# Oracle® Application Server Metadata Repository Creation Assistant

User's Guide 10*g* Release 2 (10.1.2) for UNIX **Part No. B14129-01** 

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Oracle Application Server Metadata Repository Creation Assistant User's Guide 10g Release 2 (10.1.2) for UNIX

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## **Send Us Your Comments**

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### **Preface**

This guide describes how to run the Oracle Application Server Metadata Repository Creation Assistant tool ("OracleAS Metadata Repository Creation Assistant"), which enables you to load OracleAS Metadata Repository into an existing database. You can also use the OracleAS Metadata Repository Creation Assistant to register OracleAS Metadata Repository with Oracle Internet Directory.

### Intended Audience

This guide is intended for database administrators. You need to be able to log in to your database as the SYS user. Steps that you might need to perform include changing the value of database initialization parameters, backing up schemas and tablespaces, and restarting the database.

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### **Structure**

This guide contains the following chapters:

## Chapter 1, "OracleAS Metadata Repository Creation Assistant Overview and Requirements"

This chapter provides an overview of OracleAS Metadata Repository Creation Assistant, how to install it, and how to start it up. It also lists the requirements needed by the target database.

#### Chapter 2, "Loading the OracleAS Metadata Repository into an Existing Database"

This chapter describes how to use the OracleAS Metadata Repository Creation Assistant to install, or load, the OracleAS Metadata Repository into your database.

## Chapter 3, "Registering OracleAS Metadata Repository with Oracle Internet Directory"

This chapter describes how to use the OracleAS Metadata Repository Creation Assistant to register the OracleAS Metadata Repository with Oracle Internet Directory.

#### Chapter 4, "Deregistering and Removing OracleAS Metadata Repository"

This chapter describes how to use the OracleAS Metadata Repository Creation Assistant to remove OracleAS Metadata Repository from your database, and how to deregister it from your Oracle Internet Directory.

#### Appendix A, "Deinstalling OracleAS Metadata Repository Creation Assistant"

This appendix describes how to remove the OracleAS Metadata Repository Creation Assistant from your computer.

### Appendix B, "Troubleshooting OracleAS Metadata Repository Creation Assistant"

This appendix describes how to fix common problems.

### **Related Documents**

For more information, see the following manuals:

- Oracle Application Server Installation Guide
- Oracle Application Server Administrator's Guide
- Oracle Application Server Concepts

### **Conventions**

This guide uses the following conventions:

Convention	Meaning
boldface text	Boldface type in text indicates objects (such as buttons and fields) on screens.
code	Text in the code font indicates filenames, commands, or contents of configuration files.
italicized code	Italicized code font indicates placeholder text that you need to replace with an appropriate value.
[]	Brackets enclose optional clauses from which you can choose one or none.
	Ellipses indicate that extraneous information have been omitted.

## OracleAS Metadata Repository Creation **Assistant Overview and Requirements**

Instead of having the installer create a new database for the OracleAS Metadata Repository, you can install the OracleAS Metadata Repository in an existing database. This chapter describes how to use Oracle Application Server Metadata Repository Creation Assistant ("OracleAS Metadata Repository Creation Assistant"), which is the tool that performs the installation. You can also use OracleAS Metadata Repository Creation Assistant to register OracleAS Metadata Repository with Oracle Internet Directory.

#### Notes:

- This guide does not cover upgrading an existing OracleAS Metadata Repository. For upgrade instructions, see the *Oracle* Application Server Upgrade and Compatibility Guide.
- You cannot use OracleAS Metadata Repository Creation Assistant to register a metadata repository from Release 2 (9.0.2) with an Oracle Internet Directory from Release 2 (9.0.4).
- You can only register the OracleAS Metadata Repository with supported versions of Oracle Internet Directory. See Section 1.6, "Requirements for Oracle Internet Directory" for details.
- You cannot load the OracleAS Metadata Repository into a database that contains an Oracle E-Business Suite instance. This is currently not supported.

#### Contents:

- Section 1.1, "Oracle AS Metadata Repository Creation Assistant Overview"
- Section 1.2, "Steps for Running OracleAS Metadata Repository Creation Assistant"
- Section 1.3, "Requirements for the Computer Running OracleAS Metadata Repository Creation Assistant"
- Section 1.4, "Installing OracleAS Metadata Repository Creation Assistant"
- Section 1.5, "Requirements for the Database"
- Section 1.6, "Requirements for Oracle Internet Directory"
- Section 1.7, "Starting OracleAS Metadata Repository Creation Assistant"
- Section 1.8, "Which Section to Read Next?"

### 1.1 OracleAS Metadata Repository Creation Assistant Overview

You can run OracleAS Metadata Repository Creation Assistant to perform the following operations:

- load the OracleAS Metadata Repository in an existing database
- register the OracleAS Metadata Repository with Oracle Internet Directory
- remove OracleAS Metadata Repository schemas and tablespaces from a database
- deregister the OracleAS Metadata Repository from Oracle Internet Directory

### 1.1.1 Support for Different Database Storage Types

OracleAS Metadata Repository Creation Assistant can load the OracleAS Metadata Repository in single node databases and Real Application Clusters databases. OracleAS Metadata Repository Creation Assistant can load the OracleAS Metadata Repository on the following storage management options:

- data files created as regular files on the operating system
- data files on cluster file systems
- Automatic Storage Management (ASM) instances
- Oracle-managed files
- raw devices

### 1.1.2 Support for Local and Remote Databases

When you run OracleAS Metadata Repository Creation Assistant, you need to specify the target database, which is the database on which you want to perform an operation (such as loading, registering, removing, or deregistering the OracleAS Metadata Repository). The database can be running on the same computer as OracleAS Metadata Repository Creation Assistant ("local database"), or on a different computer ("remote database").

For remote databases, the operating system of the computer running the database can be different from the operating system of the computer running OracleAS Metadata Repository Creation Assistant. For example, you can run OracleAS Metadata Repository Creation Assistant on a Windows computer to load the OracleAS Metadata Repository on a database running on a Linux computer.

### 1.2 Steps for Running OracleAS Metadata Repository Creation Assistant

Before you can run OracleAS Metadata Repository Creation Assistant, you have to install it first.

1. Install OracleAS Metadata Repository Creation Assistant.

You have to run the installer from the "OracleAS Metadata Repository Creation Assistant" CD-ROM. If you are using the Oracle Application Server DVD-ROM, the installer is in the repca directory.

- During the installation, you specify the directory where you want to install OracleAS Metadata Repository Creation Assistant.
- 2. Run OracleAS Metadata Repository Creation Assistant from the installed directory.

### 1.3 Requirements for the Computer Running OracleAS Metadata **Repository Creation Assistant**

The computer where you run OracleAS Metadata Repository Creation Assistant must meet the following requirements:

Table 1–1 Requirements for the Computer Running OracleAS Metadata Repository Creation Assistant

Item	Requirement				
Operating system	Windows 2000 with Service Pack 3 or later				
	Windows 2003				
	Windows XP				
	Solaris 8				
	Solaris 9				
	HP-UX 11i (11.11) PA-RISC				
	HP-UX 11i (11.23) PA-RISC				
	Red Hat Enterprise Linux AS/ES 2.1, Update 5				
	Red Hat Enterprise Linux AS/ES 3.0, Update 3				
	SUSE Linux Enterprise Server 8, SP3				
	SUSE Linux Enterprise Server 9				
	For hardware requirements, see the <i>Oracle Application Server Installation Guide</i> .				
Disk space	For installing OracleAS Metadata Repository Creation Assistant, you need at least 600 MB.				
	<b>Note:</b> Each time you run OracleAS Metadata Repository Creation Assistant to perform the loading operation, you need approximately 10 MB of disk space for log files.				
	For disk space required for the database, see Section 1.5.5, "Disk Space Needed for SYSTEM and UNDO Tablespaces" and Section 1.5.6, "Disk Space Needed for OracleAS Metadata Repository Tablespaces".				
Memory	512 MB				
Virtual memory	1535 MB				
Display	256 colors				

### 1.4 Installing OracleAS Metadata Repository Creation Assistant

To install OracleAS Metadata Repository Creation Assistant:

- Insert the "OracleAS Metadata Repository Creation Assistant" CD-ROM or the Oracle Application Server DVD-ROM.
- If your computer does not mount CD-ROMs or DVD-ROMs automatically, you need to set the mount point manually.
- **3.** Start the installer.

CD-ROM: Run runInstaller to start the installer.

DVD-ROM: Navigate to the repca directory and run runInstaller to start the installer.

Welcome screen: Click Next.

5. Specify File Locations screen: In the Name field, enter a name for this OracleAS Metadata Repository Creation Assistant installation. The name of the Oracle home must be 128 characters or fewer, and can contain only alphanumeric characters and the underscore character. Example: repca10\_1\_2.

In the **Destination Path** field, enter a full path to the directory where you want to install OracleAS Metadata Repository Creation Assistant. This guide refers to this directory as the Oracle home for OracleAS Metadata Repository Creation Assistant.

Click Next.

**6.** Launch Repository Creation Assistant screen: Select **Yes** if you want to run OracleAS Metadata Repository Creation Assistant immediately after installation. Otherwise, select No. In either case, you can always run OracleAS Metadata Repository Creation Assistant anytime after installation.

Click Next.

- **7.** Summary screen: Click **Install** to start the installation.
- **8.** Configuration Assistants screen: The installer runs configuration assistants to install OracleAS Metadata Repository Creation Assistant.

**Note:** If you selected **Yes** in the Launch Repository Creation Assistant screen, the installer starts up OracleAS Metadata Repository Creation Assistant as a configuration assistant. In the Configuration Assistants screen, the status of the "OracleAS Repository Creation Assistant" line stays at "In Progress" as long as OracleAS Metadata Repository Creation Assistant is running. When you exit OracleAS Metadata Repository Creation Assistant, the installer advances to the End of Installation screen.

The installer stays running until you exit OracleAS Metadata Repository Creation Assistant.

**9.** End of Installation screen: Click **Exit** to exit the installer.

### 1.5 Requirements for the Database

The database where you want to install the OracleAS Metadata Repository must meet requirements in the areas listed in Table 1–2.

**Tip:** Run the prerequisite check tool (see Section 1.5.1, "Run the Prerequisite Check Tool") before running OracleAS Metadata Repository Creation Assistant. This tool checks many of the database requirements for you. Although OracleAS Metadata Repository Creation Assistant also checks the requirements for you, the prerequisite tool is easier to use because it checks the requirements without stopping at the first unmet requirement. You can then resolve all unmet requirements at the same time, instead of going through the cycle of resolving an unmet requirement, then rerunning OracleAS Metadata Repository Creation Assistant, and resolving the next unmet requirement.

You may have to restart the database to comply with a requirement.

Then when you run OracleAS Metadata Repository Creation Assistant, which also checks the requirements, you have a good chance of installing the OracleAS Metadata Repository successfully.

Table 1–2 lists the items checked by the prerequisite check tool.

Table 1-2 **Database Requirements** 

Item	Checked for you?
Section 1.5.2, "Database Version"	Yes
Section 1.5.3, "Standard Edition Databases: Notes"	No
Section 1.5.4, "Swap Space Requirement"	No
Section 1.5.5, "Disk Space Needed for SYSTEM and UNDO Tablespaces"	Checked for you if these tablespaces are not set to autoextend.
Section 1.5.6, "Disk Space Needed for OracleAS Metadata Repository Tablespaces"	No
Section 1.5.7, "OracleAS Metadata Repository on Windows XP Not Supported"	No
Section 1.5.8, "Initialization Parameters"	Some are not checked.
Section 1.5.9, "Database Options"	Yes
Section 1.5.10, "PL/SQL Packages"	Yes
Section 1.5.11, "DBMS_LDAP Package"	Yes
Section 1.5.12, "Knowledge Base Required (Oracle Database 10g Only)"	Yes
Section 1.5.13, "Password File Authentication"	No
Section 1.5.14, "Schemas and Tablespaces"	Yes
Section 1.5.15, "Registration with Oracle Internet Directory"	No

### 1.5.1 Run the Prerequisite Check Tool

OracleAS Metadata Repository Creation Assistant comes with a prerequisite check tool, located in the ORACLE\_HOME/repca/prereq directory, where ORACLE\_HOME is where you installed OracleAS Metadata Repository Creation Assistant. This tool checks most of the database requirements for you. Table 1-2 lists the items checked by the tool.

You should run this tool before running OracleAS Metadata Repository Creation

**Tip:** You can run this tool several times, until your database meets all the requirements.

#### Usage:

DBPrereqChecker -DBHOST dbhost -DBPORT dbport -DBNAME dbname -SYSPWD syspassword [-LOGDIR logdir] [-HELP]

Table 1–3 Parameters for DBPrereqChecker

Parameter	Description		
-DBHOST dbhost	Specifies the name of the computer running the database.		
-DBPORT dbport	Specifies the port on which the database listener is listening.		
-DBNAME dbname	Specifies the service name of the database.		
-SYSPWD syspassword	Specifies the password of the SYS user.		
-LOGDIR logdir	Specifies the directory where you want the log file to be written. Be sure you have write permission for the directory.		
	The name of the log file is RepcaPrerequisiteCheck.log. The log file contains information on which requirements were met and which were not.		
	If this parameter is not specified, the tool writes to the console.		
-HELP	Displays the help for the tool.		

#### Example:

prompt> DBPrereqChecker -DBHOST mydb.mydomain.com -DBPORT 1521 -DBNAME orcl1.mydomain.com -SYSPWD topsecret -LOGDIR /tmp

#### 1.5.2 Database Version

You can install the OracleAS Metadata Repository in the following database versions:

Table 1–4 Supported Database Versions

Database Series	Supported Versions	See This Section for Details		
Oracle9i Release 2 (9.2.x)	9.2.0.6 with some patches, or later	Section 1.5.2.1, "Oracle9i Release 2 (9.2.x) Databases"		
		<ul> <li>Section 1.5.2.2, "Oracle9i Release 2 (9.2.0.6) Real Application Clusters Databases"</li> </ul>		
Oracle Database 10g	10.1.0.4 or later			

To check the release of your database, query the PRODUCT\_COMPONENT\_VERSION view:

prompt> sqlplus "sys/password as sysdba" SQL> select version from product\_component\_version where product like 'Oracle%9i%' or product like 'Oracle%Database%';

password specifies the password for the SYS user.

#### 1.5.2.1 Oracle9*i* Release 2 (9.2.x) Databases

If you have a 9.2.x database, ensure that its version is 9.2.0.6 with some patches (see below), or later.

If you are running a Release 2 (9.2.0.6) database in a Real Application Clusters environment, see also Section 1.5.2.2, "Oracle9i Release 2 (9.2.0.6) Real Application Clusters Databases".

#### **Patches Required**

For Oracle9i Release 2 (9.2.0.6) database, you need to apply patch 4015165 before you can load OracleAS Metadata Repository into the database. You can download this patch from OracleMetaLink (http://metalink.oracle.com).

### Upgrading to 9.2.0.6

You can upgrade to Release 2 (9.2.0.6) from earlier 9.2.x releases by applying the 9.2.0.6 patch set, which is patch set number 3948480. You can download the patch set from Oracle MetaLink (http://metalink.oracle.com).

Ensure that the following steps for upgrading your database to 9.2.0.6 are performed. These steps are documented in the README file for the 9.2.0.6 patch set.

- Make sure that the initialization (init.ora) parameters are set as specified in the README file for the patch set, that the SYSTEM and XDB tablespaces have sufficient free space, and that the CLUSTER\_DATABASE initialization parameter is set as specified in the README file.
- Run the catpatch.sql script (step 6 in the README file).
- Run utlrp.sql (step 10 in the README file for the patch set).
- Run the Oracle Internet Directory step only if you were running Oracle Internet Directory version 9.2.0.x. If Oracle Internet Directory has never been used with this database, you do not have to perform this step.

To check that you have run the catpatch.sql script, you can run the following command in SQL\*Plus:

```
prompt> sqlplus "sys/password as sysdba"
SOL> select comp name, version, status from dba registry
where comp_id = 'CATPROC';
```

You should get the following results:

COMP_NAMI	Ξ			VERSION	STATUS
Oracle9i	Packages	and	Types	9.2.0.6.0	Valid

**Note:** Be sure that the catpatch.sql script has been run against your database. Even if you have patched your database Oracle home to 9.2.0.6, when you create a new database using the Database Configuration Assistant (DBCA), the new database might not have the catpatch.sql script run against it. This is the case if you created the database using DBCA from the seed template or from a custom template that did not have the catpatch.sql script run against it.

If you have such a database, run catpatch.sql on the database first, then you can run OracleAS Metadata Repository Creation Assistant.

#### 1.5.2.2 Oracle9i Release 2 (9.2.0.6) Real Application Clusters Databases

If you are running a Release 2 (9.2.0.6) database in a Real Application Clusters environment, you need to apply patch 3047933 (ARU 6662789) before you can load the OracleAS Metadata Repository on your database.

You can download the patch from Oracle*MetaLink* (http://metalink.oracle.com).

#### 1.5.3 Standard Edition Databases: Notes

If you are using the Standard Edition of a supported database, you will not be able to use Oracle Internet Directory's multimaster replication feature (because this feature relies on ASR, which is available only on the Enterprise Edition database).

As an alternative, you can use the fan-out replication feature. See the Oracle Internet Directory Administrator's Guide for details.

### 1.5.4 Swap Space Requirement

You must have at least 512 MB of available swap space on the computer running the database. See Oracle Application Server Installation Guide for information on how to check and increase it, if necessary.

