra Search uses a set of codes to indicate the crawling result of the crawled URL. Besides the standard HTTP status codes, it uses its own codes for non-HTTP related issues. Only URLs with a status of 200 will be indexed. [Table 11–1](#) lists the Oracle Ultra Search status codes.

**Table 11–1 Oracle Ultra Search Crawler URL Status Codes**

Code	Description	Code	Description
200	URL OK	907	Socket bind exception
400	Bad Request	908	Filter not available
401	Authorization required	909	Duplicate document detected
402	Payment required	910	Duplicate document ignored
403	Access forbidden	911	Empty document
404	Not found	951	URL not indexed



**Table 11–1 (Cont.) Oracle Ultra Search Crawler URL Status Codes**

<b>Code</b>	<b>Description</b>	<b>Code</b>	<b>Description</b>
405	Method not allowed	952	URL crawled
406	Not acceptable	953	Meta tag redirection
407	Proxy authentication required	954	HTTP redirection
408	Request timeout	955	Black list URL
409	Conflict	956	URL is not unique
410	Gone	957	Sentry URL (URL as a placeholder)
414	Request-URI too large	958	Document read error
500	Internal server error	959	Form login failed
501	Not implemented	1001	Data type is not TEXT/HTML
502	Bad gateway	1002	Broken network data stream
503	Service unavailable	1003	HTTP redirect location does not exist
504	Gateway timeout	1004	Bad relative URL
505	HTTP version not supported	1005	HTTP error
902	Timeout reading document	1006	Error parsing HTTP header
903	Filtering failed	1007	Invalid URL table column name
904	Out of memory error	1008	JDBC driver missing
905	IOEXCEPTION in processing URL	1009	Binary document reported as text document
906	Connection refused	1010	Invalid display URL

## 11.1.2 Upgrading to Oracle Application Server 10g

Per the *Oracle Application Server 10g Upgrading to 10g (9.0.4)* document, you must apply database 9.0.1.5 patchset before you upgrade iAS 9.0.2 to Oracle Application Server 10g.

After you apply the patchset, **do not** perform the following post install actions as described in the patchset note:

"Execute the following steps only if you have installed Oracle Ultra Search in the database you are attempting to modify."

Instead, perform the following post install steps:

- `CONNECT / AS SYSDBA`
- `GRANT SELECT ON SYS.DBMS_LOCK_ALLOCATED TO WKSYS;`
- `ALTER USER WKSYS ACCOUNT UNLOCK;`
- `ALTER PACKAGE WKSYS.WK_CRW COMPILE BODY;`
- `ALTER PACKAGE WKSYS.WK_SNAPSHOT COMPILE BODY;`

## 11.1.3 Oracle Ultra Search and OracleAS Portal

Oracle Ultra Search can only crawl public Oracle AS Portal sources. See the *Oracle Application Server Portal Configuration Guide* for how to set up public pages.

## 11.1.4 Security Considerations When Using Restricting Access to a Data Source

This section covers Important security considerations when using a single ACL to restrict access to a data source.

An Oracle Ultra Search data source can be protected by a single administrator specified ACL. This ACL specifies which users and groups are allowed to view the documents belonging to that data source.

Oracle Ultra Search uses the Oracle Server's ACL evaluation engine to evaluate permissions when queries are performed by search users. This ACL evaluation engine is a feature of Oracle XML database. If an Oracle Ultra Search query attempts to retrieve a document that is protected by an administrator specified ACL, the ACL is evaluated and subsequently cached.

The duration an ACL is cached is controlled by an XDB configuration parameter. Please consult the chapter titled "Oracle XML DB Resource Security" in the book *Oracle XML DB Developer's Guide*. The XDB documentation indicates that the `/xdbconfig/sysconfig/acl-max-age` parameter should be modified. The value is a number in seconds that determines how long ACLs are cached. Please see the chapter on "Installing and Configuring Oracle XML DB" for information on altering this configuration parameter.

Since ACLs are cached, it is important to remember that changes to an administrator specified ACL may not propagate immediately. This only applies to database sessions that existed before the change was made.

### 11.1.5 Oracle Ultra Search Reconfiguration After Database Character Set Change

Two SQL scripts (`wk0prefcheck.sql` and `wk0idxcheck.sql`) under `$ORACLE_HOME/ultrasearch/admin/` are used for this reconfiguration.

- `wk0prefcheck.sql` is invoked under `wksys` to reconfigure default cache character set and index preference.
- `wk0idxcheck.sql` is needed for reconfiguring instance(s) created before database character set change, e.g., the default instance. This script must be invoked by the instance owner and `wk0prefcheck.sql` must be run first as it depends on reconfigured default settings generated by `wk0prefcheck.sql`.
- Running `wk0idxcheck.sql` will also drop and recreate the Oracle Text index used by Oracle Ultra Search. So if there are already data source indexed then user must force re-crawl all of the data sources.
- Note that `wk0idxcheck.sql` must be run once for each instance. So if there are two instances "inst1" and "inst2" owned by "owner1" and "owner2" respectively then `wk0idxcheck.sql` should be run twice; once by "owner1" and once by "owner2"

### 11.1.6 Data Returned to Oracle Ultra Search Must Be in UTF-8 Character Set

All data returned to Oracle Ultra Search must be in the UTF-8 character set. However, multibyte character sets such as Chinese or Korean are incompatible with UTF-8. Therefore, Oracle Ultra Search does not correctly handle or recognize the incoming data.

### 11.1.7 Crawl of Data Source with Multi-byte Name Fails

An Oracle Ultra Search crawl of a data source with a multi-byte name will fail. An error of the file not being found occurs if the local environment that starts the Oracle database is not compatible with the locale's target files.

To correct this problem, you must set the correct locale, restart the Oracle database and force Oracle Ultra Search to re-crawl the data source.

For example:

1. Shutdown the Oracle database instance with the following command:

```
SQL> shutdown immediate
```

2. Set the locale to 'ja' using the following commands:

```
> setenv LANG ja  
> setenv LC_ALL ja
```

3. Restart the Oracle database instance with the following command:

```
SQL> startup
```

4. Restart the Oracle Ultra Search schedule with a forced re-crawl.

### 11.1.8 Oracle Ultra Search does not Support All Database Character Sets

Oracle Ultra Search does not support database character sets that are not supported by Oracle Text.

For example, the AL32UTF8 character set is not supported.

For Unicode support, use UTF8.

For the complete list of supported database character sets, please consult the Oracle Text Reference for Lexer Types.

## 11.1.9 Bugs

- **Bug 3186386:** Creating or Editing Oracle Ultra Search ACLs Fails in Non-SSO Mode

An Oracle Ultra Search Administrator can log in as a database administrator or an SSO user who has been granted administrative privileges. In this release, when logging in as a database administrator, then under certain circumstances, the administrator will not be able to create nor edit administrator-specified ACLs for a data source. An "Access Denied" error will be encountered when attempting to create or modify ACLs. An "Access Denied" error is encountered. The workaround is to always log in as an SSO user in order to create/modify ACLs for a data source.

**XML DB Dependency**—the following two XML database bugs are identified in the 9.2.0.4 database release. They will be fixed in post 9.2.0.4 database patch release.

- **Bug 3172282:** Oracle Core Dumps When an Attempt Is Made to List All Aces for a Specific ACL

When using Oracle 9.2.0.4, the Oracle Ultra Search Administrators will not be able to view administrator specified ACLs after creation. As a result, these ACLs cannot be edited or modified. Administrators must therefore assume responsibility for keeping track of permissions specified in these ACLs. Furthermore, since ACLs cannot be viewed, they cannot be edited. As a result, if an ACL has to be changed, customers must drop the existing data source, recreate it, and assign a new ACL with the new permissions.

- **Bug 3176161:** Updating `resource_view` with `updatexml` Causes Core Dump

When using Oracle 9.2.0.4, this bug will prevent ACLs stored in the XDB repository from being updated. Therefore, even if bug 3172282 is fixed (and the administrator can view an administrator specified ACL after creation), the ACL cannot be successfully edited. As a result, if an ACL has to be changed, customers must drop the existing data source, recreate it, and assign a new ACL with the new permissions.

## 11.2 Customer Database Install of the Oracle Ultra Search Backend

Oracle Ultra Search can be installed on top of an existing Oracle 9i (9.0.1.4) or later database. This can be done in one of two ways:

- [Section 11.2.1, "Installation Using Oracle Application Server Repository Creation Assistant"](#)
- [Section 11.2.2, "Manual Installation with wk0setup"](#)

### 11.2.1 Installation Using Oracle Application Server Repository Creation Assistant

Oracle Application Server Repository Creation Assistant (OracleAS RepCA) converts a customer database into an OracleAS Metadata Repository. OracleAS RepCA will install all of the Oracle Application Server component schemas and also install the Oracle Ultra Search backend.

OracleAS RepCA is only available in the Oracle Application Server release. OracleAS RepCA is the recommended way of installing Oracle Ultra Search backend onto a customer database. Although there is the overhead of having all the other Oracle Application Server component schemas installed along with Oracle Ultra Search, you will get the benefits of OracleAS Infrastructure 10g (for example, Identity Management Integration, well defined processes for IM re-association, and so forth).

For details on how to use OracleAS RepCA to create an MR, refer to the "Using an Existing Database for the OracleAS Metadata Repository" section of the *Oracle Application Server 10g Installation Guide*.

**IMPORTANT:** For Oracle Ultra Search, there is a required post-OracleAS RepCA install configuration step. Oracle Ultra Search crawler is a Java application that requires JDK 1.4.1 or later. Oracle Ultra Search is configured by OracleAS RepCA to use the default JDK installation (for example, `$ORACLE_HOME/jdk/bin/java`), which in the pre-10g ORACLE\_HOME is pre-JDK 1.4.1; thus, unless your `$ORACLE_HOME/jdk/bin/java` is already JDK 1.4.1 or later, you must perform the following steps:

1. Install JDK 1.4.1 or later on the local system.
2. Go to the `ultrasearch/admin` directory of the OracleAS RepCA CD. Then execute the `wkrepca.sql` script via SQLPLUS. You will have to connect as the `wksys` user and pass to the script the path to the JDK 1.4.1 or later Java executable. For example:

```
sqlplus wksys/wksys password@repca_cd/ultrasearch/admin/wkrepca.sql
      /usr/local/jdk1.4/bin/java
```

## 11.2.2 Manual Installation with wk0setup

If you want to install only the Oracle Ultra Search backend into a customer database, you can opt for manual installation of Oracle Ultra Search backend. To illustrate this process here, we use the following values and conventions:

*ORACLE\_HOME*—the Oracle home directory of the target database

*SH* — the source directory, the directory on the OracleAS RepCA CD, that contains the Oracle Ultra Search directory (for example OracleAS RepCA)

Following are the steps involved in a manual installation of the Oracle Ultra Search backend:

1. Back up the `$ORACLE_HOME/ultrasearch` directory. You can do this by renaming this directory to `$ORACLE_HOME/ultrasearch.old`.
2. Copy `SH /ultrasearch` to `$ORACLE_HOME/ultrasearch`.
3. Change directory to `$ORACLE_HOME/ultrasearch/admin`.
4. If the Oracle Ultra Search schema `wksys` already exists on the target database then de-install it by executing:

```
sqlplus /nolog @$ORACLE_HOME/ultrasearch/admin/wk0deinstall.sql sys SYS PW
CSTR
```

See below for the meaning of each parameter.

## 5. Execute the SQLPLUS script `wk0setup.sql`.

For example:

```
sqlplus /nolog @$ORACLE_HOME/ultrasearch/admin/wk0setup.sql $ORACLE_HOME CSTR sys SYSPW 'as
sysdba' WKSYS PW TBLSPC TMPTBLSPC portal CFS oui PSEP JDBC DRV JDBC NLS JEXEC CTXHX JDBC_NODE JDBC_
ALL $ORACLE_HOME
```

where the various parameters are as follows (parameters should be enclosed in single quotes to avoid misinterpretation):

- *CSTR*—TNS alias preceded with '@' (for example, @inst1), this parameter can also be passed in as a single white space (' ')
- *SYSPW*—password for the SYS user/schema
- *WKSYS PW*—password to be used for the Oracle Ultra Search schema *wksys*
- *TBLSPC*—tablespace for *wksys*
- *TMPTBLSPC*—temporary tablespace for *wksys*
- *CFS*—if *ORACLE\_HOME* is on a Cluster File System (CFS) then 'true'; else 'false'
- *PSEP*—path separator (for example, on UNIX this is ':', on Windows it is ';')
- *JBC DRV*—path to JDBC drivers, *classes12.zip* (for example, \$ORACLE\_HOME/jdbc/lib/classes12.zip)
- *JBC NLS*—path to *nls\_charset12.zip* or *orai18.jar* (for example, \$ORACLE\_HOME/jdbc/lib/nls\_charset12.zip)
- *JEXEC* – Java executable path (for example, /packages/jdk1.4.1/bin/java). Note that this has to point to a JDK 1.4.1 or later installation
- *CTXHX* – path to *INSOFILTER*, *ctxhx* (for example, \$ORACLE\_HOME/ctx/bin/ctxhx)
- *JBC\_NODE* – thin JDBC connect string, and only the part after the '@' (for example, *HOST:PORT:SID*); note that in case of RAC, this connect string must be to the current node
- *JBC\_ALL* – same as *JBC\_NODE*, but in case of RAC with *CFS* true, this JDBC string should include all the RAC nodes (hint: use TNS syntax)



### 11.2.2.1 Backend Reconfiguration After a Database Character Set Change

If the database character set has been changed after Oracle Ultra Search installation, you must reconfigure the Oracle Ultra Search backend so that it can adapt to the new character set.

Two SQL scripts (`wk0prefcheck.sql` and `wk0idxcheck.sql`), located in `$ORACLE_HOME/ultrasearch/admin/`, are used for this reconfiguration:

- `wk0prefcheck.sql` is invoked under `wksys` to reconfigure default cache character set and index preferences.

Running `wk0idxcheck.sql` also drops and recreates the Oracle Text index used by Oracle Ultra Search. If there are already data sources indexed, you must force a re-crawl of all of the data sources.

`wk0idxcheck.sql` must be run once for each instance. For example, if there are two instances, "inst1" and "inst2," owned by "owner1" and "owner2," respectively, then `wk0idxcheck.sql` should be run twice: once by "owner1" and once by owner2.

- `wk0idxcheck.sql` is needed for reconfiguring instance(s) created before the database character set change (for example, the default instance). This script must be invoked by the instance owner, and `wk0prefcheck.sql` must be run first, as it depends on reconfigured default settings generated by `wk0prefcheck.sql`.

## 11.3 Documentation Errata

This section describes documentation errata for the *Oracle Ultra Search User's Guide*. It includes the following topics:

- [Section 11.3.1, "General Corrections"](#)
- [Section 11.3.2, "Section 1.3.4 - Secure Search"](#)
- [Section 11.3.3, "Section 2.2.2 - Configure a Secure Oracle Ultra Search Installation"](#)
- [Section 11.3.4, "Section 2.5.4 - Installing the Middle Tier with the Oracle Application Server Release"](#)
- [Section 11.3.5, "Section 2.5.4.1 - Configuring the Middle Tier with Oracle HTTP Server and OC4J"](#)
- [Section 11.3.6, "Section 2.5.4.5 - Editing the ultrasearch.properties File"](#)
- [Section 11.3.7, "Section 2.6.2 Configuring the Backend on Remote Crawler Hosts"](#)
- [Section 11.3.8, "Section 5.1.1 - Ultra Search Security Model"](#)
- [Section 11.3.8, "Section 5.1.1 - Ultra Search Security Model"](#)
- [Section 11.3.9, "Section 7.5.2 - Remote Crawler Profiles"](#)

### 11.3.1 General Corrections

References to the "temporary directory" in the tuning and administration chapters should read "cache directory" instead.

### 11.3.2 Section 1.3.4 - Secure Search

Oracle Ultra Search only supports the "Crawl ACLs from the Data Source" mode for user-defined data source types where the crawler agent retrieves the ACL from the data source along with other document attributes. You cannot get ACL from a data source if it is a Web, table, portal, email, or file type.

With agent APIs, there is a new URL property "UrlData.ACL" that allows the agent to set the ACL of the URL submitted. There is also a new `AclHelper` class in the Agent APIs. This generates the ACL string to make sure that the ACL string format is correct.

Only Distinguished Name (DN) and Global User Id (GUID) can be used as the principal of an ACL.

### 11.3.3 Section 2.2.2 - Configure a Secure Oracle Ultra Search Installation

The following additions and corrections apply to setting up a secure Oracle Ultra Search installation. Before you can set up a secure Oracle Ultra Search installation, you must:

- Install or upgrade the Oracle Database version 9.2.0.4 or higher. The document incorrectly reads version 10.1.0 or higher.
- Install Oracle Internet Directory. The middle tier and IM (identity management) version should be 9.0.4 or higher.

The document currently states that you can use OracleAS RepCA to convert a 9.2.0.4 database to an iAS 9.0.4 metadata repository. It should add that you can do this if you have a 9.2.0.4 database.

- Register the database to Oracle Internet Directory.  
You can use OracleAS RepCA to register the database to Oracle Internet Directory. After registration, you need to perform these manual steps:
  - Add the distinguished name of the database to the database server parameter file, `spfile.ora`, as an `RDBMS_SERVER_DN` initialization parameter value.
  - Restart the database, so that the new initialization parameter takes effect.
- Configure the Oracle-Oracle Internet Directory SSL link (previously, the "SSL" was omitted). To establish a secure connection between database and Oracle Internet Directory, please follow the instructions in the following books:
  - **Configuring Oracle Internet Directory for SSL:** "Chapter 13, Secure Sockets Layer (SSL) and the Directory," in the Oracle 9.2 release of the *Oracle Internet Directory Administrator's Guide*
  - **Configuring the database for SSL:** Chapter 15, "Managing Enterprise User Security" (Part II, Task 1 - Task 3), in the Oracle Database 9.2 release of the *Oracle Advanced Security Administrator's Guide*

Also, the reference to the *Oracle Database Administrator's Guide* for details on configuring the database to use Oracle Identity Management and Oracle Internet Directory should be ignored.

### 11.3.4 Section 2.5.4 - Installing the Middle Tier with the Oracle Application Server Release

If you checked the "OracleAS Portal" option on the "Configuration Options" Oracle Installer screen, then the configuration steps in the following section are automatically performed by the Oracle Portal Configuration Assistant (OPCA).

You do not need to perform any additional manual steps as indicated in the section text ("Editing the data-sources.xml File"). Everything is configured automatically.

### 11.3.5 Section 2.5.4.1 - Configuring the Middle Tier with Oracle HTTP Server and OC4J

For application.xml file, under the <orion-application> tag, change the following:

Change:

```
<library path="$ORACLE_HOME/ultrasearch/lib/ultrasearch_query.jar" />
<library path="$ORACLE_HOME/ultrasearch/webapp/config" />
<library path="$ORACLE_HOME/jlib/uix2.jar" />
<library path="$ORACLE_HOME/jlib/share.jar" />
<library path="$ORACLE_HOME/jlib/regexp.jar" />
<library path="$ORACLE_HOME/lib/mail.jar" />
<library path="$ORACLE_HOME/lib/activation.jar" />
<library path="$ORACLE_HOME/lib/xmlparserv2.jar" />
<library path="$ORACLE_HOME/jdbc/lib/nls_charset12.zip" />
<library path="$ORACLE_HOME/jdbc/lib/classes12.jar" />
```

to:

```
<library path="$ORACLE_HOME/ultrasearch/lib/ultrasearch_query.jar" />
<library path="$ORACLE_HOME/ultrasearch/webapp/config" />
<library path="$ORACLE_HOME/jlib/uix2.jar" />
<library path="$ORACLE_HOME/jlib/share.jar" />
<library path="$ORACLE_HOME/jlib/regexp.jar" />
<library path="$ORACLE_HOME/jdbc/lib/nls_charset12.zip" />
<library path="$ORACLE_HOME/jlib/repository.jar"/>
<library path="$ORACLE_HOME/jlib/ohw.jar"/>
<library path="$ORACLE_HOME/jlib/ldapjclnt9.jar"/>
<library path="$ORACLE_HOME/j2ee/home/jazn.jar"/>
<library path="$ORACLE_HOME/portal/jlib/ptlshare.jar"/>
<library path="$ORACLE_HOME/portal/jlib/pdkjava.jar"/>
```

For the default-web-site.xml under the <web-site> tag, add the following:

**Change:**

```
<web-app application="UltrasearchAdmin" name="admin" root="/ultrasearch/admin" />
<web-app application="UltrasearchQuery" name="query" root="/ultrasearch/query"/>
<web-app application="UltrasearchPortlet" name="query" root="/provider/ultrasearch" />
```

**To:**

```
<web-app application="UltrasearchQuery" name="query" root="/ultrasearch/query"/>
<web-app application="UltrasearchQuery" name="welcome" root="/ultrasearch" />
<web-app application="UltrasearchAdmin" name="admin" root="/ultrasearch/admin" />
<web-app application="UltrasearchAdmin" name="admin_sso" root="/ultrasearch/admin_sso" />
<web-app application="UltrasearchAdmin" name="ohw" root="/ultrasearch/ohw" />
```

**11.3.6 Section 2.5.4.5 - Editing the ultrasearch.properties File**

The content of the `ultrasearch.properties` file has changed.

Here is an example of the `ultrasearch.properties` file:

```
connection.driver=oracle.jdbc.driver.OracleDriver
#If set, The JDBC connection URL specified here will override the dynamically
#acquired one from OID.
#This setting is also used by the 9i query sample (gsearch.jsp)
#Example: connection.url=jdbc:oracle:thin:@<host>:<port>:<sid>
connection.url=%JDBC_CONN_STR%
oracle.net.encryption_client=REQUESTED
oracle.net.encryption_types_client=(RC4_56,DES56C,RC4_40,DES40C)
oracle.net.crypto_checksum_client=REQUESTED
oracle.net.crypto_checksum_types_client=(MD5)
oid.app_entity_cn=m16bi.sgtcnsun03.cn.oracle.com
domain=us.oracle.com
```

You no longer need to configure the JDBC connect string in the `ultrasearch.properties` file. The database connect information is taken from Oracle Internet Directory.

---



---

**Note:** The Oracle Ultra Search 9i query sample pages (`gsearch.jsp`) will no longer work out of the box. You must use a separate property file or edit the `ultrasearch.properties` file.

---



---

## 11.3.7 Section 2.6.2 Configuring the Backend on Remote Crawler Hosts

Step 4 should read as follows:

4. Invoke the registration script.

Start up SQL\*Plus as the WKSYS super-user and enter the following:

```
@full_path_of_registration_script
```

The registration script for RMI-based remote crawling is the following:

```
$REMOTE_ORACLE_HOME/ultrasearch/tools/remotecrawler/scripts/<platform>/register.sql
```

The registration script for JDBC-based remote crawling is the following:

```
$REMOTE_ORACLE_HOME/ultrasearch/tools/remotecrawler/scripts/<platform>/register_jdbc.sql
```

For example, if the value for `$REMOTE_ORACLE_HOME` on a UNIX host is `/home/oracle9i`, then enter the following at the SQL\*Plus prompt to register an RMI-based remote crawler:

```
/home/oracle9i/ultrasearch/tools/remotecrawler/scripts/unix/register.sql
```

Likewise, if you are running SQL\*Plus on Windows, and `$REMOTE_ORACLE_HOME` is in `d:\Oracle\Oracle9i`, then enter the following at the SQL\*Plus prompt to register a JDBC-based remote crawler:

```
d:\Oracle\Oracle9i\ultrasearch\tools\remotecrawler\scripts\winnt\register_jdbc.sql
```

## 11.3.8 Section 5.1.1 - Ultra Search Security Model

For Oracle Ultra Search to access secure Web sites, you may need to import certificates into the crawler's trust store and the Oracle Containers for J2EE (OC4J) JVM's trust store.

The Oracle Ultra Search administration tool is a Web application that runs within the OC4J JVM. Secure portal instances require clients to authenticate with SSL. To discover page groups in secure portal instances, the Oracle Ultra Search administration tool must make HTTPS network calls.

By default, the OC4J JVM recognizes certificates of well-known certificate authorities. However, if the secure portal instance uses a self-signed certificate or a certificate signed by an unknown certificate authority, then you must import the portal's certificate into the OC4J JVM's truststore. This can be done with the `keytool` utility provided by Sun Microsystems.

The OC4J JVM default truststore is located at `$ORACLE_HOME/jdk/jre/lib/security/cacerts`.

**See Also:** Sun Microsystems documentation for more information about using Sun's keytool key and certificate management utility, for information on customization of the SSL service, and for information on truststore management.

OracleAS Containers for J2EE documentation for information on configuring OC4J to use a different truststore.

### 11.3.9 Section 7.5.2 - Remote Crawler Profiles

At the end of this section the following note should be present:

---

---

**Note:** The remote crawler cache directory must be mounted to the server side crawler cache directory (specified under "Crawler" "Settings" tab), otherwise the documents can not be indexed.

---

---

Note: The remote crawler cache directory must be mounted to the server side crawler cache directory (specified under "Crawler" "Settings" tab), otherwise the documents can not be indexed.





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## OracleAS Syndication Services

This chapter describes issues with OracleAS Syndication Services. It includes the following topic:

- [Section 12.1, "Documentation Errata"](#)

## 12.1 Documentation Errata

This section describes documentation errata for OracleAS Syndication Services. It includes the following topic:

- [Section 12.1.1, "Notes Regarding Incremental Updates for File and WebDAV Connectors"](#)

### 12.1.1 Notes Regarding Incremental Updates for File and WebDAV Connectors

Incremental updates are based on the last modification date of the files and the Web distributed authoring and versioning (WebDAV) resources being accessed. In principle, the files delivered from one update to the next are determined by scanning the source directory and identifying all the elements whose modification date is later than the previous update time. In some operating systems, when moving files from one location to another, the modification date of the files will not be updated and the moved resources will therefore retain the original modification time.

This behavior should be kept in mind when moving files into a directory used by OracleAS Syndication Services as a content source. In fact, if the original modification date of the moved files is earlier than the time of the last update, then those files will not be delivered in the next incremental update. The files can be pulled by a full update in this case.

A copy of the files in the directory will not present this issue as the modification date is set to current date by the copy command.

# Part IV

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## OracleAS Wireless Issues

This part describes issues associated with the OracleAS Wireless. It contains the following chapters:

- [Chapter 13, "OracleAS Wireless"](#)



# 13

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## OracleAS Wireless

This chapter describes issues with OracleAS Wireless. 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 includes information and workarounds for general issues in OracleAS Wireless. It includes the following topics:

- [Section 13.1.1, "Performance Optimization and JSP Files Modification"](#)
- [Section 13.1.2, "Messaging Transport"](#)
- [Section 13.1.3, "Multi-byte Usernames in Jabber Not Supported"](#)
- [Section 13.1.4, "Driver Name Change"](#)
- [Section 13.1.5, "Push SOAP URL"](#)
- [Section 13.1.6, "Broken Images in Some MXML Messages"](#)
- [Section 13.1.7, "Premature Delivery of Notifications"](#)
- [Section 13.1.8, "XHTML and XForms"](#)
- [Section 13.1.9, "Errors with Localized Voice Message for Device Validation in Customization Portal"](#)
- [Section 13.1.10, "Unavailable Functionality for Re-Created SSO Users"](#)
- [Section 13.1.11, "Working with Signature Capture Form Control"](#)
- [Section 13.1.12, "Integrating Oracle Application Server Wireless with Web Cache"](#)
- [Section 13.1.13, "Integrating Oracle Application Server Wireless with Oracle Portal"](#)
- [Section 13.1.14, "Oracle Application Server Wireless log.xml File does not Support NLS"](#)
- [Section 13.1.15, "POST Method is Not Supported by All Markup Languages"](#)
- [Section 13.1.16, "Wireless User LDIF File Generation Fails"](#)

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**Note:** For more information about Performance issues and strategies, see the OracleAS Wireless section of Oracle Technology Network.

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### 13.1.1 Performance Optimization and JSP Files Modification

In general, Oracle Application Server Containers for J2EE (OC4J) examines JavaServer Pages (JSP) files to detect changes, then recompiles. However, this OC4J behavior was changed in regards to the JSP files that are deployed inside the *ptg* web application.

If you make changes to these included, precompiled JSP files, OC4J will not detect and compile the changes in those JSP files.

---

**See:** For more information on OC4J Configuration, see "JSP Configuration Parameters" in *Oracle Application Server Containers for J2EE Support for JavaServer Pages Developer's Guide*.

---

For example, all JSP files that are deployed inside the *ptg* web application are precompiled. If for some reason you want to modify those JSP files, then you can no longer use the precompiled class files; you must change the OC4J settings to enable JSP compilation. To do that, modify the `web.xml` file for the *ptg* application, located in:

```
[ORACLE_HOME]/OC4J_Wireless/applications/ptg/ptg-web/WEB-INF/web.xml.
```

In order to avoid this problem (in which modifications to JSP files do not take effect), and to optimize the performance of some of the JSP files included in Oracle Application Server Wireless, you must modify the `web.xml` file, as detailed below:

1. Delete the following from the file:

```
<!--
WARNING!!! Overridden JSP engine settings
With this configuration the JSP files in this application will NOT be
recompiled.
Any changes to the JSP source files will NOT take effect.
If you want to switch back to the default JSP engine settings simply comment out
the servlet declaration and mapping for the jsp servlet below.
-->
<servlet>
<servlet-name>jsp</servlet-name>
<servlet-class>oracle.jsp.runtimev2.JspServlet</servlet-class>
<!-- you can disable page scope listener if you
don't need this function. -->
<init-param>
<param-name>check_page_scope</param-name>
<param-value>>true</param-value>
```

```
</init-param>
<!-- you can set main_mode to "justrun" to speed up
JSP dispatching, if you don't need to recompile
your JSP anymore. You can always switch your
main_mode. Please see our doc for details -->
<init-param>
<param-name>main_mode</param-name>
<param-value>justrun</param-value>
</init-param>
<load-on-startup>0</load-on-startup>
</servlet>
<servlet-mapping>
<servlet-name>jsp</servlet-name>
<url-pattern>/* .jsp</url-pattern>
</servlet-mapping>
<servlet-mapping>
<servlet-name>jsp</servlet-name>
<url-pattern>/* .JSP</url-pattern>
</servlet-mapping>
<servlet-mapping>
<servlet-name>jsp</servlet-name>
<url-pattern>/* .jspx</url-pattern>
</servlet-mapping>
<servlet-mapping>
<servlet-name>jsp</servlet-name>
<url-pattern>/* .sqljsp</url-pattern>
</servlet-mapping>
<servlet-mapping>
<servlet-name>jsp</servlet-name>
<url-pattern>/* .SQLJSP</url-pattern>
</servlet-mapping>
```

### **2. Restart the OC4J\_Wireless application.**



### 13.1.2 Messaging Transport

The following Messaging issues exist:

- Due to a bug in the device, sending MMS messages with the Subject containing non-ASCII characters to the Nokia 3650 is not supported.
- Sending SyncML server settings to the Nokia 3650 is not supported.
- All pre-seeded site-level drivers are enabled by default. You can disable unwanted drivers for better performance.
- Messaging Transport supports sending messages in English only over Enhanced Messaging Services (EMS). Other languages are supported on SMS and MMS.

### 13.1.3 Multi-byte Usernames in Jabber Not Supported

Jabber, the backend used with Instant Messaging, does not support multi-byte usernames; the Instant Messaging module consequently does not support multi-byte usernames.

### 13.1.4 Driver Name Change

In the User Interface and documentation, all references to *XMSDriver* should read *PushDriver*.

### 13.1.5 Push SOAP URL

The Push SOAP URL has changed in this release. If you are using the XMS client against a newly installed instance of Oracle Application Server Wireless, the client must be updated to use the new URL. By default, the new URL will be `/xms/webservices` (rather than `/push/webservices`) as in earlier releases.

If the instance has been upgraded from the 9.0.2 to the 9.0.4 release, the old URL (`/push/webservices`) will still be valid, though the application will in fact be running the 9.0.2 codebase. As such, this URL is intended for backward compatibility only; you should update the clients of the SOAP API to use the new URL (`/xms/webservices`).

### 13.1.6 Broken Images in Some MXML Messages

MXML messages containing an image reference with the attribute `addImageExtension=true`, when sent using XMS to an email recipient, may appear with broken in-line images on certain email clients. The workaround for this problem is to:

1. Go to the **Foundation** tab in Oracle Application Server Wireless Tools.
2. Select the *ASYNC* device.
3. Click **Edit**.
4. Go to the *Browser* section and navigate to the *Image File MIME types* table.
5. Move the following MIME types from the left pane to the right pane:
  - `image/bmp bmp`
  - `image/png png`
  - `image/tiff tif`
  - `image/gif gif`
  - `image/jpeg jpg`
6. Click **Apply** to save the changes.

### 13.1.7 Premature Delivery of Notifications

Notification messages sent through email to users that have a sending window specified in their contact rules may be delivered prematurely. That is, if a notification is generated at 9:00AM, and the user has specified in his contact rules that he does not want any emails until 10:00AM, the message will be sent immediately, rather than delayed for 60 minutes.

