Oracle® Application Server Metadata Repository Creation Assistant

User's Guide

10*g* (10.1.4.0.1) for Microsoft Windows

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Preface

This guide describes how to run the Oracle Application Server Repository Creation Assistant tool ("OracleAS RepCA"), which enables you to load OracleAS Metadata Repository into an existing database. You can also use the OracleAS RepCA 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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- *Oracle Application Server Installation Guide*
- *Oracle Application Server Administrator's Guide*
- *Oracle Application Server Concepts*

Conventions

The following text conventions are used in this document:

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

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OracleAS RepCA 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 Repository Creation Assistant ("OracleAS RepCA"), which is the tool that performs the installation. You can also use OracleAS RepCA 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 RepCA to register a metadata repository from Release 2 (9.0.2) with an Oracle Internet Directory from 10*g* (9.0.4).

- You can only register the OracleAS Metadata Repository with supported versions of Oracle Internet Directory. See Section 1.7, "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, "OracleAS RepCA Overview"
- Section 1.2, "Steps for Running OracleAS RepCA"
- Section 1.3, "Requirements for the Computer Running OracleAS RepCA"
- Section 1.4, "Installing OracleAS RepCA"
- Section 1.5, "Using an Assistive Technology with the Installer"
- Section 1.6, "Requirements for the Database"
- Section 1.7, "Requirements for Oracle Internet Directory"
- Section 1.8, "Starting OracleAS RepCA"
- Section 1.9, "Which Section to Read Next?"

1.1 OracleAS RepCA Overview

You can run OracleAS RepCA 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 RepCA can load the OracleAS Metadata Repository in single node databases and Real Application Clusters databases. OracleAS RepCA 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 RepCA, 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 RepCA ("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 RepCA. For example, you can run OracleAS RepCA on a Windows computer to load the OracleAS Metadata Repository on a database running on a Linux computer.

1.2 Steps for Running OracleAS RepCA

Before you can run OracleAS RepCA, you have to install it first.

1. Install OracleAS RepCA.

   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 RepCA.

2. Run OracleAS RepCA from the installed directory.

1.3 Requirements for the Computer Running OracleAS RepCA

The computer where you run OracleAS RepCA must meet the following requirements:

> **Note:** The Oracle Application Server Repository Creation Assistant 10*g* (10.1.4.0.1) hardware and software requirements included in this guide were accurate at the time this manual was released to manufacturing. For the most up-to-date information about hardware and software requirements, see *Oracle Application Server Certification Information 10g (10.1.4.0.1)*.

Table 1–1 Requirements for the Computer Running OracleAS RepCA

Item	Requirement
Operating system	Windows 2000 with Service Pack 3 or later
	Windows 2003
	For hardware requirements, see the *Oracle Application Server Installation Guide*.
Disk space	For installing OracleAS RepCA software, you need at least 670 MB.
	Note: Each time you run OracleAS RepCA 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 1.6.5, "Disk Space Needed for SYSTEM and UNDO Tablespaces" and Section 1.6.6, "Disk Space Needed for OracleAS Metadata Repository Tablespaces".
Memory	512 MB
Virtual memory	1535 MB
Display	256 colors

1.4 Installing OracleAS RepCA

To install OracleAS RepCA:

1. Insert the "OracleAS Metadata Repository Creation Assistant" CD-ROM or the Oracle Application Server DVD-ROM.

2. Start the installer.

   CD-ROM: Run `setup.exe` to start the installer.

   DVD-ROM: Navigate to the `repca` directory and run `setup.exe` to start the installer.

3. Welcome screen: Click **Next**.

4. Specify File Locations screen: In the **Name** field, enter a name for this OracleAS RepCA 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`.

   The Oracle home name will appear in two places in the Start menu:

   - Start > Programs > Oracle - *OracleHomeName*

   - Start > Programs > OracleAS Infrastructure - *OracleHomeName*

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

   Click **Next**.

5. Language Selection screen: By default, the installer installs OracleAS RepCA with text in English and in the operating system language. If you need additional languages, move them to the **Selected Languages** box.

   Click **Next**.

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

   > **Note:** If you need to use assistive technologies, you must install Java Access Bridge before using the OracleAS RepCA. If you plan to install Java Access Bridge, you should select **No** on the Launch Repository Creation Assistant screen. After installing OracleAS RepCA, see Section 1.5, "Using an Assistive Technology with the Installer" for installation instructions.

   Click **Next**.