### 1.5.5 Disk Space Needed for SYSTEM and UNDO Tablespaces

You need the following amounts of free space for the SYSTEM and UNDO tablespaces:

Table 1–5 Free Space Required for the SYSTEM and UNDO Tablespaces

Tablespace	Free Space Required
SYSTEM	367,001,600 bytes
UNDO	367,001,600 bytes

If these tablespaces are set to autoextend, OracleAS Metadata Repository Creation Assistant cannot check the space for you because the tablespaces may use up available space in the file system, and OracleAS Metadata Repository Creation Assistant cannot check the free space on your file system. You have to perform the checks yourself.

If these tablespaces are not set to autoextend, OracleAS Metadata Repository Creation Assistant can check the free space for you, because OracleAS Metadata Repository Creation Assistant can query the database to find out how much space is available in the tablespace.

### 1.5.6 Disk Space Needed for OracleAS Metadata Repository Tablespaces

Make sure that you have at least 1.15 GB of disk space for the OracleAS Metadata Repository tablespaces. This is in addition to the space needed for the SYSTEM and UNDO tablespaces (see previous section).

### 1.5.7 OracleAS Metadata Repository on Windows XP Not Supported

You can load the OracleAS Metadata Repository on existing databases running on Windows XP. However, as with most Oracle Application Server installations on Windows XP, this is not supported.

You can run the OracleAS Metadata Repository Creation Assistant tool on Windows XP. This is supported.

For the latest certification updates, check Oracle MetaLink (http://metalink.oracle.com).

### 1.5.8 Initialization Parameters

During installation, the database must have its initialization parameters set to the values specified in Table 1–6 and Table 1–7:

- Table 1–6 lists the parameters that are not checked by OracleAS Metadata Repository Creation Assistant. You have to check these parameters yourself.
- Table 1–7 lists the parameters that are checked by OracleAS Metadata Repository Creation Assistant. If OracleAS Metadata Repository Creation Assistant finds parameters that do not meet the requirements, it displays an alert. You need to change the value of the parameter before OracleAS Metadata Repository Creation Assistant can continue.

After installation, you can change the values of most of these parameters to optimize performance, if necessary.

**Notes:** The value of the db\_block\_size parameter must be 8192 or greater. This parameter is set when the database was created and cannot be changed. If your database has a lower value for this parameter, this means that you cannot use this database for the metadata repository.

Initialization Parameters that You Have to Check Manually Table 1–6

Parameter	Required Value	Parameter Class	Notes
nls_length_semantics	BYTE	Dynamic	Note: OracleAS Metadata Repository Creation Assistant does not check this parameter. You have to check it manually.
			The CHAR value for this parameter is not supported.
max_commit_ propagation_delay	0	Static	Note: OracleAS Metadata Repository Creation Assistant does not check this parameter. You have to check it manually.
			This parameter is required only if you are loading the OracleAS Metadata Repository into a Real Application Clusters database.
compatible	9.2.0.0.0 or higher	Static	<b>Note:</b> OracleAS Metadata Repository Creation Assistant does not check this parameter. You have to check it manually.
			Do not set this parameter to a value lower than 9.2.0.0.0.

Table 1–7 Initialization Parameters: Required Values (Checked by OracleAS Metadata Repository Creation Assistant)

Parameter	Required Value	Parameter Class	Notes
Farameter	nequired value	raiailletei Ciass	110162
db_block_size	8192 or greater	Not changeable. See "Notes" column.	You cannot change the value of this parameter once the database has been created.
aq_tm_processes	1 or greater	Dynamic	You can change the value of this parameter after installation.
open_cursors	300 or greater	Dynamic	You can change the value of this parameter after installation.
job_queue_processes	1 or greater	Dynamic	You can change the value of this parameter after installation.
db_cache_size	Greater than 144 MB	Dynamic	You can change the value of this parameter after installation.
shared_pool_size	Greater than 175 MB	Dynamic	You can change the value of this parameter after installation.
java_pool_size	Greater than 120 MB	Static	You can change the value of this parameter after installation.
pga_aggregate_target	Greater than 96 MB	Dynamic	You can change the value of this parameter after installation.
query_rewrite_ enabled	TRUE	Dynamic	Do not change this parameter after installation, because OracleAS Wireles requires this value.
query_rewrite_ integrity	trusted or enforced	Dynamic	Do not change this parameter after installation, because OracleAS Wireles requires this value.

Table 1–7 (Cont.) Initialization Parameters: Required Values (Checked by OracleAS Metadata Repository Creation Assistant)

Parameter	Required Value	Parameter Class	Notes
sessions	400 or greater	Static	You can change the value of this parameter after installation.
undo_management	AUTO	Static	You can change the value of this parameter after installation.
_system_trig_enabled	true	Dynamic	This is an internal Oracle parameter. Set it to true to enable system triggers.
db_create_file_dest	The directory where OracleAS Metadata Repository Creation Assistant should create the data files for OracleAS Metadata Repository	Dynamic	This initialization parameter is needed only if you are installing the OracleAS Metadata Repository in a database that uses Oracle-managed files.

#### **Checking Parameter Values**

To check the values of the initialization parameters using SQL\*Plus, you can use the show parameters command:

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

password specifies the password for the SYS user.

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

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

#### **Changing Parameter Values**

The method that you use to change a parameter's value depends on whether the parameter is static or dynamic, and on whether your database uses a parameter file or a server parameter file.

See the Oracle Database Administrator's Guide for your database for details on parameter files, server parameter files, and how to change parameter values.

If your database uses a parameter file, you can change the parameter values using two different methods:

- You can edit the parameter file and restart the database. This method works for both static and dynamic parameters.
- To change the values of dynamic parameters, you can use the alter system command, but the new values persist only until the database is shut down. For example:

```
prompt> sqlplus "sys/password as sysdba"
SQL> alter system set aq_tm_processes=9;
```

If your database uses a server parameter file, use the alter system command to change the parameter values. For static parameters, set the scope to spfile. You have to restart the database for the new value to take effect. For dynamic parameters, you can set the scope to spfile, memory, or both. For the values to persist, set the scope to spfile or both. For example:

```
prompt> sqlplus "sys/password as sysdba"
SQL> alter system set aq_tm_processes=9 scope=both;
```

### **Changing Values of Internal Parameters**

To change the values of internal Oracle parameters such as \_system\_trig\_enabled, you have to enclose the parameter name in double quotes:

```
prompt> sqlplus "sys/password as sysdba"
SQL> alter system set "_system_trig_enabled"=true;
```

If the parameter name is not enclosed in double quotes, you will get an error:

```
prompt> sqlplus "sys/password as sysdba"
SQL> alter system set _system_trig_enabled=true;
ERROR at line 1: ORA-00911: invalid character
```

### 1.5.9 Database Options

The database must have the following database options enabled:

Table 1-8 Required Database Options

Required Option	How to Check if the Option	on is Installed in the Database	
OLAP Window Functions	To check if the database has these options, query the V\$OPTION view (password specifies the password for the SYS user):		
Parallel load	prompt> sqlplus "sys/password as sysdba"  SQL> select * from v\$option;  Among the rows returned by the query, you should see these two rows:		
	PARAMETER	VALUE	
	OLAP Window Functions Parallel load	TRUE TRUE	
Java	<pre>prompt&gt; sqlplus "sys/password as sysdba"  SQL&gt; select count(*) from dba_objects     where object_type like 'JAVA%' and     owner = 'SYS' and status = 'VALID';</pre>		
	The count returned should	l be greater than 0.	
Intermedia	<pre>prompt&gt; sqlplus "sys/password as sysdba" SQL&gt; select count(name) from sys.props\$ where name = 'EXPORT_VIEWS_VERSION';</pre>		
	The count returned should	be greater than 0.	
Oracle Text	<pre>prompt&gt; sqlplus "sys/pa SQL&gt; select count(*) fr where owner = 'CTXSYS' view_name = 'CTX_VERSI</pre>	com dba_views / and	
	The count should be greate	er than 0.	

### 1.5.10 PL/SQL Packages

The database must have the following PL/SQL packages installed:

```
DBMS_DDL
DBMS_LOCK
DBMS_OUTPUT
DBMS_REPUTIL
DBMS_SQL
DBMS_STATS
DBMS_UTILITY
UTL_FILE
UTL_RAW
```

To check if a package is installed in the database, query the ALL\_OBJECTS view. The following example checks for the DBMS\_DDL package:

```
prompt> sqlplus "sys/password as sysdba"
SQL> select count(object_name) from all_objects
    where object name like 'DBMS_DDL%' and
       status = 'VALID';
```

Run the query for each package. Replace DBMS DDL with the name of the package. The count returned should be greater than 0.

### 1.5.11 DBMS\_LDAP Package

Check that your database contains the DBMS\_LDAP package, and that the package is valid. You need to reinstall the package if it is not valid.

1. Check that the version of the DBMS\_LDAP package is 2. The following SQL command must return 0.

```
prompt> sqlplus "sys/password as sysdba"
SQL> select dbms_ldap_utl.check_interface_version('2') from dual;
DBMS_LDAP_UTL.CHECK_INTERFACE_VERSION('2')
______
```

If the command returns a different value, or if it returns an error such as:

The DBMS\_LDAP package supplied with this database doesn't support the version 2 interface used by 904 components.

you need to reload the package. Go to "Reloading the DBMS\_LDAP Package" at the end of this section.

- 2. Check that the DBMS\_LDAP package is valid. The following SQL command must return 9.
  - **a.** Create a file containing the following lines. You can name the file anything you like (for example, test\_ldap.sql).

```
select count(*) from dba_objects where
( object_name = 'DBMS_LDAP' and
object_type = 'PACKAGE' and
status = 'VALID' and owner = 'SYS'
```

```
) OR
( object_name = 'DBMS_LDAP' and
object_type = 'PACKAGE BODY' and
status = 'VALID' and owner = 'SYS'
( object name = 'DBMS LDAP UTL' and
object_type = 'PACKAGE' and
status = 'VALID' and owner = 'SYS'
) OR
( object_name = 'DBMS_LDAP_UTL' and
object_type = 'PACKAGE BODY' and
status = 'VALID' and owner = 'SYS'
( object_name = 'DBMS_LDAP' and
object_type = 'SYNONYM' and
status = 'VALID' and owner = 'PUBLIC'
( object_name = 'DBMS_LDAP_UTL' and
object_type = 'SYNONYM' and
status = 'VALID' and owner = 'PUBLIC'
( object_name = 'DBMS_LDAP_API_FFI' and
object_type = 'PACKAGE' and
status = 'VALID' and owner = 'SYS'
( object_name = 'DBMS_LDAP_API_FFI' and
object_type = 'PACKAGE BODY' and
status = 'VALID' and owner = 'SYS'
( object name = 'DBMS LDAP API LIB' and
object_type = 'LIBRARY' and
status = 'VALID' and owner = 'SYS'
```

**b.** Run the file in SQL\*Plus. For example, if you named the file test\_ldap.sql, the command would look like the following:

```
prompt> sqlplus "sys/password as sysdba"
SQL> @test_ldap.sql
 COUNT(*)
```

If the command returns a value other than 9, you need to reload the package.

#### Reloading the DBMS\_LDAP Package

- 1. Check that the following files exist in the ORACLE\_HOME/rdbms/admin directory:
  - catldap.sql
  - dbmsldap.sql
  - prvtldap.plb
  - prvtldh.plb
- **2.** Using SQL\*Plus, run catldap.sql as the SYS user.

```
prompt> cd $ORACLE_HOME/rdbms/admin
prompt> sqlplus "sys/password as sysdba"
SQL> @catldap.sql
```

### 1.5.12 Knowledge Base Required (Oracle Database 10g Only)

If you plan to install the OracleAS Metadata Repository on Oracle Database 10g and you plan to use OracleAS Portal, then the database must have the Oracle Text supplied knowledge base. The knowledge base is an hierarchical tree of concepts used for indexing themes and performing ABOUT queries.

OracleAS Metadata Repository Creation Assistant checks if your database contains the knowledge base. If your database does not contain it, OracleAS Metadata Repository Creation Assistant displays the following warning:

"Knowledge base not found.

OracleAS RepCA was not able to find the Oracle Text Supplied Knowledge Base in the database specified.

If you are planning to use this repository for installing OracleAS Portal, you have to install Oracle Text Supplied Knowledge Base. Oracle Text Supplied Knowledge Base can be installed in the database using Oracle Database 10g Companion

If you are not planning to use this repository for installing OracleAS Portal, you may continue further.

Do you want to continue?"

If you do not plan to use OracleAS Portal, enter **Y** to continue. Otherwise, enter **N**.

If you want to check yourself to see if knowledge base is installed on your database, you can run the following query:

```
create or replace procedure Check_KB (l_return_value OUT varchar) is
  ORA20000_TEXT_EXCEPTION exception;
  pragma exception_init (ORA20000_TEXT_EXCEPTION, -20000);
  1_test_table constant varchar2(30) := 'WWSRC_INSO_TEST';
  1_test_table_index constant varchar2(30) := 'WWRSC_INSO_TEST_INDEX';
  procedure drop_test_table ( p_test_table in varchar2 ) is
  begin
     for c1 in ( select table_name from user_tables
                 where table_name = p_test_table )
     loop
        execute immediate 'drop table '||c1.table_name;
     end loop;
   end drop_test_table;
   begin
     l_return_value := 'TRUE';
     drop_test_table(l_test_table);
     execute immediate 'create table '||l_test_table||'( id number, content blob,
           query_id number, theme varchar2(2000), weight number,
          CONSTRAINT wwsrc_inso_test_pk PRIMARY KEY(id) )';
      execute immediate 'insert into '||l_test_table||'(id, content)
                     values(1, empty_blob())';
         execute immediate 'create index '||l_test_table_index||' on '||
             l_test_table||'(content) indextype is ctxsys.context
              PARAMETERS(''filter CTXSYS.INSO_FILTER'')';
```

```
ctx_doc.themes( index_name => l_test_table_index, textkey => '1',
              restab => l_test_table );
      exception when ORA20000_TEXT_EXCEPTION then
      if (instr(sqlerrm, 'DRG-11446') > 0) then
        l_return_value := 'FALSE';
        l_return_value := 'FALSE';
      end if:
   end:
   drop_test_table(l_test_table);
   exception when others then
     drop_test_table(l_test_table);
     l_return_value := 'FALSE';
end;
```

If the knowledge base is not installed, the following error is displayed when searching in OracleAS Portal with the Oracle Text Enable Themes and Gists option selected:

```
Error: The Oracle Text Installation is not complete. Knowledge base file or files
are missing. (WWWS-32026)
```

If your database does not have knowledge base installed, you can install it from the Oracle Database 10g Companion CD-ROM. See the Oracle Database Companion CD Installation Guide for details.

#### 1.5.13 Password File Authentication

The database must be set up to use password file authentication. For more information on password file authentication, see the Oracle Database Administrator's Guide.

Password file authentication is required only for running OracleAS Metadata Repository Creation Assistant. It is not required once the metadata repository has been installed.

You can check if the database is set up to use password file authentication, in one of two wavs.

Look up the value of the remote\_login\_passwordfile initialization parameter by running the following command in SQL\*Plus:

```
prompt> sqlplus "sys/password as sysdba"
SQL> show parameters remote_login_passwordfile
                    TYPE VALUE
NAME
remote_login_passwordfile string EXCLUSIVE
```

The value of the remote\_login\_passwordfile initialization parameter must be either EXCLUSIVE or SHARED. If the parameter has a different value or if it is not defined, the database is not set up for password file authentication.

Try connecting to the database as sysdba through a SQL\*Net connection.

```
prompt> sqlplus "sys/password@sqlnet_dbname as sysdba"
```

sqlnet\_dbname denotes the entry for the database in the tnsnames.ora file. If the database is not set up for password authentication, you will not be able to connect.

If you are sure the database is set up for password file authentication, but you get an ORA-01017 error, "Invalid username/password; logon denied", a possible cause is that you changed the SYS password when setting up the password file (the

value specified in the *password* parameter actually sets the password for the SYS user). If this is the case, you just need to change the SYS password to something that you can remember.

You can still log in as SYS if you have the sysdba operating system privilege. For the password, you can specify anything. The sysdba operating system privilege overrides the password.

```
prompt> sqlplus "sys/badPassword as sysdba"
SQL> alter user sys identified by newPassword;
SQL> exit
```

Now when you connect to the database with "sys/newPassword@sqlnet\_dbname as sysdba", it should work.

To set up a database for password file authentication:

1. Create a password file using the orapwd command (all on one line).

```
prompt> $ORACLE_HOME/bin/orapwd file=fullpath_to_pwfile password=password
entries=maxUsers
```

Values you need to provide:

fullpath\_to\_pwfile - Enter the full path to the file where the password information will be written. The filename must be orapwsid. Typically, the password file is stored in the ORACLE\_HOME/dbs directory.

password - Set the password for the SYS user.

**Note:** The value that you specify for *password* parameter **sets** the password for the SYS user. If you specify a different value from the current SYS password, you are changing the SYS password.

maxUsers - Specify the maximum number of users that the file can contain.

The following example sets the password file for a database whose name is "mydb":

```
prompt> $ORACLE_HOME/bin/orapwd
    file=/opt/oracle/db92/OraHome1/dbs/orapwmydb
   password=topsecret entries=9
```

- 2. Set the remote login passwordfile initialization parameter to EXCLUSIVE. You can set it to SHARED if you want to use the same password file for multiple databases. If you have a Real Application Clusters database, you must set the parameter to EXCLUSIVE.
- Restart the database.

### 1.5.14 Schemas and Tablespaces

OracleAS Metadata Repository Creation Assistant installs the schemas and tablespaces listed in Table 1–9 in your existing database. Ensure that the database does not contain schemas and tablespaces of the same name.