There is no workaround for this issue.

## 13.1.8 XHTML and XForms

This section describes issues with XHTML and XForms. It includes the following topics:

- [Section 13.1.8.1, "Async Support for XHTML/XForms"](#)
- [Section 13.1.8.2, "Error Using Back Button with XForms"](#)
- [Section 13.1.8.3, "Showing Radio Buttons, Checkboxes and Select List with XForms"](#)
- [Section 13.1.8.4, "Form Submission using XForms"](#)

### 13.1.8.1 Async Support for XHTML/XForms

To develop Async services using XForms, *item element*, instead of *itemset*, should be used to represent the option list for the elements `select` and `select1`.

### 13.1.8.2 Error Using Back Button with XForms

The browser **Back** button cannot be (reliably) used with XForms web applications. Oracle Application Server caches the state of a form on the server to support multiple round trips between the browser and the Application Server. When using the browser **Back** button, the browser (cache) does not fetch the current state from the server; this may result in a conflict. Also on certain actions (such as XForms `submit`) the Application Server (after the submit) clears the state (on the server), and the server throws an error if resubmit is tried (using the browser **Back** button).

### 13.1.8.3 Showing Radio Buttons, Checkboxes and Select List with XForms

XForms uses the `select1` and `select` controls to show the intent that one or more may be selected from a list of values. To show radio buttons, checkboxes or select lists, use these controls. Also use the *appearance* attribute to control the type of `select1` or `select` the UI will display. Use `appearance="full"` to display a radio button (in the case of `select1`) or checkbox (in the case of `select`).

### 13.1.8.4 Form Submission using XForms

When XForms documents use the *post submission* method, the XForms processor does not submit the `xmlns` namespace attributes (default namespace and namespace prefixes used) in the submitted XML (instance) data. This is a known bug, and authors can work around this problem by defining the namespace prefixes in the instance data's root element.

### 13.1.9 Errors with Localized Voice Message for Device Validation in Customization Portal

The device validation message through the voice channel will only work when the user's locale is set to *English*, and the message is rendered by a voice gateway with an English Automatic Speech Recognition (ASR) engine. Any other settings for the user locale or the gateway ASR engine are unsupported and will likely cause errors in message delivery.

### 13.1.10 Unavailable Functionality for Re-Created SSO Users

Re-created SSO users of the Oracle Application Server Wireless Tools cannot access some of the tools' functionality. If a user is deleted and then re-created, then that user cannot use all of the functionality of the Wireless Tools. This problem occurs because of the way the SSO server caches GUID information for the users. To solve this problem, restart the SSO server.

### 13.1.11 Working with Signature Capture Form Control

Some browsers (such as the Spectrum24® WebClient for Palm Computing Platform) support the ability to capture signatures. Applications developed using OracleAS Wireless XML can generate the target markup required to support signature capture. In this release, the following browsers are supported for signature capture:

- Symbol Spectrum24® WebClient for Palm Computing Platform Version 2.8-10 for Palm OS 4.1
- Microsoft Pocket Internet Explorer 4.1 on Microsoft Pocket PC
- Microsoft Pocket Internet Explorer on Microsoft CE3 or later

On supported Microsoft Pocket PC and Windows Mobile platforms, the Oracle Signature Capture Plug-in for Pocket Internet Explorer must be installed. The Oracle Signature Capture Plug-in is available for download from Oracle MetaLink at <http://metalink.oracle.com> or contact Oracle Support.

### 13.1.12 Integrating Oracle Application Server Wireless with Web Cache

WebCache supports MobileXML documents, but does not support documents that are written in XHTML+XForms or XHTML-MP.

### **13.1.13 Integrating Oracle Application Server Wireless with Oracle Portal**

In order for devices to use this function, they (devices) must send the appropriate HTTP Accept header.

### **13.1.14 Oracle Application Server Wireless log.xml File does not Support NLS**

In this release, the Oracle Application Server Wireless `log.xml` file does not support NLS.

### **13.1.15 POST Method is Not Supported by All Markup Languages**

The XForms transformer sometimes outputs markup language that includes the `POST` method. Therefore devices that do not support the `POST` method, such as old J-Phone Type C2 devices in Japan, are not supported with XForms.

### **13.1.16 Wireless User LDIF File Generation Fails**

The `$ORACLE_HOME/wireless/bin/generateUserLdif.sh` script fails to generate a wireless user LDIF file. There is currently no known workaround for this issue. See bug number 3298675 for more information.

## 13.2 Configuration Issues and Workarounds

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

- [Section 13.2.1, "Potential Conflicts in Application Entities Based on OID"](#)
- [Section 13.2.2, "OC4J\\_Wireless"](#)
- [Section 13.2.3, "Oracle Application Server Workflow Integration"](#)
- [Section 13.2.4, "OracleAS Wireless Site URLs Incorrect"](#)
- [Section 13.2.5, "Discovering New Devices or Simulators Using the Openwave Plug-in"](#)
- [Section 13.2.6, "Integrating Oracle Application Server Wireless with Oracle Internet Directory \(OID\)"](#)
- [Section 13.2.7, "Additional Post-Installation Step for Wireless Calendar PIM Module"](#)

### 13.2.1 Potential Conflicts in Application Entities Based on OID

Oracle Application Server Wireless middle tiers installed against the common meta data repository (Oracle Application Server Wireless schema) share a common application entity in OID. The application entity is created as part of the *first* Oracle Application Server Wireless middle tier installation, and is owned by the OID user who installs that middle tier. Subsequent Oracle Application Server Wireless middle tiers installed against the same meta data repository use the application entity that was created as part of the first middle tier installation.

Subsequent Oracle Application Server Wireless middle tier installations against a meta data repository should be done by the same OID user who installed the first Oracle Application Server Wireless middle tier.

If you want to use a different OID user to install subsequent Oracle Application Server Wireless middle tiers, then you must add the OID user as a shared owner of the application entity before starting any subsequent Oracle Application Server Wireless middle tier installations.

To add a shared owner for a Oracle Application Server Wireless application entity:

1. Find the name of the Oracle Application Server Wireless application entity by executing

```
$ORACLE_HOME/wireless/bin/getAppEntityName.sh[bat]
```

from the first middle tier. This script prints the name of the Oracle Application Server Wireless application entity.

2. Use the OID Deployment Delegation Console or OID Directory Manager to add the new OID user as a Component Owner for the Oracle Application Server Wireless application entity name returned in the previous step.

---

---

**See:** For more details, see "Using Deployment Delegation Console to Add Users to Groups" in *Oracle Application Server 10g Installation Guide*.

---

---

## 13.2.2 OC4J\_Wireless

If your OC4J\_Wireless server must support a large number of concurrent users, increase the maximum memory size to 1 GB (or more) using the following JVM options:

```
-Xms512m -Xmx1024m
```

You can increase the `MaxClients` parameter in `httpd.conf` to support higher hit rates. For example, by setting `MaxClients` to *1024* in `httpd.conf`, you can allow up to 1024 concurrent HTTP requests. Consequently, you can expect an increased number of Application Server threads in the OC4J\_Wireless instance. Ensure you reduce the thread stack size to 256k in order to support large numbers of Application Server threads in OC4J\_Wireless. The stack size is set by the following JVM option:

```
-Xss256k
```

If you are running OC4J\_Wireless instances on multi-CPU machines, you can set the JVM options to enable the Parallel GC algorithm in JDK 1.4. You may set the `ParallelGCThreads` parameter to the number of CPUs in your host. For 4-CPU machines, you can try the following JDK 1.4 JVM options to increase the performance of the OC4J\_Wireless instances:

```
-XX:+UseParallelGC -XX:ParallelGCThreads=4
```

The following GC tuning parameters provide better performance for the OC4J\_Wireless:

```
-XX:NewRatio=2 -XX:SurvivorRatio=16
```

### 13.2.3 Oracle Application Server Workflow Integration

For a user to be able to receive Workflow notifications properly, ensure the following settings in the customization portal are set properly:

- A device should be created and validated.
- The option, *Allow other applications to access my user profile*, in the User Profile section should be checked.
- The Contact Rules section should not have *Unavailable* checked.

Also, a setting must be set properly on the Workflow home page.

To do so:

1. Log on to your Workflow home page.
2. Click **User Preferences**. The value for *Send me electronic mail notifications* cannot be *Do not send me mail*. If it is, the user must change it by clicking **Update**. Choose any option except for *Do not send me mail* or *Plain text summary mail*.
3. To confirm your change, click **OK**.

To enable the Workflow worklist application, the Workflow folder must be made visible. To do this:

1. Log on to the Oracle Application Server Wireless tool.
2. Click the **Content** tab on the top right to go to the *Publish Content* page.
3. Select the *Workflow* folder and click **Edit**.
4. Check the *Visible* box and click **Apply**.

### 13.2.4 OracleAS Wireless Site URLs Incorrect

During 9.0.4 middle tier installation, WebCache must be configured with the HTTPS Port number. If WebCache is not configured with the HTTPS Port number, then Oracle Application Server Wireless will by default set its HTTPS Port to zero.

After you configure WebCache with the correct HTTPS Port, you must use Oracle Enterprise Manager to reconfigure all of the HTTPS-related URL parameters.



### 13.2.5 Discovering New Devices or Simulators Using the Openwave Plug-in

If you use the plug-in interface that is provided by Openwave, change the user agent of the HDML\_EZweb logical device to:

```
UP.Browser/3.0*UP.Link/3*, UP.Browser/3.2.9.1-*UP.Link/3*"
```

### 13.2.6 Integrating Oracle Application Server Wireless with Oracle Internet Directory (OID)

Run Oracle Directory Integration Server (`odisrv`) when you want to synchronize data between Oracle Application Server Wireless and OID.

### 13.2.7 Additional Post-Installation Step for Wireless Calendar PIM Module

In addition to the post-installation configuration steps listed in the *Oracle Application Server Wireless Administrator's Guide*, complete the following step to configure the Wireless Calendar PIM Module on Linux:

Add the following entries to the system `/etc/services` file:

```
unieng          5730/tcp
unisnc          5731/tcp
unidas          5732/tcp
unicsm          5734/tcp
```

## 13.3 Documentation Errata

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

- [Section 13.3.1, "Determining a User's Locale"](#)
- [Section 13.3.2, "Documenting UNIX Ports"](#)
- [Section 13.3.3, "Account Numbers in Oracle Application Server Wireless Tool"](#)
- [Section 13.3.4, "MXML Tag Glossary"](#)
- [Section 13.3.5, "Configuring Oracle Application Server Wireless for Voice Applications"](#)
- [Section 13.3.6, "Locations of Audio Parameters"](#)
- [Section 13.3.7, "Grammar.jsp"](#)
- [Section 13.3.8, "Driver Attributes"](#)
- [Section 13.3.9, "Jabber Example"](#)
- [Section 13.3.10, "More Tuning Information"](#)
- [Section 13.3.11, "Updated URLs"](#)
- [Section 13.3.12, "Generating Wireless User LDIF file"](#)

### 13.3.1 Determining a User's Locale

Section 15.2.2.1 of the *Oracle Application Server Wireless Administrator's Guide* should read as follows:

The Oracle Application Server Wireless Web Server (`ptg/rm`) determines the locale of a user in the following order:

1. Use `PAlocale` (if present).
2. Use the `Accept-Language` HTTP header (if present).
3. Use the site default locale.

### 13.3.2 Documenting UNIX Ports

Throughout the *Oracle Application Server Wireless Administrator's Guide* and *Oracle Application Server Wireless Developer's Guide*, you can substitute UNIX for Solaris in all instances except for the Oracle Application Server Wireless tuning described in Chapter 13 of the *Oracle Application Server Wireless Administrator's Guide*

("Optimizing Oracle Application Server Wireless"). The tuning knobs described in this chapter are Solaris-specific.

### 13.3.3 Account Numbers in Oracle Application Server Wireless Tool

When you create or modify a device using the Oracle Application Server Wireless Tool, you enter the Primary Phone Number for the device. This number becomes the Account Number for the device. The online Help sometimes refers to the Primary Phone Number in places where the user interface displays the label *Account Number*. The correct usage is Account Number.

### 13.3.4 MXML Tag Glossary

The online MXML tag glossary omits the `dtmf` attribute `<SimpleMenu>`.

This attribute controls whether or not DTMF keys are assigned to the first 9 `<SimpleMenuItem>`s automatically.

Values for the `dtmf` attribute are *true* or *false*; the default is *false*.

### 13.3.5 Configuring Oracle Application Server Wireless for Voice Applications

The following changes to the documentation in *Oracle Application Server Wireless Administrator's Guide* have occurred since the book was released:

- Section 9.2.2, "Configuring and Testing Voice-Enabled Applications" should be removed as the information is no longer necessary.
- Section 9.2.3.1, "Provisioning Mobile Studio for Voice Access": in addition to the existing step, you must set the `PALogin` parameter (`PALogin=true`).

### 13.3.6 Locations of Audio Parameters

The `ORACLE_SERVICES_PIM_MAIL_AUDIO_TMP_DIR` and `ORACLE_SERVICES_PIM_MAIL_AUDIO_TMP_URL` parameters are in the Mail application, not the Voice Main Menu application as stated in Section 9.2.3.2.5, "Configuring the Voice Main Menu to Prefetch the Mail Application" in *Oracle Application Server Wireless Administrator's Guide*.

### 13.3.7 Grammar.jsp

The following notes apply to Section 9.2.4.1, "Testing the General Commands" in *Oracle Application Server Wireless Administrator's Guide*:

- The path to `grammar.jsp` is incorrect. The path to `globalGrammar.jsp` on the integrated instance is: `<IAS-HOME>/j2ee/OC4J_Wireless/applications/modules/modules-web/common/jsp/globalGrammar.jsp`.
- The following text is no longer valid:  
"Modify the following file for the My Oracle main menu, or another .JSP for a personalized menu:  
`<iasw-root>/iaswv20/wireless/j2ee/applications/voice/voice-web/mainmenu/MOCGrammar.jsp`"

### 13.3.8 Driver Attributes

The following changes to driver attributes (in Section 10.6.1, "Pre-Built Drivers" of *Oracle Application Server Developer's Guide*) have been made:

- For the UCP Driver, the `sms.server.default.encoding` attribute:  
The default encoding of the text message. The default value is *IA5*. For multi-byte languages (such as Chinese), the attribute must be set to *UCS-2*. The attribute `sms.message.chunksize` should be set accordingly (that is, the chunksize should be no more than 160 if the encoding is *IA5*; no more than 70 if the encoding is *UCS-2*).
- For the SMPP Driver, the `sms.server.default.encoding` attribute:  
The default encoding of the text message. The default value is *IA5*. For multi-byte languages (such as Chinese), the attribute must be set to *UCS-2*. The attribute `sms.message.chunksize` should be set accordingly (that is, the chunksize should be no more than 160 if the encoding is *IA5*; no more than 70 if the encoding is *UCS-2*).

### 13.3.9 Jabber Example

In Section 10.6.1.9.1, "About Jabber" in *Oracle Application Server Wireless Developer's Guide*, a figure is mistakenly referenced. Instead, this paragraph is appropriate:

Consider a scenario in which an Oracle Application Server Wireless instance is connected to MSN through Jabber's MSN transport gateway using the ID *oracleagent@msn.com*. End users on MSN can then access applications on the Oracle Application Server Wireless instance by sending messages to this ID (*oracleagent@msn.com*) from their client.

### 13.3.10 More Tuning Information

Tuning information has changed and has been enhanced since publication of the Oracle Application Server Wireless books. See Oracle Technology Network for the latest information about tuning Oracle Application Server Wireless.

### 13.3.11 Updated URLs

Some URLs have changed since publication of the OracleAS Wireless books. [Table 13-1](#) details the changes.

**Table 13-1 OracleAS Wireless Changed URL**

Existing URL	Should Be...
<a href="http://software.palm.com/download.jsp">http://software.palm.com/download.jsp</a>	<a href="http://software.palm.com">http://software.palm.com</a>
<a href="http://java.sun.com/products/Javacomm/">http://java.sun.com/products/Javacomm/</a>	<a href="http://java.sun.com/products/javacomm/">http://java.sun.com/products/javacomm/</a>
<a href="http://messenger.us.oracle.com/push/web services">http://messenger.us.oracle.com/push/web services</a>	<a href="http://messenger.oracle.com/push/webservices">http://messenger.oracle.com/push/webservices</a>
<a href="http://mobile.us.oracle.com/ompm/site/product/devices/certified/certified_gateways_wap.jsp">http://mobile.us.oracle.com/ompm/site/product/devices/certified/certified_gateways_wap.jsp</a>	<a href="http://www.otn.oracle.com/">http://www.otn.oracle.com/</a> . Go to the Mobile Tech Center.
<a href="http://mservice.oracle.com/">http://mservice.oracle.com/</a>	<a href="http://www.otn.oracle.com/">http://www.otn.oracle.com/</a> . Go to the Mobile Tech Center.
<a href="http://software.palm.com/download.jsp">http://software.palm.com/download.jsp</a>	<a href="http://software.palm.com/">http://software.palm.com/</a>
<a href="http://vvsp.local.hostname:vvsp.local.port/">http://vvsp.local.hostname:vvsp.local.port/</a>	Not a link; example only.

**Table 13–1 OracleAS Wireless Changed URL (Cont.)**

Existing URL	Should Be...
<a href="http://www.otn.oracle.com/docs/products/oracle9i/doc_library/901_%20doc/nav/docindex.htm">http://www.otn.oracle.com/docs/products/oracle9i/doc_library/901_%20doc/nav/docindex.htm</a>	Disregard reference.
<a href="http://www.otn.oracle.com/wireless">http://www.otn.oracle.com/wireless</a>	<a href="http://www.otn.oracle.com">http://www.otn.oracle.com</a>
<a href="http://xmlns.oracle.com/2002/MobileXML">http://xmlns.oracle.com/2002/MobileXML</a>	<a href="http://xmlns.oracle.com">http://xmlns.oracle.com</a>

### 13.3.12 Generating Wireless User LDIF file

Section 5.4.3.1 of the Oracle Application Server 10g Upgrading to 10g (9.0.4) Guide states that the account number and PIN migration tool requires an LDIF file containing user account numbers and PINs. However, the guide does not document how to generate this file.

Use the following script to generate the LDIF file:

```
$ORACLE_HOME/wireless/bin/generateUserLdif.sh
```

# Part V

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## Caching Issues

This part describes issues associated with Caching components. It contains the following chapters:

- [Chapter 14, "OracleAS Web Cache"](#)





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## OracleAS Web Cache

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

- [Section 14.1, "General Issues and Workarounds"](#)
- [Section 14.2, "Configuration Issues and Workarounds"](#)

## 14.1 General Issues and Workarounds

This section describes general issues and their workarounds for OracleAS Web Cache. It includes the following topics:

- [Section 14.1.1, "Security"](#)
- [Section 14.1.2, "Compressed Content Not Displaying Correctly in Browsers"](#)
- [Section 14.1.3, "Cookie and JavaScript in Pages Monitored by End-User Performance Monitoring"](#)
- [Section 14.1.4, "Performance Degradation and Memory"](#)
- [Section 14.1.5, "Disk Space and Service Interruption"](#)
- [Section 14.1.6, "Impact of HTTP Traffic Changes"](#)
- [Section 14.1.7, "Change in Behavior of Responses to Range Requests"](#)
- [Section 14.1.8, "Client-Side Certificate Handling"](#)

### 14.1.1 Security

When you configure OracleAS Web Cache to cache Web pages other users can access these pages if they know the URLs. For this reason, do not create cache secure content.

### 14.1.2 Compressed Content Not Displaying Correctly in Browsers

When you enable compression, some browser bugs effect compression and the output HTML. You may have to perform additional configuration to use compression for certain browsers types, or you may have to disable compression for specific browsers with bugs.

**See Also:**

- *Oracle Application Server Web Cache Administrator's Guide* for an initial list of browser limitations
- Vendor documentation for the browser

### 14.1.3 Cookie and JavaScript in Pages Monitored by End-User Performance Monitoring

End-user performance monitoring creates an additional cookie and inserts JavaScript into pages. If this behavior causes a problem for an application, then disable this feature in the End-User Performance Monitoring page (**Logging and Diagnostics > End-User Performance Monitoring**) of OracleAS Web Cache Manager.

### 14.1.4 Performance Degradation and Memory

Because OracleAS Web Cache is an in-memory cache, it is best to deploy OracleAS Web Cache on a dedicated computer. Unless the computer is dedicated to run OracleAS Web Cache, ensure the maximum cache size does not exceed 20 percent of the total memory.

If peaks in time taken to cache or invalidate objects occur, check if the computer is paging. If paging occurs on the computer on which OracleAS Web Cache is installed, performance can be severely degraded. To configure OracleAS Web Cache to work efficiently on a computer with paging, either deploy OracleAS Web Cache on a dedicated computer or reduce the maximum cache size and maximum cached object size.

If the amount of memory used by OracleAS Web Cache is greater than the maximum cache size, the growth in memory usage may be caused by numerous simultaneous requests for documents that are larger than the maximum cached object size. In this situation, because the documents are not cached, OracleAS Web Cache uses more memory processing the requests and forwarding them to the origin server than it would to cache the documents. Review access logs to determine if many simultaneous requests for large documents have been made and adjust the size of the maximum cached object size so that those documents are cached. In addition, check to be sure that a caching rule or response header specifies that the documents be cached.

To modify the maximum cache size or the maximum cached object size, set new limits for the **Maximum Cache Size** and **Maximum Cached Object Size** in the Resource Limits page (**Properties > Resource Limits**) of OracleAS Web Cache Manager.

**See Also:** *Oracle Application Server Web Cache Administrator's Guide* for more information about recommended topologies

### 14.1.5 Disk Space and Service Interruption

A system without enough disk space can cause OracleAS Web Cache to fail. Ensure there is sufficient space on the partition that contains the log files.

### 14.1.6 Impact of HTTP Traffic Changes

When OracleAS Web Cache is added to an existing application Web server environment, HTTP traffic changes effect the following aspects of the application:

- Protocol/Hostname/Port Mapping

To ensure traffic is directed through OracleAS Web Cache, configure all absolute URLs to use the protocol, host name, and port number of OracleAS Web Cache. Also, ensure the `Port` directive in the Oracle HTTP Server `httpd.conf` file specifies the OracleAS Web Cache listening port.

- SSL Processing

Change certificate management from the origin server to OracleAS Web Cache.

- Page Delivery Timing

For compressed pages or pages that requires processing, OracleAS Web Cache waits for an entire page from the origin server before it sends it to the browser.

- HTTP Protocol

OracleAS Web Cache transparently performs the following:

- OracleAS Web Cache upgrades and downgrades the protocol version between the origin server and browser.
- For cacheable objects, OracleAS Web Cache sends content to browsers with the `Content-Length` response header instead of chunked encoding for the initial request.
- For cache hits, OracleAS Web Cache overwrites the `Content-Length` response-header field whenever it is different from what the origin server sent. This feature ensures browsers receive full page content.

## 14.1.7 Change in Behavior of Responses to Range Requests

In previous releases, when OracleAS Web Cache received a request for a multi-part document with an HTTP `Range` request-header field and that document was not already cached, OracleAS Web Cache requested the entire document from the origin server and served it to the client. If the document was already cached, OracleAS Web Cache served only the part that the client requested.

In this release, when OracleAS Web Cache receives a request for a multi-part document with an HTTP `Range` request-header field and that document is not already cached, OracleAS Web Cache now requests the partial document from the origin server. OracleAS Web Cache correctly returns the response (which could be an entire or partial document depending on what it received from the origin server) to the client.

However, OracleAS Web Cache caches only responses that are entire documents; it does not cache responses that are range responses. This caching behavior will be fixed in a future release.

## 14.1.8 Client-Side Certificate Handling

This section describes issues with client-side certificate handling. It includes the following topics:

- [Section 14.1.8.1, "Server Gated Cryptography Certificates and Global Server IDs"](#)
- [Section 14.1.8.2, "Client-Side Certificate Support in Cache Hierarchies"](#)

### 14.1.8.1 Server Gated Cryptography Certificates and Global Server IDs

The Oracle Application Server does not support Microsoft Server Gated Cryptography Certificates (SGC) or VeriSign Global Server IDs. This cryptography enables export version browsers to transparently upgrade to strong 128-bit encryption from weaker 40-bit encryption when communicating with an application server. Without this cryptography, browsers with the weaker 40-bit encryption cannot negotiate a secure connection to the Oracle Application Server. In a future release of the Oracle Application Server, Oracle plans to support SGC and Global Server IDs.

### 14.1.8.2 Client-Side Certificate Support in Cache Hierarchies

OracleAS Web Cache does not support the use of client-side certificates in distributed cache hierarchies.

In an ESI cache hierarchy, a provider cache must be able to accept the client-side certificate information in HTTP headers from the subscriber cache. However, with this configuration, the provider caches could inadvertently accept the certificate information in a header from a bogus entity. To prevent this, you must secure the provider caches, by methods such as installing them behind a firewall.

**See Also:** *Oracle Application Server Web Cache Administrator's Guide* for more information about configuring OracleAS Web Cache for client-side certificates

## 14.2 Configuration Issues and Workarounds

This section describes configuration issues and their workarounds for OracleAS Web Cache. It includes the following topics:

- [Section 14.2.1, "How To Get Started with Configuration"](#)
- [Section 14.2.2, "Common Configuration Mistakes"](#)
- [Section 14.2.3, "Port Conflicts"](#)
- [Section 14.2.4, "Caching Large Objects"](#)
- [Section 14.2.5, "Mismatched Oracle Home Definitions Causes Web Cache to Fail to Start"](#)
- [Section 14.2.6, "Logging Cache Clusters Peer Requests"](#)
- [Section 14.2.7, "Removing a Cache from a Cluster Before Running chgiphost.sh"](#)
- [Section 14.2.8, "Sending Invalidation Requests Between Cache Cluster Members During Upgrade"](#)
- [Section 14.2.9, "Configuring OracleAS Web Cache Listen Port and Logical Site Ports"](#)
- [Section 14.2.10, "admin server Process Not Starting After OracleAS Web Cache Manager Configuration Update"](#)
- [Section 14.2.11, "Binding Session Associated with Multiple Cookies"](#)
- [Section 14.2.12, "Stopping the OracleAS Web Cache Processes Before Running webcache\\_setuser.sh Script"](#)

## 14.2.1 How To Get Started with Configuration

Use OracleAS Web Cache Manager to configure OracleAS Web Cache. Once configuration is complete, you can use the Application Server Control to start, stop, or restart the cache, as well as monitor cache and origin server status.

To use OracleAS Web Cache Manager:

1. If not currently logged on to the OracleAS Web Cache computer, log in with the user ID of the user that performed the installation.
2. Start OracleAS Web Cache with the Oracle Process Manager and Notification (OPMN) Server. From the command line, enter:

```
opmnctl startproc ias-component=WebCache
```

3. Point your browser to the OracleAS Web Cache Welcome URL:

```
http://web_cache_hostname:portno/webcacheadmin
```

4. When prompted for the administrator user ID and password, enter either the user name, `ias_admin`, or the OracleAS Web Cache administrator user name, `administrator`, for the user name. If you supplied a password during the installation, enter that password.

OracleAS Web Cache uses two configuration files: `webcache.xml` and `internal.xml`. The OracleAS Web Cache Manager writes its configuration information to the `webcache.xml` file. OracleAS Web Cache uses `internal.xml` file. These files are located in the `$ORACLE_HOME/webcache` directory on UNIX and `ORACLE_HOME\webcache` directory on Windows. Do not edit these configuration files manually, except in the cases described in these Release Notes, or when directed to do so by Oracle Support Services. Improper editing of these configuration files may cause problems in OracleAS Web Cache.

**See Also:** *Oracle Application Server Web Cache Administrator's Guide* for complete configuration coverage



## 14.2.2 Common Configuration Mistakes

Common configuration mistakes include:

- Not mapping sites to origin servers in the Site-to-Server Mapping page (**Origin Servers, Sites, and Load Balancing > Site-to-Server Mapping**). When sites are not mapped, OracleAS Web Cache directs requests to the default Oracle HTTP Server. Other site configuration errors include:
  - Not specifying all the site aliases
  - Misuse of the wildcard character \*
  - Creating multiple site-to-server mappings for a site with multiple origin servers

**See Also:** ["Configuring OracleAS Web Cache Listen Port and Logical Site Ports"](#) on page 14-13 for additional configuration advice

- Port conflicts

**See Also:** ["Port Conflicts"](#) on page 14-10

- Ping URL

When configuring the **Ping URL** field in the Origin Server page (**Origin Servers, Sites, and Load Balancing > Origin Servers**), how you enter the URL depends on the origin server. For an application Web Server, enter either a relative or fully-qualified URL that includes the domain name, or site name, representing the virtual host of the application Web server. For a proxy server, enter a fully-qualified URL that includes the domain name, or site name, representing the virtual host of the origin server behind the proxy server. Ensure the URL is cached.

- Running webcached with root privilege

You must configure webcached to run with root privilege when privileged port numbers less than 1024, there are more than 1,024 file descriptors, or the current `opmnctl` or `webcachectl` user does not match the configured user in the Process Identity page (**Properties > Process Identity**) of OracleAS Web Cache Manager.

**See Also:** *Oracle Application Server Web Cache Administrator's Guide* for complete configuration details

### 14.2.3 Port Conflicts

By default, OracleAS Web Cache is configured to use the following default HTTP ports:

- Listen requests: 7777
- Administration requests: 4000
- Invalidation requests: 4001
- Statistics requests: 4002

If these ports are in use, then the installation procedure attempts to assign other port numbers from a range of possible port numbers.

The Oracle HTTP Server is configured to use the following default ports:

- HTTP requests: 7778
- HTTPS requests: 4444

At the end of installation, OracleAS Web Cache attempts to start. If there are port conflicts, then OracleAS Web Cache may fail to start.

**See Also:** *Oracle Application Server Web Cache Administrator's Guide* for more information about configuring ports, resolving port conflicts, and event log messages related to port conflicts.

### 14.2.4 Caching Large Objects

To specify a maximum cached object size, go to the Resource Limits page (**Properties > Resource Limits**) of OracleAS Web Cache Manager.

If you specify a maximum cached object size, only documents that are not larger than a specified size and that match the caching rules will be stored in the cache. Objects larger than the specified size will not be cached, even if they meet other caching rules. The default is 100 KB for 9.0.4 installations. For upgraded caches, the default is that no limit is specified. If you want to apply the default to upgraded caches, modify the entry for **Maximum Cached Object Size** in the Resource Limits page.

If you have documents that are larger than the maximum cached object size and those documents are requested frequently, consider increasing the maximum cached object size limit.

The setting for the maximum cached object size is ignored if no Content-Length header is present in the response.

**See Also:** *Oracle Application Server Web Cache Administrator's Guide* for more information about configuring resource limits

## 14.2.5 Mismatched Oracle Home Definitions Causes Web Cache to Fail to Start

If the definition of Oracle home in the `webcache.xml` configuration file is different than the definition of Oracle home in your environment, OracleAS Web Cache may fail to start.

On UNIX, you may see the following alert message in the event log:

```
No matching CACHE element found in webcache.xml for current host name
(webcache-host) and ORACLE_HOME (Oracle_home).
```

On Windows, you may see the following message:

```
The description for Event ID ( 1 ) in Source ( Oracle-Web-Cache ) cannot be
found. The local computer may not have the necessary registry information or
message DLL files to display messages from a remote computer. The following
information is part of the event: Cannot open log files because NULL socket
indicates problem.
```

During installation, the Oracle home is written to the ORACLEHOME attribute of the CACHE\_NAME element, in the `webcache.xml` file. The Oracle home is specified with the \$ORACLE\_HOME environment variable on UNIX and the ORACLE\_HOME parameter located at HKEY\_LOCAL\_MACHINE\SOFTWARE\ORACLE in the Windows registry.

If there is a mismatch, modify either the ORACLEHOME attribute in the `webcache.xml` file or the Oracle home environment setting. (In a cluster environment, there is more than one CACHE\_NAME element in the `webcache.xml` file, one for each cluster member. Be sure to modify the correct element.)

## 14.2.6 Logging Cache Clusters Peer Requests

By default, peer requests between two members of a cache cluster are not logged in the access log. Only client requests to the cluster are logged. Peer request logging can be enabled for individual cache cluster members by adding the `ACCESSLOGIGNOREPEERREQUEST` attribute to the `MISCELLANEOUS` element in the `internal.xml` configuration file.

The valid values for this attribute are:

- YES
- NO

The default value is YES.

The following example shows the `MISCELLANEOUS` element with peer-to-peer logging enabled:

```
<MISCELLANEOUS ACCESSLOGIGNOREPEERREQUEST="NO" />
```

## 14.2.7 Removing a Cache from a Cluster Before Running `chgiphost.sh`

The script `chgiphost.sh` enables you to change the host name or IP address of a computer. If the computer contains a middle-tier instance that is part of OracleAS Web Cache cluster, remove the instance from the cluster prior to running this script.