### 1.5.14.1 List of Schemas and Tablespaces

Table 1–9 lists the OracleAS Metadata Repository schemas and tablespaces that OracleAS Metadata Repository Creation Assistant will create in your database.

Table 1–9 Schemas and Tablespaces

Component	Schema	Tablespace	Default Database File
OracleAS Portal	PORTAL	PORTAL	portal.dbf
OracleAS Portal	PORTAL	PORTAL_DOC	ptldoc.dbf
OracleAS Portal	PORTAL	PORTAL_IDX	ptlidx.dbf
OracleAS Portal	PORTAL	PORTAL_LOG	ptllog.dbf
OracleAS Portal	PORTAL_APP	PORTAL	portal.dbf
OracleAS Portal	PORTAL_DEMO	PORTAL	portal.dbf
OracleAS Portal	PORTAL_PUBLIC	PORTAL	portal.dbf
OracleAS Single Sign-On	ORASSO	IAS_META	ias_meta01.dbf
OracleAS Single Sign-On	ORASSO_PA	IAS_META	ias_meta01.dbf
OracleAS Single Sign-On	ORASSO_DS	IAS_META	ias_meta01.dbf
OracleAS Single Sign-On	ORASSO_PS	IAS_META	ias_meta01.dbf
OracleAS Single Sign-On	ORASSO_PUBLIC	IAS_META	ias_meta01.dbf
OracleAS Wireless	WIRELESS	IAS_META	ias_meta01.dbf
Oracle Workflow	OWF_MGR	IAS_META	ias_meta01.dbf
OracleAS Discoverer	DISCOVERER5	DISCO_PTM5_META	discopltm1.dbf
OracleAS Discoverer	DISCOVERER5	DISCO_PTM5_CACHE	discopltc1.dbf
OracleAS Distributed Configuration Management (DCM)	DCM	DCM	dcm.dbf
OracleAS Web Clipping Support	WCRSYS	WCRSYS_TS	wcrsys01.dbf
OracleAS Integration B2B	B2B	B2B_RT	b2b_rt.dbf
OracleAS Integration B2B	B2B	B2B_DT	b2b_dt.dbf
OracleAS Integration B2B	B2B	B2B_IDX	b2b_idx.dbf
OracleAS Integration B2B	B2B	B2B_LOB	b2b_lob.dbf
OracleAS Certificate Authority	OCA	OCATS	oca.dbf
OracleAS Certificate Authority	ORAOCA_PUBLIC	OCATS	oca.dbf
OracleAS UDDI	UDDISYS	UDDISYS_TS	uddisys01.dbf
Oracle Internet Directory	ODS	OLTS_ATTRSTORE	attrs1_oid.dbf
Oracle Internet Directory	ODS	OLTS_BATTRSTORE	battrs1_oid.dbf
Oracle Internet Directory	ODS	OLTS_CT_STORE	gcats1_oid.dbf
Oracle Internet Directory	ODS	OLTS_DEFAULT	gdefault1_oid.dbf
Oracle Internet Directory	ODS	OLTS_SVRMGSTORE	svrmg1_oid.dbf
Oracle Ultra Search	WKSYS	IAS_META	ias_meta01.dbf
Oracle Ultra Search	WKPROXY	IAS_META	ias_meta01.dbf

Table 1–9 (Cont.) Schemas and Tablespaces

Component	Schema	Tablespace	Default Database File
Oracle Ultra Search	WK_TEST	IAS_META	ias_meta01.dbf
Multiple components	DSGATEWAY	DSGATEWAY_TAB	oss_sys01.dbf
Metadata Repository Version	INTERNET_APPSERVER_ REGISTRY	IAS_META	ias_meta01.dbf

### 1.5.14.2 Schema Name Already In Use

If OracleAS Metadata Repository Creation Assistant finds even one schema of the same name in the existing database, it asks for confirmation before it drops and re-creates the schema with new data.

If you want to save the data in the schema, do not proceed. Back up the data you want to save, restore it under a different schema, and rerun OracleAS Metadata Repository Creation Assistant. This time, you can tell it to drop and re-create the schema.

To get a list of existing schema names in the database, query the ALL\_USERS view:

```
prompt> sqlplus "sys/password as sysdba"
SQL> select username from all_users;
```

password specifies the password for the SYS user.

See Chapter 4, "Deregistering and Removing OracleAS Metadata Repository" if you want to run OracleAS Metadata Repository Creation Assistant to remove schemas and tablespaces used by OracleAS Metadata Repository.

#### 1.5.14.3 Tablespace Name Already In Use

If OracleAS Metadata Repository Creation Assistant finds even one tablespace of the same name in the existing database, it cannot continue. It displays an error dialog. In this case:

- Dismiss the error dialog and exit OracleAS Metadata Repository Creation Assistant.
- Back up the data in the tablespace (if desired).
- Drop the tablespace.
- Rerun OracleAS Metadata Repository Creation Assistant.

To get a list of existing tablespace names in the database, query the V\$TABLESPACE view:

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

password specifies the password for the SYS user.

**Note:** If you run OracleAS Metadata Repository Creation Assistant and cancel it before it completes, it might have created some of the tablespaces listed in Table 1–9 in your database. You have to drop these tablespaces before you can rerun OracleAS Metadata Repository Creation Assistant.

See Chapter 4, "Deregistering and Removing OracleAS Metadata Repository" if you want to run OracleAS Metadata Repository Creation Assistant to remove schemas and tablespaces used by OracleAS Metadata Repository.

To drop a tablespace, you can run SQL statements manually. You can also run OracleAS Metadata Repository Creation Assistant to remove OracleAS Metadata Repository tablespaces and schemas. See Chapter 4, "Deregistering and Removing OracleAS Metadata Repository".

To run SQL statements manually, perform the following steps. The order of the tasks is important. If you delete the data files first, then you cannot drop the tablespace. If the tablespace exists, you cannot rerun OracleAS Metadata Repository Creation Assistant.

1. Use SQL\*Plus and log in to the database as the SYS user.

```
prompt> sqlplus "sys/password as sysdba"
```

**2.** Drop the schemas in the tablespace.

```
SQL> drop user schema_name cascade;
```

**3.** Drop the tablespace.

SQL> drop tablespace tablespace\_name including contents cascade constraints; SQL> exit;

**4.** Delete the data files (the .dbf files) associated with the tablespace.

#### 1.5.14.4 Tablespace Sizes

If you are using files (as opposed to raw devices) for tablespaces, select the size for each tablespace that OracleAS Metadata Repository Creation Assistant will create.

OracleAS Metadata Repository Creation Assistant offers three size options for each tablespace (see Table 1–10). These sizes represent light usage, moderate usage, and heavy usage of the component. If you have applications that use a component heavily, you should select the biggest size for the component's tablespaces. You should select the minimum size for components that you do not plan on using with this repository.

The tablespace sizes are initial sizes. Extensive use of the component may increase the size of the tablespaces because they are set to AUTOEXTEND.

		Initial Sizes (in MB)		
Component	Tablespace	Small	Medium	Large
OracleAS Portal	PORTAL	75	100	150
OracleAS Portal	PORTAL_DOC	25	40	50
OracleAS Portal	PORTAL_IDX	30	50	60
OracleAS Portal	PORTAL_LOG	30	50	60

Table 1–10 Initial Sizes for Tablespaces

Table 1–10 (Cont.) Initial Sizes for Tablespaces

		Initial Sizes (in MB)		
Component	Tablespace	Small	Medium	Large
OracleAS Single Sign-On	IAS_META	200	300	500
OracleAS Wireless				
Oracle Ultra Search				
Oracle Workflow				
INTERNET_APPSERVER_ REGISTRY (schema for storing information about the OracleAS Metadata Repository version)				
OracleAS Discoverer	DISCO_PTM5_META	5	10	15
OracleAS Discoverer	DISCO_PTM5_CACHE	5	10	15
OracleAS Distributed Configuration Management (DCM)	DCM	50	100	200
OracleAS Web Clipping Support	WCRSYS_TS	35	45	55
OracleAS Certificate Authority	OCATS	15	35	55
OracleAS UDDI	UDDISYS_TS	35	50	65
Oracle Internet Directory	OLTS_ATTRSTORE	10	15	20
Oracle Internet Directory	OLTS_BATTRSTORE	10	15	20
Oracle Internet Directory	OLTS_CT_STORE	10	15	20
Oracle Internet Directory	OLTS_DEFAULT	10	15	20
Oracle Internet Directory	OLTS_SVRMGSTORE	10	15	20
Multiple components	DSGATEWAY_TAB	25	35	45

If your existing database uses ASM, Oracle-managed files, or raw devices, you do not need to select the sizes for the tablespaces. However, you need to verify that the sizes of the storage devices are adequate for the components (see Table 1–11 and Table 1–12). If you are planning on using a component extensively, make sure the storage device for the tablespace has even more space available.

Table 1–11 Minimum Size for System Tablespaces

Tablespace	Minimum Size
SYSTEM tablespace	1024 MB
TEMP tablespace	128 MB
UNDOTBS1 tablespace	256 MB
UNDOTBS2 tablespace	256 MB
DRSYS tablespace	64 MB

Raw Devices for the OracleAS Metadata Repository Table 1–12

Raw Device for	Minimum Size	Recommended Name
PORTAL tablespace	128 MB	dbname_raw_portal_128m
PORTAL_DOC tablespace	64 MB	dbname_raw_portaldoc_64m
PORTAL_IDX tablespace	64 MB	dbname_raw_portalidx_64m
PORTAL_LOG tablespace	64 MB	dbname_raw_portallog_64m
DCM tablespace	256 MB	dbname_raw_dcm_256m
OCATS tablespace	64 MB	dbname_raw_ocats_64m
DISCO_PTM5_CACHE tablespace	64 MB	dbname_raw_discoptm5cache_64m
DISCO_PTM5_META tablespace	64 MB	dbname_raw_discoptm5meta_64m
WCRSYS_TS tablespace	64 MB	dbname_raw_wcrsysts_64m
UDDISYS_TS tablespace	64 MB	dbname_raw_uddisysts_64m
OLTS_ATTRSTORE tablespace	128 MB	dbname_raw_oltsattrstore_128m
OLTS_BTTRSTORE tablespace	64 MB	dbname_raw_oltsbttrstore_64m
OLTS_CT_STORE tablespace	256 MB	dbname_raw_oltsctstore_256m
OLTS_DEFAULT tablespace	128 MB	dbname_raw_oltsdefault_128m
OLTS_SVRMGSTORE tablespace	64 MB	dbname_raw_oltssvrmgstore_64m
IAS_META tablespace	256 MB	dbname_raw_iasmeta1_256m
DSGATEWAY_TAB tablespace	64 MB	dbname_raw_dsgatewaytab_64m

For information on using raw devices, see the database documentation.

### 1.5.15 Registration with Oracle Internet Directory

For registration to be successful, check the following points:

- Ensure that the existing database is not already registered with Oracle Internet Directory. You cannot register a database that is already registered with Oracle Internet Directory.
- Ensure that another database with the same SID is not already registered with Oracle Internet Directory.

To check if a database is already registered with Oracle Internet Directory, you have to look in Oracle Internet Directory:

- 1. Connect to Oracle Internet Directory using Oracle Directory Manager.
  - **a.** Start up Oracle Directory Manager.

prompt> \$ORACLE\_HOME/bin/oidadmin

- **b.** In the Connect screen, enter the connect information. Log in as the Oracle Internet Directory superuser (cn=orcladmin).
- Check to see if your database is registered with Oracle Internet Directory. Expand these entries: **Entry Management** > **cn=OracleContext**.

If your database is registered with Oracle Internet Directory, you would see an entry called "cn=your\_database\_name".

To remove the registration, see step 2 in Section B.3, "Manual Steps: Cleaning Up a Failed Registration or Deregistering OracleAS Metadata Repository".

3. Check to see if your database has a metadata repository that is registered with Oracle Internet Directory. Expand these entries:

Entry Management > cn=OracleContext > cn=Products > cn=IAS > cn=IAS **Infrastructure Databases** 

If your database has a metadata repository that is registered with Oracle Internet Directory, you would see an entry called "orclReferenceName=your\_database\_ name".

To remove the registration, see step 3 in Section B.3, "Manual Steps: Cleaning Up a Failed Registration or Deregistering OracleAS Metadata Repository".

### 1.6 Requirements for Oracle Internet Directory

To register the OracleAS Metadata Repository with Oracle Internet Directory, the Oracle Internet Directory must be version 9.0.4 or later. Note that Oracle Internet Directory version 9.2.x is not supported.

To check the Oracle Internet Directory version, run the following command:

```
prompt> oidldapd -version
```

The oidldapd command can be found in the ORACLE\_HOME/bin directory, where ORACLE\_HOME is the directory where you installed Oracle Internet Directory.

### 1.7 Starting OracleAS Metadata Repository Creation Assistant

To start OracleAS Metadata Repository Creation Assistant:

- Check that you have installed OracleAS Metadata Repository Creation Assistant. See Section 1.4, "Installing OracleAS Metadata Repository Creation Assistant" for details.
- **2.** Ensure the listener for the existing database and the database itself are up and running.
- 3. If the NLS LANG environment variable is set to a non-English locale, unset it or set it to american america.us7ascii.

```
prompt> unsetenv NLS_LANG
- or -
prompt> setenv NLS_LANG american_america.us7ascii
```

If NLS\_LANG is set to a non-English locale, OracleAS Metadata Repository Creation Assistant will fail to load the Workflow schema.

You can set NLS\_LANG back to its original value after running OracleAS Metadata Repository Creation Assistant.

4. Start up OracleAS Metadata Repository Creation Assistant from the Oracle home for OracleAS Metadata Repository Creation Assistant (this is the directory where you installed OracleAS Metadata Repository Creation Assistant):

```
prompt> cd ORACLE_HOME_RepCA
prompt> runRepca
```

### 1.8 Which Section to Read Next?

The remaining sections in this chapter describe the procedures for using OracleAS Metadata Repository Creation Assistant.

#### **Loading Operations**

For loading operations, with or without registration with Oracle Internet Directory, select the section that matches your database type and storage option:

Table 1-13 Which Section to Read Next

Database Type	Storage Type	Section to Read
Non-Real Application Clusters	File system	Section 2.1, "Installing in a Database that Uses the File System"
Non-Real Application Clusters	Raw devices	Section 2.2, "Installing in a Database that Uses Raw Devices"
Real Application Clusters	Cluster file system or volume manager	Section 2.3, "Installing in a Real Application Clusters Database"
Real Application Clusters	Raw devices	Section 2.3, "Installing in a Real Application Clusters Database"
Automatic Storage Management (ASM)	Disk group	Section 2.4, "Installing in a Database that Uses Automatic Storage Management"
Automatic Storage Management (ASM)	File system	Section 2.4, "Installing in a Database that Uses Automatic Storage Management"
Oracle-managed files	File system	Section 2.5, "Installing in a Database that Uses Oracle-Managed Files"

#### **Registration Only Operations**

If you just want to register the OracleAS Metadata Repository with Oracle Internet Directory, see Chapter 3, "Registering OracleAS Metadata Repository with Oracle Internet Directory".

#### **Removal or Deregistration Operations**

See Chapter 4, "Deregistering and Removing OracleAS Metadata Repository".

## Loading the OracleAS Metadata Repository into an Existing Database

This chapter describes how to install, or load, the OracleAS Metadata Repository in an existing database. When you install, you choose whether you want to load the OracleAS Metadata Repository only, or load and register the OracleAS Metadata Repository with Oracle Internet Directory.

#### Contents:

- Section 2.1, "Installing in a Database that Uses the File System"
- Section 2.2, "Installing in a Database that Uses Raw Devices"
- Section 2.3, "Installing in a Real Application Clusters Database"
- Section 2.4, "Installing in a Database that Uses Automatic Storage Management"
- Section 2.5, "Installing in a Database that Uses Oracle-Managed Files"
- Section 2.6, "Harmless Errors in the Log File"
- Section 2.7, "Post-Installation Steps"
- Section 2.8, "If Loading Failed"
- Section 2.9, "If Registration Failed"
- Section 2.10, "Re-Installing the OracleAS Metadata Repository in the Same Database"

### 2.1 Installing in a Database that Uses the File System

To install the OracleAS Metadata Repository in an existing database that uses the file system for its data files:

- Ensure that the database meets the requirements listed in Section 1.5, "Requirements for the Database".
- Start up OracleAS Metadata Repository Creation Assistant. See Section 1.7, "Starting OracleAS Metadata Repository Creation Assistant" for details.
- **3.** Follow the screens:

Table 2–1 Installing OracleAS Metadata Repository in a Database that Uses the Regular File System

	Screen	Action		
1.	Welcome	Click Next.		
2.	Specify Oracle Home	<b>Oracle Home</b> : Enter the full path of the Oracle home directory for the database. Be sure you use the conventions of the computer that is running the database (for example, use the proper slashes).		
		<b>Log File Directory</b> : Enter the full path of the directory where you want OracleAS Metadata Repository Creation Assistant to write its log files. This path is on the computer where you are running OracleAS Metadata Repository Creation Assistant.		
		Note that once you click <b>Next</b> to move to the next screen, you cannot change the log file directory. If you click <b>Back</b> to return to this screen, the <b>Log File Directory</b> field becomes read-only. This is to prevent OracleAS Metadata Repository Creation Assistant from writing log files in different directories.		
		Click Next.		
3.	Select Operation	Select <b>Load</b> if you want to load the OracleAS Metadata Repository into the database but without registering it with Oracle Internet Directory. Select this option if you do not have an Oracle Internet Directory yet.		
		Select <b>Load and Register</b> if you want to load the OracleAS Metadata Repository into the database and register it with Oracle Internet Directory.		
		Click Next.		
4. Specify Database Enter connect information		Enter connect information for the existing database.		
	Connection Information	SYS Password: Enter the password for the SYS user.		
		Single node instance: Select this option, and complete the fields under it:		
		<ul> <li>Hostname: Enter the name of the computer that is running the database. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.</li> </ul>		
		<ul> <li>Port: Enter the port number for the database.</li> </ul>		
		<ul> <li>Service Name: Enter the service name of the database. Note that the service name must include the database domain name.</li> </ul>		
		Example: asdb.mydomain.com		
		Click Next.		
5.	Specify Storage Options	Select Regular or Cluster File System.		