**See Also:**

- *Oracle Application Server Web Cache Administrator's Guide* for more information about removing cache clusters
- *Oracle Application Server 10g Administrator's Guide* for more information about using the `chgiphost.sh` script

## 14.2.8 Sending Invalidation Requests Between Cache Cluster Members During Upgrade

If you have a OracleAS Web Cache cluster, you can upgrade one cache cluster member at a time. The caches will continue to respond to requests. However, because other cluster members have a different version of the configuration, the caches will not forward requests to those cache cluster members operating with a different version. Instead, if the requested document is not cached by that cache or by cluster members with the same version of the configuration, OracleAS Web Cache forwards the request to the origin server. In this situation, the Operations page (**Operations > Cache Operations**) in OracleAS Web Cache Manager indicates that the **Operation Needed** is **Incompatible software version**.

When the cache cluster members are not running the same version of OracleAS Web Cache, you can still invalidate documents and you can propagate the invalidation to other cluster members, but the invalidation request must originate with the cache that is operating with the earlier version, such as 9.0.2 or 9.0.3, of OracleAS Web Cache.

**See Also:** *Oracle Application Server 10g Upgrading to 10g (9.0.4)* for more information about upgrading OracleAS Web Cache to 10g (9.0.4), including information about upgrading cache cluster members

## 14.2.9 Configuring OracleAS Web Cache Listen Port and Logical Site Ports

In a configuration in which the OracleAS Web Cache listen port is the same as the logical site port, changing the OracleAS Web Cache listen port in the Listen Ports page (**Ports > Listen Ports**) of OracleAS Web Cache Manager requires you to also change the logical site port in the Site Definitions and Site-to-Server Mapping pages (**Origin Servers, Sites, and Load Balancing > Site Definitions** or **Site-to-Server Mapping**).

## 14.2.10 admin server Process Not Starting After OracleAS Web Cache Manager Configuration Update

OracleAS Web Cache Manager does not enforce stringent validation checking. This is especially a problem when the `admin` server process is shut down after applying invalid configuration changes. In that case, the `admin` server process will not be able to start up, and the OracleAS Web Cache Manager will become inaccessible. If you suspect a problem, check the `event_log` file for startup errors or the Event Viewer on Windows.

To solve this problem:

- If you want to retain the configuration changes you made, then send the `webcache.xml` file to Oracle Support Services to troubleshoot the invalid configuration entry.
- If you want to restore configuration to a previous configuration, then run the `webcachectl reset` command to restore to the previous version of the configuration. The `opmnctl` utility does not provide a reset command.

### 14.2.11 Binding Session Associated with Multiple Cookies

To configure OracleAS Web Cache to bind user sessions to an origin server, you associate a site with a session definition name in the Session Binding page (**Origin Servers, Sites, and Load Balancing > Session Binding**). If you want OracleAS Web Cache to bind user sessions with multiple cookies when any cookie is set, select a session of `Any Set Cookie`. When selecting `Any Set Cookie`, in **Session Binding Cookie**, click **Enable** to instruct OracleAS Web Cache to include a `Set-Cookie` response-header in the response.

**See Also:** *Oracle Application Server Web Cache Administrator's Guide* for more information about configuring session binding settings

### 14.2.12 Stopping the OracleAS Web Cache Processes Before Running `webcache_setuser.sh` Script

Prior to running the `webcache_setuser.sh` script, stop both the `cache` and `admin` server processes.

- In an Oracle Application Server installation, use either Oracle Enterprise Manager or the Oracle Process Manager and Notification Server (OPMN) Server utility command `opmnctl stopproc ias-component=WebCache`.
- In a standalone OracleAS Web Cache installation, use the `webcachectl` utility command `webcachectl stop`. Do not use `webcachectl stop` from an Oracle Application Server home directory.

You cannot use the **Restart** option in the Cache Operations page to restart the `admin` server process.

# Part VI

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## Business Intelligence Issues

This part describes issues associated with Business Intelligence components. It contains the following chapters:

- [Chapter 15, "OracleAS Discoverer"](#)
- [Chapter 16, "Oracle Reports"](#)
- [Chapter 17, "OracleAS Personalization"](#)





# 15

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## OracleAS Discoverer

This chapter describes issues associated with OracleAS Discoverer. It includes the following topics:

- [Section 15.1, "General Issues and Workarounds"](#)
- [Section 15.2, "Configuration Issues and Workarounds"](#)
- [Section 15.3, "Useful Information"](#)
- [Section 15.4, "Documentation Errata"](#)

## 15.1 General Issues and Workarounds

This section describes general issues and their workarounds for OracleAS Discoverer. It includes the following topics:

- [Section 15.1.1, "Certification Information"](#)
- [Section 15.1.3, "OracleAS Discoverer Plus and Internet Browsers with Pop-Ups Disabled"](#)
- [Section 15.1.4, "Launching OracleAS Discoverer Plus from a Netscape v7.0 Browser"](#)
- [Section 15.1.5, "Problems Launching Microsoft Internet Explorer v6.0 when Exporting to Excel"](#)
- [Section 15.1.6, "Issue Running OracleAS Discoverer Plus on NT with Sun Java Plug-In 1.4.1"](#)
- [Section 15.1.7, "Problem With Microsoft Internet Explorer, HTTP 1.1 Protocol and Compressed Data"](#)
- [Section 15.1.8, "Effective Font Sizes in OracleAS Discoverer Viewer using Netscape 4.7 Browser"](#)
- [Section 15.1.9, "Known Issues when using OracleAS Discoverer with Netscape 4.x"](#)
- [Section 15.1.10, "Error: Could Not Open Web Cache Connection \(WWC-40019\)"](#)
- [Section 15.1.11, "Unable to launch OracleAS Discoverer Java Plus with Turkish Locale with Jinitiator 1.3"](#)
- [Section 15.1.12, "Microsoft Internet Explorer v6.0 does not Automatically Open Exported Non-ascii Named Worksheets in OracleAS Discoverer Java Plus"](#)
- [Section 15.1.13, "Microsoft Excel May Hang or Show Some Errors When Reopened While Using OracleAS Discoverer Viewer"](#)
- [Section 15.1.14, "Buttons Not Displayed, or Text Only in English"](#)

### 15.1.1 Certification Information

For the latest certification information, which supersedes that in the Oracle Application Server Discoverer documentation, please refer to:

<http://metalink.oracle.com>

## 15.1.2 Internal Error on Exiting Discoverer Plus

If workbook scheduling is not enabled on your system, you might see the following error message when you exit Discoverer Plus:

**An internal error has occurred. If this persists, please contact your Discoverer manager**

This error occurs because Discoverer is attempting to get the status of a user's scheduled workbooks by querying VSPARAMETER. Use one of the following workarounds to resolve this issue:

- Set up workbook scheduling functionality, as described in the *Oracle Discoverer Administrator Administration Guide* and *Oracle Developer Suite Release Notes*.
- Set the default value of the ShowExpiredRunsOnExit preference to 0.
- In Discoverer Plus, choose Tools | Options | General and select the **Don't show expired results on exit, delete results automatically** checkbox.

## 15.1.3 OracleAS Discoverer Plus and Internet Browsers with Pop-Ups Disabled

OracleAS Discoverer Plus appears as a pop-up window from the main Discoverer Connections page. However, some Internet browsers provide an option to disallow pop-up windows. If your browser has such an option and Discoverer Plus is not appearing when you select a connection, make sure the browser's option to disallow pop-up windows is turned off.

## 15.1.4 Launching OracleAS Discoverer Plus from a Netscape v7.0 Browser

To successfully launch Discoverer Plus from a Netscape v7.0 browser, follow the instructions below to change your Netscape preferences:

1. Select Edit | Preferences | Helper Applications from the Netscape menu bar.
2. Clear the **Always use the Netscape Plug-in Finder Service** check box.

### 15.1.5 Problems Launching Microsoft Internet Explorer v6.0 when Exporting to Excel

If you are exporting from Discoverer Plus to Microsoft Excel using Microsoft Internet Explorer v6.0, a separate browser window might not launch as expected. This problem is due to a change in behavior in Microsoft Internet Explorer v6.0.

Follow the instructions below to work around the problem by specifying the Discoverer middle tier as a trusted site in Microsoft Internet Explorer (the menu options mentioned below are correct at the time of writing):

1. Select Tools | Internet Options from the Microsoft Internet Explorer menu bar to display the Internet Options dialog.
2. Display the Security tab.
3. Select the Trusted Sites icon and click the Sites button to display the Trusted sites dialog.
4. Enter the URL of the Discoverer middle tier in the format:

`http://<host.domain>:<port>/discoverer/viewer/discoverer/plus`

where:

- `<host.domain>` is the server name and domain on which the Oracle HTTP Server is installed
- `<port>` is the port number (typically 7777 or 7778) on which Discoverer is installed

### 15.1.6 Issue Running OracleAS Discoverer Plus on NT with Sun Java Plug-In 1.4.1

If you want to use Discoverer Plus on an NT client, use JInitiator 1.3.1.9 or the Sun Java Plug-In 1.4.2. This is due to issues with the Sun Java Plug-In 1.4.1.

### 15.1.7 Problem With Microsoft Internet Explorer, HTTP 1.1 Protocol and Compressed Data

There is a known issue (user fails to see a page) with Microsoft Internet Explorer where the first 2048 bytes of data sent by a web server using HTTP compression are lost. To find out more information about this problem, go to the following link:

<http://support.microsoft.com/default.aspx?scid=kb;en-us;Q313712>

Follow the instructions below to work around the problem by specifying HTTP 1.0 on the client to disable HTTP compression:

1. Select Tools | Internet Options from the Microsoft Internet Explorer menu bar to display the Internet Options dialog.
2. Display the Advanced tab.
3. Clear both of the following check boxes (in the HTTP 1.1 settings category):
  - the **Use HTTP 1.1** check box
  - the **Use HTTP 1.1 through proxy connections** check box

### 15.1.8 Effective Font Sizes in OracleAS Discoverer Viewer using Netscape 4.7 Browser

There is a known issue with the rendering of fonts in Discoverer Viewer with the Netscape 4.7 browser. This is due to limited support for Cascading Style Sheets (CSS) in Netscape 4.7, which causes the font size specified in the CSS to be ignored.

To correct this problem, upgrade to a newer version of a supported browser.

### 15.1.9 Known Issues when using OracleAS Discoverer with Netscape 4.x

The following are known issues when using Discoverer with Netscape 4.x:

- it is not possible to filter the workbook list using non-ASCII characters when using Discoverer Viewer with Netscape 4.x
- it is not possible to use non-ASCII parameters when using Discoverer Viewer with Netscape 4.x
- it is not possible to create private connections using non-ASCII characters when using Discoverer with Netscape 4.x
- browser window re-sizing is disabled when using Discoverer Plus with Netscape 4.x

The workaround is to use a later version of Netscape.

### 15.1.10 Error: Could Not Open Web Cache Connection (WWC-40019)

This error message might appear if you perform a new Oracle Application Server Business Intelligence and Forms type installation with an existing OracleAS Infrastructure 10g, and you subsequently edit and try to publish a Discoverer portlet.

The workaround is to make sure that OracleAS Web Cache is disabled for OracleAS Portal content.

1. Log in to OracleAS Portal as the Portal administrator (e.g. with the username Portal).
2. Display the Administer tab.
3. Display the Portal sub-tab.
4. Select the Global Settings link in the Services area.
5. Display the Cache tab.
6. Clear the **Enable Web Cache for Caching Portal Content** check box.
7. Make sure that the **Host Name** field is set correctly.

**Note:** If more than one Oracle Application Server middle tier has been installed, the Host Name is updated with the most recent Oracle Application Server installation. You might need to change the Host Name to that of a previous Oracle Application Server installation.

8. Save the changes you have made by clicking Apply or OK.

### **15.1.11 Unable to launch OracleAS Discoverer Java Plus with Turkish Locale with Jinitiator 1.3**

You will not be able to launch OracleAS Discoverer Java Plus with Turkish Locale settings with Jinitiator 1.3, the default JVM setting for Java Plus.

You must change the JVM from JDK 1.3 to JRE 1.4.1.

### **15.1.12 Microsoft Internet Explorer v6.0 does not Automatically Open Exported Non-ascii Named Worksheets in OracleAS Discoverer Java Plus**

Microsoft Internet Explorer v6.0 does not automatically open exported non-ascii named worksheets in OracleAS Discoverer Java Plus.

You need to save the exported sheets and then open them.

### **15.1.13 Microsoft Excel May Hang or Show Some Errors When Reopened While Using OracleAS Discoverer Viewer**

Microsoft Excel may hang or show some errors when reopened while using OracleAS Discoverer Viewer. The Microsoft Excel exported sheet also includes a pivot table.

To workaround:

1. Open the exported Microsoft Excel file and enable macros.
2. Save the file.
3. Once again, open the saved Microsoft Excel file and disable macros while opening it.

### **15.1.14 Buttons Not Displayed, or Text Only in English**

Following installation of Oracle Application Server, you may not see complete translation in OracleAS Discoverer Viewer and OracleAS Discoverer Connection page. Some buttons, text or links may be displayed only in English.

To correct this problem, re-start all of your OPMN services after installation of Oracle Application Server.

### 15.1.15 Expected Language Not Appearing in Discoverer Viewer or Discoverer Portlets

If the Discoverer Portlet Provider test servlet is invoked (<http://hostname:port/discoverer/portletprovider>), English language text might appear in Discoverer Viewer and Discoverer portlets instead of the expected language.

The workaround is to restart the OC4J\_BI\_Forms service using Oracle Enterprise Manager Application Server Control.



## 15.2 Configuration Issues and Workarounds

This section describes configuration issues and their workarounds for OracleAS Discoverer. It includes the following topic:

- [Section 15.2.1, "Always Use HTTPS URL When Plus Transport Is HTTPS"](#)
- [Section 15.2.2, "Error when configuring OracleAS Discoverer after installation"](#)
- [Section 15.2.3, "Unable to launch OracleAS Discoverer Java Plus with Turkish Locale with Jinitiator 1.3"](#)

### 15.2.1 Always Use HTTPS URL When Plus Transport Is HTTPS

Chapter 12, "Maintaining security with OracleAS Discoverer" of the *Oracle Application Server Discoverer Configuration Guide* describes how Discoverer middle tier administrators can specify HTTPS as the Discoverer Plus transport protocol (used for communicating between the applet and the middle tier). Having specified the HTTPS protocol, the *Oracle Application Server Discoverer Configuration Guide* also instructs administrators to give end users a HTTPS URL to start Discoverer Plus. However, if end users attempt to use the default HTTP URL to start Discoverer Plus, the following error message will be displayed:

**Unable to connect to Oracle Discoverer Application Server. Attempt 1. RMI protocol over HTTPS transport: no response from web server at <url>.**

To correct this problem, end users must use the HTTPS URL to start Discoverer Plus.

### 15.2.2 Error when configuring OracleAS Discoverer after installation

When you install Oracle Application Server, you can specify that OracleAS Discoverer is configured for you during installation.

You can also configure OracleAS Discoverer after installation, using Oracle Application Server Control. If you do configure OracleAS Discoverer after installation, you might see the following error message when you display Discoverer configuration pages:

**An error occurred:oracle.disco.oem.configuration.  
DiscoConfigurationException:**

**Cannot find element: configuration Entity Path [system/configuration] not valid. Check log to see if the PlugIn was loaded**

If you see the above error message, restart Oracle Application Server Control from the command line as follows:

1. Stop Oracle Application Server Control by typing the following at the command prompt:

```
$ORACLE_HOME/bin/emctl stop iasconsole
```

2. Start Oracle Application Server Control by typing the following at the command prompt:

```
$ORACLE_HOME/bin/emctl start iasconsole
```

### 15.2.3 Unable to launch OracleAS Discoverer Java Plus with Turkish Locale with Jinitiator 1.3

You will not be able to launch OracleAS Discoverer Java Plus with Turkish Locale settings with Jinitiator 1.3, the default JVM setting for Java Plus.

You must change the JVM from JDK 1.3 to JRE 1.4.1.

## 15.3 Useful Information

This section describes useful information for OracleAS Discoverer. It includes the following topics:

- [Section 15.3.1, "Upgrading from Oracle Discoverer 3.1"](#)
- [Section 15.3.2, "Manually Editing the End User Layer Tables"](#)
- [Section 15.3.3, "Refresh Query For End Users Only Able to Run Scheduled Workbooks"](#)
- [Section 15.3.4, "Availability of HWOnline files"](#)
- [Section 15.3.5, "Formatting – Font Size of Axis Labels"](#)
- [Section 15.3.6, "Scheduling and aggregation"](#)
- [Section 15.3.7, "Additional OracleAS Discoverer Portlet Provider Configuration Parameters to Improve Performance"](#)
- [Section 15.3.8, "Setting Oracle Discoverer Registry Variables for Use by Oracle Discoverer EUL Command Line for Java commands"](#)
- [Section 15.3.9, "Additional Oracle Discoverer Registry Variables"](#)
- [Section 15.3.10, "Migrating OracleAS Discoverer Viewer Customizations"](#)
- [Section 15.3.11, "Running the Oracle Discoverer EUL Command Line for Java \(UNIX only\)"](#)
- [Section 15.3.12, "OracleAS Discoverer and Real Application Clusters \(RAC\)/Transparent Application Failover \(TAF\)"](#)
- [Section 15.3.13, "XWindow Display No Longer Required"](#)
- [Section 15.3.14, "Troubleshooting COBRA Error"](#)

### 15.3.1 Upgrading from Oracle Discoverer 3.1

If you are upgrading from Oracle Discoverer 3.1, the *Oracle Discoverer Administrator Administration Guide* documents the requirement to upgrade the EUL to Discoverer 4.1 as an intermediate step.

For the purposes of this upgrade, if you are not already in possession of Oracle Discoverer Administration Edition 4.1, it will be made available on the Oracle Technology Network:

<http://otn.oracle.com>

### 15.3.2 Manually Editing the End User Layer Tables

Do NOT manually edit the End User Layer (EUL) tables or their contents (e.g. by using SQL\*Plus), unless specifically directed to do so by Oracle Support or Development. Manual editing of the EUL tables is not supported and any manual changes can result in a corrupt EUL.

### 15.3.3 Refresh Query For End Users Only Able to Run Scheduled Workbooks

For end users who are only able to run scheduled workbooks, note that the Refresh button on the Scheduling Manager dialog will not re-run the query from the base tables, but from the table that stores the scheduled workbook results. This is also the case for the 'Run query automatically' option on the General tab of the Options dialog.

### 15.3.4 Availability of HWOnline files

Previous versions of Oracle Discoverer shipped with the files HWOnline.htm and Memo.doc, which were used to demonstrate 'drill out' functionality. To reduce disk space requirements and installation time, these files and instructions for their use will be made available from the Oracle Technology Network:

<http://otn.oracle.com>

### 15.3.5 Formatting – Font Size of Axis Labels

In previous versions of Discoverer, the font size of an axis item was automatically set to be slightly larger than the data. From the 9.0.4 release onwards, the default font size of the axis label will be the same size as the data.

### 15.3.6 Scheduling and aggregation

Note the following if you intend to schedule workbooks that contain:

- DISTINCT aggregates (e.g. COUNT DISTINCT, SUM DISTINCT)
- calculations that include the CASE expression
- calculations that include analytic functions
- calculations that include PL/SQL functions

Regardless of the option actually selected on the Aggregation tab of the Options dialog for the workbook, Discoverer will process the scheduled workbook as if you had selected the **Show <Non-aggregable label>, the "values that cannot be aggregated" option, set on the Sheet Format tab** option.

In addition, note that the **Show the aggregated value calculated by the database. The database uses the same aggregation method as Discoverer** option on the Aggregation tab of the Options dialog is not available for scheduled workbooks.

### 15.3.7 Additional OracleAS Discoverer Portlet Provider Configuration Parameters to Improve Performance

[Table 15-1](#) shows additional settings in the `configuration.xml` file that enable you to improve the performance of the OracleAS Discoverer session pool when using OracleAS Discoverer Portlet Provider.

**Table 15–1 OracleAS Discoverer Portlet Provider Configuration Parameters**

Setting	Description
/disco:configuration/portlet/ @maxSessionAgeHour	<p>Specifies the maximum amount of time (in hours) that a Discoverer session is allowed to be in the session pool. When this time has passed, the Portlet Provider removes this session from the pool.</p> <p>The default value for this setting is 1 hour. In most situations, the default value will be satisfactory.</p> <p>Specify a lower value if sessions are consuming too much memory. If you lower this value, memory consumption is reduced because sessions are recycled faster and memory used by the recycled sessions is returned to the operating system. However, note that there will be a slight increase in refresh times because sessions will have to be restarted.</p> <p>Note that maxSessionAgeHour is an absolute timeout. Even if a session in the pool is being used frequently (i.e. is never inactive for more than the maxSessionInactivityPeriodMinute), the session will be removed when the maxSessionAgeHour value is reached.</p>
/disco:configuration/portlet/ @maxSessionInactivityPeriodMinute	<p>Specifies the maximum amount of time (in minutes) that a Discoverer session is allowed to be inactive in the session pool. When this time has passed, the Portlet Provider removes this session from the pool.</p> <p>The default value for this setting is 10 minutes. In most situations, the default value will be satisfactory.</p> <p>Specify a lower value if sessions are consuming too much memory. If you lower this value, memory consumption is reduced because sessions are recycled faster and memory used by the recycled sessions is returned to the operating system. However, note that there will be a slight increase in refresh times because sessions will have to be restarted.</p> <p>Note that maxSessionInactivityPeriodMinute only applies to session inactivity and a running query is not considered inactivity. In other words, a session will not be terminated because it is running a query that takes longer than the time specified by maxSessionInactivityPeriodMinute.</p>

### 15.3.8 Setting Oracle Discoverer Registry Variables for Use by Oracle Discoverer EUL Command Line for Java commands

When using some of the commands provided by the Oracle Discoverer EUL Command Line for Java, you might want to explicitly set certain Discoverer registry variables, as shown in [Table 15–2](#):

**Table 15-2 OracleAS Discoverer Registry Variables**

Command	Discoverer Registry Variable
-export	ArchiveCacheFlushInterval FormatXML ExportJoinFromMaster
-refresh_<object>	DefaultPreserveDisplayPropertyForRefresh EnableTriggers
-import	FormatXML
-connect -apps_user	AppsFNDNAM AppsGWYUID
-load	SetNULLItemHeadingOnBulkLoad MaxNumberJoinPredicates
all commands	SqlTrace

On Windows platforms, Discoverer registry variables are stored in the Windows Registry. On UNIX platforms, Discoverer registry variables are stored in the .reg\_key.dc file.

To set these Discoverer registry variables, do one of the following:

- (on Windows only) specify values for registry variables as required by editing the Windows Registry using regedit or regedt32
- (on Windows and UNIX) specify values for registry variables as required by entering the following at the command prompt:

```
dis51pr -setadminpref <registry variable name> <value>
```

For more information about Discoverer registry variables (including descriptions, default values and allowable values), see:

- *Oracle Discoverer Administrator Administration Guide*
- *Oracle Application Server Discoverer Configuration Guide*

### 15.3.9 Additional Oracle Discoverer Registry Variables

**Table 15–3** shows additional Discoverer registry variables are available, in addition to those documented in the *Oracle Discoverer Administrator Administration Guide* and the *Oracle Application Server Discoverer Configuration Guide*.

**Table 15–3 Additional Discoverer Registry Variables**

Category	Discoverer registry variable	Description	Default	Valid Values
Database	DefaultPreserveDisplayPropertyForRefresh	When refreshing, specifies whether an updated item description is discarded and replaced with the original description, or whether the updated description is retained.	0	0 = Use updated description 1 = Use original description
Database	EnableTriggers	Specifies whether database triggers are disabled.  For example, Discoverer attempts to make a database call for every new column found during a refresh. If this value is set to 0, Discoverer will not make the database call.	0	0 = Disable database triggers 1 = Enable database triggers
Database	ExportJoinFromMaster	When exporting a business area, specifies whether joins from the master folder are also exported.	0	0 = Do export joins from Master Folder  Any value other than 0 = Do not export joins from the Master Folder
Database	SetNULLItemHeadingOnBulkLoad	When performing a bulk load, specifies whether item headings are set to the same value as item display names, or set to null.	0	0 = Set item headings to item display names 1 = Set item headings to null



### 15.3.10 Migrating OracleAS Discoverer Viewer Customizations

If you are upgrading from earlier versions of Discoverer and you have customized Discoverer Viewer, you might have to manually edit files and reapply your customizations. For more information:

- if you are upgrading from 4.1 to 9.0.4, see the *Oracle Application Server Discoverer Configuration Guide*
- if you are upgrading from 9.0.2 to 9.0.4, see the *Oracle Application Server 10g Upgrading to 10g (9.0.4)*

If you do customize Discoverer Viewer, you are responsible for migrating customizations across Discoverer versions. Depending on the changes you have made, it is possible that you will be unable to simply replace files delivered in a new version of Discoverer with your customized files. You might have to manually edit the new files to include your customizations.

### 15.3.11 Running the Oracle Discoverer EUL Command Line for Java (UNIX only)

To run the Oracle Discoverer EUL Command Line for Java on UNIX, a number of environment variables must be set correctly. You can either set the environment variables explicitly using the `discwb.sh` script or implicitly using the `eulapi` script, as described below:

- to explicitly set the environment variables before issuing Discoverer EUL Command Line for Java commands, type the following at the command line prompt from which you will be issuing those commands:

```
<ORACLE_HOME>/discoverer/discwb.sh
```

Subsequently, you can enter Discoverer EUL Command Line for Java commands by typing:

```
java -jar <ORACLE_HOME>/discoverer/lib/eulbuilder.jar -<command list>
```

For example, to refresh a folder called `Sales1`, you might type the following:

```
java -jar <ORACLE_HOME>/discoverer/lib/eulbuilder.jar -connect  
jchan/12345@my_database -refresh_folder Sales1
```

- to implicitly set the environment variables when you run Discoverer EUL Command Line for Java commands, use the eulapi script in the <ORACLE\_HOME>/bin directory to run commands. For example, to refresh a folder called Sales1, you might type the following:

```
<ORACLE_HOME>/bin/eulapi -connect jchan/12345@my_database -refresh_folder  
Sales1
```

**Hint:** To avoid entering <ORACLE\_HOME>/bin each time you run the eulapi script, run discwb.sh first.

### 15.3.12 OracleAS Discoverer and Real Application Clusters (RAC)/Transparent Application Failover (TAF)

OracleAS Discoverer's support for Transparent Application Failover (TAF) on a Real Application Cluster (RAC) system requires a failover mode of 'select', as shown in the example tnsnames.ora entry below:

```
NAME =  
  (DESCRIPTION=  
    (ADDRESS=  
      (PROTOCOL=tcp)  
      (HOST=servername)  
      (PORT=1521))  
    (CONNECT_DATA=  
      (SERVICE_NAME= NAME)  
      (FAILOVER_MODE=  
        (TYPE=select)  
        (METHOD=basic)  
        (RETRIES=4)  
        (DELAY=15))))
```

Oracle recommends initially setting RETRIES and DELAY to the values given in the example above (i.e. 4 and 15 respectively). However, you might need to increase these values for your own system.

In certain rare scenarios, end users might see an error message if failover occurs. When they acknowledge the error message, their sessions will continue as normal. A fix for these scenarios is planned for release as a patch to the 9.0.4 release.

### 15.3.13 XWindow Display No Longer Required

Section 2.12, "How to run Discoverer Viewer over HTTP" of the *Oracle Application Server Discoverer Configuration Guide* states:

If you install OracleAS in a UNIX environment, an XWindow display must be available to the Discoverer servlet to support Discoverer Viewer's graphing and charting functionality. For more information about setting the DISPLAY environment variable to refer to the X Server, see the *Oracle Application Server 10g Installation Guide*.

An XWindow display is no longer required.

### 15.3.14 Troubleshooting COBRA Error

The following error may appear while accessing OracleAS Discoverer Plus or OracleAS Discoverer Viewer URLs:

```
Attempt 1. CORBA protocol : Failed to connect to session  
hostname.domainOracleDiscovererSession9 using OSAgent.
```

If you see this error, restart the OracleAS Discoverer services using OPMN by entering the following commands:

```
$ ./opmnctl stopproc ias-component=Discoverer  
$ ./opmnctl startproc ias-component=Discoverer
```

## 15.4 Documentation Errata

This section describes known errors in the documentation. It includes the following topics:

- [Section 15.4.1, "Extra Step Required When Registering Discoverer Portlet Provider with OracleAS Portal"](#)
- [Section 15.4.2, "Corrections to Configuration Settings in 'configuration.xml' File"](#)
- [Section 15.4.3, "Missing '-jar' in Example Syntax given for Running Oracle Discoverer EUL Command Line for Java commands"](#)
- [Section 15.4.4, "Required EUL Version Incorrectly Stated as 5.1, Should be 5.0.2"](#)
- [Section 15.4.5, "Incorrect default setting shown for the ShowExpiredRunsOnExit preference"](#)

### 15.4.1 Extra Step Required When Registering Discoverer Portlet Provider with OracleAS Portal

Section 9.4, "How to register Discoverer Portlet Provider with OracleAS Portal" of the *Oracle Application Server Discoverer Configuration Guide* should contain an extra step as shown below:

- 9. d. Change the User Login Frequency to Once per User Session.

### 15.4.2 Corrections to Configuration Settings in 'configuration.xml' File

Section A.4, "List of configuration settings in configuration.xml" of the *Oracle Application Server Discoverer Configuration Guide*: includes a table that contains a number of minor errors, as shown below:

**Table 15–4 Corrections Table**

Setting	Correction
/disco:configuration/portlet/@maximumSessions	Should read: /disco:configuration/portlet/@maxSessions
/disco:configuration/servlet/xsl_translator/stylesheet_pool	Should read: /disco:configuration/servlet/xsl_translator/@stylesheet_pool
query_progress_delay	This parameter can no longer be set globally in the configuration.xml file. This parameter can still be set on a per user basis as described in section 11.8, "Discoverer Viewer URL Parameters" of the <i>Oracle Application Server Discoverer Configuration Guide</i> .

### 15.4.3 Missing '-jar' in Example Syntax given for Running Oracle Discoverer EUL Command Line for Java commands

The examples in sections 1.7 and 1.9 of the *Oracle Discoverer EUL Command Line for Java User's Guide* are missing the '-jar' part of the command line syntax. When running the command line for Java, use the following syntax:

```
java -jar eulbuilder.jar -<command list>
```

### 15.4.4 Required EUL Version Incorrectly Stated as 5.1, Should be 5.0.2

The *Oracle Application Server Discoverer Configuration Guide* contains the following paragraph on page xii and on page 1-17:

Before users can use Discoverer to analyze data, the database **must** contain a Discoverer EUL Version 5.1. The Discoverer manager must have created or updated the End User Layer (EUL) Version 5.1 with Oracle Discoverer Administrator Version 9.0.4 or later (shipped as part of Oracle Developer Suite 10g (9.0.4)).

The EUL version given in the above paragraph is incorrect. The paragraph should read:

Before users can use Discoverer to analyze data, the database **must** contain a Discoverer EUL Version 5.0.2. The Discoverer manager must have created or updated the End User Layer (EUL) Version 5.0.2 with Oracle Discoverer Administrator Version 9.0.4 or later (shipped as part of Oracle Developer Suite 10g (9.0.4)).

Similarly, the *Oracle Application Server Discoverer Configuration Guide* contains the following paragraph on page D-5:

If you have an existing Discoverer Release 4.1 EUL, you must upgrade the EUL from Release 4.1 to Version 5.1 using Discoverer Administrator Version 9.0.4.

The above paragraph should read:

If you have an existing Discoverer Release 4.1 EUL, you must upgrade the EUL from Release 4.1 to Version 5.0.2 using Discoverer Administrator Version 9.0.4.

### **15.4.5 Incorrect default setting shown for the ShowExpiredRunsOnExit preference**

Section 8.8, "List of Discoverer User Preferences" of the *Oracle Application Server Discoverer Configuration Guide* incorrectly shows the default setting of the ShowExpiredRunsOnExit preference as 0. The default setting of the preference is actually 1.

# 16

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## Oracle Reports

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

- [Section 16.1, "General Issues and Workarounds"](#)
- [Section 16.2, "Configuration Issues and Workarounds"](#)
- [Section 16.3, "Administration Issues and Workarounds"](#)
- [Section 16.4, "Documentation Errata"](#)

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**Note:** Refer to Oracle Reports's documentation page on OTN, (<http://otn.oracle.com/documentation/reports.html>) to download the latest version of the *Reports Builder online help*.

---

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## 16.1 General Issues and Workarounds

This section describes general issues and their workarounds for Oracle Reports.

- [Section 16.1.1, "FTP and WebDaV Destinations Not Supported from Reports Builder"](#)
- [Section 16.1.2, "Oracle JDeveloper Integration"](#)
- [Section 16.1.3, "OracleAS Reports Services Demos Will Not Work if JServ is Configured"](#)

### 16.1.1 FTP and WebDaV Destinations Not Supported from Reports Builder

Currently there is no support for FTP and WebDaV destinations from the Reports Builder environment. However, they are supported from the Reports Runtime and the Reports Server environments.

### 16.1.2 Oracle JDeveloper Integration

This section describes issues with Oracle JDeveloper integration. It includes the following topics:

- [Section 16.1.2.1, "Deadlock When Debugging JSP Reports in Oracle JDeveloper"](#)
- [Section 16.1.2.2, "Graph Not Appearing in Oracle JDeveloper"](#)
- [Section 16.1.2.3, "Reports In-process Server"](#)

#### 16.1.2.1 Deadlock When Debugging JSP Reports in Oracle JDeveloper

When debugging an OracleAS Reports Services JSP in Oracle JDeveloper, you must disable any breakpoints that are not of source type. If you do not disable these breakpoints, a deadlock is detected. You can disable breakpoints that are not of source type in the Breakpoints window.

#### 16.1.2.2 Graph Not Appearing in Oracle JDeveloper

When running a JSP report with the `rw:graph` tag in Oracle JDeveloper, the image is not visible in the browser. To fix this problem, set the `IMAGEURL` in the `rwervlet.properties` file in `ORACLE_HOME/reports/conf`:

```
IMAGEURL=http://host:port/Workspace-Project-context-root/servlet/  
oracle.reports.rwclient.RWClient
```



### 16.1.2.3 Reports In-process Server

If the Java Virtual Machine (JVM) is set to `ojvm`, `minimal`, or `vanilla` in Oracle JDeveloper's Virtual Machine settings (**Project Settings > Runner > Virtual Machine**), the `rwServlet`'s in-process server is not killed when JDeveloper's embedded OC4J server is terminated. As a result, a port conflict occurs the next time OC4J is started. To avoid this problem, do one of the following:

- Set the JVM to Java Virtual Machine to `hotspot`.
- Disable the in-process server in `ORACLE_HOME/reports/conf/rwServlet.properties` by setting:  
`server_in_process=no`
- Use the standalone Reports Server instead.

### 16.1.3 OracleAS Reports Services Demos Will Not Work if JServ is Configured

If you configure JServ and OracleAS Reports Services in the same application server instance, you will not be able to run OracleAS Reports Services demos.

## 16.2 Configuration Issues and Workarounds

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

- [Section 16.2.1, "Implementing Removal of DISPLAY and Printer Dependencies"](#)
- [Section 16.2.2, "Repairing Fonts Not Appearing Correctly in Web Source View"](#)
- [Section 16.2.3, "Optimizing the Deployment of Reports"](#)
- [Section 16.2.4, "Improving Image Resolution of Graphs Output to a PDF File or a Printer"](#)
- [Section 16.2.5, "Specifying the Values for Oracle Reports' Java Virtual Machine"](#)
- [Section 16.2.6, "Resolving Reports-Portal Integration Error When Attempting OID Create Resource"](#)
- [Section 16.2.7, "Running to Web Layout on Reports Builder"](#)

## 16.2.1 Implementing Removal of DISPLAY and Printer Dependencies

With Oracle Reports 10g (9.0.4), it is no longer necessary to have the `DISPLAY` environment variable or a valid printer defined at runtime.

The `REPORTS_DEFAULT_DISPLAY` environment variable specifies whether to implement the following includes introduced with Oracle Reports 10g (9.0.4):

- the elimination of the dependency on the `DISPLAY` environment variable, which was required in prior releases to define the windowing system display surface for creating images and getting pixel resolution
- the elimination of the dependency on having a valid printer defined for font information (`PRINTER` and `TK_PRINTER` environment variables set to a valid printer, or a valid entry in `uiprint.txt`)
- using `screenprinter.ppd` for surface resolution for images and font information
- enhanced imaging support

---

---

**Note:**

- For existing customers upgrading to Oracle Reports 10g (9.0.4), the default setting of `REPORTS_DEFAULT_DISPLAY` (`YES`) may impact the appearance, number of pages, output file size, or performance of existing reports.
  - Even when the `DISPLAY` environment variable is set, it will not be used unless `REPORTS_DEFAULT_DISPLAY` is set to `NO`.
- 
- 

**See Also:**

- *Oracle Application Server Reports Services Publishing Reports to the Web* and the *Reports Builder Online Help* for more information on the `REPORTS_DEFAULT_DISPLAY` environment variable and `screenprinter.ppd`.
- Section "Fonts in Report Output" in the chapter "Managing Fonts in Oracle Reports" in *Oracle Application Server Reports Services Publishing Reports to the Web*.

## 16.2.2 Repairing Fonts Not Appearing Correctly in Web Source View

Text in the user interface of Reports Builder, such as the window title, uses fonts taken from the system resource files for the current language. These system resource files are supplied with the Oracle Reports installation. In Oracle Reports, you can map these fonts in the [RWBUILDER] section of `uifont.ali`. If found, the mapped font is used instead of the original font; if not, Oracle Reports uses the original font.

---

---

**Note:** The mapped font needs to be a fixed-width font.

---

---

In the Web Source view of the Report Editor, the following languages may appear garbled: Arabic, Central European languages, Cyrillic, Greek, Hebrew, Japanese, Thai, and Turkish. To work around this issue, you can set the font names for Reports Builder in `uifont.ali` as follows:

```
[rwbuilder]
....AR8MSWIN1256="Courier New"
....CL8MSWIN1251="Courier New"
....EE8MSWIN1250="Courier New"
....EL8MSWIN1253="Courier New"
....IW8MSWIN1255="Courier New"
....JA16SJIS="MS Gothic"
....TH8TISASCII="Andale Duospace WT"
....TR8MSWIN1254="Courier New"
```

You can download a copy of the Andale Duospace WT (fixed-width) font from Metalink, (<http://metalink.oracle.com>). The ARU number is 2638552.

## 16.2.3 Optimizing the Deployment of Reports

Before you deploy a report on a machine that is either slow or is running on a load, you may want to configure the following:

- **Ping timeout (OPMN-side):** Ping timeout is the measure that OPMN uses to determine the time that it must wait for a callback from an in-process Reports Server (in `OC4J_BI_FORMS`), before considering it as a timeout.

The default timeout period is 150. This period is calculated from: ping timeout, ping interval, and number of retries. The default values for these are:

ping timeout = 30 seconds

ping interval = 20 seconds

number of retries - 3

---

---

**Note:** The number of retries is applicable only when OPMN successfully connects to OC4J and receives regular ONS notifications from the process.

---

---

Based on these values, there will be three ping attempts with a timeout of 30 seconds each at 20 second intervals. The first ping is done after the specified ping interval. Thus, from the time the OC4J is started by OPMN, approximately 150 (20 + 3\*30 + 2\*20) seconds will elapse before the process is considered unresponsive and restarted. However, if after OPMN connects to OC4J but OC4J is too slow in sending regular ONS notifications then the 30 second timeout is applicable.

**See Also:** *Oracle Application Server Reports Services Publishing Reports to the Web* for more information on the `opmn.xml` file.

- **Callback timeout (Reports Server-side):** Callback timeout is the measure that Reports Server uses to determine the time that it must wait for a response from the engine before timing out. You can specify this value in the Reports Server configuration file, `server_name.conf`. This time out period is in milliseconds.

For example:

```
<engine id="rwEng" class="oracle.reports.engine.EngineImpl" initEngine="1"
maxEngine="1" minEngine="0" engLife="50" maxIdle="30"
callbackTimeOut="80000">
```

---

---

**Note:** Increase the timeout when the machine is very slow.

---

---

## 16.2.4 Improving Image Resolution of Graphs Output to a PDF File or a Printer

The `REPORTS_GRAPH_IMAGE_DPI` environment variable specifies a dots per inch (DPI) value for graphs output to a PDF file or a printer. The default value for this environment variable is set at 72 DPI to minimize the time taken to generate the report as well as to reduce the report file size.

If you specify a value higher than 72 DPI, you will see an improvement in the image resolution for graphs sent to a PDF file or a printer. However, this affects the time taken to generate the report output as well as the file size.

---

---

**Note:** With the value of 250:

- The time taken to generate a report with an Oracle Reports graph increases 5 to 6 times when compared to the time taken to generate the same report with the value set to 72dpi.
  - The PDF file size also increases 5 to 6 times.
- 
- 

**Valid Values** 72 through 300

**Default** 72

### Usage Notes

- On Unix, set the environment variable in `reports.sh`.
- When you set a DPI value greater than 250 and your chart is bigger than 5"x5" (approximately), you may also need to change the JVM heap size value via `REPORTS_JVM_OPTIONS` to avoid the `Out Of Memory` error for the JVM.

**See Also:** *Oracle Application Server Reports Services Publishing Reports to the Web* for more information on setting the JVM options.

- This variable is currently not supported in Oracle Reports distribution functionality as this is specific to PDF and printer outputs only.

## 16.2.5 Specifying the Values for Oracle Reports' Java Virtual Machine

You may want to set the JVM options explicitly to get certain, specific behaviors from the JVM that aren't enabled, by default. To do so, use the command line keyword `JVMOPTIONS` to set options for either Reports Runtime, Reports Builder, or Reports Converter's Java Virtual Machine (JVM).

For example, you could use the following command line to start Reports Builder with a 512Mb heap space:

```
rwbuilder jvmoptions=-Xmx512M
```

Multiple options can be passed, in which case the options must be enclosed in quotes:

```
rwbuilder jvmoptions="-Xmx256M -Xms=128M"
```

**Syntax** `JVMOPTIONS={options in reports runtime, reports builder, reports converter JVM}`

**Default** `-Xmx256M`

---

---

**Note:** The value set using the `jvmoptions` keyword will override the value in the `REPORTS_JVM_OPTIONS` environment variable, if set.

---

---

## 16.2.6 Resolving Reports-Portal Integration Error When Attempting OID Create Resource

In OracleAS Portal, when configuring Oracle Reports Security settings for Reports Definition File Access, you may encounter an error when editing a reports definition file, when you click **Run** or **Run as Portlet**.

```
500 Internal Server Error
Unexpected Error. Please contact Administrator
```

This error occurs when all of the following conditions are true:

- Running in an Interop deployment (which allows for a mixed 9.0.2/9.0.4 environment), with 9.0.4 MT (mid-tier), 9.0.4 IM (Identity Management), and 9.0.2 MR (metadata repository) configured to run together.



- Running Oracle Reports within OracleAS Portal, using the SSOCONN parameter.
- The connection resource specified in the SSOCONN parameter has not been created in the Oracle Internet Directory server.

To implement the workaround, perform the following steps:

1. In the 9.0.4 IM *ORACLE\_HOME*, open the following file in a text editor:

```
ORACLE_HOME/Apache/Apache/conf/mod_osso.conf
```

2. Add the following flag:

```
OsoRedirectByForm on
```

For example:

```
<IfModule mod_osso.c>
OsoIpCheck off
OsoIdleTimeout off
OsoConfigFile
/private1/iasinst/install_set1/904infra/Apache/Apache/conf/osso/osso.conf
OsoRedirectByForm on
</IfModule>
```

## 16.2.7 Running to Web Layout on Reports Builder

It is possible to preview a report from Reports Builder by using the Run to Web Layout functionality. You do not need to have the Reports Server configured in order to use this functionality as Reports Builder includes an embedded OC4J (Oracle Application Server Containers for J2EE) server.

After upgrading to Oracle Reports 10g (9.0.4) from 9.0.2, you must ensure that the location in the environment variables *CLASSPATH* or *REPORTS\_CLASSPATH*, refer only to the *oc4j.jar* file in the 10g (9.0.4) *ORACLE\_HOME* and not to the 9.0.2 *ORACLE\_HOME*. You must remove the *oc4j.jar* file path to the 9.0.2 *ORACLE\_HOME*, if it exists in either *REPORTS\_CLASSPATH* or *CLASSPATH*.

---



---

**Note:** Including the 9.0.2. *oc4j.jar* file path in either *CLASSPATH* or *REPORTS\_CLASSPATH* will cause Run to Web Layout functionality to fail with the following error:

```
The major.minor version '48.0' is too recent for
this tool to understand
```

---



---

## 16.3 Administration Issues and Workarounds

This section describes administration issues and their workarounds for Oracle Reports.

- [Section 16.3.1, "Authenticating EM Access to Reports Server information"](#)
- [Section 16.3.2, "Running Reports on OracleAS Portal as an Item Link"](#)

### 16.3.1 Authenticating EM Access to Reports Server information

The `identifier` element in `server_name.conf` contains a new value, `SERVERACCESSKEY`. This value is used to ensure that the Reports Server information in Enterprise Manager is secure.

The following authentication is implemented:

- The value of the `identifier` element in the `server_name.conf` file is encrypted and is of the form `%SERVERACCESSKEY_USER%/ %SERVERACCESSKEY_PASSWORD%`. For example:

```
<identifier confidential="yes" encrypted="no">
%SERVERACCESSKEY_USER%/ %SERVERACCESSKEY_PASSWORD%</identifier>
```

- The corresponding entries in the `targets.xml` file are:

```
<Property NAME="UserName" VALUE="%SERVERACCESSKEY_USER%" ENCRYPTED="FALSE"/>
<Property NAME="Password" VALUE="%SERVERACCESSKEY_PASSWORD%"
ENCRYPTED="FALSE"/>
```

The default installation ensures that the install time values of `%SERVERACCESSKEY_USER%` and `%SERVERACCESSKEY_PASSWORD%` match those in `targets.xml`.

---

---

**Note:** `%SERVERACCESSKEY_USER%` and `%SERVERACCESSKEY_PASSWORD%` in `server_name.conf` and `targets.xml` must match for the Reports Server pages in EM to display data correctly.

---

---

To change the user name and password:

1. Edit the `ORACLE_HOME/reports/conf/server_name.conf` file, as follows:

```
<identifier confidential="yes" encrypted="no">new_
username/new_password</identifier>
```

2. Edit the `ORACLE_HOME/sysman/emd/targets.xml` file, as follows:

```
<Property NAME="UserName" VALUE="new_username" ENCRYPTED="FALSE"/>
<Property NAME="Password" VALUE="new_password" ENCRYPTED="FALSE"/>
```

3. Restart EM and Reports Server. The user name and password in `server_name.conf` and `targets.xml` will be encrypted after the restart.

---



---

**Note:** Beginning with Oracle Reports 10g (9.0.4), Enterprise Manager (EM) will not use OID authentication to access Reports Server information. It will use the `SERVERACCESSKEY` value to implement the authentication.

---



---

## 16.3.2 Running Reports on OracleAS Portal as an Item Link

When you install OracleAS Portal with a non-default language setting, some entries required to publish a report as an item link on a portal page are not installed automatically. You must install the language of your choice by using the `rclang.sql` script.

Thus, you must run the script `rclang.sql` (`ORACLE_HOME/portal/admin/plsql/wwd/`) if:

- You have selected at least one language in addition to the default ("US") at the time of installing OracleAS Portal.

AND

- You want to publish a report as an item link in OracleAS Portal.

---



---

**Note:** This is a one time post-installation task and will ensure that you can publish a report as an item link on OracleAS Portal.

---



---

To run the script:

1. Change the directory to `ORACLE_HOME/portal/admin/plsql/wwd/`.
2. Run `sqlplus`.
3. Log on to OracleAS Portal using the portal schema.

---

---

**Note:** This is the portal schema used to install OracleAS Portal PL/ SQL packages.

---

---

4. Run the `rwlang.sql` script with the following parameters:

```
@rwlang.sql language_list
```

where

`language_list` is the list of languages separated by commas.

For example, to install French and Japanese:

```
@rwlang.sql f,ja
```

### Usage Notes

- There should be no space before or after the comma (,) because `sqlplus` treats the language list as two parameters, instead of one parameter separated by a comma (,).
- The header of the `rwlang.sql` script contains the complete list of all language abbreviations. Edit the script file using any text editor to find out the various abbreviations.

## 16.4 Documentation Errata

This section describes known errors in the documentation.

- Chapter 8, sections 8.1.2 through 8.2, of the *Oracle Application Server Reports Services Publishing Reports to the Web* manual specifies the `reports.sh` file as containing the `REPORTS_CLASSPATH` variable on Solaris. The `REPORTS_CLASSPATH` variable is located in the `reports.sh` file for all UNIX platforms.
- Chapter 19, "Managing and Monitoring OracleAS Reports Services", of the *Oracle Application Server Reports Services Publishing Reports to the Web* manual may show screenshots that do not reflect the latest updates to the Oracle Enterprise Manager user interface.
- Due to improvements on OTN, the URL that directly accesses the Oracle Reports Documentation page is incorrect in the documentation. Instead of `http://otn.oracle.com/docs/products/reports/content.html`, the revised URL is `http://otn.oracle.com/documentation/reports.html`.

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## OracleAS Personalization

This chapter describes issues and workarounds with OracleAS Personalization. It includes the following topics:

- [Section 17.1, "General Issues and Workarounds"](#)
- [Section 17.2, "Configuration Issues and Workarounds"](#)
- [Section 17.3, "Administrative Issues and Workarounds"](#)
- [Section 17.4, "Documentation Errata"](#)

## 17.1 General Issues and Workarounds

This section describes general issues for OracleAS Personalization and their workarounds. It includes the following topics:

- [Section 17.1.1, "Correct Name of Product"](#)
- [Section 17.1.2, "Advanced Button Brings Up "404 File Not Found" Message"](#)
- [Section 17.1.3, "Sorting by ID and Sorting by Type Do Not Work"](#)
- [Section 17.1.4, "Performance and Data Sizing"](#)
- [Section 17.1.5, "SSL Mode"](#)
- [Section 17.1.6, "RE Package Deployment Causes Failure if Different MTR Referenced"](#)
- [Section 17.1.7, "RE Package Deployment Causes Failure if RE Sessions Are Active"](#)

### 17.1.1 Correct Name of Product

The correct name of the product is "Oracle Application Server Personalization." The product was formerly known as "Oracle9i Personalization" and in some instances may be referred to as "Oracle9i Personalization" or "Oracle Personalization" or "OP". The correct abbreviation is "OracleAS Personalization", not "OP".

### 17.1.2 Advanced Button Brings Up "404 File Not Found" Message

This can happen with some versions of some browsers if a user clicks the Advanced button (at the bottom of the Log page) to bring up Message Viewer window when that window is still open from an earlier clicking on Advanced button.

### 17.1.3 Sorting by ID and Sorting by Type Do Not Work

For both sessionful and sessionless REAPI calls, for recommendation content, sorting by ID and sorting by Type do not work, whether "Ascend" or "Descend" is selected. No workaround.

## 17.1.4 Performance and Data Sizing

The table below shows the performance results on three data sets. The build time is linear in the number of customers and quadratic in the average profile size. We obtained the results shown here on a Sun Enterprise 450 (4 x UltraSPARC-II 400MHz) with 4096 megabytes of memory. Based on these numbers, it is possible to estimate the build time for any arbitrary data set.

Dataset	# of Cust	# of Items	Avg. Profile Size	Avg. Rating Profile	Avg. Purch. Profile	Avg. Nav. Profile	Build Time	# of Rules Agg. Model	# of Rules Cross-Sell Model
1	1000	50K	50	8	17	25	1 min	9152	155
2	5000	50K	71	8	27	36	3 min	166588	37
3	1000	50K	100	16	34	50	5 min	313154	2997

The column headings have the following meanings:

- **Dataset:** An identifier for the dataset.
- **# of Cust:** The number of registered customers, which is the number of records in the MTR\_CUSTOMER table.
- **# of Items:** The number of items, which is the number of records in the MTR\_ITEM table
- **Avg. Profile Size:** The number of items in each customer's profile; this is the sum of average rating profile, average purchasing profile, and average navigation profile.
- **Avg. Rating Profile:** The average number of rating items in each customer's profile. Can be computed by dividing the number of records in MTR\_RATING\_DETAIL by the number of distinct CUSTOMER\_IDs in MTR\_RATING\_DETAIL.
- **Avg. Purch. Profile:** The average number of purchasing items in each customer's profile. Can be computed by dividing the number of records in MTR\_PURCHASING\_DETAIL by the number of distinct CUSTOMER\_ID's in MTR\_PURCHASING\_DETAIL.
- **Avg. Nav. Profile:** The average number of navigation items in each customer's profile. Can be computed by dividing the number of records in MTR\_NAVIGATION\_DETAIL by the number of distinct CUSTOMER\_IDs in MTR\_NAVIGATION\_DETAIL.

- **Build Time:** The total time taken to build the aggregated model and the cross-sell model.
- **# of Rules Agg. Model:** The number of rules in the aggregated model.
- **# of Rules Cross- Sell Model:** The number of rules in the cross-sell model.

### **MOR Temp Space**

Use the following formula to calculate a rough estimate for the number of bytes of MOR temp space required:

$$(54 * P^2 * C) / 2$$

where  $P$  is the average profile size and  $C$  is the number of customers. Each item pair generated during a build takes 54 bytes, which is the space needed to store a record with two item columns and a count column. For the model build to run, the available temp space should be more than the estimated temp space requirement for the  $P$  and  $C$  values of the dataset.

## **17.1.5 SSL Mode**

As of OracleAS Personalization release 10g (9.0.4), SSL mode is not required by the OracleAS Personalization Administrative UI, but we recommend that users log in to the OracleAS Personalization Administrative UI using SSL mode. If you log in to the Administrative UI not using SSL, you will get a warning message. (The message is displayed in English only.) (See also [Section 17.4.1.](#))

## **17.1.6 RE Package Deployment Causes Failure if Different MTR Referenced**

When a new model package is deployed to a recommendation engine that references an MTR other than the one that was in the RE, all the current user sessions are terminated, and their session data is sync'd to the old MTR. This means that all current sessions are invalidated.



## 17.1.7 RE Package Deployment Causes Failure if RE Sessions Are Active

A REAPI call may fail right after a new package is deployed onto an RE when there are active RE sessions. The workaround is to retry the call.

Java code that accomplishes this is provided below. (The code catches the exception after the try block that includes a REAPI call and checks to determine whether one of three specified errors is found; if one of the three is found, it reinvokes the REAPI method.)

```
filename: RetryTest.java

// Copyright (c) 2003 Oracle Corp
/*
 * This code snippet demonstrates a work-around
 * to overcome ORA-04068 error in calling REAPI
 * right after a new package is deployed
 */

import oracle.dmt.op.re.reapi.rti;
import java.lang.Long;
import java.sql.*;
import java.io.IOException;

/*
 * Class RetryTest
 * <P>
 */
public class RetryTest
{
    /*
     * main
     * @param args
     */
    public static void main(String[] args) throws ClassNotFoundException
    {
        REProxy proxy = REProxy.getProxy();
        String custID = "945";           // arbitrary, for demo only
        String sessionID = "101";       // arbitrary, for demo only
        TuningSettings tunings;
        FilteringSettings filters;
        IdentificationData idData;
        String[] m_catList = new String[1];
        RecommendationContent recContent;
        RecommendationList rec;
    }
}
```

```
try {
    proxy.createCustomerSession(custID, sessionID);

    // create settings data
    idData = IdentificationData.createSessionful(sessionID,
                                                Enum.User.CUSTOMER);
    idData.userID = "user1";           // arbitrary, for demo only
    tunings = new TuningSettings(Enum.DataSource.NAVIGATION,
                                Enum.InterestDimension.INTEREST,
                                Enum.PersonalizationIndex.HIGH,
                                Enum.ProfileDataBalance.BALANCED,
                                Enum.ProfileUsage.EXCLUDE);
    m_catList[0] = "socks";           // arbitrary, for demo only
    filters = new FilteringSettings();
    filters.categoryList = m_catList;
    filters.categoryMembership = Enum.CategoryMembership.EXCLUDE_LEAVES;
    filters.categoryFiltering = Enum.Filtering.ON;
    recContent = new RecommendationContent(Enum.Sorting.ASCENDING);

    rec = proxy.recommendTopItems(idData,
                                  10,
                                  tunings,
                                  filters,
                                  recContent);

    System.out.println("Done!");     // arbitrary, for demo only
    proxy.releaseProxy();
} catch (BadDBConnectionException bdbe) {
    bdbe.printStackTrace();
} catch (SQLException se) {
    if (isNewDeploy(se))
        return (recommendTopItems(idData, 10, tunings, filters, recContent));
    else
        System.err.println(se);
} catch (IOException ioe) {
    System.err.println(ioe);
} catch (BadDBConnectionException bdbe) {
    bdbe.printStackTrace();
}
}

/*
 * isNewDeploy - find out if a brand new package is deployed
 */
private boolean isNewDeploy(SQLException e) {
```

```
String st = e.getMessage();
String functionName = "isNewDeploy";
try {
    if (debugAll() || debugApi())
        m_log.logT(functionName + " SQLException caught: " + e.getMessage());
    if (st.indexOf("ORA-04068") >= 0)
        return true;
    else
        return false;
} catch (NullPointerException npe) {
    return false;
}
}
```

## 17.2 Configuration Issues and Workarounds

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

- [Section 17.2.1, "Configuration of SSL for OracleAS Personalization"](#)
- [Section 17.2.2, "Native Character Sets Limitation"](#)
- [Section 17.2.3, "Deselected Personalization Missing from Configure Component Option"](#)
- [Section 17.2.4, "Need to Use SERVICE\\_NAME Instead of SID to Work in the RAC"](#)
- [Section 17.2.5, "Configuration Script Cannot Be Invoked in Non-English Locales"](#)

### 17.2.1 Configuration of SSL for OracleAS Personalization

This section describes the steps required to configure `https` so that you can access the OracleAS Personalization Administrative User Interface in SSL mode.

When you install Oracle Application Server Business Intelligence, check the option box to configure Oracle Personalization.

Use the OracleAS Personalization Schema Creation Wizard to configure OracleAS Personalization schemas in the customer database. Follow these steps:

1. Edit `$ORACLE_HOME/opmn/conf/opmn.xml` and search for `ssl-disabled` in the `<ias-component id=HTTP_Server>` element. Change the start mode from `ssl-disabled` to `ssl-enabled`. After you make the change, the entry should be as follows:

```
<data id="start-mode" value="ssl-enabled"/>
```

2. Reload OPMN using the following command:

```
opmnctl reload
```

3. Note the two following port numbers from those listed in the file `$ORACLE_HOME/install/portlist.ini`:

```
Oracle HTTP Server Listen (SSL) port = 4444  
Web Cache HTTP Listen (SSL) port = 4443
```

The following example uses port 4444 for Apache in SSL mode and port 4443 for Web Cache in SSL mode. Adjust your setting to the port values set in `portlist.ini`.

4. With a browser login to the Web Cache Administrative User Interface at `http://<host>:4000/webcacheadmin/`.

5. Add Listen Ports

```
IP: ANY
Port 4443
Protocol: HTTPS
Wallet : $OH/webcache/wallets/default/
```

Do not check **Require Client-Side Certificate**.

6. Add Origin Server

```
Hostname: <host>
Port: 4444
Routing: ENABLE
Capacity: 100
Failover Threshold: 5
Ping URL: /
Ping Interval (seconds): 10
Protocol: https
```

7. Add Site Definitions

```
Host Name: <host>
Port Number: 4443
HTTPS Only Prefix:
Client-Side Certificate: Not Required
Default Site: No
Create Alias from Site Name with/without www: No
```

8. Add Site-to-Server Mapping (Insert before last record)

- a. Select the SSL that you just configured from Site Definitions in the combo box.
- b. Check the SSL Web Server you configured.
- c. Exclude `Unrestricted`.

9. Click **Apply Changes** at the very top right hand part of the screen.

10. Click **Restart** button under **Cache Operations**.

11. Log in to Enterprise Manager for your OracleAS Business Intelligence instance.
  12. Select OC4J\_BI\_Forms and click Restart.
  13. Select HTTP Server and click Stop.
  14. Select HTTP Server again and click Start. (You must Stop and Start the server; Restart will not pick up all the changes.)
- SSL should now work. Try connecting to `https://<host>:4443/OP/Admin`.

## 17.2.2 Native Character Sets Limitation

OracleAS Personalization is certified against UTF8 only.

## 17.2.3 Deselected Personalization Missing from Configure Component Option

Follow these steps to configure the OracleAS Personalization administrative servlet if the servlet was unchecked during the initial Oracle Application Server Business Intelligence installation:

1. Locate the `.ear` file that contains the OracleAS Personalization Administrative User Interface servlet. It is found in `ORACLE_HOME` for the Oracle Application Server Business Intelligence Installation and is named

```
$ORACLE_HOME/mp/web-app/op.ear.
```

Be sure that you can reference the `.ear` file from where you start your web browser.

2. From the Enterprise Manager screen that manages the Oracle Application Server Business Intelligence instance where you wish to configure the OracleAS Personalization Administrative UI, click the OC4J\_BI\_Forms component link.
3. Click the Applications link on the OC4J: OC4J\_BI\_Forms page.
4. Click the "Deploy Ear file" button on the OC4J:OC4J\_BI\_Forms:Applications page.
5. Click the "Browse" button for the J2EE Application fill-in field and navigate to the `op.ear` file referenced in Step 1. Then
  1. Type OP in the Application Name field.
  2. Select default for the Parent Application.
  3. Click the Continue button.

6. The default URL mappings of `/OP` and `/redemo` are correct, so click the Finish button. (The OracleAS Personalization Administrative UI does not use Single Sign On; therefore, you do not need to configure JAZN on the next page. Click Finish now.)
7. Configure the Customer Database schemas using the Personalization Schema Creation Wizard (`opconfig`).
8. Restart the `OC4J_BI_Forms J2EE` container using Enterprise Manager before logging into the OracleAS Personalization Administrative UI.

## 17.2.4 Need to Use `SERVICE_NAME` Instead of `SID` to Work in the RAC

The `OPCONFIG` wizard could not create schemas in the RAC test system because it connects to Oracle using the `SID` in the `CONNECT_DATA` record in the `tnsnames.ora` file. For RAC, `SID` must be changed to `SERVICE_NAME`.

## 17.2.5 Configuration Script Cannot Be Invoked in Non-English Locales

The script `opconfig.sh` can't be invoked in a non-English environment when the input method is on. This is caused by JDK 1.4.1 issues.

You can work around this problem by installing JDK 1.4.2 and setting `JAVA_HOME` to the JDK 1.4.2 install directory before you start the configuration wizard. Another workaround is to turn off the input method before you start the configuration wizard.

## 17.3 Administrative Issues and Workarounds

This section describes administrative issues for OracleAS Personalization and their workarounds. It includes the following topics:

- [Section 17.3.1, "JDBC Drivers"](#)
- [Section 17.3.2, "Customer Database"](#)
- [Section 17.3.3, "Restrictions on Passwords"](#)
- [Section 17.3.4, "Mixed Database and Browser Languages Not Supported"](#)
- [Section 17.3.5, "OracleAS Personalization Home Directory"](#)
- [Section 17.3.6, "Changed OP MTR Columns"](#)
- [Section 17.3.7, "High Availability for OracleAS Personalization"](#)

### 17.3.1 JDBC Drivers

The OracleAS Personalization documentation omits mention of what kind of JDBC drivers customers can use. You can use the JDBC drivers that go with the database where the OracleAS Personalization Recommendation Engine is runs.

### 17.3.2 Customer Database

OracleAS Personalization requires a customer database in addition to the database included with Oracle Application Server. The customer database must be Oracle9i release 1.

### 17.3.3 Restrictions on Passwords

Because of password encryption and decryption, there are two restrictions on passwords for OracleAS Personalization users:

- OracleAS Personalization users must not enter passwords with trailing blanks.
- User passwords are limited to 30 or fewer characters, the standard Oracle limit.



### 17.3.4 Mixed Database and Browser Languages Not Supported

`NLS_LANGUAGE` determines the language for OracleAS Personalization messages. OracleAS Personalization does not translate messages to a language specific to a browser session. This is by design: the OracleAS Personalization Administrative UI is an administrative type of UI, and its user is assumed to be able to read the language specified by database `NLS_LANGUAGE`.

### 17.3.5 OracleAS Personalization Home Directory

As of release 9.0.4, the directory in which OracleAS Personalization lives has changed from `$ORACLE_HOME/dmt` to `$ORACLE_HOME/mp`.

### 17.3.6 Changed OP MTR Columns

Several tables in the OP MTR had columns of type `VARCHAR2 (4000)` changed to type `VARCHAR2(1000 CHAR)`. This change was made to the `DESCRIPTION` column in the following tables:

- `MTR_TAXONOMY`
- `MTR_CATEGORY`
- `MTR_HOTPICK_GROUP`
- `MTR_ITEM`

In addition, `NLS_LENGTH_SEMANTICS` was set to `CHAR` for all of these tables.

### 17.3.7 High Availability for OracleAS Personalization

The OracleAS Personalization Recommendation Engine Application Programming Interface (REAPI) can be embedded in a highly available web application such as OracleAS Portal.

## 17.4 Documentation Errata

This section describes known errors in OracleAS Personalization documentation. It includes the following topics:

- [Section 17.4.1, "Errors in Oracle Application Server Personalization User's Guide"](#)
- [Section 17.4.2, "Errors in Oracle Application Server Personalization Programmer's Guide"](#)
- [Section 17.4.3, "Missing Code Sample in the Programmer's Guide, Sections 9.1.1 and 9.1.2"](#)
- [Section 17.4.4, "Missing Code Sample in Programmer's Guide, Section B.3.2"](#)

### 17.4.1 Errors in *Oracle Application Server Personalization User's Guide*

Wherever the documentation says to log in by entering "http", it is recommended that you enter "https" instead. This is not a requirement, but it is a recommendation. When you log in by entering "http", you receive a warning that your session will not be secure. (See also [Section 17.1.5](#).)