Table 2–1 (Cont.) Installing OracleAS Metadata Repository in a Database that Uses the Regular File

#### Screen

#### Action

### Specify Tablespace Information

Specify where OracleAS Metadata Repository Creation Assistant should create files for the tablespaces, and the tablespace sizes. The directory you specify must meet the following criteria:

- The directory already exists on the computer running the database, which is not necessarily the computer where you are running OracleAS Metadata Repository Creation Assistant.
- The directory is writable.
- The directory has enough free space.
- The path to the directory is correct and is consistent with the operating system that is running the database.

**Use Same Directory for All Tablespaces**: Select this option if you want to place all the files for all the tablespaces in the same directory. Specify the directory in the field below this option.

**Use Individual Directories for Each Tablespace**: Select this option if you want to place the files for the tablespaces in different directories.

**Tablespaces**: Expand the tree to view the tablespaces for each component. Select a tablespace to view or edit its associated datafile or size.

Size: Select the largest size for a tablespace if you have applications that use the component heavily. If not, select the smallest size.

Filename: Enter the file name for the database file. Example: portal.dbf

**Directory**: Enter the directory where you want to put the database file for the tablespace. Ensure that the path to the directory is correct and is consistent with the operating system that is running the database.

Example (UNIX): /opt/oracle/dbfiles/ Example (Windows): C:\oracle\dbfiles\

Click Next.

Warning: Check Disk Space

This warning dialog appears if your SYSTEM and UNDO tablespaces are set to autoextend. Check that the file system that contains the SYSTEM and UNDO tablespaces have enough disk space, as specified in the warning dialog.

Specify Oracle Internet **Directory Connection** 

This and the next two screens appear only if you selected **Load and Register** earlier.

**Internet Directory Hostname**: Enter the name of the computer that is running Oracle Internet Directory. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.

**Internet Directory Port**: Enter the port number for Oracle Internet Directory.

Use SSL to Connect to Oracle Internet Directory for Registration Purposes: Select this option if you want OracleAS Metadata Repository Creation Assistant to connect to Oracle Internet Directory using SSL when performing the registration.

Click Next.

Specify Login for Oracle **Internet Directory** 

Enter the Username and Password to log in to Oracle Internet Directory. The user must belong to the iAS Admins group. You can use the user's simple name (for example, jdoe) or the user's DN (for example, cn=orcladmin).

If your Oracle Internet Directory contains more than one realm, you need to enter the realm that contains the specified user.

**Note:** If you log in as the Oracle Internet Directory superuser (cn=orcladmin), the realm value is not used because the superuser does not belong to any realm. The realm value is used only if you log in using a simple name.

Table 2–1 (Cont.) Installing OracleAS Metadata Repository in a Database that Uses the Regular File

Screen	Action
10. Specify Oracle Context	Specify the location in Oracle Internet Directory where you want to register the OracleAS Metadata Repository.
	<b>Root Oracle Context (cn=OracleContext)</b> : Select this option to register OracleAS Metadata Repository in the root Oracle context.
	<b>Custom Oracle Context</b> : Select this option to register OracleAS Metadata Repository in a specific realm in Oracle Internet Directory. Enter the DN of the realm in the provided field.
	Click Next.
11. Loading Repository	OracleAS Metadata Repository Creation Assistant creates and populates the tablespaces and schemas.
<b>12.</b> Success	Click <b>OK</b> to exit OracleAS Metadata Repository Creation Assistant.

Perform post-installation steps. See Section 2.7, "Post-Installation Steps".

# 2.2 Installing in a Database that Uses Raw Devices

This section describes how to install the OracleAS Metadata Repository in a non-Real Application Clusters database that uses raw devices. If you have a Real Application Clusters database that uses raw devices, see Section 2.3, "Installing in a Real Application Clusters Database".

To install the OracleAS Metadata Repository in a non-Real Application Clusters database that uses raw devices:

- Ensure that the database meets the requirements listed in Section 1.5, "Requirements for the Database".
- **2.** Create raw devices for the OracleAS Metadata Repository.

See Table 1-12 for a list of tablespaces for which you have to create raw devices, and their minimum sizes.

The command to create raw devices is specific to the volume manager you are using. For example, if you using VERITAS Volume Manager, the command is vxassist.

(optional) Create a file to map the tablespaces to the raw devices, and set the DBCA\_RAW\_CONFIG environment variable to point to this file.

OracleAS Metadata Repository Creation Assistant reads this file and populates the Specify Tablespace Information screen with the data. You just need to confirm the data on that screen.

If you do not create this file, you can still run OracleAS Metadata Repository Creation Assistant to install the OracleAS Metadata Repository in a database that uses raw devices. On the Specify Tablespace Information screen, it leaves the fields blank, and you have to enter the data manually.

The steps in detail:

Create a file to map the tablespaces to your raw devices.

Each line in the file has the following format:

tablespace\_name=raw\_device\_file\_path

You can use the following sample file, replacing the raw device file paths with your values. Append a "1" to the tablespace names, as shown in the sample file.

```
PORTAL1=/dev/vx/rdsk/oracle/mydb_raw_portal_128m
PORTAL_DOC1=/dev/vx/rdsk/oracle/mydb_raw_portal_doc_64m
PORTAL_IDX1=/dev/vx/rdsk/oracle/mydb_raw_portal_idx_64m
PORTAL_LOG1=/dev/vx/rdsk/oracle/mydb_raw_portal_log_64m
IAS_META1=/dev/vx/rdsk/oracle/mydb_raw_ias_meta_256m
DISCO_PTM5_META1=/dev/vx/rdsk/oracle/mydb_raw_disco_meta_64m
DISCO_PTM5_CACHE1=/dev/vx/rdsk/oracle/mydb_raw_disco_cache_64m
DCM1=/dev/vx/rdsk/oracle/mydb_raw_dcm_256m
WCRSYS_TS1=/dev/vx/rdsk/oracle/mydb_raw_clip_64m
OCATS1=/dev/vx/rdsk/oracle/mydb_raw_oca_64m
UDDISYS_TS1=/dev/vx/rdsk/oracle/mydb_raw_uddi_64m
OLTS_ATTRSTORE1=/dev/vx/rdsk/oracle/mydb_raw_olts_attr_128m
OLTS_BATTRSTORE1=/dev/vx/rdsk/oracle/mydb_raw_olts_battr_64m
OLTS_CT_STORE1=/dev/vx/rdsk/oracle/mydb_raw_olts_ct_store_256m
OLTS_DEFAULT1=/dev/vx/rdsk/oracle/mydb_raw_olts_default_128m
OLTS_SVRMGSTORE1=/dev/vx/rdsk/oracle/mydb_raw_olts_svrmgstore_64m
DSGATEWAY_TAB1=/dev/vx/rdsk/oracle/mydb_raw_synd_64m
b2b_dt1=/dev/vx/rdsk/oracle/mydb_raw_b2b_dt_256m
b2b_rt1=/dev/vx/rdsk/oracle/mydb_raw_b2b_rt_256m
b2b_lob1=/dev/vx/rdsk/oracle/mydb_raw_b2b_lob_256m
b2b_idx1=/dev/vx/rdsk/oracle/mydb_raw_b2b_idx_256m
```

See Section 1.5.14, "Schemas and Tablespaces" for a list of tablespaces and schemas in the OracleAS Metadata Repository.

**b.** Set the DBCA\_RAW\_CONFIG environment variable to the full path of the file.

For example, if you saved the file as /opt/oracle/repca/tablespace\_ map.txt, then you would set the environment variable as follows:

setenv DBCA\_RAW\_CONFIG /opt/oracle/repca/tablespace\_map.txt

- Start up OracleAS Metadata Repository Creation Assistant. See Section 1.7, "Starting OracleAS Metadata Repository Creation Assistant" for details.
- Follow the screens:

Installing OracleAS Metadata Repository in a Database that Uses Raw Devices Table 2–2

	Screen	Action
1.	Welcome	Click Next.
2.	Specify Oracle Home	<b>Oracle Home</b> : Enter the full path of the Oracle home directory for the database. Be sure you use the conventions of the computer that is running the database (for example, use the proper slashes).
		<b>Log File Directory</b> : Enter the full path of the directory where you want OracleAS Metadata Repository Creation Assistant to write its log files. This path is on the computer where you are running OracleAS Metadata Repository Creation Assistant.
		Note that once you click <b>Next</b> to move to the next screen, you cannot change the log file directory. If you click <b>Back</b> to return to this screen, the <b>Log File Directory</b> field becomes read-only. This is to prevent OracleAS Metadata Repository Creation Assistant from writing log files in different directories.

Table 2-2 (Cont.) Installing OracleAS Metadata Repository in a Database that Uses Raw Devices

Screen	Action
Select Operation	Select <b>Load</b> if you want to load the OracleAS Metadata Repository into the database but without registering it with Oracle Internet Directory. Select this option if you do not have an Oracle Internet Directory yet.
	Select <b>Load and Register</b> if you want to load the OracleAS Metadata Repository into the database and register it with Oracle Internet Directory.
	Click Next.
Specify Database	Enter connect information for the existing database.
Connection Information	SYS Password: Enter the password for the SYS user.
	Single node instance: Select this option, and complete the fields under it:
	■ <b>Hostname</b> : Enter the name of the computer that is running the database. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.
	■ <b>Port</b> : Enter the port number for the database.
	• <b>Service Name</b> : Enter the service name of the database. Note that the service name must include the database domain name.
	Example: asdb.mydomain.com
	Click Next.
Specify Storage Options	Select Raw Device.
Specify Tablespace Information	If you created a mapping file and set the DBCA_RAW_CONFIG environment variable to point to this file, this screen displays the values read from the file. See step 3 on page 2-4 for details. Correct the values, if necessary, and click <b>Next</b> .
	If you did not create a mapping file, or if the DBCA_RAW_CONFIG environment variable is unset, you have to enter the information in this screen manually. Click <b>Next</b> .
Warning: Check Disk Space	This warning dialog appears if your SYSTEM and UNDO tablespaces are set to autoextend. Check that the file system that contains the SYSTEM and UNDO tablespaces have enough disk space, as specified in the warning dialog.
Specify Oracle Internet Directory Connection	This and the next two screens appear only if you selected <b>Load and Register</b> earlier.
	<b>Internet Directory Hostname</b> : Enter the name of the computer that is running Oracle Internet Directory. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.
	<b>Internet Directory Port</b> : Enter the port number for Oracle Internet Directory.
	Use SSL to Connect to Oracle Internet Directory for Registration Purposes: Select this option if you want OracleAS Metadata Repository Creation Assistant to connect to Oracle Internet Directory using SSL when performing the registration.
	Click Next.
Specify Login for Oracle Internet Directory	Enter the Username and Password to log in to Oracle Internet Directory. The user must belong to the iAS Admins group. You can use the user's simple name (for example, jdoe) or the user's DN (for example, cn=orcladmin).
	If your Oracle Internet Directory contains more than one realm, you need to enter the realm that contains the specified user.
	Note: If you log in as the Oracle Internet Directory superuser (cn=orcladmin),
	the realm value is not used because the superuser does not belong to any realm.  The realm value is used only if you log in using a simple name.
	Specify Database Connection Information  Specify Storage Options Specify Tablespace Information  Warning: Check Disk Space  Specify Oracle Internet Directory Connection

Table 2–2 (Cont.) Installing OracleAS Metadata Repository in a Database that Uses Raw Devices

	Screen	Action
10.	Specify Oracle Context	Specify the location in Oracle Internet Directory where you want to register the OracleAS Metadata Repository.
		<b>Root Oracle Context (cn=OracleContext)</b> : Select this option to register OracleAS Metadata Repository in the root Oracle context.
		<b>Custom Oracle Context</b> : Select this option to register OracleAS Metadata Repository in a specific realm in Oracle Internet Directory. Enter the DN of the realm in the provided field.
		Click Next.
11.	Loading Repository	OracleAS Metadata Repository Creation Assistant creates and populates the tablespaces and schemas.
12.	Success	Click <b>OK</b> to exit OracleAS Metadata Repository Creation Assistant.

Perform post-installation steps. See Section 2.7, "Post-Installation Steps".

# 2.3 Installing in a Real Application Clusters Database

You can use OracleAS Metadata Repository Creation Assistant to load the OracleAS Metadata Repository into an existing Real Application Clusters database. Figure 2–1 shows how you can use this database with Oracle Application Server. In this environment, you install the OracleAS Metadata Repository and the Identity Management components separately, as described in Table 2–3.

OracleAS Infrastructure with the OracleAS Metadata Repository in a Real Application Clusters Database

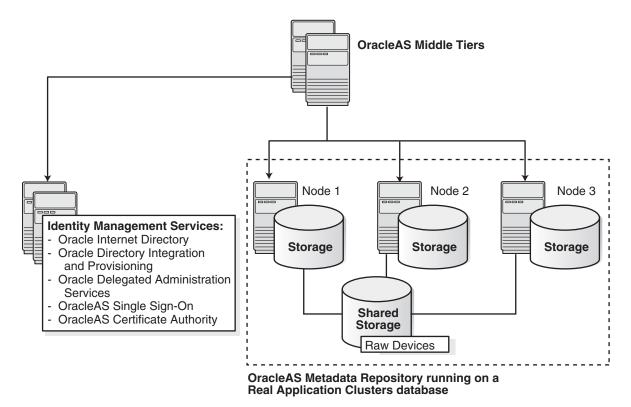


Table 2–3 OracleAS Infrastructure with Real Application Clusters

Component	Where Installed
OracleAS Metadata Repository	Installed in an existing Real Application Clusters database
Identity Management components	Installed on non-clustered computers

### 2.3.1 Installation Overview

**Note:** You need an existing Real Application Clusters database to create this environment.

You cannot use the installer to create a new Real Application Clusters database containing the OracleAS Metadata Repository.

To create this environment, install Oracle Application Server as follows:

1. Install OracleAS Metadata Repository in your existing Real Application Clusters database.

You use OracleAS Metadata Repository Creation Assistant to do this. The specific steps depend on the storage type used by the Real Application Clusters database:

- Section 2.3.2, "Installation Steps for Real Application Clusters Databases that Use a Cluster File System or Volume Manager"
- Section 2.3.3, "Installation Steps for Real Application Clusters Databases that Use Raw Devices"

**Note:** Do not register the OracleAS Metadata Repository with Oracle Internet Directory, because you have not installed Oracle Internet Directory vet.

2. Install the Identity Management components on non-clustered computers.

You can install all the Identity Management components on a single computer, or you can distribute them over multiple computers. See the Oracle Application Server Installation Guide for details.

When the installer prompts for the database hostname in the "Specify Metadata Repository Login and Connect Information" screen, enter all the node names in the Real Application Clusters, plus the port numbers for each node. Use the format node:port. Separate the pairs with a comma character.

For example, if you have three nodes (named node1, node2, and node3) in the cluster, and the listener listens on port 1521 for all nodes, then you would enter:

node1:1521, node2:1521, node3:1521

Install Oracle Application Server middle tiers.

### 2.3.2 Installation Steps for Real Application Clusters Databases that Use a Cluster File System or Volume Manager

To install the OracleAS Metadata Repository in an existing Real Application Clusters database that uses a cluster file system (such as Oracle Cluster File System) or volume manager (such as Veritas or EMC), perform these steps:

- 1. Ensure that the database meets the requirements listed in Section 1.5, "Requirements for the Database".
- 2. Start up OracleAS Metadata Repository Creation Assistant. See Section 1.7, "Starting OracleAS Metadata Repository Creation Assistant" for details.
- **3.** Follow the screens:

Table 2-4 Installing OracleAS Metadata Repository in a Real Application Clusters Database that Uses the Cluster File System

	Screen	Action
1.	Welcome	Click Next.
2.	Specify Oracle Home	<b>Oracle Home</b> : Enter the full path of the Oracle home directory for the database. Be sure you use the conventions of the computer that is running the database (for example, use the proper slashes).
		<b>Log File Directory</b> : Enter the full path of the directory where you want OracleAS Metadata Repository Creation Assistant to write its log files. This path is on the computer where you are running OracleAS Metadata Repository Creation Assistant.
		Note that once you click <b>Next</b> to move to the next screen, you cannot change the log file directory. If you click <b>Back</b> to return to this screen, the <b>Log File Directory</b> field becomes read-only. This is to prevent OracleAS Metadata Repository Creation Assistant from writing log files in different directories.
		Click Next.
3.	Select Operation	<b>Oracle Home</b> : Enter the full path of the Oracle home directory for the database.
		Select <b>Load</b> if you want to load the OracleAS Metadata Repository into the database but without registering it with Oracle Internet Directory. Select this option if you do not have an Oracle Internet Directory yet.
		Select <b>Load and Register</b> if you want to load the OracleAS Metadata Repository into the database and register it with Oracle Internet Directory.
		Click Next.
4.	Specify Database	Enter connect information for the existing database.
	Connection Information	SYS Password: Enter the password for the SYS user.
		<b>Real Application Clusters Database</b> : Select this option, and complete the fields under it:
		■ <b>Hostname and Port</b> : Enter the names of all the computers running the Real Application Clusters database and the port numbers used by the listener. Use the format <i>host</i> : <i>port</i> , and separate each <i>host</i> : <i>port</i> with a comma character:
		hostname1:port1, hostname2:port2, hostname3:port3,
		If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.
		Example 1 (same domain): myhost:1521, myhost2:1521
		<pre>Example 2 (different domain): myhost.mydomain.com:1521, myhost2.mydomain.com:1521</pre>
		• <b>Service Name</b> : Enter the service name of the database. The service name must include the database domain name. The service name must be the same for all instances in the cluster.
		Example: asdb.mydomain.com
		Click Next.
5.	Specify Storage Options	Select Regular or Cluster File System.