Note the following errors and their corrections:

- Page 2-1, line 9:  

```
http://hostname>/OP/Admin/
```

should be

```
http://<hostname>:<port>/OP/Admin
```
- Page 3-5, line 6:  

**Recommend Top Items** page

should be

**Recommend TopN Items** page
- Page 3-5, line 7:  

**Number of recommendations to display: 10**

should be

**Number of recommended items: 10**

- Page 3-6, 11th line from bottom:  
    **# of Recommended Items: 10**  
should be  
    **Number of Recommended Items: 10**
- Page 3-8, line 5:  
    **Items**  
should be  
    **Item Entry**
- Page 3-9, line 3:  
    **Number of recommendations to display: 10**  
should be  
    **Number of recommended items: 10**

## 17.4.2 Errors in *Oracle Application Server Personalization Programmer's Guide*

Note the following errors and their corrections:

- Page 2-5, line 14:  
    `http://server/redemo/`  
should be  
    `http://<hostname>:<port>/redemo`
- Page 7-10, line 9:  
    `get Database URL()`  
should be  
    `getDatabaseURL()`

- Page 10-9:

```
getDatabaseAlias()
```

should be

```
getDBAlias()
```

- Page 8-2, lines 10 and 11:

```
LoadCustomerProfiles()  
PurgeCustomerProfiles();
```

should be

```
LoadCustomerProfiles()  
PurgeCustomerProfiles()
```

### 17.4.3 Missing Code Sample in the Programmer's Guide, Sections 9.1.1 and 9.1.2

The code samples in sections 9.1.1 and 9.1.2 of the *Oracle Application Server Personalization Programmer's Guide* are missing. What is provided there is a list of the major steps required to perform the functions. The file `REBatchTest.java` contains sample code that shows how to invoke `recommendTopItems` and `crossSellForItem`.

The file `REBatchTest.java` is available on any system where OracleAS Personalization is installed, in the directory `ORACLE_HOME/mp/reapi/batch/`.

### 17.4.4 Missing Code Sample in Programmer's Guide, Section B.3.2

The sample program in Section B.3.2 of the *Oracle Application Server Personalization Programmer's Guide* is not a sample program; instead, it is a repetition of the properties file `batchtest.txt` (Section B.3.1.)

The sample program that should be in Section B.3.2. is the file `REBatchTest.java`, available on any system where OracleAS Personalization is installed, in the directory `ORACLE_HOME/mp/reapi/batch/`.

# Part VII

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## E-Business Integration Issues

This part describes issues associated with the E-Business components. It contains the following chapters:

- [Chapter 18, "Oracle Application Server ProcessConnect"](#)
- [Chapter 19, "Oracle Workflow"](#)
- [Chapter 20, "Oracle Application Server InterConnect"](#)



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# Oracle Application Server ProcessConnect

This chapter discusses the following topics:

- [Section 18.1, "Technology Adapter Issues and Workarounds"](#)
- [Section 18.2, "Integration Adapter for Tuxedo Issues and Workarounds"](#)
- [Section 18.3, "Modeling Tool and User Interface Issues and Workarounds"](#)
- [Section 18.4, "Export/Import Issues"](#)
- [Section 18.5, "Configuration Creation and Deployment Issues and Workarounds"](#)
- [Section 18.6, "Deployment Issues and Workarounds"](#)
- [Section 18.7, "Oracle Wallet Manager Utility Issues"](#)
- [Section 18.8, "Reassociating the ProcessConnect Middle Tier to Another Metadata Repository"](#)
- [Section 18.9, "Unsupported XSD Construct Issues and Workarounds"](#)
- [Section 18.10, "Deinstalling Oracle Application Server ProcessConnect"](#)
- [Section 18.11, "Other Known Issues"](#)
- [Section 18.12, "Documentation Errata"](#)
- [Section 18.13, "Netscape Problem with Pop-Up Windows"](#)

## 18.1 Technology Adapter Issues and Workarounds

This section describes technology adapter issues and workarounds for Oracle Application Server ProcessConnect.

### 18.1.1 Oracle Database Adapter: Port Value

The Oracle Database adapter delivery channel must have a value for the port if you use the Oracle Call Interface (OCI) connection (bug 3031166).

#### **Explanation**

If an OCI connection is specified in the Oracle Database adapter delivery channel and the port value is empty, then an error will occur if you select the delivery channel to browse interactions.

#### **Workaround**

Ensure that a value is specified for the port if an OCI connection is used. The actual value is not used.

### 18.1.2 Oracle Database Adapter: Table Definition Changes

The Oracle Database adapter does not support changes to table definitions while running (bug 3112202).

#### **Explanation**

If a table definition is dropped and recreated, or altered so that the columns are different, then the interaction will fail.

#### **Workaround**

Do not change the columns in a table used by an Oracle Database adapter interaction after deployment.

### 18.1.3 Web Service Adapter and HTTP Adapter: Proxy Host Name

When specifying the proxy host for the Web Service and HTTP adapters, specify only the host name.

**Correct:** 'proxy.foo.com'

**Incorrect:** 'http://proxy.foo.com'



## 18.1.4 Web Service Adapter: Web Services Description Language

The Web Services Description Language (WSDL) file must have all `xmlns` tags in the `schema` element (bug 3152573).

### Explanation

In a WSDL file, if the `schema` element uses namespace prefixes that are defined in the enclosing `definitions` element, but which are not defined in the `schema` element, then an error will occur when the native event wizard is run for the interaction records.

### Workaround

Edit the WSDL file so that the `schema` element defines all namespaces used.

#### Valid:

```
<definitions xmlns:s="http://www.w3.org/2001/XMLSchema"
             xmlns:s0="http://www.foo.com"
             targetNamespace="http://www.foo.com"
             xmlns="http://schemas.xmlsoap.org/wsdl/">
  <types>
    <s:schema elementFormDefault="qualified"
             xmlns:s="http://www.w3.org/2001/XMLSchema"
             targetNamespace="http://www.foo.com">
      ...
    ...
  ...

```

#### Invalid:

```
<definitions xmlns:s="http://www.w3.org/2001/XMLSchema"
             xmlns:s0="http://www.foo.com"
             targetNamespace="http://www.foo.com"
             xmlns="http://schemas.xmlsoap.org/wsdl/">
  <types>
    <s:schema elementFormDefault="qualified"
             targetNamespace="http://www.foo.com">
      ...
    ...
  ...

```

## 18.1.5 Advanced Queuing Adapter Exchange Protocol

When using Oracle Object Queue with payload fields, all binary members (BLOBs and RAWs) of the object type that are not marked as payload fields should be encoded with the default character set of the platform.

## 18.1.6 Advanced Queuing Adapter: Using with an 8.1.7 Application (Spoke) Database

If you are using an 8.1.7 application (spoke) database with the Advanced Queuing adapter, you must perform the following tasks:

1. Use a text editor to copy and paste the following syntax into an ASCII file:

```
connect sys/password;
create function substrc(str in varchar2, i1 in number, i2 in number)
  return varchar2 is
begin
  return substr(str, i1, i2);
end;
/
create public synonym substrc for substrc;
grant all on substrc to public;
```

2. Save the ASCII file with a SQL extension (for example, named `substrc_patch.sql`).
3. Change `password` to the password for the `sys` account of the 8.1.7 application database.
4. Use SQL\*Plus to run this SQL script against the 8.1.7 application database.

## 18.2 Integration Adapter for Tuxedo Issues and Workarounds

This section describes issues and workarounds for Oracle Application Server Integration Adapter for Tuxedo, a legacy adapter available in Oracle Application Server ProcessConnect.

### 18.2.1 Problems in Oracle Connect

In Oracle Connect, the following problems occur:

- String fields are padded instead of null-terminated.
- Arrays do not include a counter.
- Services that rely on large Field Manipulation Language (FML) files return an error.

Refer to bug 3212302 for patch information.

## 18.2.2 Importing Metadata to Oracle Connect

When importing metadata to Oracle Connect, in the Oracle Studio Import Metadata perspective, from a Field Manipulation Language (FML) file, the following problems occur:

- String fields are defined incorrectly in the generated XML metadata.
- Arrays do not include a counter.

Refer to bug 3212314 for patch information.

## 18.3 Modeling Tool and User Interface Issues and Workarounds

This section describes modeling tool and user interface issues for Oracle Application Server ProcessConnect.

### 18.3.1 Administration Tab May Hang

In the Oracle Application Server ProcessConnect user interface tool, clicking on the Administration tab may cause the system to hang under certain environment settings and operating systems (a few cases have been observed under Linux).

#### Workaround

Copy the following (that is, replace the existing file):

```
"$ORACLE_HOME/ip/install/administration.uix" to "$ORACLE_HOME/j2ee/OC4J_  
ProcessConnect/applications/integration/ip/pages/administration/administration.uix"
```

However, this causes the link to Enterprise Manager to disappear. To connect to Enterprise Manager, use another browser window and enter the URL specified on page 18-5 of the *Oracle Application Server ProcessConnect User's Guide* and repeated here:

To access Oracle Application Server ProcessConnect from the Oracle Enterprise Manager Application Server Control:

1. Go to the following URL:

```
http://hostname:port/
```

where:

*hostname* is the name of the host on which the Oracle Application Server ProcessConnect middle-tier instance is installed

*port* is the number assigned when you installed Oracle Application Server ProcessConnect. At the end of installation, the port number is displayed.

### 18.3.2 Starting, Stopping, and Restarting the OC4J\_ProcessConnect Instance

On the ProcessConnect Enterprise Manager homepage, the **Start All / Stop All / Restart All** button does not affect the OC4J\_ProcessConnect instance (bug 3167662).

#### **Workaround**

Start, stop, and restart OC4J\_ProcessConnect separately.

### 18.3.3 Session Timeout

A default session timeout is specified in the `web.xml` file and is configurable.

#### **Explanation**

Short session timeouts result in discarded session objects and hence stale pages.

The `web.xml` file is located at

`$ORACLE_HOME/j2ee/OC4J_ProcessConnect/applications/integration/ip/WEB-INF/web.xml`

#### **Workaround**

After the browser has timed out, log in to the user interface tool. Go to the Oracle Application Server ProcessConnect homepage and click through the tabs to reach the page where you timed out. Add the following to `web.xml` to configure the session timeout, where 120 is the session duration in minutes before timing out:

```
<session-config>
<session-timeout>120</session-timeout>
</session-config>
```

### 18.3.4 Netscape Problem with Pop-Up Windows

Some installations of Netscape 4.78 have problems with pop-up windows.

#### **Workaround**

Upgrade to the most recent version of Netscape.

### 18.3.5 User Interface Operations Can Be Slow

During some user interface operations, the browser appears to be hanging.

#### **Explanation**

Some user interface operations can take several minutes to complete. For example, importing a large XSD with a few hundred datatypes can take up to ten minutes. Wait and allow the operation to complete.

### 18.3.6 Multiple Users Updating an Object

Multiple users cannot export the repository simultaneously.

#### **Explanation**

In the current release, if an object is being viewed by one user and another user updates it, the first user may not see the latest version of that object until the cache is flushed to the database. In the case of concurrent updates, only the last update will be effective.

## 18.4 Export/Import Issues

All agreements are imported in the Draft state, even if they were approved before the export. You must approve the relevant agreements before creating and deploying a configuration.

## 18.5 Configuration Creation and Deployment Issues and Workarounds

When you create a new configuration, all the business processes and related objects are picked up. The configuration is created successfully only if all of these objects are valid. You may get validation errors due to extra business processes or objects that are created but not used in the integration.

#### **Workaround**

Ensure that extra objects are deleted or validated before creating the configuration.

## 18.6 Deployment Issues and Workarounds

During deployment, the modeling tool waits for the existing configuration to quiesce before deploying the new one. Sometimes this quiescing takes a long time.

### Explanation

If quiescing takes more than 3 to 4 minutes, then there are two possibilities:

1. The currently active configuration is still processing some messages.

or

2. The active configuration is still waiting for external events.

### Workaround

If the coordination reports show that you do not have any open coordinations and you do not expect any more external events, then you can abort the quiescing configuration.

## 18.7 Oracle Wallet Manager Utility Issues

This section provides a clarification to the *Oracle Application Server ProcessConnect User's Guide*, specifically:

**Chapter:** 20, "Oracle Application Server ProcessConnect Security"

**Heading:** "Setting Up SSL for the Oracle Application Server ProcessConnect B2B Adapter"

Start Oracle Wallet Manager by entering `owm` at the command prompt before performing the HTTP client steps in "Setting Up SSL for the Oracle Application Server ProcessConnect B2B Adapter" (bug 3146118).

## 18.8 Reassociating the ProcessConnect Middle Tier to Another Metadata Repository

The following steps are valid only for a J2EE installation (nonhigher J2EE installation).

1. Edit the following file so that `IASSchema=false`.

```
$ORACLE_HOME/ip/config/ConfigTool.properties
```

All other properties should be set to true.

2. Run ConfigTool at the command prompt and set the correct environmental variables:

```
java oracle.tip.install.ConfigTool oracle_home null ip_passwd wf_passwd  
dbhost dbport dbservicename null null null null null
```

Where:

*oracle\_home* is the current oracle home for this installation.

*ip\_passwd* is the password for the ip schema in the new database.

*wf\_passwd* is the password for the *owf\_mgr* schema in the new database.

*dbhost* is the hostname for the new database.

*dbport* is the port for the new database.

*db servicename* is the service name for the new database.

(Note: There is a total of 12 parameters.)

After reassociation, refer to the reassociation topics on migrating Oracle Application Server ProcessConnect and workflow seed and data to a new metadata repository in the *Oracle Application Server 10g Administrator's Guide*.

## 18.9 Unsupported XSD Construct Issues and Workarounds

This section describes additional unsupported XSD constructs. It supplements Appendix A, "Native Formats and Translators" of the *Oracle Application Server ProcessConnect User's Guide*.

### 18.9.1 A complexType Containing a Wildcard Element

A `complexType` containing a wildcard element (any tag) cannot have any other members. A runtime error occurs if `WildcardMember` is not the only member of its owning datatype (bug 3112007). A runtime error occurs with the `complexContent` extension when wildcards are restricted (bug 3115819).

#### Explanation

In XMLSchema, a wildcard member element is allowed on any complex type *if it is the last member element to occur*. For example:

```
<xs:complexType name="Colour">
  <xs:sequence>
    <xs:element name="saturation" type="xs:string"/>
    <xs:any processContents="skip" maxOccurs="2"/>
  </xs:sequence>
</xs:complexType>
```

Another way for an XSD to define types with multiple elements and a wildcard is with the `complexContent` extension and restriction. If a type is defined with a single wildcard member, it cannot be used as a base for a `complexContent` extension, because this is equivalent to having a type with the base wildcard plus additional members specified in the extended type. Similarly, no `complexContent` type derived by extension can contain a wildcard member unless its base type is empty.

**Unsupported:**

```
<xs:complexType name="Colour1">
  <xs:sequence>
    <xs:any processContents="skip" maxOccurs="1"/>
  </xs:sequence>
</xs:complexType>

<xs:complexType name="Colour2">
  <xs:complexContent>
    <xs:extension base="Colour1">
      <xs:sequence>
        <xs:element name="hue" type="xs:string"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

<xs:complexType name="Colour3">
  <xs:complexContent>
    <xs:extension base="Colour2">
      <xs:sequence>
        <xs:element name="saturation" type="xs:string"/>
        <xs:any processContents="skip" maxOccurs="2"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

Oracle Application Server ProcessConnect has only limited support for wildcard members and mandates that a `complexType` containing a wildcard member cannot contain any other member elements or attributes. Additionally, there is no support for wildcard members in types used as a base for a `complexContent` extension, and no support for wildcard members in derived `complexContent` types. In the preceding example, `Colour1` on its own is supported in ProcessConnect. `Colour2` is not supported because its base type contains a



wildcard. `Colour3` is not supported because it is derived in 2 steps from `Colour1`, which contains a wildcard, and contains a wildcard member in addition to another member.

The following example removes the unsupported structures.

### Supported:

```
<xs:complexType name="Colour1">
  <xs:sequence>
    <xs:any processContents="skip" maxOccurs="1"/>
  </xs:sequence>
</xs:complexType>
```

Unsupported wildcard structures are not detected at design time but will fail at runtime (AIP-10403, the invocation engine failed when raising a business event after executing the step). Before you create native events or business datatypes, all occurrences must be removed from XSDs.

### Workaround

If you know the expected content of the wildcard, you can replace the wildcard member with the expected content.

A more generic workaround is to define a group containing the wildcard member and then replace the wildcard in the original type with a reference to the group, as follows:

```
<xs:complexType name="Colour">
  <xs:sequence>
    <xs:element name="hue" type="xs:string"/>
    <xs:group ref="wild"/>
  </xs:sequence>
</xs:complexType>

<xs:group name="wild">
  <xs:sequence>
    <xs:any processContents="skip" maxOccurs="2"/>
  </xs:sequence>
</xs:group>
```

## 18.9.2 Nested Substitution Groups

A runtime error occurs with nested substitution groups (bug 3112030).

## Explanation

XMLSchema allows an element that is the head of one substitution group to be a member of another. ProcessConnect does not allow a substitution group to contain other substitution groups. Nested substitution groups are not caught at design time, but will cause runtime errors. To avoid this, all occurrences must be removed before creating native events or business datatypes.

In the following example, `WritingImplement` is the top-level substitution group. It has two members, `Pen` and `Pencil`. `Pencil` is also the head of a separate substitution group containing `DisposablePencil` and `MechanicalPencil`.

The following does not work because `Pencil` is in substitution group `WritingImplement`.

## Unsupported:

```
<xs:element name="subsgrp">
  <xs:complexType>
    <xs:sequence>
      <xs:element ref="WritingImplement"/>
      <xs:element ref="Pen"/>
      <xs:element ref="Pencil"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

<xs:element name="WritingImplement" abstract="true"/>

<xs:element name="Pen" substitutionGroup="WritingImplement" type="penType"/>

<xs:element name="Pencil" substitutionGroup="WritingImplement"/>
<xs:element name="MechanicalPencil" substitutionGroup="Pencil"
type="pencilType"/>
<xs:element name="DisposablePencil" substitutionGroup="Pencil"
type="pencilType"/>
```

## Workaround

Flatten the nested substitution groups into a single group containing the members of all the nested groups as well as the original group members. Each reference to any of the nested substitution groups is replaced with a reference to the flattened group (shown in bold in the following examples). In the following example, the members of substitution group `Pencil` are moved to `WritingImplement`. The reference to `Pencil` is changed to `WritingImplement`. However, the reference to `Pen` is not changed, since `Pen` is not the head of another substitution group.

### Supported:

```

<xs:element name="subsgroup">
  <xs:complexType>
    <xs:sequence>
      <xs:element ref="WritingImplement"/>
      <xs:element ref="Pen"/>
      <xs:element ref="WritingImplement"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

<xs:element name="WritingImplement" abstract="true"/>

<xs:element name="Pen" substitutionGroup="WritingImplement" type="penType"/>

<xs:element name="Pencil" substitutionGroup="WritingImplement" type="pencilType"/>
<xs:element name="MechanicalPencil" substitutionGroup="WritingImplement" type="pencilType"/>
<xs:element name="DisposablePencil" substitutionGroup="WritingImplement" type="pencilType"/>
    
```

## 18.9.3 Cardinality on Anonymous Members

A runtime error occurs with an anonymous choice group that has `maxOccurs` unbounded (bug 3133105).

### Explanation

Oracle Application Server ProcessConnect fails at runtime on anonymous members with cardinality. This structure is not detected at design time, so all occurrences must be removed from the XSD before importing it. Failure to do so will cause runtime errors. Anonymous members are created from nested choice or sequence groups and references to reusable groups. These can occur in an XSD as long as they do not have `minOccurs` or `maxOccurs` set to a value other than 1.

In the following example, the nested choice group, nested sequence group, and group ref are all invalid since they have cardinality.

### Unsupported:

```

<xs:complexType name="Document">
  <xs:sequence>
    <xs:choice minOccurs="0" maxOccurs="unbounded">
      <xs:element name="text" type="xs:string"/>
      <xs:sequence minOccurs="1" maxOccurs="2">
        <xs:element name="warning" type="xs:string"/>
        <xs:element name="code" type="xs:int"/>
      </xs:sequence>
    </xs:choice>
  </xs:sequence>
</xs:complexType>
    
```

```

        </xs:sequence>
    </xs:choice>
    <xs:group ref="mygroup minOccurs="0"/>
</xs:sequence>
</xs:complexType>

```

### Workaround

There is currently no workaround for this unsupported structure.

## 18.9.4 Members with type="xs:anySimpleType"

A runtime error occurs when `anySimpleType` has a `whiteSpace` facet with a null `facetValue` (bug 3133329).

### Explanation

The XMLSchema scalar type `anySimpleType` in namespace <http://www.w3.org/2001/XMLSchema> is the base type from which all scalar types must be derived. In a schema, it can also be used directly as the type for an element or as the base type of a scalar type.

#### Supported (whiteSpace value is set):

```

<xsd:simpleType name="ID">
  <xsd:restriction base="xsd:anySimpleType">
    <xsd:whiteSpace value="preserve">
  </xsd:restriction>
</xsd:simpleType>

```

#### Unsupported (whiteSpace value is not set):

```

<xsd:complexType name="Comment">
  <xsd:attribute name="severity" type="xsd:anySimpleType">
</xsd:complexType>

<xsd:simpleType name="SKU">
  <xsd:restriction base="xsd:anySimpleType">
    <xsd:length value="10">
  </xsd:restriction>
</xsd:simpleType>

```

Oracle Application Server ProcessConnect requires every scalar type that appears in an instance to have a value for the `whiteSpace` facet. Since `anySimpleType` does not have a value for this facet, it cannot be used directly as the type for a member. You can use `anySimpleType` as the base type for another `simpleType` if the

derived type declares a value for the `whiteSpace` facet. In the preceding example, `Comment` is not allowed because it has an attribute whose type is `anySimpleType`. `ID` is derived from `anySimpleType`, but it specifies a value for `whiteSpace` and is therefore valid. `SKU` is not allowed because it is derived directly from `anySimpleType` and does not provide a `whiteSpace` value.

### Workaround

When `anySimpleType` is used as the base for another scalar type, add a `whiteSpace` facet to the derived type. Modify the type `SKU` as follows:

```
<xsd:simpleType name="SKU">
  <xsd:restriction base="xsd:anySimpleType">
    <xsd:length value="10">
      <xsd:whiteSpace value="preserve">
    </xsd:restriction>
  </xsd:simpleType>
```

For an element whose type is `anySimpleType`, change the type to `string`. `Comment` becomes:

```
<xsd:complexType name="Comment">
  <xsd:attribute name="severity" type="xsd:string">
</xsd:complexType>
```

## 18.10 Deinstalling Oracle Application Server ProcessConnect

This section describes a potential problem when deinstalling Oracle Application Server ProcessConnect (bug 2940328 and 3092893).

The deinstall operation removes the `Components` line in `ORACLE_HOME\config\ias.properties`. This may cause a problem when you reinstall Oracle Application Server ProcessConnect against the same `ORACLE_HOME`.

After deinstalling ProcessConnect, add the following in `ORACLE_HOME\config\ias.properties`, depending on your installation type:

- If J2EE and WebCache are installed on the middle tier, add:

```
Components=Apache,J2EE,WebCache,JServ
```

- If Portal and Wireless are installed on the middle tier, add:

```
Components=Apache,J2EE,WebCache,JServ,Portal,Wireless
```

- If Business Intelligence and Forms are installed on the middle tier, add:

Components=Apache, J2EE, WebCache, JServ, Portal, Wireless, Discoverer, Personalization, Reports, Forms

## 18.11 Other Known Issues

The following are known issues in Oracle Application Server ProcessConnect.

- Creation of a native event type for a seeded interaction will fail. No warning is given to the user (bug 2815475).
- If a D3L definition contains a field of type `termstring` and the `endchar` attribute character is not found in the native wire message (for inbound translations), the D3L parser will spin and eventually cause a Java `OutOfMemoryError` (bug 3076754).

## 18.12 Documentation Errata

This section describes known errors in the documentation.

## 18.13 Netscape Problem with Pop-Up Windows

Netscape 4.78 and 4.79 have problems with pop-up windows, such as when you attempt to create an event body element and click the flashlight icon to select a datatype. To workaroud this problem, upgrade to Netscape 4.8, Netscape 7.0, or Internet Explorer 5.5.

### 18.13.1 Correction to Selecting a Rule from the Datatype Transformation Map List (Tutorial)

This section provides corrections and clarifications to the *Oracle Application Server ProcessConnect User's Guide*, specifically:

**Chapter:** 7, "Tutorial of an Integration Within an Enterprise"

**Heading:** "Creating the Rule for the Outbound Event Transformation Map"

**Page:** 7-35

In steps 11 through 13, you must select a rule from the **Datatype Transformation Map** list *before* you can click **Append**. Therefore, perform steps 11 through 13 in the following order:

11. Select **copy:from=string->to=string** from the **Datatype Transformation Map** list.

12. Click **Append**. This takes you to the Add Transformation Rules page.
13. Click **Expand All** for the **Targets** table.

### 18.13.2 Correction to Deleting a Native Event (Tutorial)

This section provides corrections and clarifications to the *Oracle Application Server ProcessConnect User's Guide*, specifically:

**Chapter:** 7, "Tutorial of an Integration Within an Enterprise"

**Heading:** "Task 3: Deleting a Native Event"

**Page:** 7-79

Before deleting the HR New Ad native event described in task 3, you must first delete the event map associated with this native event. Delete this event map from the Native Event Type Details: HR New Ad page.

### 18.13.3 Corrections to the HTTP Adapter Postinstallation Tasks

This section provides corrections and clarifications to the *Oracle Application Server ProcessConnect User's Guide*, specifically:

**Chapter:** 8, "Oracle Application Server ProcessConnect Technology Adapters"

**Heading:** "HTTP Adapter Postinstallation Tasks"

**Page:** 8-50

- In Step 1, the file to open is `orion-application.xml` file, and *not* `jazn-data.xml`. Both files are located in the directory specified in Step 1.
- In Step 2, do *not* add `<principals path="principals.xml" />`, shown for the `orion-application.xml` file. This line already appears in this file.

Instead, add the three lines shown immediately following that line to the `orion-application.xml` file:

```
<security-role-mapping name="sr_manager">
  <group name="managers"/>
</security-role-mapping>
```

- In Step 3, the file to open is `jazn-data.xml` file, and *not* `orion-application.xml`.
- In Step 4, add the entire realm section shown in Step 4 to the `jazn-data.xml` file.

- In Step 9, test that you have correctly configured your environment by invoking the following URL:

`http://hostname:port/integration/transportServletB`

Or, if you enabled SSL with the HTTP adapter in Steps 5 through 7, use HTTPS:

`https://hostname:port/integration/transportServletB`

The `B` appended to `transportServlet` tests that you have correctly configured your environment in the `orion-application.xml` and `jazn-data.xml` files. If you do not specify `B`, the environment configuration is not tested and a more general set of testing details is provided.

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**Note:** Do not delete the `/tmp/tsvalidation.log` file after starting Oracle Enterprise Manager. The information in this file is useful for debugging purposes.

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#### 18.13.4 Corrections to Table 8-4, Advanced Queuing Adapter Naming Conventions

This section provides corrections and clarifications to the *Oracle Application Server ProcessConnect User's Guide*, specifically:

**Chapter:** 8, "Oracle Application Server ProcessConnect Technology Adapters"

**Heading:** "Advanced Queuing Adapter Design-Time Tasks"

**Page:** 8-15

The last three adapter exchange protocols in Table 8-4 that have descriptions beginning with "Enqueue to..." are for the *outbound* direction, and not the inbound direction.

#### 18.13.5 Corrections to Anonymous Choice Group That Has maxOccurs Unbounded

This section provides corrections and clarifications to the *Oracle Application Server ProcessConnect User's Guide*, specifically:

**Appendix:** A, "Native Formats and Translators"

**Heading:** "Choice or sequence with minOccurs="0", maxOccurs greater than 1 except if parent is choice or sequence, or both"

**Page:** A-8



The discussion is incorrect. See [Section 18.9.3, "Cardinality on Anonymous Members"](#) on page 18-13 for an explanation.



# 19

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## Oracle Workflow

This chapter discusses the following topics:

- [Section 19.1, "Configuration Issues and Workarounds"](#)
- [Section 19.2, "Administration Issues and Workarounds"](#)
- [Section 19.3, "Documentation Errata"](#)

## 19.1 Configuration Issues and Workarounds

This section describes configuration issues and their workarounds for Oracle Workflow.

### 19.1.1 Oracle Workflow in Oracle Application Server and Oracle E-Business Suite

Do not install the standalone Oracle Workflow server in an Oracle E-Business Suite database. If you want to use the version of Oracle Workflow available with Oracle Application Server 10g (9.0.4), or any Oracle Application Server components that depend on this version of Oracle Workflow, then you must install the Oracle Workflow server into a database that is not used for an Oracle E-Business Suite instance.

If you implement Oracle Application Server 10g (9.0.4) with Oracle E-Business Suite, the Oracle Workflow Configuration Assistant will not install the standalone version of the Oracle Workflow server in that database. You can continue to use the version of the Oracle Workflow server embedded in Oracle E-Business Suite instead.

If you choose to install the Oracle Application Server Metadata Repository 10g (9.0.4) into a database used by Oracle E-Business Suite, the Oracle Workflow Configuration Assistant will not install the standalone version of the Oracle Workflow server in that database. You can continue to use the version of the Oracle Workflow server embedded in Oracle E-Business Suite instead, although there may be some limitations in Oracle Application Server functionality. Refer to Oracle *MetaLink* Note 251627.1 (<http://metalink.oracle.com>) for more information.

### 19.1.2 Oracle Workflow Component Versions

The version of the Oracle Workflow server components installed in your database, including the Oracle Workflow schema, must match the version of your Oracle Workflow middle tier components. That is, if you want to use Oracle Workflow Release 2.6.3, then both the Oracle Workflow server and middle tier components must be the Release 2.6.3 components, available with Oracle Application Server 10g (9.0.4).

If you want to use an existing Oracle9i Application Server Release 2 (9.0.2) infrastructure database that already has Oracle Workflow Release 2.6.2 installed, then you must upgrade that Oracle Workflow server installation to Release 2.6.3 before using it with an Oracle Application Server 10g (9.0.4) middle tier home. To upgrade the Oracle Workflow server installation to Release 2.6.3, run the Oracle

Workflow Configuration Assistant with the Upgrade option from the `wf` subdirectory in your Oracle Application Server 10g (9.0.4) middle tier home.

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**Note:** Do not use the Oracle Application Server Repository Creation Assistant (OracleAS RepCA) to upgrade an existing Oracle Workflow server installation. Use the Oracle Workflow Configuration Assistant to properly upgrade to Oracle Workflow Release 2.6.3.

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### 19.1.3 Configuring Oracle Workflow Manager

If you want to use the Oracle Workflow Manager component within the Oracle Enterprise Manager Application Server Control, including Oracle Workflow administration features and the Java-based Workflow Notification Mailer, run the Workflow Configuration Assistant to configure Oracle Workflow Manager.

- If you install Oracle Workflow from the Oracle Content Management Software Development Kit CD and the Oracle Universal Installer automatically launches the Workflow Configuration Assistant during the installation, Oracle Workflow Manager is configured automatically.
- If you run the Workflow Configuration Assistant manually, from any Oracle Home where Oracle Workflow files have been installed, then you must first edit the Workflow Configuration Assistant script to provide installation parameters that specify the Oracle Application Server instance and the database where your Oracle Workflow installation resides. The Workflow Configuration Assistant requires this information to configure Oracle Workflow Manager information in the `targets.xml` file for the Oracle Enterprise Manager Application Server Control.

If you want to configure Oracle Workflow Manager when running the Workflow Configuration Assistant manually, edit the Workflow Configuration Assistant script in the following directory:

- On UNIX: `$ORACLE_HOME/wf/install/wfinstall.csh`
- On Windows NT: `%ORACLE_HOME%\wf\install\wfinstall.bat`

Open the script in a text editor and locate the line similar to the following:

```
. . . repository.jar" WorkflowCA /wkdir <workflow_directory> /orahome <oracle_
home> /ospath $PATH
```

For example:

```
. . . repository.jar" WorkflowCA /wkdir /dl/iasinstall/m21pw1/wf /orahome
/dl/iasinstall/m21pw1 /ospath $PATH
```

Edit the script to append the parameters required for Oracle Workflow Manager after the `/wkdir`, `/orahome`, and `/ospath` parameters:

```
. . . repository.jar" WorkflowCA /wkdir <workflow_directory> /orahome <oracle_
home> /ospath $PATH /iasname <schema_name.machine_name> /iasmachine <machine_
name> /iasport <port_number> /iassid <database_SID> /jdbconnnode <connect_
string> /fileupdate true
```

Specify the parameter values as follows:

- `/iasname` - The name of your Oracle Application Server instance, specified in the following format: *schema\_name.machine\_name*
- `/iasmachine` - The host name of your Oracle Application Server instance.
- `/iasport` - The database listener port number for the database where the Oracle Workflow schema resides.
- `/iassid` - The System Identifier (SID) for the database where Oracle Workflow is installed.
- `/jdbconnnode` - The JDBC connect identifier to access a remote database, specified in the following format: *host:port:sid*
- `/fileupdate` - You must specify `true` as the value of this parameter in order to update the `targets.xml` file for the Oracle Enterprise Manager Application Server Control.

Save your changes to the script, and start the Workflow Configuration Assistant using the following commands:

- On UNIX:  

```
  $ORACLE_HOME/wf/install/wfinstall.csh
```
- On Windows NT:  

```
  %ORACLE_HOME%\wf\install\wfinstall.bat
```

The Oracle Workflow Configuration Assistant window will appear to let you enter the remaining configuration parameters, including additional parameters required

if you want to run the Workflow Notification Mailer. For more details, see your installation documentation.

### 19.1.4 Running the Workflow Configuration Assistant in Silent Mode

If you start the Workflow Configuration Assistant manually, you can choose to run it in silent mode by first editing the script to enter all your configuration parameters. In this case, you must specify all required parameters as well as any conditionally required parameters for features you want to use.

Edit the Workflow Configuration Assistant script in the following directory:

- On UNIX: `$ORACLE_HOME/wf/install/wfinstall.csh`
- On Windows NT: `%ORACLE_HOME%\wf\install\wfinstall.bat`

Open the script in a text editor and locate the line similar to the following:

```
. . . repository.jar" WorkflowCA /wkdir <workflow_directory> /orahome <oracle_
home> /ospath $PATH
```

For example:

```
. . . repository.jar" WorkflowCA /wkdir /dl/iasinstall/m21pw1/wf /orahome
/dl/iasinstall/m21pw1 /ospath $PATH
```

Edit the script to append your additional parameters after the `/wkdir`, `/orahome`, and `/ospath` parameters:

```
. . . repository.jar" WorkflowCA /wkdir <workflow_directory> /orahome <oracle_
home> /ospath $PATH /wfacct <workflow_schema> /wpasswd <workflow_schema_
password> /syspasswd <SYS_password> /instype <installation_type> /orasid
<database_SID> /constr <connection_string>
```

The script must include the following required parameters to run the Workflow Configuration Assistant in silent mode:

- `/wkdir` - The Oracle Workflow directory within your Oracle Home directory. The default directory is: `$ORACLE_HOME/wf`
- `/orahome` - Your Oracle Home directory.
- `/wfacct` - The user name of your Oracle Workflow database account. The default Workflow account for a fresh installation is `owf_mgr`.
- `/wpasswd` - The password for your Oracle Workflow database account.

- `/syspasswd` - Your SYS password. See your Oracle DBA if you need more information.

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**Note:** If you choose to enter these passwords in the script in order to run the Oracle Workflow Configuration Assistant in silent mode, ensure that you take precautions to protect the file so that only authorized administrators can access this sensitive information.

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- `/instype` - Specify `Install` to perform a fresh installation of Oracle Workflow, or to reinstall Oracle Workflow Release 2.6.3. Specify `Upgrade` to upgrade an existing installation of Oracle Workflow Release 2.6.0, Release 2.6.1, or Release 2.6.2. Specify `"add language"` to load a language into your existing installation of Oracle Workflow.
- `/nlsopt` - If you specified `Add language` for the `/instype` parameter, then you must also specify the `/nlsopt` parameter with the language code for the language you want to add. Oracle Workflow Server supports the languages supported by Oracle Application Server:
  - AR - Arabic
  - PTB - Brazilian Portuguese
  - FRC - Canadian French
  - CS - Czech
  - DK - Danish
  - NL - Dutch
  - US - English
  - SF - Finnish
  - F - French
  - D - German
  - EL - Greek
  - IW - Hebrew
  - HU - Hungarian
  - I - Italian
  - JA - Japanese



- KO - Korean
- ESA - Latin American Spanish
- N - Norwegian
- PL - Polish
- PT - Portuguese
- RO - Romanian
- RU - Russian
- ZHS - Simplified Chinese
- SK - Slovak
- E - Spanish
- S - Swedish
- TH - Thai
- ZHT - Traditional Chinese
- TR - Turkish

For a list of standard language abbreviations in the Oracle Database, see: *Locale Data, Oracle National Language Support Guide*.

- `/orasisd` - The System Identifier (SID) or TNS name for the database where Oracle Workflow is installed.
- `/constr` - The connect string for the database where Oracle Workflow is installed.

You can also specify the following additional parameters if you want to use the corresponding features.

- `/tablespace` - A valid tablespace name that you want to assign to the Oracle Workflow database account. If you do not specify this parameter, the default tablespace for the Oracle Workflow database account in a fresh installation defaults to `USERS`. This parameter is valid only when you are performing a fresh installation of Oracle Workflow. You cannot change the tablespace for Oracle Workflow during an upgrade.
- `/debug` - Specify `true` if you want the Workflow Configuration Assistant to write debug information to the `workflow.log` file, or `false` if you do not want to log this information.

- Specify these parameters if you want to integrate with Oracle Internet Directory as your Oracle Workflow directory service.
  - `/ldaphost` - The name of the host on which your Lightweight Directory Access Protocol (LDAP) directory resides.
  - `/ldapport` - The port on the host.
  - `/ldapuser` - The LDAP user account used to connect to the LDAP server. This user name must have write privileges and is required to bind to the LDAP directory. For example: `cn=orcladmin`
  - `/ldapopwd` - The password for the LDAP user account.
  - `/ldaplogbase` - The LDAP node under which change logs are located. For example: `cn=changelog`
  - `/ldapuserbase` - The LDAP node under which user records can be found. For example: `cn=Base`, `cn=OracleSchemaVersion`
- Specify these parameters if you want to use Oracle Workflow Manager.
  - `/iasname` - The name of your Oracle Application Server instance, specified in the following format: `schema_name.machine_name`
  - `/iasmachine` - The host name of your Oracle Application Server instance.
  - `/iasport` - The database listener port number for the database where the Oracle Workflow schema resides.
  - `/iassid` - The System Identifier (SID) for the database where Oracle Workflow is installed.
  - `/jdbconnnode` - The JDBC connect identifier to access a remote database, specified in the following format: `host:port:sid`
  - `/fileupdate` - You must specify `true` as the value of this parameter in order to update the `targets.xml` file for the Oracle Enterprise Manager Application Server Control.
- Specify these parameters if you want to use the Workflow Notification Mailer. Note that if you specify these parameters, you must also specify the Oracle Workflow Manager parameters.
  - `/mailserver` - The name of the inbound IMAP mail server.
  - `/mailuser` - The user name of the mail account that the notification mailer uses to send and receive e-mail messages.

- /mailhtml - The base URL that identifies the Web agent defined for Oracle Workflow in Oracle HTTP Server. The HTML agent should be specified in the following format:

```
http://<server.com:portID>/pls/wf
```

where <server.com:portID> represents the server and TCP/IP port number on which your web listener accepts requests.

- /mailhost - The name of the outbound SMTP mail server.
- /mailreply - The address of the e-mail account that receives incoming messages, to which notification responses should be sent.

Save your changes to the script, and start the Workflow Configuration Assistant using the following commands:

- On UNIX:

```
$ORACLE_HOME/wf/install/wfinstall.csh
```

- On Windows NT:

```
%ORACLE_HOME%\wf\install\wfinstall.bat
```

If the script includes all the minimum required parameters, then it performs the configuration silently, without displaying the Oracle Workflow Configuration Assistant window.

## 19.1.5 LDAP Port

If you choose to integrate with Oracle Internet Directory, you specify Lightweight Directory Access Protocol (LDAP) server information for your LDAP directory, either in the Workflow Configuration Assistant or in the Global Workflow Preferences page within Oracle Workflow. The port you specify to connect to the LDAP server must be a non-Secure Sockets Layer (non-SSL) port.

## 19.1.6 ecxutils.jar Errors

In some cases the workflow.log file produced during installation and configuration of Oracle Workflow may show errors in loading a file named ecxutils.jar. You can safely ignore these errors.

## 19.1.7 Changing the Workflow Directory Service Implementation After Installation

During the installation and configuration of Oracle Workflow, you choose the type of directory service to implement. You can either integrate with Oracle Internet Directory (OID) and Oracle Application Server Single Sign-On, or you can use Oracle Database users and roles as your directory repository for Oracle Workflow.

If necessary, you can change your directory service implementation after the initial installation and configuration are complete.

For more information, see Setting Up Oracle Workflow, *Oracle Workflow Administrator's Guide*.

### 19.1.7.1 Converting from Oracle Database Users to Oracle Internet Directory

1. Ensure that the DBMS\_LDAP PL/SQL package is loaded in your database. This package contains the functions and procedures that can be used to access data from LDAP servers and is required for LDAP synchronization. To check whether the DBMS\_LDAP package is already installed, connect to SQL\*Plus and use the following command:

```
desc DBMS_LDAP
```

If the DBMS\_LDAP package does not already exist, load it manually by running the `catldap.sql` script located in the `<ORACLE_HOME>/rdbms/admin` directory. Run this script as the SYS user. For example, use the following command:

```
sqlplus "SYS/<SYS password> as sysdba" @$ORACLE_HOME/rdbms/admin/catldap.sql
```

2. Run the `<ORACLE_HOME>/wf/sql/wfdircsv.sql` script to implement Oracle Workflow directory service views that support OID integration. For example, use the following command:

```
sqlplus owf_mgr/<passwd> @$ORACLE_HOME/wf/sql/wfdircsv.sql
```

3. Load the appropriate version of the WFA\_SEC package, which contains Oracle Workflow security functions and procedures. To load this package, log on to SQL\*Plus as the Oracle Workflow database user and run the `<ORACLE_HOME>/wf/sql/wfsecssb.sql` script. For example, use the following command:

```
sqlplus owf_mgr/<passwd> @$ORACLE_HOME/wf/sql/wfsecssb.sql
```

4. Update the Database Access Descriptor (DAD) for Oracle Workflow in the Oracle HTTP Server `dads.conf` file, specifying the following parameters. You can either use Oracle Enterprise Manager to update the DAD or edit the `dads.conf` file directly. The DAD should be named `/pls/your_Workflow_DAD`. For example: `/pls/wf`
  - `PlsqlDatabaseUsername` - Oracle Workflow schema
  - `PlsqlDatabasePassword` - Oracle Workflow schema password
  - `PlsqlDatabaseConnectionString` - Database connect string
  - `PlsqlDefaultPage` - `wfa_html.home`
  - `PlsqlSessionStateManagement` - `StatelessWithResetPackageState`
  - `PlsqlAuthenticationMode` - `Basic`
5. Protect the Oracle Workflow DAD by adding the following entry in your `mod_osso` configuration file. Replace "your\_Workflow\_DAD" with the name of your DAD.

```
<Location /pls/your_Workflow_DAD>
    require valid-user
    authType Basic
</Location>
```

For more information, see: *Developing Applications Using mod\_osso*, *Oracle Application Server Single Sign-On Application Developer's Guide*.

After you update the DAD and the `mod_osso` configuration file, restart Oracle HTTP Server.

6. Set the following LDAP preferences in the Global Workflow Preferences page. For details, see: *To Set Global User Preferences*, *Oracle Workflow Administrator's Guide*.
  - LDAP Host
  - LDAP Port
  - LDAP User Name
  - LDAP Password
  - LDAP Changelog Base Directory
  - LDAP User Base Directory

7. Migrate your existing Workflow user information to Oracle Internet Directory. You must perform a one-time migration of existing Oracle Workflow user information to OID to enable single sign-on and single administration. Ensure that you migrate all the necessary data from WF\_LOCAL\_USERS as well as any other user tables in which you previously stored user information. After performing the migration, you should maintain your user information only through OID.

OID provides a migration tool called `ldifmigrator`. To use this tool, you must extract your user information from the database into an intermediate LDAP Data Interchange Format (LDIF) file, with substitution variables wherever necessary. The `ldifmigrator` tool converts the intermediate entries in the file to actual LDIF entries by replacing the variables based on arguments provided at runtime or information retrieved from the LDAP directory. The LDIF file produced by the `ldifmigrator` can then be uploaded into OID using OID bulk tools.

For more information about the `ldifmigrator`, the format required for the intermediate LDIF file, and OID bulk upload tools, see: Appendix A: Syntax for LDIF and Command-Line Tools, *Oracle Internet Directory Administrator's Guide*.

8. Use the WF\_LDAP APIs to periodically synchronize your Oracle Workflow directory service with OID. For instructions, see: Synchronizing Oracle Workflow Directory Services with Oracle Internet Directory, Setting Up Oracle Workflow, *Oracle Workflow Administrator's Guide*.

### 19.1.7.2 Converting from Oracle Internet Directory to Oracle Database Users

1. Stop any database jobs you have scheduled to execute the WF\_LDAP APIs to synchronize your Oracle Workflow directory service with OID. For more information, see: Synchronizing Oracle Workflow Directory Services with Oracle Internet Directory, Setting Up Oracle Workflow, *Oracle Workflow Administrator's Guide*.
2. Update the Database Access Descriptor (DAD) for Oracle Workflow in the Oracle HTTP Server `dads.conf` file, specifying the following parameters. You can either use Oracle Enterprise Manager to update the DAD or edit the `dads.conf` file directly. The DAD should be named `/pls/your_workflow_DAD`. For example: `/pls/wf`
  - `PlsqlDatabaseConnectionString` - Database connect string
  - `PlsqlDefaultPage` - `wfa_html.home`

- PlsqlSessionStateManagement - StatelessWithResetPackageState
- PlsqlAuthenticationMode - Basic

Ensure that you do not specify a database user name or password, in order to enable mod\_plsql database authentication.

3. Delete the entry for your Workflow DAD from the mod\_osso configuration file. After you update the DAD and the mod\_osso configuration file, restart Oracle HTTP Server.
4. Run the `<ORACLE_HOME>/wf/sql/wfdirouv.sql` script to map the Oracle Workflow directory service views to your Oracle Database users and roles. For example, use the following command:

```
sqlplus owf_mgr/<passwd> @$ORACLE_HOME/wf/sql/wfdirouv.sql
```

The `wfdirouv.sql` script sets each native Oracle Database user's e-mail address to the user's respective username. As a minimal setup step, you should edit the script to either link your native Oracle Database users to an existing mail directory store through the `WF_ROLES` view definition or, if the usernames and e-mail account names match, then simply add the domain for your organization, such as `'@oracle.com'`, to the usernames in the `WF_USERS` view definition. Typically, the columns that you change are `EMAIL_ADDRESS` in `WF_USERS` and `EMAIL_ADDRESS` in `WF_ROLES`. For more information, see: *Setting Up Oracle Workflow, Oracle Workflow Administrator's Guide*.

5. Load the appropriate version of the `WFA_SEC` package, which contains Oracle Workflow security functions and procedures. To load this package, log on to SQL\*Plus as the Oracle Workflow database user and run the `<ORACLE_HOME>/wf/sql/wfsecwsb.sql` script. For example, use the following command:

```
sqlplus owf_mgr/<passwd> @$ORACLE_HOME/wf/sql/wfsecwsb.sql
```

6. Clear the following LDAP preferences in the Global Workflow Preferences page. For details, see: *To Set Global User Preferences, Oracle Workflow Administrator's Guide*.
  - LDAP Host
  - LDAP Port
  - LDAP User Name

- LDAP Password
- LDAP Changelog Base Directory
- LDAP User Base Directory

## 19.2 Administration Issues and Workarounds

This section describes administration issues and their workarounds for Oracle Workflow.

### 19.2.1 Java-Based Workflow Notification Mailer

In Release 2.6.3, Oracle Workflow includes a Java-based notification mailer program, implemented as a service component within the Generic Service Component Framework, which communicates notifications to users via e-mail and interprets responses. Oracle Workflow provides one seeded notification mailer service component called the Workflow Notification Mailer. This program requires an outbound SMTP mail server and an inbound IMAP mail server.

The new Java-based implementation of the notification mailer replaces the C-based Notification Mailer program that was used in previous releases of Oracle Workflow. If you are upgrading an existing installation of Oracle Workflow to Release 2.6.3, note that the executable file for the C-based Notification Mailer is replaced with a stub file during the upgrade, and you can no longer run that version of the Notification Mailer. Instead, use the Oracle Workflow Manager component within the Oracle Enterprise Manager Application Server Control to run the Java-based Workflow Notification Mailer.

## 19.3 Documentation Errata

This section describes known errors in the documentation.

### 19.3.1 Database Access Descriptor

In the *Oracle Workflow Installation Notes for Oracle Content Management SDK*, the description of the Workflow Configuration Assistant states that if you choose the Install or Upgrade options, the Workflow Configuration Assistant creates a Database Access Descriptor (DAD) for Oracle Workflow in the `mod_osso` configuration file within your Oracle HTTP Server installation. The DAD is actually created in the `dads.conf` file within your Oracle HTTP Server installation.



## 19.3.2 DBMS\_LDAP Package

In the *Oracle Workflow Installation Notes for Oracle Content Management SDK*, the "Oracle Workflow Server Installation" section lists "Load DBMS\_LDAP package (conditionally required)" as step 4, after running the Oracle Universal Installer and the Oracle Workflow Configuration Assistant. If you plan to integrate with Oracle Internet Directory (OID) and Oracle Application Server Single Sign-On as your Oracle Workflow directory service, this step should actually be performed as a pre-installation step. Please ensure that the DBMS\_LDAP PL/SQL package is loaded in your database before you run the Oracle Universal Installer and the Oracle Workflow Configuration Assistant.

If you do run the Oracle Universal Installer and the Oracle Workflow Configuration Assistant, specifying LDAP values for OID integration, without having the DBMS\_LDAP package installed in your database, you may encounter invalid packages after the Oracle Workflow Configuration Assistant completes. In this case, load the package as described in the *Oracle Workflow Installation Notes for Oracle Content Management SDK*, and then recompile the Oracle Workflow schema. For instructions, see the *Oracle Database Supplied PL/SQL Packages and Types Reference*.



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## Oracle Application Server InterConnect

This chapter describes issues with Oracle Application Server InterConnect. It features the following topics:

- [Section 20.1, "General Issues and Workarounds"](#)
- [Section 20.2, "Administration Issues and Workarounds"](#)
- [Section 20.3, "Documentation Errata"](#)

## 20.1 General Issues and Workarounds

This section describes general issues and their workarounds for OracleAS InterConnect). It includes the following topics:

- [Section 20.1.1, "Siebel Adapter—Supported Systems"](#)
- [Section 20.1.2, "Database Adapter—Schema Password Exposed through the agent1.sql File"](#)

### 20.1.1 Siebel Adapter—Supported Systems

The OracleAS InterConnect Adapter for Siebel 2000 supports 6.2.1 Enterprise Edition with patch 110 or higher. The patch is necessary to resolve a memory leak on the Siebel server when any kind of remote client is used. All instructions in the patch 110 *Maintenance Release Guide* from Siebel Systems must be followed carefully. The most important instruction that addresses the server side memory leak is the setting of the Siebel server `recyclefactor` component parameter. Set the `recyclefactor` parameter to a value greater than the default value of zero. The *Maintenance Release Guide* recommends a value of 3. This will improve server performance and memory usage. This step must be completed for all object managers in use.

### 20.1.2 Database Adapter—Schema Password Exposed through the agent1.sql File

The password to the schema in the spoke database of the OracleAS InterConnect Adapter for the database adapter is exposed through the `agent1.sql` file located in the following directory:

```
ORACLE_HOME/oai/9.0.2/adapters/<adapter_name>/
```

Make sure this file is password protected using the utilities provided by the operating system.

## 20.2 Administration Issues and Workarounds

This section describes administration issues and their workarounds for OracleAS InterConnect. It includes the following topics:

- [Section 20.2.1, "Data Definition Description Language Enhancement"](#)
- [Section 20.2.2, "Content-based Routing—Known Issue"](#)
- [Section 20.2.3, "OracleAS InterConnect Adapter for MQ Series will not Start"](#)
- [Section 20.2.4, "Using the HTTP Adapter to Send Messages Via SSL"](#)
- [Section 20.2.5, "The HTTP Adapter Must Have the J2EE/Webcache Component Installed"](#)

### 20.2.1 Data Definition Description Language Enhancement

This section describes data definition description language enhancements. It includes the following topics:

- [Section 20.2.1.1, "Integrate Transport Properties"](#)
- [Section 20.2.1.2, "Allow Multiple Imparrays"](#)

#### 20.2.1.1 Integrate Transport Properties

This enhancement allows the Data Definition Description Language (D3L) author to add a new type of member, property. Syntax, to a D3L structure, in addition to `fields` and `pads`. For example:

```
<struct ...  
  ...  
  <property name="prop_name" />  
  ...  
</struct>
```

---

---

**Note:** There is no type definition associated with this structure element.

---

---

The modified D3L Data Type Definition (DTD) for this new structure element is:

```
<!ENTITY % StructElements
    "field | property | pad"
>

<!ELEMENT property EMPTY >
    <!ATTLIST property
        %FieldAttributes;
    >
```

The semantics of this new structure element is to link data in a transport protocol header with the message payload. In other words, when a D3L containing a structure with one, or more, property member(s) is imported in iStudio, it will create a String OAI attribute with the name specified in the property name attribute.

At runtime, this OAI attribute will be populated with the value of a transport protocol header, `inbound-to-hub`, which name matches the name attribute of the property member. Vice versa, for outbound messages, the OracleAS InterConnect message payload property value will define the value of the corresponding protocol header.

For example, if using OracleAS InterConnect Adapter for FTP, the file structure would be:

```
<struct ..>
    <property name="filename" />
<field ...
```

In this case, the OracleAS InterConnect Application View attribute `filename`, that is derived from the D3L definition, would be assigned the name of the actual file being passed to D3L. For outbound message, the value will determine the physical filename being used to store the file.

If using OracleAS InterConnect Adapter for HTTP, an example file structure would be:

```
<struct ..>
  <property name="Host" />
  <property name="Referer" />
<field name="..." < ...
```

---



---

**Note:** This is a dynamic payload dependent feature, which will override settings in the `adapter.ini` file and/or Application View Meta Data Modify Fields. Therefore, the property `ota.send.endpoint` could be overridden by a corresponding message attribute defined via the D3L.

---



---

### 20.2.1.2 Allow Multiple Imparrays

The D3L syntax allows you to create multiple nested imparrays for outbound translations (`app-to-native` or `hub-to-spoke`).

Intuitively it makes sense to allow multiple nested imparrays to match multiple nested arrays in XML since XML does not have the need to declare the length of an array. For example:

```
<array1>
  <array2>..</array2>
  <array2>..</array2>
</array1>
<array1>
  <array2>..</array2>
  <array2>..</array2>
<array2>..</array2>
```

If this XML message was published by OracleAS InterConnect Adapter for AQ, and consumed by OracleAS InterConnect Adapter for FTP that is running in D3L mode, the above structure would then be matched by the following D3L structure:

```
<imparray id="array1">
  <imparray id="array2">
    ..
```

Since D3L does not perform parsing for `app-to-native` translation, also known as `production`, the above D3L is entirely possible. However, for `native-to-app` translations, the above D3L would be invalid since a single `imparray` by itself would consume the rest of the native message.

---

---

**Note:** This new `imparray` semantics depart from the design principle that D3L is a fully bidirectional symmetric translator and can perform both `native-to-app` and `app-to-native` translation using just one the same D3L definition.

---

---

Finally, the D3L translator will determine, at runtime, whether multiple nested `imparrays` exist in a D3L. If multiple nested `imparrays` are detected, the translator will prevent the D3L from being used for parsing purposes (`native-to-app` translations). If not detected, the D3L translator will flag an error condition.

## 20.2.2 Content-based Routing–Known Issue

When creating a content based routing rule and then exiting iStudio, upon re-starting iStudio and editing the content based routing rule, iStudio reports the following error:

```
Unable to load CBR for <event>
```

In addition, the following error is also logged in the `iStudioLog.txt` file:

```
::: org.omg.CORBA.UNKNOWN
```

The workaround for this known issue is to create a subscribing application in iStudio before creating a content based routing event involving the application.

## 20.2.3 OracleAS InterConnect Adapter for MQ Series will not Start

The OracleAS InterConnect Adapter for MQ Series (MQ Series adapter) is based on the IBM MA88 support pac. IBM released version 5.2.1 of its MA88 support package which contains the following:

- MQSeries classes for Java version V5.2.1
- MQSeries classes for Java Message Service (JMS) V5.2.1

The MQ Series adapter was developed based on version 5.2.0 of these classes.



The following instructions apply only if you have installed the 5.2.1 version of the MA88 support package, or if it came on the installation CD from IBM. You can verify your version in the `readme.txt` file in the `/opt/mqm/java/doc/en_US/` directory.

Version 5.2.1 introduces a dependency on the J2EE Connector Architecture exception `javax.resource.ResourceException`, which is defined in the MQ Series JAR `connector.jar` file.

Consequently, the MQ Series adapter configuration must be modified to include this JAR file in the classpath, to avoid receiving the following error while starting the MQ Series adapter:

```
java.lang.NoClassDefFoundError: javax/resource/ResourceException at
com.ibm.mq.MQEnvironment.<clinit>(MQEnvironment.java)
```

The `connector.jar` file can normally be found in the `/opt/mqm/java/libC:\Program Files\IBM\MQSeries\Java\lib` directory.

As a workaround, the last line of the start script must be changed to the following:

```
java -server ... -classpath /opt/mqm/java/lib/connector.jar:<previous>
```

Finally, the `java/lib` directory should be added to the OS dynamic link library path. Modify the MQ Series adapter start script as follows:

```
if [ -z "$LD_LIBRARY_PATH" ]
then
LD_LIBRARY_PATH=/opt/mqm/java/lib:/u01/app/oracle/product/ias902/lib
export LD_LIBRARY_PATH;
else
LD_LIBRARY_PATH=/opt/mqm/java/lib:/u01/app/oracle/product/ias902/lib:${LD_
LIBRARY_PATH}
export LD_LIBRARY_PATH;
fi
```

## 20.2.4 Using the HTTP Adapter to Send Messages Via SSL

To use the OracleAS InterConnect Adapter for HTTP (HTTP adapter) to send messages via SSL, modify the `service_classpath` parameter in the `adapter.ini` file. Make sure the `http_client.jar` file in the `<ORACLE_HOME>/j2ee/home/ib/directory` is in the `service_classpath`.

---

---

**Note:** `<ORACLE_HOME>` is the actual path of the Oracle Home.

---

---

## 20.2.5 The HTTP Adapter Must Have the J2EE/Webcache Component Installed

If the HTTP adapter is installed on a spoke machine that does not have the J2EE/Webcache component, the `http_client.jar` file needed by the HTTP adapter is missing.

To workaroud this issue, install the J2EE/Webcache component in the HTTP adapter's Oracle Home if it is not an OracleAS InterConnect Oracle Home.

## 20.3 Documentation Errata

This section describes known errors in the documentation. It includes the following topic:

- [Section 20.3.1, "OracleAS InterConnect Adapter Documentation"](#)

### 20.3.1 OracleAS InterConnect Adapter Documentation

Several OracleAS InterConnect Adapter Installation and User's Guides contain a chapter which address frequently asked questions. In this chapter, the issue of installing multiple OracleAS InterConnect Adapter components in the same Oracle Home is addressed incorrectly. Please refer to *Oracle Application Server InterConnect Installation Guide* for the correct information.

# Part VIII

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## Security and Identity Management Issues

This part describes issues associated with Security and Identity Management. It contains the following chapters:

- [Chapter 21, "Oracle Internet Directory"](#)
- [Chapter 22, "Oracle Delegated Administration Services"](#)
- [Chapter 23, "Oracle Directory Integration and Provisioning"](#)
- [Chapter 24, "Oracle Application Server Single Sign-On"](#)
- [Chapter 25, "OracleAS Certificate Authority"](#)
- [Chapter 26, "Oracle Enterprise Manager"](#)



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## Oracle Internet Directory

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

- [Section 21.1, "General Issues and Workarounds"](#)
- [Section 21.2, "Configuration Issues and Workarounds"](#)
- [Section 21.3, "Administration Issues and Workarounds"](#)
- [Section 21.4, "Documentation Errata"](#)

## 21.1 General Issues and Workarounds

This section describes general issues and their workarounds for Oracle Internet Directory. It includes the following topics:

- [Section 21.1.1, "OIDMON Behavior when the Oracle Internet Directory Database Shuts Down or Fails"](#)
- [Section 21.1.2, "Oracle Directory Server Instances Can Listen on Both SSL-Enabled and Non-SSL-Enabled LDAP Ports"](#)
- [Section 21.1.3, "Reverting from Incomplete Bulkload Operations"](#)
- [Section 21.1.4, "Plug-in Features not Supported in a Directory Server Running Against Oracle9i Database Server Release 9.2"](#)
- [Section 21.1.5, "Modifications on ROOT DSE Fail if ref Attribute Has a Value"](#)
- [Section 21.1.6, "Rolling Back Interrupted Bulkload Operations"](#)

### 21.1.1 OIDMON Behavior when the Oracle Internet Directory Database Shuts Down or Fails

OID Monitor needs information in the database to handle shutdown gracefully.

In a high availability scenario, OID Monitor does not automatically shut down if the database fails. Instead, OID Monitor tries to connect to the database repeatedly so that, when the database starts, OID Monitor can restart the Oracle Internet Directory server instances.

Consequently, OID Monitor cannot be shutdown gracefully if the database is not available. The user must force kill the OID Monitor process by using the appropriate mechanism on the given operating system.

If the database is down for a long time, then OID Monitor cannot restart the other Oracle Internet Directory server instance when the database is restarted. The user must force kill the OID Monitor process and restart it after the database is restarted.

### 21.1.2 Oracle Directory Server Instances Can Listen on Both SSL-Enabled and Non-SSL-Enabled LDAP Ports

Two separate instances are not required as in previous versions of Oracle Internet Directory.

### 21.1.3 Reverting from Incomplete Bulkload Operations

If loading fails when using `bulkload.sh` in bulk mode, then you can restore the directory to its original shape by using the following option:

```
bulkload.sh -connect connect_string -recover
```

However, when you do this, none of the indexes are created. To recreate indexes, use:

```
bulkload.sh -connect connect_string -index.
```

### 21.1.4 Plug-in Features not Supported in a Directory Server Running Against Oracle9i Database Server Release 9.2

In Oracle Application Server 10g (9.0.4), the following plug-in features are not supported in the directory server running against Oracle9i Database Server Release 9.2:

- Windows NT Domain external authentication plug-in.
- The `simple_bind_s()` function of `LDAP_PLUGIN` package provided as the `OID PL/SQL PLUGIN API` for connecting back to the directory server as part of plug-in definitions

### 21.1.5 Modifications on ROOT DSE Fail if ref Attribute Has a Value

If the `ref` (referral) attribute is set to a non-empty value in the root DSE entry, then any modification to the root DSE entry is attempted on the directory server referred to in this attribute. To make modifications to the root DSE entry on the original server where the `ref` attribute has a non-empty value, the `managedDSA` control should be passed. To pass the control, use the `-M` option of `ldapmodify`.

### 21.1.6 Rolling Back Interrupted Bulkload Operations

If `bulkload.sh` operations are interrupted, then the directory administrator can restore the directory to its original state by using the new `-recover` flag. If the directory is non-empty, then any indexes must be re-created after a rollback. To re-create indexes, use:

```
bulkload.sh ... -index
```

## 21.2 Configuration Issues and Workarounds

This section describes configuration issues and their workarounds for Oracle Internet Directory. It includes the following topics:

- [Section 21.2.1, "Upgrading from Oracle9iAS Release 9.0.2"](#)
- [Section 21.2.2, "Need to Set ACL Policy on Groups Container after Upgrade from Release 9.0.2"](#)
- [Section 21.2.3, "Oracle Internet Directory Generates Duplicate authpassword Verifiers"](#)
- [Section 21.2.4, "During Installation, Do not Choose a DN Immediately under the Root DSE as the Default Identity Management Realm DN"](#)
- [Section 21.2.5, "Changing Naming Contexts When Relied on for Partial Replication Is not Supported"](#)
- [Section 21.2.6, "Deploying Oracle Application Server Single Sign-On Against Fan-out Replicas"](#)
- [Section 21.2.7, "Refer to the File portlist.ini after Installing Oracle Internet Directory for LDAP Port Assignment"](#)
- [Section 21.2.8, "Use the Oracle Internet Directory Self-Service Console to Change Passwords When Required by Password Policy"](#)
- [Section 21.2.9, "Required Attributes Cannot Be Excluded from Partial Replication"](#)
- [Section 21.2.10, "Completely Unspecified Access Rights Result in "Access Granted"'"](#)

### 21.2.1 Upgrading from Oracle9iAS Release 9.0.2

Oracle9i Application Server Release 9.0.2 included the Oracle directory server along with infrastructure components Oracle Delegated Administration Services, Oracle Directory Integration Platform, and Oracle9iAS Single Sign-On. These components are certified to work with an upgraded or newly-installed Oracle Application Server 10g release of Oracle Internet Directory.

If you are upgrading to Oracle Application Server 10g in a distributed environment where some of these Oracle9iAS components have been installed on dedicated hardware nodes, then you can minimize service disruption by following these steps:

1. Upgrade the Oracle Internet Directory server node to Oracle10g.



2. Upgrade the other infrastructure components to Oracle10g.
3. Upgrade the middle-tier components to Oracle10g.

For those who cannot upgrade the infrastructure first, Oracle Application Server 10g middle-tier components are certified to run against the 9.0.2 infrastructure. However, Oracle does not support running Oracle Application Server 10g infrastructure components—namely, Oracle Delegated Administration Services, Oracle Directory Integration and Provisioning, and OracleAS Single Sign-On—against the 9.0.2 Oracle directory server.

## 21.2.2 Need to Set ACL Policy on Groups Container after Upgrade from Release 9.0.2

When upgrading Oracle Internet Directory from Release 9.0.2 to Release 9.0.4, the following ACL policy needs to be set on the groups container in the realm. The ACL policy should allow members of the group `cn=Common Group Attributes,cn=groups,Oracle_Context_DN` browse, search, and read access for private and public groups—that is, for groups where `orclisvisible` is either not set or is set to `TRUE` or `FALSE`. This ACL is described in the *Oracle Internet Directory Administrator's Guide*, in Chapter 17, in the section "Default Privileges for Reading Common Group Attributes".

The "Common Group Attributes" group is used by OracleAS Portal to query private and public groups. The ACI must to be added on the groups container. Change the *Realm DN* to the DN of the Realm and the *DN of groups container in the realm* to the appropriate group search base.