Table 2–4 (Cont.) Installing OracleAS Metadata Repository in a Real Application Clusters Database that Uses the Cluster File System

#### Screen

#### **Action**

#### Specify Tablespace 6. Information

Use Same Directory for All Tablespaces: Select this option if you want to place all the files for all the tablespaces in the same directory. Specify the directory in the field below this option. Ensure that:

- the directory already exists and is writable
- the directory has enough free space
- the path to the directory is correct and is consistent with the operating system that is running the database.

Use Individual Directories for Each Tablespace: Select this option if you want to place the files for the tablespaces in different directories.

**Tablespaces**: Expand the tree to view the tablespaces for each component. Select a tablespace to view or edit its associated datafile or size.

Size: Select the largest size for a tablespace if you have applications that use the component heavily. If not, select the smallest size.

Filename: Enter the file name for the database file. Example: portal.dbf

**Directory**: Enter the directory where you want to put the database file for the tablespace. Ensure that the path to the directory is correct and is consistent with the operating system that is running the database.

Example (UNIX): /opt/oracle/dbfiles/ Example (Windows): C:\oracle\dbfiles\

Click Next.

7. Warning: Check Disk Space

This warning dialog appears if your SYSTEM and UNDO tablespaces are set to autoextend. Check that the file system that contains the SYSTEM and UNDO tablespaces have enough disk space, as specified in the warning dialog.

Specify Oracle Internet Directory Connection

This and the next two screens appear only if you selected **Load and Register** earlier.

**Internet Directory Hostname**: Enter the name of the computer that is running Oracle Internet Directory. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.

**Internet Directory Port**: Enter the port number for Oracle Internet Directory.

Use SSL to Connect to Oracle Internet Directory for Registration Purposes: Select this option if you want OracleAS Metadata Repository Creation Assistant to connect to Oracle Internet Directory using SSL when performing the registration.

Click Next.

Specify Login for Oracle **Internet Directory** 

Enter the Username and Password to log in to Oracle Internet Directory. The user must belong to the iAS Admins group. You can use the user's simple name (for example, jdoe) or the user's DN (for example, cn=orcladmin).

If your Oracle Internet Directory contains more than one realm, you need to enter the realm that contains the specified user.

**Note:** If you log in as the Oracle Internet Directory superuser (cn=orcladmin), the realm value is not used because the superuser does not belong to any realm. The realm value is used only if you log in using a simple name.

Table 2–4 (Cont.) Installing OracleAS Metadata Repository in a Real Application Clusters Database that Uses the Cluster File System

Screen	Action
10. Specify Oracle Context	Specify the location in Oracle Internet Directory where you want to register the OracleAS Metadata Repository.
	<b>Root Oracle Context (cn=OracleContext)</b> : Select this option to register OracleAS Metadata Repository in the root Oracle context.
	<b>Custom Oracle Context</b> : Select this option to register OracleAS Metadata Repository in a specific realm in Oracle Internet Directory. Enter the DN of the realm in the provided field.
	Click Next.
11. Loading Repository	OracleAS Metadata Repository Creation Assistant creates and populates the tablespaces and schemas.
<b>12.</b> Success	Click <b>OK</b> to exit OracleAS Metadata Repository Creation Assistant.

Perform post-installation steps. See Section 2.7, "Post-Installation Steps".

### 2.3.3 Installation Steps for Real Application Clusters Databases that Use Raw Devices

To install the OracleAS Metadata Repository in a Real Application Clusters database:

- Ensure that the database meets the requirements listed in Section 1.5, "Requirements for the Database".
- **2.** Create raw devices for the OracleAS Metadata Repository.

See Table 1–12 for a list of tablespaces for which you have to create raw devices, and their minimum sizes.

The command to create raw devices is specific to the volume manager you are using. For example, if you using VERITAS Volume Manager, the command is vxassist.

**3.** (optional) Create a file to map the tablespaces to the raw devices, and set the DBCA\_RAW\_CONFIG environment variable to point to this file.

OracleAS Metadata Repository Creation Assistant reads this file and populates the Specify Tablespace Information screen with the data. You just need to confirm the data on that screen.

If you do not create this file, you can still run OracleAS Metadata Repository Creation Assistant to install the OracleAS Metadata Repository in a Real Application Clusters database that uses raw devices. On the Specify Tablespace Information screen, it leaves the fields blank, and you have to enter the data manually.

The steps in detail:

**a.** Create a file to map the tablespaces to your raw devices.

Each line in the file has the following format:

tablespace\_name=raw\_device\_file\_path

You can use the following sample file, replacing the raw device file paths with your values. Append a "1" to the tablespace names, as shown in the sample file below.

PORTAL1=/dev/vx/rdsk/oracle/mydb\_raw\_portal\_128m PORTAL\_DOC1=/dev/vx/rdsk/oracle/mydb\_raw\_portal\_doc\_64m PORTAL\_IDX1=/dev/vx/rdsk/oracle/mydb\_raw\_portal\_idx\_64m PORTAL\_LOG1=/dev/vx/rdsk/oracle/mydb\_raw\_portal\_log\_64m IAS\_META1=/dev/vx/rdsk/oracle/mydb\_raw\_ias\_meta\_256m DISCO\_PTM5\_META1=/dev/vx/rdsk/oracle/mydb\_raw\_disco\_meta\_64m DISCO\_PTM5\_CACHE1=/dev/vx/rdsk/oracle/mydb\_raw\_disco\_cache\_64m DCM1=/dev/vx/rdsk/oracle/mydb\_raw\_dcm\_256m WCRSYS\_TS1=/dev/vx/rdsk/oracle/mydb\_raw\_clip\_64m OCATS1=/dev/vx/rdsk/oracle/mydb\_raw\_oca\_64m UDDISYS\_TS1=/dev/vx/rdsk/oracle/mydb\_raw\_uddi\_64m OLTS\_ATTRSTORE1=/dev/vx/rdsk/oracle/mydb\_raw\_olts\_attr\_128m OLTS\_BATTRSTORE1=/dev/vx/rdsk/oracle/mydb\_raw\_olts\_battr\_64m OLTS CT STORE1=/dev/vx/rdsk/oracle/mydb raw olts ct store 256m OLTS\_DEFAULT1=/dev/vx/rdsk/oracle/mydb\_raw\_olts\_default\_128m OLTS\_SVRMGSTORE1=/dev/vx/rdsk/oracle/mydb\_raw\_olts\_svrmgstore\_64m DSGATEWAY\_TAB1=/dev/vx/rdsk/oracle/mydb\_raw\_synd\_64m b2b\_dt1=/dev/vx/rdsk/oracle/mydb\_raw\_b2b\_dt\_256m b2b\_rt1=/dev/vx/rdsk/oracle/mydb\_raw\_b2b\_rt\_256m b2b lob1=/dev/vx/rdsk/oracle/mydb raw b2b lob 256m b2b\_idx1=/dev/vx/rdsk/oracle/mydb\_raw\_b2b\_idx\_256m

See Section 1.5.14, "Schemas and Tablespaces" for a list of tablespaces and schemas in the OracleAS Metadata Repository.

**b.** Set the DBCA\_RAW\_CONFIG environment variable to the full path of the file.

For example, if you saved the file as /opt/oracle/repca/tablespace map.txt, then you would set the environment variable as follows:

setenv DBCA\_RAW\_CONFIG /opt/oracle/repca/tablespace\_map.txt

- Start up OracleAS Metadata Repository Creation Assistant. See Section 1.7, "Starting OracleAS Metadata Repository Creation Assistant" for details.
- Follow the screens:

Installing OracleAS Metadata Repository in a Real Application Clusters Database that Uses Raw Table 2–5 Dovisos

_	Screen	Action
	Scieen	ACTION
1.	Welcome	Click Next.
2.	Specify Oracle Home	<b>Oracle Home</b> : Enter the full path of the Oracle home directory for the database. Be sure you use the conventions of the computer that is running the database (for example, use the proper slashes).
		<b>Log File Directory</b> : Enter the full path of the directory where you want OracleAS Metadata Repository Creation Assistant to write its log files. This path is on the computer where you are running OracleAS Metadata Repository Creation Assistant.
		Note that once you click <b>Next</b> to move to the next screen, you cannot change the log file directory. If you click <b>Back</b> to return to this screen, the <b>Log File Directory</b> field becomes read-only. This is to prevent OracleAS Metadata Repository Creation Assistant from writing log files in different directories.
		Click Next.
3.	Select Operation	Select <b>Load</b> if you want to load the OracleAS Metadata Repository into the database but without registering it with Oracle Internet Directory. Select this option if you do not have an Oracle Internet Directory yet.
		Select <b>Load and Register</b> if you want to load the OracleAS Metadata Repository into the database and register it with Oracle Internet Directory.
		Click Next.

Table 2–5 (Cont.) Installing OracleAS Metadata Repository in a Real Application Clusters Database that Uses Raw Devices

#### Screen

#### Action

Specify Database Connection Information Enter connect information for the existing database.

**SYS Password**: Enter the password for the SYS user.

**Real Application Clusters Database**: Select this option, and complete the fields under it:

Hostname and Port: Enter the names of all the computers running the Real Application Clusters database and the port numbers used by the listener. Use the format *host*: *port*, and separate each *host*: *port* with a comma character:

hostname1:port1, hostname2:port2, hostname3:port3, ...

If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.

Example 1 (same domain): myhost:1521, myhost2:1521

Example 2 (different domain): myhost.mydomain.com:1521, myhost2.mydomain.com:1521

**Service Name**: Enter the service name of the database. The service name must include the database domain name. The service name must be the same for all instances in the cluster.

Example: asdb.mydomain.com

#### Click Next.

Specify Storage Options

Select Regular or Cluster File System.

Specify Tablespace Information

If you created a mapping file and set the DBCA\_RAW\_CONFIG environment variable to point to this file, this screen displays the values read from the file. See step 3 on page 2-11 for details. Correct the values, if necessary, and click **Next**.

If you did not create a mapping file, or if the DBCA\_RAW\_CONFIG environment variable is unset, you have to enter the information in this screen manually. Click Next.

Warning: Check Disk Space

This warning dialog appears if your SYSTEM and UNDO tablespaces are set to autoextend. Check that the file system that contains the SYSTEM and UNDO tablespaces have enough disk space, as specified in the warning dialog.

Specify Oracle Internet **Directory Connect** 

This and the next two screens appear only if you selected Load and Register earlier.

**Internet Directory Hostname**: Enter the name of the computer that is running Oracle Internet Directory. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.

**Internet Directory Port**: Enter the port number for Oracle Internet Directory.

Use SSL to Connect to Oracle Internet Directory for Registration Purposes: Select this option if you want OracleAS Metadata Repository Creation Assistant to connect to Oracle Internet Directory using SSL when performing the registration.

Click Next.

Specify Login for Oracle Internet Directory

Enter the Username and Password to log in to Oracle Internet Directory. The user must belong to the iASAdmins group. You can use the user's simple name (for example, jdoe) or the user's DN (for example, cn=orcladmin).

If your Oracle Internet Directory contains more than one realm, you need to enter the realm that contains the specified user.

**Note:** If you log in as the Oracle Internet Directory superuser (cn=orcladmin), the realm value is not used because the superuser does not belong to any realm. The realm value is used only if you log in using a simple name.

Table 2–5 (Cont.) Installing OracleAS Metadata Repository in a Real Application Clusters Database that Uses Raw Devices

Screen	Action
10. Specify Oracle Context	Specify the location in Oracle Internet Directory where you want to register the OracleAS Metadata Repository.
	<b>Root Oracle Context (cn=OracleContext)</b> : Select this option to register OracleAS Metadata Repository in the root Oracle context.
	<b>Custom Oracle Context</b> : Select this option to register OracleAS Metadata Repository in a specific realm in Oracle Internet Directory. Enter the DN of the realm in the provided field.
	Click Next.
11. Loading Repository	OracleAS Metadata Repository Creation Assistant creates and populates the tablespaces and schemas.
<b>12.</b> Success	Click <b>OK</b> to exit OracleAS Metadata Repository Creation Assistant.

Perform post-installation steps. See Section 2.7, "Post-Installation Steps".

# 2.4 Installing in a Database that Uses Automatic Storage Management

This section describes how to install the OracleAS Metadata Repository in an existing disk group on a database that uses Automatic Storage Management (ASM).

On an ASM-configured database, you can install the OracleAS Metadata Repository on an existing disk group, or on regular files. If you want to use a disk group, the database must have at least one disk group configured.

- Section 2.4.1, "Installing on a Disk Group"
- Section 2.4.2, "Installing on Regular Files"

### 2.4.1 Installing on a Disk Group

This section describes how to install the OracleAS Metadata Repository on a disk group in an ASM instance.

If you want to install OracleAS Metadata Repository in an ASM instance but you want to install on regular files instead of on a disk group, see Section 2.4.2, "Installing on Regular Files".

To install the OracleAS Metadata Repository on a disk group in an ASM instance, perform these steps:

- Ensure that the database meets the requirements listed in Section 1.5, "Requirements for the Database".
- Start up OracleAS Metadata Repository Creation Assistant. See Section 1.7, "Starting OracleAS Metadata Repository Creation Assistant" for details.
- Follow the screens:

Table 2–6 Installing OracleAS Metadata Repository on a Disk Group in an ASM Instance

	Screen	Action
1.	Welcome	Click Next.
2.	Specify Oracle Home	<b>Oracle Home</b> : Enter the full path of the Oracle home directory for the database. Be sure you use the conventions of the computer that is running the database (for example, use the proper slashes).
		<b>Log File Directory</b> : Enter the full path of the directory where you want OracleAS Metadata Repository Creation Assistant to write its log files. This path is on the computer where you are running OracleAS Metadata Repository Creation Assistant.
		Note that once you click <b>Next</b> to move to the next screen, you cannot change the log file directory. If you click <b>Back</b> to return to this screen, the <b>Log File Directory</b> field becomes read-only. This is to prevent OracleAS Metadata Repository Creation Assistant from writing log files in different directories.
		Click Next.
3.	Select Operation	Select <b>Load</b> if you want to load the OracleAS Metadata Repository into the database but without registering it with Oracle Internet Directory. Select this option if you do not have an Oracle Internet Directory yet.
		Select <b>Load and Register</b> if you want to load the OracleAS Metadata Repository into the database and register it with Oracle Internet Directory.
		Click Next.
4.	Specify Database	Enter connect information for the existing database.
	Connection Information	SYS Password: Enter the password for the SYS user.
		Single node instance: Select this option, and complete the fields under it:
		■ <b>Hostname</b> : Enter the name of the computer that is running the database. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.
		■ <b>Port</b> : Enter the port number for the database.
		■ <b>Service Name</b> : Enter the service name of the database. Note that the service name must include the database domain name.
		Example: asdb.mydomain.com
		Click Next.
5.	Specify Storage Options	Select Automatic Storage Management (ASM).
6.	Select Disk Group	Select the disk group in which you want to install the OracleAS Metadata Repository.
		Click Next.
7.	Specify Tablespace Information	This screen displays the tablespaces that OracleAS Metadata Repository Creation Assistant needs to create.
		In the <b>Size</b> column, select the appropriate size for the tablespaces. Select the largest size for a tablespace if you have applications that use the component heavily. If not, select the smallest size.
		Click Next.
8.	Warning: Check Disk Space	This warning dialog appears if your SYSTEM and UNDO tablespaces are set to autoextend. Check that the file system that contains the SYSTEM and UNDO tablespaces have enough disk space, as specified in the warning dialog.

Table 2-6 (Cont.) Installing OracleAS Metadata Repository on a Disk Group in an ASM Instance

	Screen	Action
9.	Specify Oracle Internet Directory Connection	This and the next two screens appear only if you selected <b>Load and Register</b> earlier.
		<b>Internet Directory Hostname</b> : Enter the name of the computer that is running Oracle Internet Directory. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.
		<b>Internet Directory Port</b> : Enter the port number for Oracle Internet Directory.
		<b>Use SSL to Connect to Oracle Internet Directory for Registration Purposes</b> : Select this option if you want OracleAS Metadata Repository Creation Assistant to connect to Oracle Internet Directory using SSL when performing the registration.
		Click Next.
10.	Specify Login for Oracle Internet Directory	Enter the Username and Password to log in to Oracle Internet Directory. The user must belong to the iASAdmins group. You can use the user's simple name (for example, jdoe) or the user's DN (for example, cn=orcladmin).
		If your Oracle Internet Directory contains more than one realm, you need to enter the realm that contains the specified user.
		<b>Note:</b> If you log in as the Oracle Internet Directory superuser (cn=orcladmin), the realm value is not used because the superuser does not belong to any realm. The realm value is used only if you log in using a simple name.
		Click Next.
11.	Specify Oracle Context	Specify the location in Oracle Internet Directory where you want to register the OracleAS Metadata Repository.
		<b>Root Oracle Context (cn=OracleContext)</b> : Select this option to register OracleAS Metadata Repository in the root Oracle context.
		<b>Custom Oracle Context</b> : Select this option to register OracleAS Metadata Repository in a specific realm in Oracle Internet Directory. Enter the DN of the realm in the provided field.
		Click Next.
12.	Loading Repository	OracleAS Metadata Repository Creation Assistant creates and populates the tablespaces and schemas.
13.	Success	Click <b>OK</b> to exit OracleAS Metadata Repository Creation Assistant.