```
dn: DN of groups container in the realm
changetype: modify
add: orclaci
orclaci: access to entry filter=(!(orclisvisible=false)) by group="cn=Common
Group Attributes,cn=groups, cn=Oracle Context, Realm DN" (browse)
orclaci: access to attr=(*) filter=(!(orclisvisible=false)) by group="cn=Common
Group Attributes,cn=groups,cn=Oracle Context, Realm DN" (search, read)
orclaci: access to entry filter=(orclisvisible=false) by group="cn=Common Group
Attributes,cn=groups,cn=Oracle Context, Realm DN" (browse)
orclaci: access to attr=(*) filter=(orclisvisible=false) by group="cn=Common
Group Attributes,cn=groups, cn=Oracle Context, Realm DN" (search, read)
```

### 21.2.3 Oracle Internet Directory Generates Duplicate authpassword Verifiers

If the `commonUserSearchBase` attribute value in the Product Common entry of the Root Oracle Context overlaps with the values for the same attribute in the Realm Oracle Context, then duplicate authpassword verifiers are generated for users in those realms. Hence, the `commonUserSearchBase` attribute in the Common Product entry (`cn=common,cn=products,cn=OracleContext`) should not be populated.

### 21.2.4 During Installation, Do not Choose a DN Immediately under the Root DSE as the Default Identity Management Realm DN

During Oracle Internet Directory installation, the Oracle Installer suggests a default value for the default identity management realm. You can choose either this default value or a customized one. However, choosing a DN immediately under the root—that is, a one-level DN—causes problems in the OracleAS Single Sign-On configuration.

### 21.2.5 Changing Naming Contexts When Relied on for Partial Replication Is not Supported

If you are configuring partial replication from specific naming contexts in an Oracle Internet Directory node to fan-out replication nodes, then do not change the names of these naming context entries in the source node.

### 21.2.6 Deploying Oracle Application Server Single Sign-On Against Fan-out Replicas

After configuring partial replication from specific naming contexts in an Oracle Internet Directory node to other fan-out replication nodes, you can configure OracleAS Single Sign-On independently against any or all of these nodes. To deploy OracleAS Single Sign-On against a replication node, follow these steps:

1. Locate the database registration entry of the database on the replica node.

```
$ORACLE_HOME/bin/ldapsearch -h replica host -p port -D cn=orcladmin  
-w super user password -b "cn=oraclecontext" -s one  
"objectclass=orclbdbserver" dn
```

This returns a list of DNs of all the databases registered in Oracle Internet Directory in the form of `cn=short database name,cn=oraclecontext`. Find the one that corresponds to the underlying database of the replica node.

2. Identify the ReplicaID of the replica node. Get the ReplicaID of the replica node from the root DSE entry at the following replica node:

```
$ORACLE_HOME/bin/ldapsearch -h replica host -p port -D cn=orcladmin
-w super user password -b "" -s base "objectclass=*" orclreplicaid
```

3. Modify the replication configuration DN. Create a file `repid.ldif` as follows:

```
dn: orclreplicaid=ReplicaID from Step 2, cn=replication configuration
changetype: modify
replace: seeAlso
seeAlso: DB registration DN from Step 1
```

4. Use `ldapmodify` to upload the LDIF file `repid.ldif` to the replica host:

```
$ORACLE_HOME/bin/ldapmodify -h replica host -p port -D cn=orcladmin
-w super user password -v -f repid.ldif
```

## 21.2.7 Refer to the File `portlist.ini` after Installing Oracle Internet Directory for LDAP Port Assignment

During installation of Oracle Application Server or third-party products, you are prompted for an Oracle Internet Directory or LDAP port. To find the specific port number assigned to Oracle Internet Directory at installation, see the file `$ORACLE_HOME/install/portlist.ini`.

The default port for enabling LDAP at Oracle Internet Directory installation time is 389. The Oracle Installer always tries that port as its first choice. However, on many Unix machines, `/etc/services` includes a line for LDAP reserving port 389. With that line there, the Installer opts instead for a port number between 3060 to 3129, inclusive.

To confirm the port at which Oracle Internet Directory is running, simply run the `ldapbind` command-line tool, supplying either the host name and port number specified in the `portlist.ini` file or an alternative port specified during the Oracle Internet Directory installation.

## 21.2.8 Use the Oracle Internet Directory Self-Service Console to Change Passwords When Required by Password Policy

Oracle Internet Directory 10g (9.0.4) enables prompting of users to change their passwords after initial login. Users must change their passwords by using the Oracle Internet Directory Self-Service Console Password Change screen. Using other mechanisms may not satisfy the password change requirement, and users may be prompted to change their password the next time they log in as well.

## 21.2.9 Required Attributes Cannot Be Excluded from Partial Replication

Partial replication enables you to exclude certain attributes from replication. You do this by adding those attributes to the `excludedAttributes` attribute of the `cn=NamingContext` entry. However, if you exclude required attributes, then replication fails.

Attributes that cannot be excluded are specified in the *Oracle Internet Directory Administrator's Guide*. These can include attributes not considered mandatory for user-defined object class definitions. For example, even if `cn` is an optional attribute for one or more user-defined object class definitions, it still cannot be excluded from partial replication.

## 21.2.10 Completely Unspecified Access Rights Result in "Access Granted"

Adding access control information for each type of directory access to the root DSE of each DIT ensures that attempts to access directory data resolve appropriately. Appropriate resolution involves either granting or denying access to the requested resource. Without such top-level policies, attempts to access resources stored in Oracle Internet Directory can result in an "Unresolved" ACI determination as documented in Chapter 14 of the *Oracle Internet Directory Administrator's Guide*. When an ACI determination is "Unresolved", Oracle Internet Directory grants access to the requested resource.

## 21.3 Administration Issues and Workarounds

This section describes administration issues and their workarounds for Oracle Internet Directory. It includes the following topics:

- [Section 21.3.1, "Partial Replication Cannot Handle ldapmoddn Changing the Root Entry of a Naming Context"](#)
- [Section 21.3.2, "Unlocking Privileged User Accounts"](#)
- [Section 21.3.3, "Restarting Directory Replication and Directory Integration and Provisioning Server Instances in Real Application Cluster or Rack-Mounted Mode"](#)
- [Section 21.3.4, "Oracle Internet Directory Servers Can Be Started Only by the Operating System User Who Installed the Oracle Internet Directory Software"](#)
- [Section 21.3.5, "ODS Database User Password Can Be Changed Only by Using the oidpasswd Tool"](#)
- [Section 21.3.6, "Application Server Control Does Not Display Port Status Information if Oracle Directory Server is Running in SSL Mode Only"](#)

### 21.3.1 Partial Replication Cannot Handle ldapmoddn Changing the Root Entry of a Naming Context

Partial replication does not support changing the root entry of a naming context by using ldapmoddn.

### 21.3.2 Unlocking Privileged User Accounts

Oracle Identity Management has two distinct types of privileged user. Both privileged user accounts can be locked if certain password policies are activated.

The first type of privileged user, the super user with the DN `cn=orcladmin`, is represented as a special user entry found within the default identity management realm. It enables directory administrators to make any modifications to the DIT and any changes to the configuration of Oracle Internet Directory servers. If the super user (`orcladmin`) account is locked—for example, as a result of too many attempts to bind with an incorrect password—then an administrator with DBA privileges to the Oracle Internet Directory repository can unlock it by using the `oidpasswd` tool. To unlock the `orcladmin` account execute the command:

```
oidpasswd unlock_su_acct=TRUE
```

The second privileged user, a realm-specific privileged user, governs capabilities such as creation and deletion of users and groups within a realm and all the functionality related to Oracle Delegated Administration Services. This account is represented by an entry with the DN `cn=orcladmin,cn=users,realm DN`. Note that, in contrast to the single super user account, each realm has its own realm-specific privileged user. To unlock the realm-specific privileged account, the administrator modifies the account password by using Oracle Directory Manager.

### **21.3.3 Restarting Directory Replication and Directory Integration and Provisioning Server Instances in Real Application Cluster or Rack-Mounted Mode**

If the primary node running either the directory replication server (`oidrepld`), or the directory integration and provisioning server (`odisrv`), or both, fails, then the OID Monitor on the secondary node starts these processes on the secondary node after five minutes. However, when the primary node is restarted, these servers are not automatically restarted on the primary node.

Normal shutdown is not treated as a failover. If all the processes are stopped normally, then the OID Monitor running on the secondary node does *not* start these processes on the secondary node after five minutes. Moreover, as in the case of a failure, when the primary node is restarted, these servers are not automatically restarted on the primary node.

### **21.3.4 Oracle Internet Directory Servers Can Be Started Only by the Operating System User Who Installed the Oracle Internet Directory Software**

The Oracle Internet Directory servers—that is, the directory server, the directory replication server, and the directory integration and provisioning server daemons—can be started only by the operating system user who installed the Oracle Internet Directory software.

### **21.3.5 ODS Database User Password Can Be Changed Only by Using the `oidpasswd` Tool**

To change the ODS database user password, you must use the `oidpasswd` tool. If you change the ODS database user password by any other means, then Oracle Internet Directory instances fail to start.

### 21.3.6 Application Server Control Does Not Display Port Status Information if Oracle Directory Server is Running in SSL Mode Only

If one or more Oracle directory servers are running only in SSL mode, then the Application Server Control does not display the port status information for those servers.

## 21.4 Documentation Errata

This section describes errors in the documentation for Oracle Internet Directory. It includes this topic:

- [Section 21.4.1, "Parameters in init\\$ORACLE\\_SID.ora Are not Loaded Automatically at Database Startup"](#)

### 21.4.1 Parameters in init\$ORACLE\_SID.ora Are not Loaded Automatically at Database Startup

At startup, the database reads database initialization parameters from `spfile$ORACLE_SID.ora` rather than from `init$ORACLE_SID.ora`—unless the user explicitly specifies the latter when starting the database. Thus, wherever the *Oracle Internet Directory Administrator's Guide* specifies database parameter changes, the subsequent database restart must specify explicitly the `init$ORACLE_SID.ora` file.





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# Oracle Delegated Administration Services

This chapter describes issues for both the Oracle Delegated Administration Services and the Oracle Internet Directory Self-Service Console. It includes the following topics:

- [Section 22.1, "General Issues and Workarounds"](#)
- [Section 22.2, "Configuration Issues and Workarounds"](#)
- [Section 22.3, "Administration Issues and Workarounds"](#)
- [Section 22.4, "Documentation Errata"](#)

## 22.1 General Issues and Workarounds

This section describes general issues and their workarounds for Oracle Delegated Administration Services. It includes the following topics:

- [Section 22.1.1, "Use the Oracle Internet Directory Self-Service Console to Change Passwords When Required by Password Policy"](#)
- [Section 22.1.2, "Realm Values Cannot Be Edited with Oracle Delegated Administration Services Configuration Privileges in Releases 9.0.2 and 9.0.4"](#)
- [Section 22.1.3, "Roles with No Members Are not Displayed in Role Assignment Section in Create/edit User"](#)
- [Section 22.1.4, "Group Owner Unable to Edit Groups Created in the Same Session"](#)

### 22.1.1 Use the Oracle Internet Directory Self-Service Console to Change Passwords When Required by Password Policy

Oracle Internet Directory 10g (9.0.4) enables prompting of users to change their passwords after initial login. Users must change their passwords by using the Oracle Internet Directory Self-Service Console Password Change screen. Using other mechanisms may not satisfy the password change requirement, and users may be prompted to change their password the next time they log in as well.

### 22.1.2 Realm Values Cannot Be Edited with Oracle Delegated Administration Services Configuration Privileges in Releases 9.0.2 and 9.0.4

In Releases 9.0.2 and 9.0.4 upgrade, only the orcladmin user can edit realm values. Other users, even those with Oracle Delegated Administration Services configuration privileges cannot edit them. This is because the latter do not have sufficient privileges to read the User Search Base, User Creation Base, Group Search Base, and Group Creation Base. The workaround is to modify the ACLs on these containers and enable anonymous browse access.

### 22.1.3 Roles with No Members Are not Displayed in Role Assignment Section in Create/edit User

Workaround: A role should contain at least one unique member, so that it would be displayed in the Role Assignment section in Create User page and the Edit User page.

To add a unique member to a role, the syntax of the LDIF file is:

```
dn: DN_of_role_entry
changetype: modify
add:uniquemember
uniquemember:DN of member entry
```

**Issue this command to modify the file:**

```
ldapmodify -p oid_port -h oid_host -D "cn=orcladmin" -w admin_password -v -f
file_name.ldif
```

### 22.1.4 Group Owner Unable to Edit Groups Created in the Same Session

After creating a group, the owner of the group cannot edit the group in the same session. Workaround: Logout, close the browser, then login again. [2944346]

## 22.2 Configuration Issues and Workarounds

This section describes configuration issues and their workarounds for Oracle Delegated Administration Services. It includes the following topics:

- [Section 22.2.1, "Deploying Oracle Delegated Administration Services on a Separate Host"](#)
- [Section 22.2.2, "Default Realm Administrator Lacks Necessary Configuration Privileges"](#)
- [Section 22.2.3, "Configuring Oracle Delegated Administration Services to Run Against an Oracle Internet Directory Installation Upgraded from 9.2 to 9.0.4"](#)

### 22.2.1 Deploying Oracle Delegated Administration Services on a Separate Host

To configure Oracle Delegated Administration Services in a separate Oracle Home, you perform a standalone installation of it. To do this, you select the Identity Management installation type, and, on the Configuration Options screen, select **Delegated Administration Services**.

**See Also:** *Oracle Application Server 10g Installation Guide* for Release 10g (9.0.4)

### 22.2.2 Default Realm Administrator Lacks Necessary Configuration Privileges

When logging in to Oracle Internet Directory Self-Service Console, the administrator of the default realm does not have the necessary privileges to create users or change DAS configuration. The workaround is:

1. In Oracle Directory Manager, navigate to: `cn=userpassword, cn=attributes, cn=User Configuration, cn=Attribute Configuration, cn=DAS, cn=Products, cn=OracleContext, DN of the realm`.
2. Select the above entry and change the value of `orcldasviewable` to 0.
3. Choose **Apply**.
4. Restart the Oracle Internet Directory Self-Service Console.

### 22.2.3 Configuring Oracle Delegated Administration Services to Run Against an Oracle Internet Directory Installation Upgraded from 9.2 to 9.0.4

Follow these steps to make Oracle Delegated Administration Services 10g (9.0.4) work against an installation of Oracle Internet Directory that has been upgraded from Release 9.2 to Release 9.0.4.

1. Use `ldapmodify` to run the `schema_delta.sbs` file located in `$ORACLE_HOME/ldap/das`. When you do this, replace all the occurrences of `%s_OracleContextDN%` in `schema_delta.sbs` with the value `cn=oraclecontext, realm DN`.

The syntax for `ldapmodify` is:

```
ldapmodify -p port number -h host -D "cn=orcladmin" -w orcladmin password  
-f schema_delta.sbs
```

2. Modify the ACL on the container `cn=users, realm DN` and `cn=groups, realm DN` to allow anonymous browse access.

## 22.3 Administration Issues and Workarounds

This section describes administration issues and their workarounds for Oracle Delegated Administration Services. It includes the following topics:

- [Section 22.3.1, "Unified Messaging Voicemail PIN Field Mislabeled in Oracle Internet Directory Self-Service Console"](#)
- [Section 22.3.2, "Unlocking Privileged User Accounts"](#)
- [Section 22.3.3, "Running Oracle Delegated Administration Services in One DNS Domain and OracleAS Portal in Another"](#)

### 22.3.1 Unified Messaging Voicemail PIN Field Mislabeled in Oracle Internet Directory Self-Service Console

When Oracle Collaboration Suite users use the Self-Service Console to change their passwords, the field name associated with their voicemail PIN number is incorrectly displayed as 'EmailServerContainer'. To solve this problem:

1. Use Oracle Directory Manager to navigate to the entry of the following DN:  
`cn=orclpwdverifierconfig,cn=EMailServerContainer,  
cn=Products,cn=OracleContext,cn=subscriber realm`
2. Select the entry.
3. Select All for **View Properties**.
4. In the `displayname` text box, enter `Voicemail PIN`.
5. Choose **Apply**.

## 22.3.2 Unlocking Privileged User Accounts

Oracle Identity Management has two distinct types of privileged user. Both privileged user accounts can be locked if certain password policies are activated.

The first type of privileged user, the super user with the DN `cn=orcladmin`, is represented as a special user entry found within the default identity management realm. It enables directory administrators to make any modifications to the DIT and any changes to the configuration of Oracle Internet Directory servers. If the super user (`orcladmin`) account is locked—for example, as a result of too many attempts to bind with an incorrect password—then an administrator with DBA privileges to the Oracle Internet Directory repository can unlock it by using the `oidpasswd` tool. To unlock the `orcladmin` account execute the command:

```
oidpasswd unlock_su_acct=TRUE
```

The second privileged user, a realm-specific privileged user, governs capabilities such as creation and deletion of users and groups within a realm and all the functionality related to Oracle Delegated Administration Services. This account is represented by an entry with the DN `cn=orcladmin,cn=users,realm DN`. Note that, in contrast to the single super user account, each realm has its own realm-specific privileged user. To unlock the realm-specific privileged account, the administrator modifies the realm-specific privileged users account password by using Oracle Directory Manager.

## 22.3.3 Running Oracle Delegated Administration Services in One DNS Domain and OracleAS Portal in Another

If you are running Oracle Delegated Administration Services in one domain, and OracleAS Portal in another, then, in the *Oracle Application Server Portal Configuration Guide*, follow the instructions in Section 6.1.6.2, "Relationship Between OracleAS Portal and Oracle Internet Directory".

## 22.4 Documentation Errata

This section describes errors in the documentation for Oracle Delegated Administration Services. It includes the following topics:

- [Section 22.4.1, "Online Help Incorrectly States How to Edit Identity Management Realms"](#)
- [Section 22.4.2, "Online Help for "Configure Roles" Screen Does Not Display"](#)

### 22.4.1 Online Help Incorrectly States How to Edit Identity Management Realms

The online help for the Oracle Internet Directory Self-Service Console incorrectly states that, after searching for a particular realm, you can modify it by selecting it from the search results page and choosing **Proceed**. However, the search results page enables you only to view, and not to modify, the selected realm. To modify a realm configuration, select the **Configuration** tab, enter your changes, then choose **Submit**. For instructions on viewing and modifying configuration settings for a realm, see the Chapter 31, "Oracle Internet Directory Self-Service Console" in the *Oracle Internet Directory Administrator's Guide*.

### 22.4.2 Online Help for "Configure Roles" Screen Does Not Display

In the Oracle Internet Directory Self-Service Console, the Configure Roles page (Step 5 of the "Configure User Entry" task) has help icons at the top and bottom of the page that generate the error message "The requested topic could not be found."



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## Oracle Directory Integration and Provisioning

This chapter describes the issues associated with Oracle Directory Integration and Provisioning. It includes the following topics:

- [Section 23.1, "Configuration Issues and Workarounds"](#)
- [Section 23.2, "Administration Issues and Workarounds"](#)
- [Section 23.3, "Documentation Errata"](#)

## 23.1 Configuration Issues and Workarounds

This section describes configuration issues and their workarounds for Oracle Directory Integration and Provisioning. It includes the following topics:

- [Section 23.1.1, "Specify Encoding in the Property File Before Using the Directory Integration and Provisioning Assistant"](#)
- [Section 23.1.2, "When a Directory Integration Profile Is Created by Using Oracle Directory Manager, ACIs Are not Set Up Correctly"](#)
- [Section 23.1.3, "Align the Location of the Default Identity Management Realm with the Third-Party Directory Domain"](#)
- [Section 23.1.4, "Directory Integration and Provisioning Server Status Post-Installation"](#)
- [Section 23.1.5, "Two Oracle Internet Directory Plug-in Features Are not Supported after Upgrade from Oracle Internet Directory Release 9.2"](#)

### 23.1.1 Specify Encoding in the Property File Before Using the Directory Integration and Provisioning Assistant

You must specify the encoding used by an LDIF if the file:

- Is generated by using a utility of a third-party directory
- Contains NLS data
- Is processed on a different platform

This is because, by default, the Directory Integration and Provisioning Assistant assumes that the file is processed on the system on which it was generated.

To specify encoding, use the `odip.bootstrap.srcenc` property of the configuration property file used for bootstrapping. For more details, see the Directory Integration and Provisioning Assistant documentation in Chapter 37 of the *Oracle Internet Directory Administrator's Guide*.

## 23.1.2 When a Directory Integration Profile Is Created by Using Oracle Directory Manager, ACIs Are not Set Up Correctly

When a profile is created using the Create Like functionality in Oracle Directory Manager, the ACIs are not copied properly. The workaround is as follows:

1. Create LDIF file `profileacl.ldif`:

```
dn: orclODIPAgentName=<Profile Name>,cn=subscriber profile,cn=changelog
subscriber, cn=oracle internet directory
changetype: modify
replace: orclaci
orclaci: access to attr = (*) by group="cn=odisgroup,cn=odi,cn=oracle
internet directory" (read,write,search,compare)
orclaci: access to entry by group="cn=odisgroup,cn=odi,cn=oracle internet
directory" (browse,proxy)
```

Upload the file:

```
$ORACLE_HOME/bin/ldapmodify -h <OID host> -p <OID port> -D <OID superuser>
-w <OID superuser password> -v -f profileacl.ldif
```

## 23.1.3 Align the Location of the Default Identity Management Realm with the Third-Party Directory Domain

If you are installing the Oracle Identity Management infrastructure with the aim of eventually synchronizing with a third-party directory, then align the location of the default identity management realm with the third-party domain. For example, if your third-party domain is `sales.acme.com`, then locate the root of your Oracle identity management realm at `dc=sales,dc=acme,dc=com`.

If you have already installed an infrastructure, and the realm you specified is not aligned with that of the third-party directory, then you have two options depending on whether you are already using that realm:

- If you have not installed any other middle tiers against this infrastructure, then re-install the infrastructure and choose the correct default realm location. To make sure that the user and group objects are stored correctly in the DIT, see "Customizing Identity Management Realms Based on Deployment Requirements" located at <http://otn.oracle.com>.
- If you are already using the non-aligned realm, then follow the instructions in "Customizing Identity Management Realms Based on Deployment Requirements" located at <http://otn.oracle.com>.

**See Also:** Part VII of the *Oracle Internet Directory Administrator's Guide* for fuller instructions on integrating Oracle Internet Directory and third-party directories

### 23.1.4 Directory Integration and Provisioning Server Status Post-Installation

Only after Oracle Internet Directory is installed along with the infrastructure does the OID configuration Assistant launch the directory integration and provisioning server. In standalone installations of Oracle Directory Integration and Provisioning, the OID Configuration Assistant simply registers the server, and does not launch it.

The restriction behind all of this is that two instances of the directory integration and provisioning server cannot have either the same instance number or the same configuration set number.

The first instance of the directory integration and provisioning server always starts by using instance number 1 and configuration set number 0. If another instance of the server is then launched from another installation, then it, too, tries to use instance number 1 and configuration set number 0. As a result, the second instance errors out because that instance number and configuration set number are already in use.

However, because the directory integration and provisioning server is registered, you can manually launch an instance of it. You do this by using the script `$ORACLE_HOME/bin/odisrv`. When you do this, be sure that the server instance does not have the same instance number or configuration set number as any other currently running instance.

### 23.1.5 Two Oracle Internet Directory Plug-in Features Are not Supported after Upgrade from Oracle Internet Directory Release 9.2

In Oracle Application Server 10g (9.0.4), the following plug-in features are not supported in the directory server running against Oracle9i Database Server Release 9.2:

- Windows NT Domain external authentication plug-in.
- The `simple_bind_s()` function of LDAP\_PLUGIN package provided as the OID PL/SQL PLUGIN API for connecting back to the directory server as part of plug-in definitions.

## 23.2 Administration Issues and Workarounds

This section describes administration issues and their workarounds for Oracle Directory Integration and Provisioning. It includes the following topics:

- [Section 23.2.1, "Restarting Directory Replication and Directory Integration and Provisioning Server Instances in Real Application Cluster or Rack-Mounted Mode"](#)
- [Section 23.2.2, "Using Real Application Clusters and the Directory Integration and Provisioning Service"](#)
- [Section 23.2.3, "Required User Schema in Windows-Synchronized Realms"](#)
- [Section 23.2.4, "Synchronizing Selected Types of Objects from Active Directory to Oracle Internet Directory"](#)
- [Section 23.2.5, "Password Synchronization from Oracle Internet Directory to Active Directory"](#)
- [Section 23.2.6, "Group Names with Special Characters Cannot Be Synchronized with Microsoft Active Directory"](#)

### 23.2.1 Restarting Directory Replication and Directory Integration and Provisioning Server Instances in Real Application Cluster or Rack-Mounted Mode

If the primary node that is running either the directory replication server (oidrepld), or the directory integration and provisioning server (odisrv), or both, fails, then, after five minutes, the OID Monitor on the secondary node starts these processes on the secondary node. However, when the primary node is restarted, these servers are not automatically restarted on the primary node.

Normal shutdown is not treated as a failover. If all the processes are stopped normally, then the OID Monitor running on the secondary node does *not* start these processes on the secondary node after five minutes. Moreover, as in the case of a failure, when the primary node is restarted, these servers are not automatically restarted on the primary node.

## 23.2.2 Using Real Application Clusters and the Directory Integration and Provisioning Service

Suppose that you have the following scenario:

- Oracle Internet Directory is configured in Real Application Clusters (RAC) mode.
- The directory integration and provisioning server is executing as part of an Oracle Directory Integration and Provisioning-only installation on another node.
- The Oracle Internet Directory node against which the directory integration and provisioning server is executing fails.

In this scenario, the directory integration and provisioning server cannot transparently switch execution to one of the other RAC-enabled Oracle Internet Directory nodes. As a result, the directory integration and provisioning server also aborts, and must be started manually by using the `$ORACLE_HOME/bin/odisrv` script.

## 23.2.3 Required User Schema in Windows-Synchronized Realms

In Microsoft Windows-connected deployments, users in one identity management realm may need to be able to authenticate locally—that is, to Oracle Internet Directory—while those in others realms may need to be authenticated by Microsoft Active Directory. The external authentication plug-in must be configured only for the identity management realms whose users authenticate to Microsoft Active Directory.

All users within such realms need to include the attributes defined in the object class `orclADUser`, which contains the required attributes for Windows authentication. All users created in Microsoft Active Directory and synchronized into Oracle Internet Directory have these attributes by default, because Microsoft Active Directory creates them by default. Conversely, users provisioned within such realms by Oracle Internet Directory and synchronized into Microsoft Active Directory do not by default inherit from the correct schema unless properly configured.

This can be accomplished in multiple ways:

- Oracle Delegated Administration Services can be configured to ensure that newly-provisioned Oracle Internet Directory user entries automatically inherit the attributes from the `OrclADUser` object class. Some of these are mandatory, such as `orclSAMAccountName`, and must be specified when the user is created by using the Oracle Internet Directory Self-Service Console.
- Users can be synchronized from a third-party directory by using a mapping configuration profile that adds the additional attributes to the entries when synchronizing them into Oracle Internet Directory.
- Directory administrators, by using Oracle Directory Manager, can manually ensure that all `orclADUser` attributes exist for each user before configuring the Active Directory connector for the identity management realm in question.
- If an individual user's credentials are stored within Oracle Internet Directory and not authenticated by Active Directory, then this user's nickname attribute value can be added to the `exceptionEntry` property of the external authentication plug-in entry. This would be needed, for example, when all users in Oracle Internet Directory are configured to authenticate externally. In this case you must specify local account names such as `cn=orcladmin` as `exceptionEntry` values because these accounts do not exist in Active Directory.

By default, none of the preseeded users in the realm have the `orclSAMAccountName` attribute populated. You must, therefore, populate this attribute to `orcladmin` under the realm.

## 23.2.4 Synchronizing Selected Types of Objects from Active Directory to Oracle Internet Directory

If you are synchronizing user entries from Microsoft Active Directory to Oracle Internet Directory, and you need to synchronize only certain types of objects, then be sure to populate the connected directory search filter appropriately. For example, if you are synchronizing changes to user and group information, but not changes to computer information, then the value of this attribute must be as follows:

```
SEARCHFILTER=(|(objectclass=group)(!(objectclass=user)(!(objectclass=computer)))
```

Use Oracle Directory Manager or the Directory Integration and Provisioning Assistant to update this attribute.

### 23.2.5 Password Synchronization from Oracle Internet Directory to Active Directory

The Oracle directory server enables password modifications in both SSL and non-SSL mode, but Microsoft Active Directory supports them in SSL mode only. Thus, synchronization of passwords from Oracle Internet Directory to Microsoft Active Directory can happen only if the following are true:

- The Oracle directory server is executing in server authentication SSL mode
- The directory integration and provisioning server is connected to Microsoft Active Directory in that mode

**See Also:** Chapter 43, "Integration with the Microsoft Windows Environment" in *Oracle Internet Directory Administrator's Guide*

### 23.2.6 Group Names with Special Characters Cannot Be Synchronized with Microsoft Active Directory

The `samaccountname` attribute in Active Directory does not allow special characters. As a result, if Oracle Internet Directory is the source of truth for group names for Active Directory, and if a group name, found in its `cn` attribute, contains special characters, then export synchronization fails. This is because the Oracle Internet Directory `cn` attribute is mapped to the `samaccountname` attribute in Microsoft Active Directory. For user entries, a workaround exists: In the mapping configuration file, map some other attribute containing no special characters to the Microsoft Active Directory `samaccountname` attribute.

For groups, however, there is no mandatory attribute in the `orclGroup` object class other than `cn` available to map to `samaccountname`. For this reason, there can be no special characters in Oracle Internet Directory group names being exported to Microsoft Active Directory.



## 23.3 Documentation Errata

This section describes errors in the documentation for Oracle Directory Integration and Provisioning. It includes the following topics:

- [Section 23.3.1, "Incorrect Wording About Supported Configurations for Integrating with Microsoft Active Directory"](#).
- [Section 23.3.2, "Incorrect Wording About Configuring the Default Integration Profile for Two-Way Synchronization with Microsoft Active Directory"](#)

### 23.3.1 Incorrect Wording About Supported Configurations for Integrating with Microsoft Active Directory

In the *Oracle Internet Directory Administrator's Guide*, in Chapter 43, "Integration with the Microsoft Windows Environment," in the section "Supported Configurations for Integrating with Microsoft Active Directory," the following wording is incorrect: "Password synchronization. In this environment, synchronization ensures only the creation of footprints on the SunONE Directory Server." The correct wording is: "Password synchronization. In this environment, synchronization ensures only the creation of footprints on the Microsoft Active Directory."

Similarly, the following wording is incorrect: "In a deployment with SunONE Directory Server as the central repository". The correct wording is: "In a deployment with Microsoft Active Directory as the central repository."

### 23.3.2 Incorrect Wording About Configuring the Default Integration Profile for Two-Way Synchronization with Microsoft Active Directory

In the *Oracle Internet Directory Administrator's Guide*, in Chapter 43, "Integration with the Microsoft Windows Environment," in the section "Configuring the Default Integration Profile for Two-Way Synchronization," the following wording is incorrect: "modifiersname != DN of the user account with which changes are made by the export profile in SunONE". The correct wording is: "modifiersname != DN of the user account with which changes are made by the export profile in Microsoft Active Directory."



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# Oracle Application Server Single Sign-On

This brief chapter presents issues raised by chapters 4 and 9 of *Oracle Application Server Single Sign-On Administrator's Guide*. It contains the following topics:

- [Logging Out of the Single Sign-On Administration Application](#)
- [Port Numbers with mod\\_osso\\_url](#)
- [Managing Single Sign-On Audit Records](#)

## 24.1 Logging Out of the Single Sign-On Administration Application

Logging out of partner applications when the single sign-on server is enabled for SSL does not correctly delete the session for the single sign-on administration application. The steps that follow rectify this problem. Perform them when you enable the single sign-on server for SSL. Include them in the steps in "Enabling SSL" in Chapter 9. Insert them before the subsection "Protect Single Sign-On URLs."

1. Obtain the password for the single sign-on schema (`orasso`). For instructions, see Appendix B in *Oracle Application Server Single Sign-On Administrator's Guide*.
2. Connect to the Oracle identity management database as the `orasso` schema:

```
sqlplus orasso/password
```

3. Run this SQL\*Plus query:

```
SQL>update orasso.wwctx_cookie_info$ set secure='N';  
SQL>commit;
```

## 24.2 Port Numbers with `mod_osso_url`

"Syntax and Parameters for `ossoereg.jar`" in Chapter 4 does not mention that a port number should not be provided for the `mod_osso_url` parameter if the partner Oracle HTTP Server is listening on the default HTTP port of 80 or on the default HTTPS port of 443. Following the example given in the chapter, if the partner is listening on port 80, the value for `mod_osso_url` is `http://application.mydomain.com`. If the partner is listening on port 7777, a nondefault HTTP port, the value is `http://application.mydomain.com:7777`.

## 24.3 Managing Single Sign-On Audit Records

The single sign-on server records authentication failures and successes in the Oracle identity management database. In time, the audit table, `ORASSO.WWSSO_AUDIT_LOG_TABLE_T`, runs out of space. When this happens, you see this error message in database alert logs:

```
ORA-1654: unable to extend index ORASSO.AUDIT_INDEX1 by 128 in tablespace IAS_  
META
```

In addition, further authentication requests fail.

Be sure to monitor `ORASSO.WWSSO_AUDIT_LOG_TABLE_T` regularly. When it becomes full, either back up the table and free up space or add space. Note that this is an internal, product-specific table. Direct access through SQL\*Plus is not supported.



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## OracleAS Certificate Authority

This chapter describes issues with OracleAS Certificate Authority (OCA). It includes the following topics:

- [Section 25.1, "General Issues and Workarounds"](#)
- [Section 25.2, "Configuration Issues and Workarounds"](#)
- [Section 25.3, "Administration Issues and Workarounds"](#)
- [Section 25.4, "Documentation Errata"](#)

## 25.1 General Issues and Workarounds

This section describes general issues and their workarounds for OCA. It includes the following topics:

- [Installing Another OracleAS Certificate Authority](#)
- [Choosing a Chinese Locale for OCA Installation](#)

### 25.1.1 Installing Another OracleAS Certificate Authority

The OracleAS Certificate Authority schema in one repository can only be used with one OCA.

When installing another OracleAS Certificate Authority, you must not choose a repository that has been used to install an earlier OCA: the OCA configuration tool will fail.

This failure will force you to exit the whole installation and restart it.

### 25.1.2 Choosing a Chinese Locale for OCA Installation

When installing another OracleAS Certificate Authority, you must not install and start OCA in zh or zh\_TW locale. Instead, use one of the following locales:

- For Simplified Chinese, use zh\_CN.GBK
- For Traditional Chinese, use zh\_TW.BIG5.



## 25.2 Configuration Issues and Workarounds

This section describes configuration issues and their workarounds for OracleAS Certificate Authority. It includes the following topics:

- [Section 25.2.1, "Administrator's Password"](#)
- [Section 25.2.2, "OCA's SSL Connection to Oracle Internet Directory"](#)
- [Section 25.2.3, "Enabling PKI Authentication with SSO and OCA"](#)

### 25.2.1 Administrator's Password

During installation, you establish the password for the administrator of the Oracle Application Server Certificate Authority. The following information supersedes the administrator password information given in Section 6.24 of the Oracle Application Server 10g Installation Guide in Table 6.14. Passwords must

- Use only characters in the ASCII character set
- Begin with an alphabetic character from your database character set;
- Be at least eight characters long;
- Contain at least one alphabetic character and at least one non-alphabetic character, that is, a numeric or special character;
- Be different from all Oracle reserved words; and
- Contain only alphanumeric characters from your database character set. If needed, the underscore (`_`), dollar sign (`$`), or pound sign (`#`) can also be used, although Oracle strongly discourages you from using `$` and `#`.

Thus during installation, the password you choose for the OCA administrator must accommodate these restrictions.

---

---

**Note:** If your database will be using Oracle's password complexity verification routine (specified using the PL/SQL script `UTLPPWDMG.SQL`), then the password must also meet the following requirements (or additional requirements that you add to that script):

- Be at least four characters long
- Differ from the username
- Have at least one alpha, one numeric, and one punctuation mark character
- Be different from simple or obvious words, such as `welcome`, `account`, `database`, or `user`

Subsequent changes to this password must also differ from the previous password by at least 3 characters.

---

---

## 25.2.2 OCA's SSL Connection to Oracle Internet Directory

In Oracle Application Server 10g, by default, the Oracle Internet Directory server has two ports available: SSL and NON SSL.

To secure the connection between OCA and Oracle Internet Directory, OCA always connects to the directory server using the SSL port. This DH (Diffie Hellman SSL) connection does not require authentication. OCA then authenticates itself to the directory server by sending its username/password over the now-secured SSL connection.

Therefore, on the administrative pages, on the General page within Configuration Management, the section for Certificate Publishing has a check box for "Protect publication using SSL mode". This check box is not relevant anymore, because OCA always uses SSL.

## 25.2.3 Enabling PKI Authentication with SSO and OCA

This section extends the discussion of the same name ("Enabling PKI Authentication with SSO and OCA") that appears in Chapter 3 of the *Oracle Application Server Certificate Authority Administrator's Guide*, on page 3-22.

After installation, the OracleAS Single Sign-On server can be PKI-enabled. If a site chooses to PKI-enable its OracleAS Single Sign-On, then users of the applications partnering with OracleAS Single Sign-On, which use its authentication service, must have certificates to log in to those applications.

**See Also:** *Oracle Application Server Single Sign-On Administrator's Guide*, Chapter 7: Signing on with Digital Certificates.:

This requirement presents the following issue:

- Users need to log on to OCA to get their certificates.
- Since OCA also uses the OracleAS Single Sign-On authentication service, users without certificates cannot log on to OCA.

This issue is resolved by using multiple authentication levels in the OracleAS Single Sign-On server. Once PKI is enabled, all partner applications will have "medium high" security level (using certificates for authentication), even though OCA can have "medium" security level by using username/password or Windows Native Authentication. This allows OCA to use passwords to authenticate a user before issuing a certificate, but forces other SSO-enabled applications to use certificates for authentication.

To configure OCA to have "medium" security level using username/password:

1. In `$ORACLE_HOME/sso/conf/policy.properties`, make sure that the following lines exist:

```
MediumSecurity = 40
MediumSecurity_AuthPlugin = oracle.security.sso.server.auth.SSOServerAuth
```

2. After finding or inserting the two lines from step 1, you need to add an additional line. To do so, you need to know the OCA server authentication SSL port. You can find it by signing on to the Oracle Enterprise Manager Control and clicking the instance on which OCA was installed. Then click the Ports link, find the entry in the Type column that says "OCA Server Authentication (SSL)", and use the number in the adjacent column, headed "Port In Use".

Once you know this port number, add the following line:

```
ocaHostName\ :ocaPort = MediumSecurity
```

where `ocaPort` is OCA's server authentication (SSL) port on the host machine `ocaHostName`. For example, if OCA is allocated port 4400 during installation on the host machine `myoca1234.us.company.com`, this line would read

```
myoca1234.us.company.com\ :4400 = MediumSecurity
```

3. Restart the OracleAS Single Sign-On server with the following command:

```
$ORACLE_HOME/opmn/bin/opmnctl restartproc type=oc4j instancename=OC4J_ SECURITY
```

**See Also:** For more detail, see Chapter 6, Multiple Authentication, in the *Oracle Application Server Single Sign-On Administrator's Guide*.

Similarly, OCA can be configured to use other authentication mechanisms like Windows Native Authentication. Assign a security level to the plugin implementing the authentication mechanism as in Step 1 and then assign the OCA URL to use that security level as in Step 2.

**See Also:** Chapter 8: Windows Native Authentication in the *Oracle Application Server Single Sign-On Administrator's Guide*.

### 25.2.3.1 Re-registering OCA's Virtual Host to SSO Server

This section corrects one parameter in the discussion of the same name ("Re-registering OCA's Virtual Host to SSO Server") that appears in Chapter 3 of the *Oracle Application Server Certificate Authority Administrator's Guide*, also on page 3-22.

The syntax for the command to re-register with the SSL server, to be run on a single line from the \$ORACLE\_HOME where OCA is installed, is given there as follows:

```
$ORACLE_HOME/jdk/bin/java -jar $ORACLE_HOME/sso/lib/ossoreg.jar
-oracle_home_path orcl_home_path
-site_name site_name
-config_mod_osso TRUE
-mod_osso_url mod_osso_url
-u userid
[-virtualhost virtual_host_name]
[-update_mode CREATE | DELETE | MODIFY]
[-config_file config_file_path]
[-admin_info admin_info]
[-admin_id adminid]
```

The correction is to remove the square brackets, which indicated an optional parameter, from the line reading

```
[-virtualhost virtual_host_name]
```

so that it reads instead as follows:

```
-virtualhost virtual_host_name
```

indicating, by the absence of the square brackets, that this parameter is required.

Thus in the example that directly follows, on page 3-23, the command in step 2 should read as follows:

```
$ORACLE_HOME/jdk/bin/java -jar $ORACLE_HOME/sso/lib/ossoreg.jar
-oracle_home_path $ORACLE_HOME -site_name "my_oa_site_name"
-config_mod_osso TRUE -mod_osso_url https://myoca.mysite.com:4400
-u root -config_file $ORACLE_HOME/Apache/Apache/conf/osso/oca/osso.conf
-virtualhost
```

For OCA, the `-virtualhost` command does not require that a `virtual_host_name` be specified.

## 25.3 Administration Issues and Workarounds

This section describes administration issues and their workarounds for OracleAS Certificate Authority. It includes the following topics:

- [Section 25.3.1, "National Language Support \(NLS\)"](#)
- [Section 25.3.2, "E-mail Templates"](#)
- [Section 25.3.3, "Using Netscape 7.x to Export or Import a Certificate"](#)

### 25.3.1 National Language Support (NLS)

OracleAS Certificate Authority alerts and notifications are created and sent in the language of the Server Locale. They will not use the language of the client locale, if that is different from the Server locale. If OCA were to be installed on a server that is in English, and a Japanese client submits a request, the notification will be in English.

If you use templates for customizing alerts or notifications, as described in the next section, the language in which you edit the templates is used. It is advisable to edit the templates in the language of the server, because the message body is encoded in the language of the server locale.

If you do not use templates, then all alerts and notifications will appear in the language of the server locale.

### 25.3.2 E-mail Templates

As the administrator, you can specify the body of e-mail alerts and notifications as templates, which are stored in the following directory:

```
$ORACLE_HOME/oca/templates/email
```

You can use the tokens described below to format the e-mail to provide specific information. These tokens are replaced before the e-mail is sent. [Table 25-1](#) lists the notifications, filenames for e-mail format and the supported tokens.

**Table 25-1 Notifications, Templates, and Tokens Supported for E-mail Customization**

Notifications	Template File Name	Supported Tokens
CertificateRequestNotify	reqacc.txt	#NAME#, #REQUESTID#, #SUBJECTDN#, #PHONE#, #EMAIL#

**Table 25–1 Notifications, Templates, and Tokens Supported for E-mail Customization (Cont.)**

Notifications	Template File Name	Supported Tokens
RequestApprovalNotify	reqapp.txt	#NAME#, #REQUESTID#, #SUBJECTDN#, #SERIALNUM#, #OCAURL#, #PHONE#, #EMAIL#, #VALIDITY#
RequestRejectionNotify	reqrej.txt	#NAME#, #REQUESTID#, #SUBJECTDN#, #PHONE#, #EMAIL#
PendingRequestsAlert	pendreq.txt	#NAME#, #NUMBERREQUESTS#
CRLAutoGenFailureAlert	crlfail.txt	#NAME#

---

**Note:** If you do not check the box for **Use Template in Configuration Management** in the **Notification** screen, then templates are not used. All alerts and notifications would be predefined text that cannot be changed.

---

### 25.3.2.1 Values for the tokens

[Table 25–2](#) describes the values that will replace each of the listed tokens before the alert or notification is sent:

**Table 25–2 Values Taken by Tokens Supported for Customization in Notifications and Templates**

<b>Notifications and Template File Names</b>	<b>Supported Tokens</b>	<b>To Be Replaced by This Data:</b>
CertificateRequestNotify	#NAME#	the contact data Name specified in the certificate request
	#REQUESTID#	the request ID issued by OCA to this request
Template = reqacc.txt	#SUBJECTDN#	the DN in the certificate request
	#PHONE#	the contact data phone number in the certificate request
	#EMAIL#	the contact data email address in the certificate request
RequestApprovalNotify	#NAME#	the contact data Name specified in the certificate request
	#REQUESTID#	the request ID issued by OCA to this request
Template = reqapp.txt	#SUBJECTDN#	the DN in the certificate request
	#SERIALNUM#	the serial number of the certificate
	#OCAURL#	the URL of the user home page
	#PHONE#	the contact data phone number specified in the certificate request
	#EMAIL#	the contact data email ID specified in the certificate request
	#VALIDITY#	the validity period for which the certificate request is approved by the administrator.
RequestRejectionNotify	#NAME#	the contact data Name in the certificate request
	#REQUESTID#	the request ID issued by OCA to this request
Template = reqrej.txt	#SUBJECTDN#	the DN in the certificate request
	#PHONE#	the contact data phone number in the certificate request
	#EMAIL#	the contact data email address in the certificate request
PendingRequestsAlert	#NAME#	the value specified in the <b>OracleAS Certificate Authority Administrator</b> field under <b>Configuration Management</b> in the <b>Notification</b> screen
Template = pendreq.txt	#NUMBERREQUESTS#	the number of pending requests in the OCA repository
CRLAutoGenFailureAlert	#NAME#	the value specified in the <b>OracleAS Certificate Authority Administrator</b> field under <b>Configuration Management</b> in the <b>Notification</b> screen
Template = crlfail.txt		



## 25.3.3 Using Netscape 7.x to Export or Import a Certificate

### 25.3.3.1 Netscape 7.x Export of Certificate to a PKCS#12 Wallet

After importing the certificate into your browser from the OCA screen, you can export it as a PKCS#12 wallet using the following steps:

1. In Netscape's **Edit** menu, click **Preferences**. The Preferences window appears.
2. In the Preferences Window, expand the option, 'Private & Security' and click **Certificates**.
3. Click **Manage Certificates** (on the right) to display the Certificate Manager window.
4. Select the certificate that needs to be exported and click **Backup**.
5. Enter the file name for the PKCS#12 wallet and click on **Save**.
6. Enter the Netscape Repository password, and click **OK**.

A window appears, labeled 'Choose a Certificate Backup password', with the prompt 'Please enter the master password for the Software Security Device'.

7. In this window, enter the password with which the PKCS#12 wallet will be encrypted. You will need to enter the same password again to confirm the password. There is a password quality meter in this window that gives information on how good this password provided is.
8. Click **OK**. An alert appears saying that backup is successful.

### 25.3.3.2 Netscape 7.x Import of Certificate from a PKCS#12 Wallet

1. In Netscape's **Edit** menu, click **Preferences**. The Preferences window appears.
2. In the Preferences Window, expand the option, 'Private & Security' and click **Certificates**.
3. Click **Manage Certificates** (on the right) to display the Certificate Manager window.
4. Click **Import**
5. Choose the PKCS#12 wallet containing the certificate and key to be imported and click **Open**.
6. Enter the Netscape Repository password in the popup that appears, and click **OK**.

7. The prompt says 'Please enter the master password for the Software Security Device'. A window appears, labeled **Password Entry Dialog**.
8. In this window, enter the password that will be used to decrypt the PKCS#12 wallet, and click **OK**.
9. An alert appears, saying that restoration of the certificate and private key is successful.

## 25.4 Documentation Errata

This section describes known errors in the documentation for OracleAS Certificate Authority. It includes the following topics:

- [Section 25.4.1, "References to "portlist.ini""](#)
- [Section 25.4.2, "Identity Management Services Errata"](#)

### 25.4.1 References to "portlist.ini"

Pages 3-4, 3-7, 3-20, and 6-15 refer to the SSL port. Chapter 3 refers to the file "portlist.ini" as the place to find what port number to use. However, if port changes have occurred since installation, the most current information will be found by signing on to the Oracle Enterprise Manager Control and clicking the instance on which OCA was installed. Then click the Ports link, find the entry in the Type column that says "OCA Server Authentication (SSL)", and use the number in the adjacent column, headed "Port In Use".

### 25.4.2 Identity Management Services Errata

#### 25.4.2.1 Chapter 6, Advanced Topics

Replace an explanatory sentence and add a Note in Chapter 6 of the OracleAS Certificate Authority Administrator's Guide, in the section entitled "Changing Identity Management (IM) Services (SSO/OID) Used by OCA", pages 6:15,16.

The sentence immediately after Step 6 should read as follows:

This command performs the following two actions:

- Updates the file oca.conf at \$ORACLE\_HOME/oca/conf to point to the new IM Services machine (Machine 2)
- Registers OCA with the new SSO server (Machine 2)

Then the following note should appear after that second bullet just added:

---

---

**Note:** Identity Management (IM) reassociation can be used

- to accommodate changes to the configuration of SSO or OID services for scalability or failover purposes, or
- to accommodate the transition from a pilot IM to production IM.

For more information on such reassociation, see *Oracle Application Server 10g Administrator's Guide*.

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## Oracle Enterprise Manager

This chapter describes issues with Oracle Enterprise Manager. It includes the following topics:

- [Section 26.1, "General Issues and Workarounds"](#)
- [Section 26.2, "Documentation Errata"](#)

## 26.1 General Issues and Workarounds

This section describes general issues and their workarounds for the Oracle Enterprise Manager Application Server Control. It includes the following topics:

- [Section 26.1.1, "Using Multiple Browser Windows When Managing Multiple Application Servers on the Same Host"](#)
- [Section 26.1.2, "Oracle HTTP Server Must Be Running To Collect OC4J Metrics"](#)
- [Section 26.1.3, "Virtual Hosts Must Have at Most One IP:Port Pair"](#)
- [Section 26.1.4, "Protocol Used for OracleAS Web Cache Admin Port Must Match the Protocol for the Statistics Port"](#)
- [Section 26.1.5, "No Support for Path Information When Configuring JAZN"](#)
- [Section 26.1.6, "Lookup Error When Deploying OC4J Application"](#)
- [Section 26.1.7, "OC4J Restart Required After Adding Users on the OC4J Security Page"](#)
- [Section 26.1.8, ""SMISession has been invalidated" Error in Browser Window"](#)
- [Section 26.1.9, "NLS\\_LANG and LC\\_ALL \(OS Default Locale\) Must Be Defined Before Starting Management Processes"](#)
- [Section 26.1.10, "Newly Created Virtual Host Access Log Not Available in the Log Viewer"](#)
- [Section 26.1.11, "Problems Displaying XML Log Files in the Log Viewer"](#)
- [Section 26.1.12, "Problems with the Oracle Application Server 10g Application Server Control After Deinstalling Oracle Application Server 9.0.2 or 9.0.3"](#)
- [Section 26.1.13, "Performance Notes for the Application Server Control"](#)
- [Section 26.1.14, "Network Utilization Metrics Not Displayed"](#)

### 26.1.1 Using Multiple Browser Windows When Managing Multiple Application Servers on the Same Host

When you are making configuration changes within the Application Server Control, the browser keeps track of the state of your editing session. For example, the browser keeps track of the changes you make and your location within on-screen configuration wizards before you click **Finish** or **Apply**.

A problem with the browser state can occur if you have installed multiple application server instances on a single host and you open two more browser windows to manage the OC4J instances on the host. If you switch between the windows while making configuration changes, you could experience some unpredictable behavior. For example, the browser may display a message saying that the session has expired.

To avoid this problem, start a new browser instance from the desktop and close any new windows opened from the original browser session.

If you are using Netscape 7 you will need to create a new Netscape Profile for additional browser windows.

### 26.1.2 Oracle HTTP Server Must Be Running To Collect OC4J Metrics

In order to collect performance metrics for the OC4J instances in an application server installation, the Oracle HTTP Server for the application server instance must be up and running. If the Oracle HTTP Server component is down, OC4J metrics will not be collected and, as a result, will not be available in the Application Server Control.

### 26.1.3 Virtual Hosts Must Have at Most One IP:Port Pair

The Application Server Control does not support the ability to enter multiple IP address pairs in the Virtual Host directive in the Oracle HTTP Server httpd.conf configuration file.

In other words, do not enter more than the following in the httpd.conf file when using the Application Server Control to manage your Oracle HTTP Server instance:

```
<VirtualHost 1.2.3.4:5678 9.10.11.12:5679 >  
  ...  
</VirtualHost>
```

## 26.1.4 Protocol Used for OracleAS Web Cache Admin Port Must Match the Protocol for the Statistics Port

Oracle Application Server Web Cache provides two ports. One port is the Administration port, which is used to access the Web Cache Manager. The other port is used to gather Web Cache performance statistics.

If you change the protocol for Oracle Application Server Web Cache, you must be sure to use the same protocol for the Administration Port and the Statistics port. If the protocol for these two ports does not match, the Application Server Control may not be able to gather performance metrics and the link to the Web Cache Manager on the Web Cache target home page will not function properly.

## 26.1.5 No Support for Path Information When Configuring JAZN

OC4J security employs a user manager to authenticate and authorize users and groups that attempt to access a J2EE application. One of the user managers that can be used to designate the users and groups for an application is the JAZN user manager.

With the Enterprise Manager Application Server Control, you can specify that the JAZN user manager be associated with an application. Using the Deploy Application: User Manager page for Enterprise Manager, you can specify that the application use either a JAZN XML configuration or a JAZN LDAP configuration.

When you use Enterprise Manager to specify an XML-based JAZN configuration, the following line is entered into the orion-application.xml file:

```
<jazn provider="XML" location="./jazn-data.xml" />
```

When you use Enterprise Manager to specify an LDAP-based JAZN configuration, the following line is entered in the orion-application.xml file:

```
<jazn provider="LDAP" default-realm="sample_subrealm" location="<<ldap_url>>" />
```

Some applications may prefer to specify a JAZN configuration by providing a path to a jazn.xml file, but Enterprise Manager does NOT support this type of JAZN configuration. This type of JAZN configuration would be specified as follows in the orion-application.xml file:

```
<jazn config="jazn.xml" />
```



If you manually specify this type of JAZN configuration in the `orion-application.xml` file, you will either NOT be able to use the Enterprise Manager OC4J Security page or you may experience problems even after apparently using the page successfully.

For more information about using user managers specifying users and groups for a J2EE application, see *Oracle Application Server Containers for J2EE Security Guide*.

### 26.1.6 Lookup Error When Deploying OC4J Application

When you are attempting to deploy an OC4J application using the Application Server Control, you may receive the following error:

```
Deployment failed: Nested exception
Root Cause: Lookup error: javax.naming.NoPermissionException: Not allowed to
look up java:comp/ServerAdministrator, check the namespace-access tag setting
in orion-application.xml for details;
```

This error may appear if the user manager for the OC4J default application does not include the user `admin` and the group `administrators`.

To view or define the users and groups for the default application user manager:

1. Navigate to the OC4J home page for the OC4J instance you used to deploy your application.
2. Click **Applications** to display the list of application deployed in the selected OC4J instance.
3. Click the **Default Application Name**, which appears at the top of the Applications page.

Enterprise Manager displays the OC4J Application home page for the default application.

4. Scroll to the bottom of the page and click **Security**.

Enterprise Manager displays the Security page, which lists the Groups and Users.

### 26.1.7 OC4J Restart Required After Adding Users on the OC4J Security Page

After you make changes on the OC4J Security page, you must restart the OC4J instance in order for the changes to take effect. For example, if you add the user `admin` and the `administrators` group as described in [Section 26.1.6](#), you must restart the OC4J instance to complete the procedure.

## 26.1.8 "SMISession has been invalidated" Error in Browser Window

In some cases, you may see the following error message displayed in your browser window:

```
The SMISession has been invalidated. Resolution: Please close the current SMISession, start another one and reapply the actions
```

To resolve this issue, click the **Refresh Data** icon located to the right of the time stamp, or close and reopen the browser to start a new session. This error can be the result of multiple users performing conflicting configuration actions on a single Enterprise Manager Application Server Control at the same time.

## 26.1.9 NLS\_LANG and LC\_ALL (OS Default Locale) Must Be Defined Before Starting Management Processes

If in a non-English environment, you launch a command line tool (for example, `opmnctl` or `emctl`) to start a process, make sure the operating system default locale and the `NLS_LANG` settings are configured properly.

### 26.1.9.1 Checking the Operating System Locale

To make sure the default locale is set properly, make sure the `LC_ALL` or `LANG` environment variables are set with the appropriate value. To check the current setting, issue the following command:

```
$PROMPT> locale
```

For the specific value in each operating system, refer to the platform-specific documentation.

### 26.1.9.2 Checking the NLS\_LANG Setting

To check the `NLS_LANG` setting:

1. Make sure the `NLS_LANG` environment variable is set with the appropriate and compatible value with the OS default locale setting. For the specific value for the language, refer to the Globalization Support Guide of the Oracle product you are using.
2. Check to see if the `NLS_LANG` setting exists in following file:

```
$ORACLE_HOME/opmn/conf/opmn.xml
```

3. If `opmn.xml` exists, make sure the `NLS_LANG` setting in the `opmn.xml` file is identical to the `NLS_LANG` environment variable.
4. For example, the following content should appear in the `opmn.xml` file:

```
<environment>
  <variable id="TMP" value="/tmp"/>
  <variable id="NLS_LANG" value="JAPANESE_JAPAN.JA16SJIS"/>
</environment>
```

### 26.1.10 Newly Created Virtual Host Access Log Not Available in the Log Viewer

When operations that affect the name, location, or creation of HTTP Server logs are performed (for example, if you create a new HTTP Server virtual host), the Log File Viewer may not reflect these updates. For example, the log files for the newly created virtual host may not appear in the Log Viewer.

This problem is caused because the Log File Viewer may cache information about HTTP Server log files. Press the **Refresh Data** icon on the Log File Viewer page to work around this situation and discover the current log files.

### 26.1.11 Problems Displaying XML Log Files in the Log Viewer

Depending upon the version of Internet Explorer and the server platform that the application server is running on, you may not be able to display log files that are stored in XML format.

For example, if you click the name of a log file on the Log File page the Application Server Control may display an error rather than the contents of the log file.

To work around this problem, try using a different browser or browser version to display the XML log file.

### 26.1.12 Problems with the Oracle Application Server 10g Application Server Control After Deinstalling Oracle Application Server 9.0.2 or 9.0.3

In certain situations, deinstallation of Application Server 9.0.2 or 9.0.3 may, through an automatic procedure run at deinstall time, cause a number of configuration files in the Application Server 10g directories to be overwritten with incorrect information.

The Enterprise Manager control scripts in Application Server 10g have been modified to make as-needed backups of these files; as a result, you should be able to recover from this problem by replacing the files from the backup versions.

**These files are:**

```
$ORACLE_HOME/sysman/config/iasadmin.properties  
$ORACLE_HOME/sysman/emd/targets.xml  
$ORACLE_HOME/sysman/j2ee/config/jazn-data.xml  
$ORACLE_HOME/sysman/webapps/emd/WEB-INF/config/consoleConfig.xml
```

There may be a number of backup files in each of these cases. The backups are named in the form `<original-file-name>.n`, where `n` is a number from 1 to 10.

The most recent backup of the file is `.1`, then next most recent `.2`, and so on. You should check the timestamps or inspect these files to determine which is the most recent correct version of the data. This is most likely the last backup version before you deinstalled Application Server 9.0.2 or 9.0.3.

**To restore these files:**

- **Shut down the Application Server Control:**  

```
$PROMPT> emctl stop iasconsole
```
- **Remove, or rename the four files listed above**
- **Copy the version of the backup file which you have determined to be the correct, working version**
- **Start the Application Server Control:**  

```
$PROMPT> emctl start iasconsole
```

## 26.1.13 Performance Notes for the Application Server Control

The following performance notes can help improve the overall performance of the Oracle Enterprise Manager Application Server Control in specific usage situations.

### 26.1.13.1 Deployment Performance in Internet Explorer and Netscape Navigator 7.0

If you attempt to deploy an OC4J application while using Microsoft Internet Explorer or Netscape 7.0, the file upload may take an extremely long time (for example, 10 minutes for a 45MB .ear file as compared to 15 seconds with Netscape 7.1). This has a direct impact on the OC4J deployment wizard performance.

If you are using Netscape Navigator, upgrade to Netscape 7.1.

If you are using Internet Explorer, refer to the following Microsoft knowledge base article, which addresses this problem:

<http://support.microsoft.com/default.aspx?scid=kb;en-us;329781>

### 26.1.13.2 Problems Deploying Large OC4J Applications

When attempting to deploy a large application (greater than 50MB EAR or WAR file), the default configuration for the DCM Daemon is insufficient. Attempting to deploy such a large application will result in an Out Of Memory error.

To resolve this issue, use the Application Server Control to increase the java heap for the DCM Daemon:

1. Navigate to the Application Server home page in the Application Server Control.
2. Click **Process Management** to edit the `opmn.xml` file.
3. Locate the DCM Daemon configuration section and append the following string to the value section of the `java-parameters` data tag:

```
-Xmx<nnn>MB
```

For example:

```
-Xmx128M
```

### 26.1.13.3 Agent Memory Errors

Oracle Application Server includes a version of the Oracle Management Agent that gathers monitoring data for the Application Server Control. If the Management Agent is running out of memory while collecting application server metrics, the memory available to the JVM running within the Management Agent can be increased (default is 64M).

Within the `$ORACLE_HOME/sysman/config/emd.properties` file, the `agentJavaDefines` property can have the `-Xmx<nnn>M` (for example, `-Xmx128M`) qualifier appended to it to increase the amount of java heap available to the Management Agent JVM. The Management Agent must be restarted for the qualifier to be recognized.

### 26.1.13.4 Additional Performance Notes

To retrieve cached metrics (metrics which are collected by default and stored in the agents memory) for pages within the Application Server Control, define the environment variable `EM_OC4J_OPTS` to the following before starting the Application Server Control:

```
-Doracle.sysman.refreshFlag=true
```

To disable the processing page so that the Application Server Control waits for start, stop, and other such actions, define the environment variable `EM_OC4J_OPTS` to the following before starting the Application Server Control:

```
-Doracle.sysman.eml.util.iAS.waitForCompletion=true
```

To increase the timeout (default is 2 seconds) for status and host related metric retrieval for non-opmn managed components on the Application Server home page, define the environment variable `EM_OC4J_OPTS` to the following before starting the Application Server Control:

```
-Doracle.sysman.ias.ApplicationServerObject.timeout=true
```

## 26.1.14 Network Utilization Metrics Not Displayed

If network interfaces do not show values for "Network Interface Combined Utilization (%)", "Network Interface Read Utilization (%)" and "Network Interface Write Utilization (%)" metrics, create the text file

`$ORACLE_HOME/sysman/config/network_speed` and create entries using the following syntax:

```
<Interface Name> <Speed in Mbps>
```

For example, if metrics are not displayed for the interface `eth0`, add the following entry, where 100 is the network speed in MB per second:

```
eth0 100
```

## 26.2 Documentation Errata

This section describes known errors in the documentation and online help. It includes the following topics:

- [Section 26.2.1, "Incorrect Location of the `setupinfo.txt` File"](#)
- [Section 26.2.2, "Oracle HTTP Server Listener Port May Be Listed Twice"](#)

### 26.2.1 Incorrect Location of the `setupinfo.txt` File

The `setupinfo.txt` file contains information about the URLs and port numbers you can use to access the Application Server Control, as well as other information about the Oracle Application Server installation.

The online help topic "Displaying the Application Server Control" incorrectly identifies the location of this file after the application server installation. The correct location of the file is:

```
$ORACLE_HOME/Apache/Apache/setupinfo.txt
```

### 26.2.2 Oracle HTTP Server Listener Port May Be Listed Twice

On the ports page of the Application Server Control, an additional Oracle HTTP Server Listener row for Oracle HTTP Server Listener with Oracle HTTP Server Diagnostic port may be listed twice. This may happen if you execute an OPMN reload operation after making changes to the `opmn.xml` file. The double port listing typically occurs when a new OC4J instance is created.

The duplicate row will go away when you restart Oracle HTTP Server.