**4.** Perform post-installation steps. See Section 2.7, "Post-Installation Steps".

### 2.4.2 Installing on Regular Files

The procedure for installing the OracleAS Metadata Repository on regular files in an ASM instance is the same as the procedure for installing on regular files on a non-ASM database. See Section 2.1, "Installing in a Database that Uses the File System".

# 2.5 Installing in a Database that Uses Oracle-Managed Files

To install the OracleAS Metadata Repository in a database that uses Oracle-managed files, perform these steps:

Ensure that the database meets the requirements listed in Section 1.5, "Requirements for the Database".

In particular, make sure the db\_create\_file\_dest initialization parameter specifies the directory where OracleAS Metadata Repository Creation Assistant should create the data files for the OracleAS Metadata Repository. For example: prompt> sqlplus "sys/password as sysdba" SQL> alter system set db\_create\_file\_dest ='/u03/oradata';

If this initialization parameter is not set, you will get an error.

- 2. Start up OracleAS Metadata Repository Creation Assistant. See Section 1.7, "Starting OracleAS Metadata Repository Creation Assistant" for details.
- **3.** Follow the screens:

Table 2-7 Installing OracleAS Metadata Repository on a Database that Uses Oracle-Managed Files

	Screen	Action
1.	Welcome	Click Next.
2.	Specify Oracle Home	<b>Oracle Home</b> : Enter the full path of the Oracle home directory for the database. Be sure you use the conventions of the computer that is running the database (for example, use the proper slashes).
		<b>Log File Directory</b> : Enter the full path of the directory where you want OracleAS Metadata Repository Creation Assistant to write its log files. This path is on the computer where you are running OracleAS Metadata Repository Creation Assistant.
		Note that once you click <b>Next</b> to move to the next screen, you cannot change the log file directory. If you click <b>Back</b> to return to this screen, the <b>Log File Directory</b> field becomes read-only. This is to prevent OracleAS Metadata Repository Creation Assistant from writing log files in different directories.
		Click Next.
3.	Select Operation	Select <b>Load</b> if you want to load the OracleAS Metadata Repository into the database but without registering it with Oracle Internet Directory. Select this option if you do not have an Oracle Internet Directory yet.
		Select <b>Load and Register</b> if you want to load the OracleAS Metadata Repository into the database and register it with Oracle Internet Directory.
		Click Next.
4.	Specify Database	Enter connect information for the existing database.
	Connection Information	SYS Password: Enter the password for the SYS user.
		Single node instance: Select this option, and complete the fields under it:
		■ <b>Hostname</b> : Enter the name of the computer that is running the database. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.
		<ul><li>Port: Enter the port number for the database.</li></ul>
		• <b>Service Name</b> : Enter the service name of the database. Note that the service name must include the database domain name.
		Example: asdb.mydomain.com
		Click Next.
5.	Specify Storage Options	Select Oracle-Managed Files.
6.	Directory for Oracle-Managed Files	This screen shows the directory where OracleAS Metadata Repository Creation Assistant will create the data files for OracleAS Metadata Repository. This value is read from the db_create_file_dest initialization parameter.
		If this parameter is not set, you will get an error message.
		If you want OracleAS Metadata Repository Creation Assistant to create the data files in a different directory, edit the <code>db_create_file_dest</code> initialization parameter to specify the desired directory (using SQL*Plus or other database administration tool), go back one screen, and click <b>Next</b> to move forward until you return to this screen. You should see the new value of the parameter.

Table 2–7 (Cont.) Installing OracleAS Metadata Repository on a Database that Uses Oracle-Managed Files

	Screen	Action	
7.	Specify Tablespace Information	This screen displays the tablespaces that OracleAS Metadata Repository Creation Assistant needs to create.	
		In the <b>Size</b> column, select the appropriate size for the tablespaces. Select the largest size for a tablespace if you have applications that use the component heavily. If not, select the smallest size.	
		Click Next.	
8.	Warning: Check Disk Space	This warning dialog appears if your SYSTEM and UNDO tablespaces are set to autoextend. Check that the file system that contains the SYSTEM and UNDO tablespaces have enough disk space, as specified in the warning dialog.	
9.	Specify Oracle Internet Directory Connect	This and the next two screens appear only if you selected <b>Load and Register</b> earlier.	
		<b>Internet Directory Hostname</b> : Enter the name of the computer that is running Oracle Internet Directory. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.	
		<b>Internet Directory Port</b> : Enter the port number for Oracle Internet Directory.	
		<b>Use SSL to Connect to Oracle Internet Directory for Registration Purposes</b> : Select this option if you want OracleAS Metadata Repository Creation Assistant to connect to Oracle Internet Directory using SSL when performing the registration.	
		Click Next.	
10.	Specify Login for Oracle Internet Directory	Enter the Username and Password to log in to Oracle Internet Directory. The user must belong to the iASAdmins group. You can use the user's simple name (for example, jdoe) or the user's DN (for example, cn=orcladmin).	
		If your Oracle Internet Directory contains more than one realm, you need to enter the realm that contains the specified user.	
		<b>Note:</b> If you log in as the Oracle Internet Directory superuser (cn=orcladmin), the realm value is not used because the superuser does not belong to any realm. The realm value is used only if you log in using a simple name.	
		Click Next.	
11.	Specify Oracle Context	Specify the location in Oracle Internet Directory where you want to register the OracleAS Metadata Repository.	
		<b>Root Oracle Context (cn=OracleContext)</b> : Select this option to register OracleAS Metadata Repository in the root Oracle context.	
		<b>Custom Oracle Context</b> : Select this option to register OracleAS Metadata Repository in a specific realm in Oracle Internet Directory. Enter the DN of the realm in the provided field.	
		Click Next.	
12.	Loading Repository	OracleAS Metadata Repository Creation Assistant creates and populates the tablespaces and schemas.	
13.	Success	Click <b>OK</b> to exit OracleAS Metadata Repository Creation Assistant.	

**4.** Perform post-installation steps. See Section 2.7, "Post-Installation Steps".

# 2.6 Harmless Errors in the Log File

The following errors in the log file are harmless. You may ignore them.

- Section 2.6.1, "SP2-0332 Errors"
- Section 2.6.2, "SP2-0606 Errors"

### 2.6.1 SP2-0332 Errors

If the log file shows an SP2-0332 error in the following context, you may ignore it:

```
ERROR at line 1:
ORA-04043: object OID_METRIC_TYPE does not exist
Type created.
Type created.
Package created.
Package body created.
SP2-0332: Cannot create spool file.
Procedure created.
PL/SQL procedure successfully completed.
```

### 2.6.2 SP2-0606 Errors

If the log file shows an SP2-0606 error in the following context, you may ignore it:

```
ERROR at line 1:
ORA-04043: object OID_METRIC_TYPE does not exist
Type created.
Type created.
Package created.
Package body created.
SP2-0606: Cannot create SPOOL file "LOGS/oidimeta.log"
Procedure created.
PL/SQL procedure successfully completed.
```

# 2.7 Post-Installation Steps

After installing the OracleAS Metadata Repository in your database, you need to perform these steps:

- Section 2.7.1, "Update sqlnet.ora File"
- Section 2.7.2, "Copy Idap.ora File to the Database Oracle Home"
- Section 2.7.3, "Unlock the DCM Schema and Set Its Password"
- Section 2.7.4, "Create Instance for Oracle Ultra Search"

### 2.7.1 Update sqlnet.ora File

Configure SQL\*Net settings so that the ORASSO PS schema in the OracleAS Metadata Repository can be contacted. To do this, update the ORACLE\_

HOME/network/admin/sqlnet.ora file (ORACLE HOME specifies the database home where you installed the OracleAS Metadata Repository) by adding LDAP to the NAMES.DIRECTORY\_PATH entry as follows:

```
NAMES.DIRECTORY_PATH= (LDAP, TNSNAMES, ONAMES, HOSTNAME)
```

If you do not perform this configuration, errors are displayed in OracleAS Portal when using the OracleAS Single Sign-On administration portlet. The error is caused by the DB link used by OracleAS Portal to connect to the ORASSO\_PS schema for external application functionality. The DB link is resolved using the SQL\*Net settings configured in the database home where the OracleAS Metadata Repository resides.

### 2.7.2 Copy Idap.ora File to the Database Oracle Home

This procedure is applicable only if you loaded and registered the OracleAS Metadata Repository with Oracle Internet Directory. If you only loaded the OracleAS Metadata Repository without registering it with Oracle Internet Directory, then you can skip this

If your database is version 9.2.0.6 (or higher in the 9.2.x series), copy the file Repository\_Creation\_Assistant\_OH/network/admin/ldap.ora to Database\_OH/network/admin/ldap.ora.

Repository\_Creation\_Assistant\_OH is the Oracle home for the OracleAS Metadata Repository Creation Assistant.

*Database\_OH* is the Oracle home for your database.

If your database is version 10.1.0.4 (or higher in the 10.1.x series), copy the file Repository\_Creation\_Assistant\_OH/network/admin/ldap.ora to Database\_OH/ldap/admin/ldap.ora.

Repository\_Creation\_Assistant\_OH is the Oracle home for the OracleAS Metadata Repository Creation Assistant.

*Database\_OH* is the Oracle home for your database.

### 2.7.3 Unlock the DCM Schema and Set Its Password

Unlock the dcm schema and set its password. This step is required only if (1) you want to use the metadata repository **only** for database clustering of "J2EE and Web Cache" middle tier instances and (2) you did not register the metadata repository with Oracle Internet Directory.

- Set the ORACLE\_HOME environment variable to point to the full path of the directory where the database is installed.
- 2. Set the ORACLE SID environment variable to the database's SID.
- **3.** Unlock the dcm schema and set its password using SQL\*Plus.

The following alter user command sets the password to "welcome1", but you can set it to any value.

```
prompt> $ORACLE_HOME/bin/sqlplus "sys/password as sysdba"
SQL> alter user dcm identified by welcome1 account unlock;
```

### 2.7.4 Create Instance for Oracle Ultra Search

Oracle Application Server uses the Oracle Ultra Search that comes with the database. If you loaded the OracleAS Metadata Repository in a 9.2.0.6 database, the Oracle Ultra Search that comes with this version of the database does not include a default instance. This means that you will have to create an Oracle Ultra Search instance. For details on how to create an instance, see the section "Creating an Instance" in the chapter "Understanding the Oracle Ultra Search Administration Tool" in the Oracle Ultra Search Administrator's Guide.

If you do not create an Oracle Ultra Search instance, you will get an error when you try the following:

- **1.** Log in to OracleAS Portal.
- Navigate to the Oracle Ultra Search Administration page. You will get the following error:

"Error: No Ultra Search instances have been assigned to user "ORCLADMIN" for administration. Contact the Ultra Search administrator for your organization."

# 2.8 If Loading Failed

If loading failed, you have to remove the OracleAS Metadata Repository objects that were loaded before the failure occurred. To remove the objects:

- Run OracleAS Metadata Repository Creation Assistant, and select the remove option. You can remove the objects using the wizard or the script. See Section 4, "Deregistering and Removing OracleAS Metadata Repository" for details.
- 2. Perform this step only if your database did not contain Oracle Internet Directory schemas before you loaded the OracleAS Metadata Repository. In other words, the Oracle Internet Directory schemas in your database were loaded by OracleAS Metadata Repository. If your database already contained Oracle Internet Directory schemas when you ran OracleAS Metadata Repository Creation Assistant, then you can skip this step.

In this step, you delete the Oracle Internet Directory objects from your database. You have to do this as a separate step because the remove operation in OracleAS Metadata Repository Creation Assistant does not remove the Oracle Internet Directory objects from your database. See Section 4.1, "Oracle Internet Directory Objects Not Removed".

To delete the Oracle Internet Directory objects, see Section 4.8, "Removing Oracle Internet Directory Objects".

# 2.9 If Registration Failed

If OracleAS Metadata Repository Creation Assistant failed to register the OracleAS Metadata Repository with Oracle Internet Directory, follow the deregistration procedure to clean up the entries in Oracle Internet Directory. You have to clean up the entries in Oracle Internet Directory before trying to register the OracleAS Metadata Repository again.

See Section 4.4, "Deregistering and Removing OracleAS Metadata Repository Using the Wizard" for instructions on how to deregister the OracleAS Metadata Repository from Oracle Internet Directory.

# 2.10 Re-Installing the OracleAS Metadata Repository in the Same **Database**

This section is applicable only for 9.2.0.6 databases. It does not apply for 10g databases.

If you want to remove and re-install OracleAS Metadata Repository in your 9.2.0.6 database, follow these steps:

- Remove OracleAS Metadata Repository from your database using OracleAS Metadata Repository Creation Assistant.
- Perform this step only if your database did not contain Oracle Internet Directory schemas before you loaded the OracleAS Metadata Repository. In other words, the Oracle Internet Directory schemas in your database were loaded by OracleAS Metadata Repository. If your database already contained Oracle Internet Directory schemas when you ran OracleAS Metadata Repository Creation Assistant, then you can skip this step.

In this step, you delete the Oracle Internet Directory objects from your database. You have to do this as a separate step because the remove operation in OracleAS Metadata Repository Creation Assistant does not remove the Oracle Internet Directory objects from your database. See Section 4.1, "Oracle Internet Directory Objects Not Removed".

To delete the Oracle Internet Directory objects, see Section 4.8, "Removing Oracle Internet Directory Objects".

Re-install OracleAS Metadata Repository in your database.

### Using a Re-Installed OracleAS Metadata Repository

Note the following points before using the re-installed OracleAS Metadata Repository:

- You cannot install Oracle Internet Directory against this OracleAS Metadata Repository. The installer gives an error message that "Oracle Internet Directory is already configured with a database, Oracle Internet Directory can be installed only once per database".
- You can register an existing Oracle Internet Directory with this OracleAS Metadata Repository.
- You can install middle tiers to use this OracleAS Metadata Repository and Oracle Internet Directory.

# Registering OracleAS Metadata Repository with Oracle Internet Directory

If you did not register the OracleAS Metadata Repository with an Oracle Internet Directory when you installed it, you can run OracleAS Metadata Repository Creation Assistant again just to do the registration. It does not install any schemas or tablespaces in the database.

You cannot use the Database Configuration Assistant (DBCA) to register the OracleAS Metadata Repository with Oracle Internet Directory if the metadata repository is in a Real Application Clusters database. You must use OracleAS Metadata Repository Creation Assistant to do the registration.

#### Contents:

- Section 3.1, "Registering with Oracle Internet Directory"
- Section 3.2, "Post-Registration Step"
- Section 3.3, "If You Exit Before Registration Is Completed, or If Registration Fails"

# 3.1 Registering with Oracle Internet Directory

#### Notes:

- You can only register the OracleAS Metadata Repository with supported versions of Oracle Internet Directory. See Section 1.6, "Requirements for Oracle Internet Directory" for details.
- You cannot use OracleAS Metadata Repository Creation Assistant to register a metadata repository from Release 2 (9.0.2) with an Oracle Internet Directory from Release 2 (9.0.4).
- If OracleAS Metadata Repository Creation Assistant finds the same service name already registered with Oracle Internet Directory, it will just display an error message saying that the service name is already registered with the Oracle Internet Directory. In order to continue, you need to remove the registration first.

To register the OracleAS Metadata Repository with Oracle Internet Directory:

- Start up OracleAS Metadata Repository Creation Assistant. See Section 1.7, "Starting OracleAS Metadata Repository Creation Assistant".
- Follow the screens:

Table 3–1 Registering OracleAS Metadata Repository with Oracle Internet Directory

	Screen	Action	
1.	Welcome	Click Next.	
2.	Specify Oracle Home	<b>Oracle Home</b> : Enter the full path of the Oracle home directory for the database. Be sure you use the conventions of the computer that is running the database (for example, use the proper slashes).	
		<b>Log File Directory</b> : Enter the full path of the directory where you want OracleAS Metadata Repository Creation Assistant to write its log files. This path is on the computer where you are running OracleAS Metadata Repository Creation Assistant.	
		Note that once you click <b>Next</b> to move to the next screen, you cannot change the log file directory. If you click <b>Back</b> to return to this screen, the <b>Log File Directory</b> field becomes read-only. This is to prevent OracleAS Metadata Repository Creation Assistant from writing log files in different directories.	
		Click Next.	
3.	Select Operation	Select <b>Register</b> .	
		Click Next.	
4.	Specify Database	Enter connect information for the database.	
	Connection Information	<b>DBA Username</b> and <b>Password</b> : Enter the username and password to log in to the database. The user must have DBA privileges.	
		Select <b>Single Node Instance</b> or <b>Real Application Clusters database</b> , depending on your database type, and complete the appropriate fields.	
		Fields for Single Node Instance:	
		■ Hostname: Enter the name of the computer that is running the database. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.	
		<ul> <li>Port: Enter the port number for the database.</li> </ul>	
		• <b>Service Name</b> : Enter the service name of the database. Note that the service name must include the database domain name.	
		Example: asdb.mydomain.com	
		Fields for Real Application Clusters Database:	
		■ <b>Hostname and Port</b> : Enter the names of all the computers running the Real Application Clusters database and the port numbers used by the listener. Use the format <i>host</i> : <i>port</i> , and separate each <i>host</i> : <i>port</i> with a comma character:	
		hostname1:port1, hostname2:port2, hostname3:port3,	
		If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.	
		Example 1 (same domain): myhost: 1521, myhost2: 1521	
		<pre>Example 2 (different domain): myhost.mydomain.com:1521, myhost2.mydomain.com:1521</pre>	
		■ Service Name: Enter the service name of the database. The service name must include the database domain name. The service name must be the same for all instances in the cluster.	
		Example: asdb.mydomain.com	
		Click Next.	

Table 3–1 (Cont.) Registering OracleAS Metadata Repository with Oracle Internet Directory

	Screen	Action
5.	Specify Oracle Internet Directory Connection	<b>Internet Directory Hostname</b> : Enter the name of the computer that is running Oracle Internet Directory. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.
		Internet Directory Port: Enter the port number for Oracle Internet Directory.
		<b>Use SSL to Connect to Oracle Internet Directory for Registration Purposes</b> : Select this option if you want OracleAS Metadata Repository Creation Assistant to connect to Oracle Internet Directory using SSL when performing the registration.
		Click Next.
6.	Specify Login for Oracle Internet Directory	Enter the Username and Password to log in to Oracle Internet Directory. The user must belong to the iAS Admins group. You can use the user's simple name (for example, jdoe) or the user's DN (for example, cn=orcladmin).
		If your Oracle Internet Directory contains more than one realm, you need to enter the realm that contains the specified user.
		<b>Note:</b> If you log in as the Oracle Internet Directory superuser (cn=orcladmin), the realm value is not used because the superuser does not belong to any realm. The realm value is used only if you log in using a simple name.
		Click Next.
7.	Specify Oracle Context	Specify the location in Oracle Internet Directory where you want to register the OracleAS Metadata Repository.
		<b>Root Oracle Context (cn=OracleContext)</b> : Select this option to register OracleAS Metadata Repository in the root Oracle context.
		<b>Custom Oracle Context</b> : Select this option to register OracleAS Metadata Repository in a specific realm in Oracle Internet Directory. Enter the DN of the realm in the provided field.
		Click Next.
8.	Success	Click <b>OK</b> to exit OracleAS Metadata Repository Creation Assistant.

# 3.2 Post-Registration Step

After registering the OracleAS Metadata Repository with Oracle Internet Directory, you need to copy the ldap.ora file from the OracleAS Metadata Repository Creation Assistant home to the database home. See Section 2.7.2, "Copy Idap.ora File to the Database Oracle Home" for details.

# 3.3 If You Exit Before Registration Is Completed, or If Registration Fails

If you exit OracleAS Metadata Repository Creation Assistant before the registration is completed or if the registration fails, you must perform the following manual steps before you run OracleAS Metadata Repository Creation Assistant again to re-register.

- Remove repository entries from Oracle Internet Directory. See Section 4.4, "Deregistering and Removing OracleAS Metadata Repository Using the Wizard".
- **2.** Reset all schema passwords to their default values.

```
prompt> sqlplus "sys/password as sysdba"
SQL> alter user schema_name identified by schema_password;
```

**3.** Lock all schema passwords.

```
prompt> sqlplus "sys/password as sysdba"
SQL> alter user schema_name account lock password expire;
```

Once these steps are done, you can restart OracleAS Metadata Repository Creation Assistant to register the database.

# **Deregistering and Removing OracleAS Metadata Repository**

You can also use OracleAS Metadata Repository Creation Assistant to remove OracleAS Metadata Repository tablespaces and schemas from your database and deregister it from Oracle Internet Directory.

### Contents:

- Section 4.1, "Oracle Internet Directory Objects Not Removed"
- Section 4.2, "If the Database Is an Oracle Internet Directory Database"
- Section 4.3, "If Middle Tiers Are Using the OracleAS Metadata Repository"
- Section 4.4, "Deregistering and Removing OracleAS Metadata Repository Using the Wizard"
- Section 4.5, "Removing the OracleAS Metadata Repository"
- Section 4.6, "Deregistering the OracleAS Metadata Repository"
- Section 4.7, "Removing OracleAS Metadata Repository Using the cleanMR Script"
- Section 4.8, "Removing Oracle Internet Directory Objects"
- Section 4.9, "Cleaning up the Database If You Cancelled a Deregistration Operation"

#### **Earlier Versions Are Not Compatible**

You cannot use this version of OracleAS Metadata Repository Creation Assistant to remove or deregister OracleAS Metadata Repository that was loaded or registered by an earlier version of OracleAS Metadata Repository Creation Assistant. For example, you cannot use this version of OracleAS Metadata Repository Creation Assistant to remove or deregister an OracleAS Metadata Repository that was loaded and registered by OracleAS Metadata Repository Creation Assistant from 9.0.4.x. To remove or deregister OracleAS Metadata Repository from 9.0.4.x, use the same version of OracleAS Metadata Repository Creation Assistant that was used to load it.

### Use the Wizard or the Script?

You can deregister and remove the OracleAS Metadata Repository using the wizard or the cleanMR script. Note that the script performs the removal operation only; it does not deregister the OracleAS Metadata Repository for you.

# 4.1 Oracle Internet Directory Objects Not Removed

If you are removing the OracleAS Metadata Repository from a Release 2 (9.2.0.6) database, OracleAS Metadata Repository Creation Assistant does not remove the Oracle Internet Directory schema (ODS) or tablespaces (OLTS\_ATTRSTORE, OLTS\_ BATTRSTORE, OLTS\_CT\_STORE, OLTS\_DEFAULT, OLTS\_SVRMGSTORE) from the database.

If you reload the OracleAS Metadata Repository on the same database, OracleAS Metadata Repository Creation Assistant will succeed. It will reuse the Oracle Internet Directory objects.

# 4.2 If the Database Is an Oracle Internet Directory Database

If the database is an Oracle Internet Directory database, you cannot deregister it. OracleAS Metadata Repository Creation Assistant displays an error and does not continue with the deregistration.

An Oracle Internet Directory database is a database that is in use by Oracle Internet Directory. Examples of Oracle Internet Directory databases:

- If you install an "Identity Management + OracleAS Metadata Repository" installation type, the database is an Oracle Internet Directory database.
- If you install Oracle Internet Directory and register it with an OracleAS Metadata Repository (created using the installer or OracleAS Metadata Repository Creation Assistant), the database is an Oracle Internet Directory database.

# 4.3 If Middle Tiers Are Using the OracleAS Metadata Repository

If the database is not an Oracle Internet Directory database, OracleAS Metadata Repository Creation Assistant then checks if there are any middle tiers using the OracleAS Metadata Repository database that you want to remove or deregister.

If it finds that middle tiers are using the OracleAS Metadata Repository, then it displays a warning. If you continue with the deregistration or removal, the middle tiers will no longer be functional.

# 4.4 Deregistering and Removing OracleAS Metadata Repository Using the Wizard

This section describes how to use the wizard to deregister and remove the OracleAS Metadata Repository.

If you just want to deregister the OracleAS Metadata Repository from Oracle Internet Directory, see Section 4.6, "Deregistering the OracleAS Metadata Repository".

If you just want to remove the OracleAS Metadata Repository, see Section 4.5, "Removing the OracleAS Metadata Repository".

To deregister and remove the OracleAS Metadata Repository, follow these steps:

Stop all Oracle Application Server instances that are using the OracleAS Metadata Repository that you want to remove or deregister.

Although you have shut down the Oracle Application Server instances, it is possible that the database still shows some OracleAS Metadata Repository schemas as being active. You can check this by running the following query against the database:

prompt> sqlplus "sys/password as sysdba" SQL> select schemaname from v\$session;

password specifies the password for the SYS user.

If you see any OracleAS Metadata Repository schemas in "schemaname", then those schemas are still active. The OracleAS Metadata Repository schemas are listed in Table 1–9.

If you are sure the instances are shut down, restart the database to clear the session information.

If you do not do this, OracleAS Metadata Repository Creation Assistant will detect that some sessions from Oracle Application Server instances are still active, and it will display a warning.

- Start up OracleAS Metadata Repository Creation Assistant. See Section 1.7, "Starting OracleAS Metadata Repository Creation Assistant" for details.
- Follow these screens:

Table 4–1 Deregistering and Removing OracleAS Metadata Repository

	Screen	Action		
1.	Welcome	Click Next.		
2.	Specify Oracle Home	<b>Oracle Home</b> : Enter the full path of the Oracle home directory for the database. Be sure you use the conventions of the computer that is running the database (for example, use the proper slashes).		
		<b>Log File Directory</b> : Enter the full path of the directory where you want OracleAS Metadata Repository Creation Assistant to write its log files. This path is on the computer where you are running OracleAS Metadata Repository Creation Assistant.		
		Note that once you click <b>Next</b> to move to the next screen, you cannot change the log file directory. If you click <b>Back</b> to return to this screen, the <b>Log File Directory</b> field becomes read-only. This is to prevent OracleAS Metadata Repository Creation Assistant from writing log files in different directories.		
		Click Next.		
3.	Select Operation	Select Remove.		
		Click Next.		
4.	Select Remove Option	<b>Deregister and Remove</b> : Select this option to remove the OracleAS Metadata Repository tablespaces and schemas from your database, and deregister it from Oracle Internet Directory.		
		Click Next.		

Table 4–1 (Cont.) Deregistering and Removing OracleAS Metadata Repository

### Screen

#### Action

#### Specify Database 5. Connection Information

Enter connect information for the existing database.

**SYS Password**: Enter the password for the SYS user.

Select either Single Node Instance or Real Application Clusters Database, depending on the type of your database, and complete the appropriate fields.

#### Fields for Single Node Instance:

- **Hostname**: Enter the name of the computer that is running the database. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.
- **Port**: Enter the port number for the database.
- **Service Name**: Enter the service name of the database. Note that the service name must include the database domain name.

Example: asdb.mydomain.com

### Fields for **Real Application Clusters Database**:

Hostname and Port: Enter the names of all the computers running the Real Application Clusters database and the port numbers used by the listener. Use the format *host*: *port*, and separate each *host*: *port* with a comma character:

hostname1:port1, hostname2:port2, hostname3:port3, ...

If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.

Example 1 (same domain): myhost:1521, myhost2:1521

Example 2 (different domain): myhost.mydomain.com:1521, myhost2.mydomain.com:1521

**Service Name**: Enter the service name of the database. The service name must include the database domain name. The service name must be the same for all instances in the cluster.

Example: asdb.mydomain.com

### Click Next.

### Specify Oracle Internet Directory Connection

Enter connect information for the Oracle Internet Directory from which you want to deregister the OracleAS Metadata Repository.

**Internet Directory Hostname**: Enter the name of the computer that is running Oracle Internet Directory. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.

**Internet Directory Port**: Enter the port number for Oracle Internet Directory.

**Use SSL to Connect to Oracle Internet Directory for Deregistration Purposes:** Select this option if you want OracleAS Metadata Repository Creation Assistant to connect to Oracle Internet Directory using SSL when performing the deregistration.

### Click Next.

### Specify Login for Oracle Internet Directory

Enter the Username and Password to log in to Oracle Internet Directory. The user must belong to the iAS Admins group. You can use the user's simple name (for example, jdoe) or the user's DN (for example, cn=orcladmin).

If your Oracle Internet Directory contains more than one realm, you need to enter the realm that contains the specified user.

**Note:** If you log in as the Oracle Internet Directory superuser (cn=orcladmin), the realm value is not used because the superuser does not belong to any realm. The realm value is used only if you log in using a simple name.

Table 4–1 (Cont.) Deregistering and Removing OracleAS Metadata Repository

	Screen	Action
8.	Specify Oracle Context	Specify the location in Oracle Internet Directory from which you want to deregister the OracleAS Metadata Repository.
		<b>Root Oracle Context (cn=OracleContext)</b> : Select this option to deregister OracleAS Metadata Repository from the root Oracle context.
		<b>Custom Oracle Context</b> : Select this option to deregister OracleAS Metadata Repository from a specific realm in Oracle Internet Directory. Enter the DN of the realm in the provided field.
		<b>NOTE:</b> Once you click <b>Next</b> on this screen, it is important that you <b>do not cancel</b> the operation. If you cancel the operation before it completes, you will not be able to register or deregister the database. If you do cancel it, you will have to perform some manual steps to clean up the database before you can proceed. See Section 4.9, "Cleaning up the Database If You Cancelled a Deregistration Operation".
		Click Next.
9.	Success	Click <b>OK</b> to exit OracleAS Metadata Repository Creation Assistant.

# 4.5 Removing the OracleAS Metadata Repository

This section describes how to use the wizard to remove the OracleAS Metadata Repository.

If you just want to deregister the OracleAS Metadata Repository from Oracle Internet Directory, see Section 4.6, "Deregistering the OracleAS Metadata Repository".

If you want to deregister and remove the OracleAS Metadata Repository, see Section 4.4, "Deregistering and Removing OracleAS Metadata Repository Using the Wizard".

To remove the OracleAS Metadata Repository, follow these steps:

Stop all Oracle Application Server instances that are using the OracleAS Metadata Repository that you want to remove.

Although you have shut down the Oracle Application Server instances, it is possible that the database still shows some OracleAS Metadata Repository schemas as being active. You can check this by running the following query against the database:

```
prompt> sqlplus "sys/password as sysdba"
SQL> select schemaname from v$session;
```

password specifies the password for the SYS user.

If you see any OracleAS Metadata Repository schemas in "schemaname", then those schemas are still active. The OracleAS Metadata Repository schemas are listed in Table 1–9.

If you are sure the instances are shut down, restart the database to clear the session information.

If you do not do this, OracleAS Metadata Repository Creation Assistant will detect that some sessions from Oracle Application Server instances are still active, and it will display a warning.

- 2. Start up OracleAS Metadata Repository Creation Assistant. See Section 1.7, "Starting OracleAS Metadata Repository Creation Assistant" for details.
- **3.** Follow these screens:

Table 4-2 Removing OracleAS Metadata Repository

	Screen	Action	
1.	Welcome	Click Next.	
2.	Specify Oracle Home	<b>Oracle Home</b> : Enter the full path of the Oracle home directory for the database. Be sure you use the conventions of the computer that is running the database (for example, use the proper slashes).	
		<b>Log File Directory</b> : Enter the full path of the directory where you want OracleAS Metadata Repository Creation Assistant to write its log files. This path is on the computer where you are running OracleAS Metadata Repository Creation Assistant.	
		Note that once you click <b>Next</b> to move to the next screen, you cannot change the log file directory. If you click <b>Back</b> to return to this screen, the <b>Log File Directory</b> field becomes read-only. This is to prevent OracleAS Metadata Repository Creation Assistant from writing log files in different directories.	
		Click Next.	
3.	Select Operation	Select Remove.	
		Click Next.	
4.	Select Remove Option	<b>Remove</b> : Select this option to remove the OracleAS Metadata Repository tablespaces and schemas from your database.	
		Click Next.	

Table 4–2 (Cont.) Removing OracleAS Metadata Repository

#### Screen

#### Action

### Specify Database Connection Information

Enter connect information for the existing database.

**SYS Password**: Enter the password for the SYS user.

Select either Single Node Instance or Real Application Clusters Database, depending on the type of your database, and complete the appropriate fields.

#### Fields for **Single Node Instance**:

- **Hostname**: Enter the name of the computer that is running the database. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.
- **Port**: Enter the port number for the database.
- **Service Name**: Enter the service name of the database. Note that the service name must include the database domain name.

Example: asdb.mydomain.com

#### Fields for **Real Application Clusters Database**:

**Hostname and Port**: Enter the names of all the computers running the Real Application Clusters database and the port numbers used by the listener. Use the format *host*: *port*, and separate each *host*: *port* with a comma character:

```
hostname1:port1, hostname2:port2, hostname3:port3, ...
```

If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.

Example 1 (same domain): myhost:1521, myhost2:1521

Example 2 (different domain): myhost.mydomain.com:1521, myhost2.mydomain.com:1521

**Service Name**: Enter the service name of the database. The service name must include the database domain name. The service name must be the same for all instances in the cluster.

Example: asdb.mydomain.com

Click Next.

### **6.** Success

Click **OK** to exit OracleAS Metadata Repository Creation Assistant.

# 4.6 Deregistering the OracleAS Metadata Repository

This section how to use the wizard to deregister the OracleAS Metadata Repository from Oracle Internet Directory. The OracleAS Metadata Repository objects are not removed from the database.

If you just want to remove the OracleAS Metadata Repository, see Section 4.5, "Removing the OracleAS Metadata Repository".

If you want to deregister and remove the OracleAS Metadata Repository, see Section 4.4, "Deregistering and Removing OracleAS Metadata Repository Using the Wizard".

Stop all Oracle Application Server instances that are using the OracleAS Metadata Repository that you want to deregister.

Although you have shut down the Oracle Application Server instances, it is possible that the database still shows some OracleAS Metadata Repository schemas as being active. You can check this by running the following query against the database:

prompt> sqlplus "sys/password as sysdba"

#### SQL> select schemaname from v\$session;

password specifies the password for the SYS user.

If you see any OracleAS Metadata Repository schemas in "schemaname", then those schemas are still active. The OracleAS Metadata Repository schemas are listed in Table 1–9.

If you are sure the instances are shut down, restart the database to clear the session information.

If you do not do this, OracleAS Metadata Repository Creation Assistant will detect that some sessions from Oracle Application Server instances are still active, and it will display a warning.

- Start up OracleAS Metadata Repository Creation Assistant. See Section 1.7, "Starting OracleAS Metadata Repository Creation Assistant" for details.
- **3.** Follow these screens:

Table 1-3 Peregistering Oracle AS Metadata Penesitory

Ia	Table 4–3 Deregistering OracleAS Metadata Repository		
	Screen	Action	
1.	Welcome	Click Next.	
2.	Specify Oracle Home	<b>Oracle Home</b> : Enter the full path of the Oracle home directory for the database. Be sure you use the conventions of the computer that is running the database (for example, use the proper slashes).	
		<b>Log File Directory</b> : Enter the full path of the directory where you want OracleAS Metadata Repository Creation Assistant to write its log files. This path is on the computer where you are running OracleAS Metadata Repository Creation Assistant.	
		Note that once you click <b>Next</b> to move to the next screen, you cannot change the log file directory. If you click <b>Back</b> to return to this screen, the <b>Log File Directory</b> field becomes read-only. This is to prevent OracleAS Metadata Repository Creation Assistant from writing log files in different directories.	
		Click Next.	
3.	Select Operation	Select Remove.	
		Click Next.	
4.	Select Remove Option	Select <b>Deregister</b> .	
		Click Next.	

### Table 4–3 (Cont.) Deregistering OracleAS Metadata Repository

#### Screen

#### Action

### Specify Database Connection Information

Enter connect information for the existing database.

**DBA Username** and **Password**: Enter the username and password to log in to the database. The user must have DBA privileges.

Select either Single Node Instance or Real Application Clusters Database, depending on the type of your database, and complete the appropriate fields.

#### Fields for **Single Node Instance**:

- Hostname: Enter the name of the computer that is running the database. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.
- **Port**: Enter the port number for the database.
- **Service Name**: Enter the service name of the database. Note that the service name must include the database domain name.

Example: asdb.mydomain.com

### Fields for Real Application Clusters Database:

Hostname and Port: Enter the names of all the computers running the Real Application Clusters database and the port numbers used by the listener. Use the format *host*: *port*, and separate each *host*: *port* with a comma character:

hostname1:port1, hostname2:port2, hostname3:port3, ...

If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.

Example 1 (same domain): myhost:1521, myhost2:1521

Example 2 (different domain): myhost.mydomain.com: 1521, myhost2.mydomain.com:1521

**Service Name**: Enter the service name of the database. The service name must include the database domain name. The service name must be the same for all instances in the cluster.

Example: asdb.mydomain.com

### Click Next.

Specify Oracle Internet **Directory Connection** 

**Internet Directory Hostname**: Enter the name of the computer that is running Oracle Internet Directory. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.

**Internet Directory Port**: Enter the port number for Oracle Internet Directory.

Use SSL to Connect to Oracle Internet Directory for Deregistration Purposes: Select this option if you want OracleAS Metadata Repository Creation Assistant to connect to Oracle Internet Directory using SSL when performing the deregistration.

Click Next.

Specify Login for Oracle Internet Directory

Enter the Username and Password to log in to Oracle Internet Directory. The user must belong to the iAS Admins group. You can use the user's simple name (for example, jdoe) or the user's DN (for example, cn=orcladmin).

If your Oracle Internet Directory contains more than one realm, you need to enter the realm that contains the specified user.

**Note:** If you log in as the Oracle Internet Directory superuser (cn=orcladmin), the realm value is not used because the superuser does not belong to any realm. The realm value is used only if you log in using a simple name.

Table 4–3 (Cont.) Deregistering OracleAS Metadata Repository

	Screen	Action
8.	Specify Oracle Context	Specify the location in Oracle Internet Directory from which you want to deregister the OracleAS Metadata Repository.
		<b>Root Oracle Context (cn=OracleContext)</b> : Select this option to deregister OracleAS Metadata Repository from the root Oracle context.
		<b>Custom Oracle Context</b> : Select this option to deregister OracleAS Metadata Repository from a specific realm in Oracle Internet Directory. Enter the DN of the realm in the provided field.
		<b>NOTE:</b> Once you click <b>Next</b> on this screen, it is important that you <b>do not cancel</b> the operation. If you cancel the operation before it completes, you will not be able to register or deregister the database. If you do cancel it, you will have to perform some manual steps to clean up the database before you can proceed. See Section 4.9, "Cleaning up the Database If You Cancelled a Deregistration Operation".
		Click Next.
9.	Success	Click <b>OK</b> to exit OracleAS Metadata Repository Creation Assistant.

### Schemas Locked and Passwords Expired After Deregistration

If you are only deregistering the OracleAS Metadata Repository (without removing the OracleAS Metadata Repository objects), OracleAS Metadata Repository Creation Assistant locks the schemas and expires the schemas' passwords. This means that if you want to reuse the schemas, you have to:

Unlock the schema. You can do this using the "alter user" SQL statement. For example:

```
prompt> sqlplus "sys/password as sysdba"
SOL> alter user PORTAL account unlock;
```

Change the password for the schema. You can also do this using the "alter user" SQL statement. For example:

```
prompt> sqlplus "sys/password as sysdba"
SQL> alter user PORTAL identified by new_password;
```

For a list of schemas, see Table 1–9.

# 4.7 Removing OracleAS Metadata Repository Using the cleanMR Script

**Note:** The script only removes the OracleAS Metadata Repository. It does not deregister the OracleAS Metadata Repository. If you want to deregister the OracleAS Metadata Repository, you have to use the wizard.

The cleanMR script is located in the ORACLE\_HOME/repca/clean directory, where ORACLE\_HOME specifies the directory where you installed OracleAS Metadata Repository Creation Assistant.

You must run cleanMR on the computer that is running the database.

If you are running cleanMR against a Real Application Clusters database, you just have to run it on one of the nodes.

### Stop All Oracle Application Server Instances Before Running the Script

Before running the script, stop all Oracle Application Server instances that are using the OracleAS Metadata Repository that you want to remove.

Although you have shut down the Oracle Application Server instances, it is possible that the database still shows some OracleAS Metadata Repository schemas as being active. You can check this by running the following query against the database:

```
prompt> sqlplus "sys/password as sysdba"
SQL> select schemaname from v$session;
```

password specifies the password for the SYS user.

If you see any OracleAS Metadata Repository schemas in "schemaname", then those schemas are still active. The OracleAS Metadata Repository schemas are listed in Table 1–9.

If you are sure the instances are shut down, restart the database to clear the session information.

If you do not do this, you may get some errors that you are trying to drop a user that is currently connected to the database.

### Syntax for cleanMR

```
prompt> cleanMR -HOST db host -PORT db port -SERVICE NAME service name
         [-DBUSER dbuser] -DBPASSWD password [-DBROLE dbrole]
```

Table 4–4 Pa	rameters t	for c	leanMF
--------------	------------	-------	--------

Parameter	Optional or Required	Description
-HOST db_host	Required	Specifies the name of the computer running the database.
-PORT db_port	Required	Specifies the port number on which the database listener is listening.
-SERVICE_NAME service_name	Required	Specifies the service name of the database.
-DBUSER dbuser	Optional	Specifies the database user that the script will use to connect to the database. If not specified, the default user is "SYS".
-DBPASSWD password	Required	Specifies the password for DBUSER.
-DBROLE dbrole	Optional	Specifies the database user role. If not specified, the default role is "SYSDBA".

### Example:

cleanMR -HOST myhost -PORT 1521 -SERVICE\_NAME asdb -DBPASSWD topsecret

#### **Notes**

The script does not remove the ODS schema, and it does not remove these tablespaces: OLTS ATTRSTORE, OLTS BATTRSTORE, OLTS CT STORE, OLTS DEFAULT, OLTS\_SVRMGSTORE. These objects pertain to Oracle Internet Directory.

If you are sure you want to remove these objects, see Section 4.8, "Removing Oracle Internet Directory Objects".

The script does not remove data files.

### If You See ORA-2000, ORU-10027 Errors

If you see the following errors from the cleanMR script:

```
ORA-20000: ORU-10027: buffer overflow, limit of 2000 bytes
ORA-06512: at "SYS.DBMS_OUTPUT", line 35
ORA-06512: at "SYS.DBMS_OUTPUT", line 198
ORA-06512: at "SYS.DBMS_OUTPUT", line 139
ORA-06512: at line 201
```

you need to rerun the script to remove the remaining objects that were not removed the first time.

# 4.8 Removing Oracle Internet Directory Objects

Be sure you want to remove Oracle Internet Directory objects before you run the repca\_cleanOID.sql script. If your database contained Oracle Internet Directory objects before you loaded the OracleAS Metadata Repository, you might to double-check that you are not using these objects in an Oracle Internet Directory that you need.

The Oracle Internet Directory objects are:

- Schema: ODS
- Tablespace: OLTS\_ATTRSTORE
- Tablespace: OLTS\_BATTRSTORE
- Tablespace: OLTS\_CT\_STORE
- Tablespace: OLTS\_DEFAULT
- Tablespace: OLTS\_SVRMGSTORE

You can run the script as follows (ORACLE\_HOME specifies the directory where you installed OracleAS Metadata Repository Creation Assistant):

```
prompt> cd ORACLE_HOME/repca/clean
prompt> sqlplus "sys/password as sysdba"
SQL> @repca_cleanOID.sql
```

# 4.9 Cleaning up the Database If You Cancelled a Deregistration Operation

If you cancelled a deregistration operation before it completed, you will not be able to register or deregister the database. You have to perform these clean-up steps first:

- Remove the database registration entries from Oracle Internet Directory manually. See Section B.3, "Manual Steps: Cleaning Up a Failed Registration or Deregistering OracleAS Metadata Repository" for details.
- 2. Edit the registration entry in the database by running the following statements in SQL\*Plus.

```
prompt> sqlplus "sys/password as sysdba"
SQL> execute dbms_ias_version.set_component_loading (
   component_id=>'MRC',
   component_name=>'Oracle Application Server Metadata Repository Version',
   schema_name=>'SYS' );
SQL> execute dbms_ias_version.set_component_valid( component_id=>'MRC' );
```

# **Deinstalling OracleAS Metadata Repository Creation Assistant**

If you no longer need OracleAS Metadata Repository Creation Assistant, you can deinstall it using the procedure described in this appendix.

Remember that you need OracleAS Metadata Repository Creation Assistant if you want to remove or deregister OracleAS Metadata Repository.

- Log in as the operating system user who installed OracleAS Metadata Repository Creation Assistant.
- **2.** Start the installer.

prompt> \$ORACLE\_HOME/oui/bin/runInstaller

ORACLE\_HOME refers to the directory where you installed OracleAS Metadata Repository Creation Assistant.

- Follow these steps in the installer.
  - Welcome screen: Click **Deinstall Products**.
  - Inventory screen: Select the OracleAS Metadata Repository Creation Assistant installation that you want to deinstall, and click Remove.
  - **c.** Confirmation screen: Verify the components selected for deinstallation. Click **Yes** to continue.
  - **d.** Deinstallation Progress screen: Monitor the progress of the deinstallation.
  - Exit the installer when the deinstallation is complete.
- Delete any remaining files in the Oracle home directory.

prompt> rm -rf \$ORACLE\_HOME

Α	-2

# **Troubleshooting OracleAS Metadata Repository Creation Assistant**

This appendix describes how to solve common problems that you might encounter when running OracleAS Metadata Repository Creation Assistant. It contains the following sections:

- Section B.1, "Unable to Connect to the Database"
- Section B.2, "Unable to Connect as "sys" User"
- Section B.3, "Manual Steps: Cleaning Up a Failed Registration or Deregistering OracleAS Metadata Repository"
- Section B.4, "ORA-01403: No Data Found"
- Section B.5, "Need More Help?"

## B.1 Unable to Connect to the Database

### **Problem**

OracleAS Metadata Repository Creation Assistant is unable to connect to the database

### Solution

Check the following:

- Make sure you are using correct service name (SID or SID.domainname).
- Make sure the database is up.
- Make sure the listener is up.
- Make sure you have network connectivity to the database.
- Check that the glogin.sql or the login.sql files, located in the ORACLE\_ HOME/sqlplus/admin directory, do not contain user prompt lines, which look like the following:

```
column db_name new_value db_name noprint
select user | | ' on ' | | name "db_name" from v$database ;
set sqlprompt "&db_name> "
```

If either file contains the user prompt lines:

- Rename the file to something else.
- Exit OracleAS Metadata Repository Creation Assistant.

- **c.** Restart OracleAS Metadata Repository Creation Assistant.
- Try connecting again.
- When OracleAS Metadata Repository Creation Assistant is done, rename the file back.

# **B.2 Unable to Connect as "sys" User**

#### **Problem**

You get the following message when running OracleAS Metadata Repository Creation Assistant:

```
RepCA unable to connect as sys. Error message:
*** Specify Database Connect ***
ERROR -SQLException on getting SID and SYSTEMNAME
informationjava.sql.SOLException:
@ ORA-01017 : invalid username/password; logon denied
```

#### Solution

Try the following:

- Check that you entered the correct password for the "sys" user.
- Reset the password for the "sys" user and try again. You can reset the password using the ORACLE\_HOME/bin/orapwd command. See Section 1.5.13, "Password File Authentication", step 1 on page 1-17, for details.
- Check that the glogin.sql or the login.sql files, located in the ORACLE\_ HOME/sqlplus/admin directory, do not contain user prompt lines, which look like the following:

```
column db_name new_value db_name noprint
select user | ' on ' | name "db_name" from v$database ;
set sqlprompt "&db_name> "
```

If either file contains these lines:

- Rename the file to something else.
- Exit OracleAS Metadata Repository Creation Assistant.
- Restart OracleAS Metadata Repository Creation Assistant.
- Try connecting again.
- When OracleAS Metadata Repository Creation Assistant is done, rename the file back.

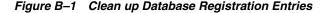
# B.3 Manual Steps: Cleaning Up a Failed Registration or Deregistering **OracleAS Metadata Repository**

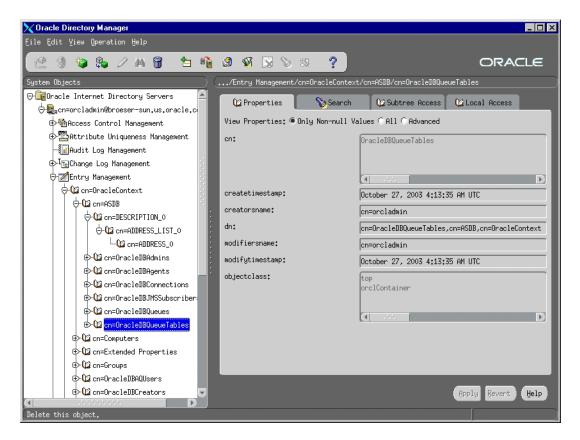
This section describes how to clean up registration entries in Oracle Internet Directory without using OracleAS Metadata Repository Creation Assistant.

- Connect to Oracle Internet Directory using Oracle Directory Manager.
  - **a.** Start up Oracle Directory Manager.

```
prompt> $ORACLE_HOME/bin/oidadmin
```

- **b.** In the Connect screen, enter the connect information. Log in as the Oracle Internet Directory superuser (cn=orcladmin).
- Clean up the database registration entries in Oracle Internet Directory:
  - **a.** Expand the following entries (shown in Figure B–1):
    - **Entry Management** > cn=OracleContext > cn=your\_database\_name
  - **b.** Delete all the child entries under cn=your\_database\_name, starting with the bottom-most child entry.
    - Before deleting the cn=DESCRIPTION\_0 entry, expand it until you reach the last child. Then delete each child starting with the innermost child.
    - To delete an entry, right-click each child entry and select Delete from the pop-up menu. Click Yes in the Confirmation dialog. When deleting some child entries, you may get some error messages. You can ignore these error messages.
  - Right-click cn=your\_database\_name and delete it.



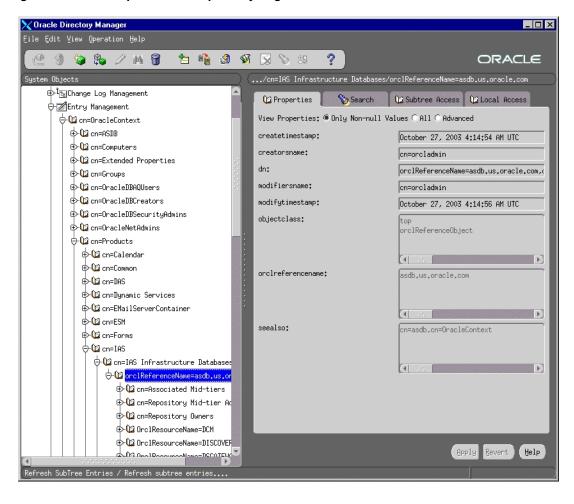


- Clean up the metadata repository registration entries in Oracle Internet Directory:
  - Expand the following entries (shown in Figure B–2):

Entry Management > cn=OracleContext > cn=Products > cn=IAS > cn=IAS **Infrastructure Databases** > **orclReferenceName=***your\_database\_name* 

- **b.** Delete each child entry under orclReferenceName=your\_database\_
- **c.** Delete the orclReferenceName=your\_database\_name entry.

Figure B-2 Clean up Metadata Repository Registration Entries



## B.4 ORA-01403: No Data Found

#### **Problem**

When OracleAS Metadata Repository Creation Assistant loads the Workflow schema, it returns a PL/SQL error ORA-01403: "no data found".

#### Solution

Your NLS\_LANG environment variable is set to a non-English locale. Before you run OracleAS Metadata Repository Creation Assistant, you need to make sure that the NLS\_LANG environment variable is unset or is set to american\_ america.us7ascii.

```
prompt> unsetenv NLS_LANG
- or -
prompt> setenv NLS_LANG american_america.us7ascii
```

You can set NLS\_LANG back to its original value after running OracleAS Metadata Repository Creation Assistant.

# **B.5 Need More Help?**

If this appendix does not solve the problem you encountered, try these other sources:

- Oracle Application Server Release Notes, available on the Oracle Technology Network (http://www.oracle.com/technology/documentation)
- OracleMetaLink (http://metalink.oracle.com)

If you do not find a solution for your problem, open a service request.

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