7. Summary screen: Click **Install** to start the installation.

8. Configuration Assistants screen: The installer runs configuration assistants to install OracleAS RepCA.

   > **Note:** If you selected **Yes** in the Launch Repository Creation Assistant screen, the installer starts up OracleAS RepCA 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 RepCA is running. When you exit OracleAS RepCA, the installer advances to the End of Installation screen.
   >
   > The installer stays running until you exit OracleAS RepCA.

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

1.5 Using an Assistive Technology with the Installer

Java Access Bridge enables assistive technologies, such as JAWS screen reader, to read Java applications running on the Windows platform. Assistive technologies can read Java-based interfaces, such as Oracle Universal Installer.

Your Oracle Application Server Repository Creation Assistant installation media contain the Java Runtime Environment (JRE) 1.4.2, which Oracle Universal Installer uses during installation. The JRE enables use of Java Access Bridge during installation.

To set up Java Access Bridge with JRE 1.4.2, run the following batch file on Oracle installation media. If Java Access Bridge is already running on your system, you must turn off the assistive technology prior to running this batch file.

```
DRIVE_LETTER:\install\access_setup.bat
```

After the batch file has run, restart your assistive technology program.

1.6 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 1.6.1, "Run the Prerequisite Check Tool") before running OracleAS RepCA. This tool checks many of the database requirements for you. Although OracleAS RepCA 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 RepCA, and resolving the next unmet requirement.
>
> You may have to restart the database to comply with a requirement.
>
> Then when you run OracleAS RepCA, 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 1.6.2, "Database Version"	Yes
Section 1.6.3, "Standard Edition Databases: Notes"	No
Section 1.6.4, "Swap Space Requirement"	No
Section 1.6.5, "Disk Space Needed for SYSTEM and UNDO Tablespaces"	Checked for you if these tablespaces are not set to autoextend.
Section 1.6.6, "Disk Space Needed for OracleAS Metadata Repository Tablespaces"	No
Section 1.6.7, "Initialization Parameters"	Some are not checked.
Section 1.6.8, "Database Options"	Yes
Section 1.6.9, "PL/SQL Packages"	Yes
Section 1.6.10, "DBMS_LDAP Package"	Yes
Section 1.6.11, "Knowledge Base Required (Oracle Database 10g Only)"	Yes
Section 1.6.12, "Oracle Ultra Search Required (Oracle Database 10g Release 2 (10.2.x) only)"	Yes
Section 1.6.13, "Password File Authentication"	No
Section 1.6.14, "Schemas and Tablespaces"	Yes
Section 1.6.15, "Registration with Oracle Internet Directory"	No

1.6.1 Run the Prerequisite Check Tool

OracleAS RepCA comes with a prerequisite check tool, located in the ORACLE_ HOME\repca\prereq directory, where ORACLE_HOME is where you installed OracleAS RepCA. 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 RepCA.

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

Usage:

```
DBPrereqChecker.bat -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:

```
C:\> DBPrereqChecker.bat -DBHOST mydb.mydomain.com -DBPORT 1521
      -DBNAME orcl1.mydomain.com -SYSPWD topsecret -LOGDIR C:\temp
```

1.6.2 Database Version

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

> **Note:** The Oracle Application Server Repository Creation Assistant 10*g* (10.1.4.0.1) hardware and software requirements included in this guide were accurate at the time this manual was released to manufacturing. For the most up-to-date information about hardware and software requirements, see *Oracle Application Server Certification Information 10g (10.1.4.0.1)*.

Table 1–4   Supported Database Versions

Database Series	Supported Versions	See This Section for Details
Oracle9*i* Release 2 (9.2.x)	9.2.0.7 or later	■ Section 1.6.2.1, "Oracle9i Release 2 (9.2.x) Databases"
Oracle Database 10*g* Release 1 (10.1.x)	10.1.0.5 or later	■ Section 1.6.2.2, "Oracle Database 10g (10.1.x) Databases"

Table 1–4 (Cont.) Supported Database Versions

Database Series	Supported Versions	See This Section for Details
Oracle Database 10*g* Release 2 (10.2.x)	10.2.0.2 or later	▪ Section 1.6.2.3, "Oracle Database 10g Release 2 (10.2.x) Databases"

To check the release of your database, query the PRODUCT_COMPONENT_VERSION view:

```
C:\> 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.

1.6.2.1 Oracle9*i* Release 2 (9.2.x) Databases

Before you run Oracle Application Server Repository Creation Assistant on an Oracle9*i* Release 2 (9.2.x) database, you must install the 9.2.0.7 patch set, which is patch set number 4163445. You can download the patch set from Oracle*MetaLink* (http://metalink.oracle.com).

Ensure that the following steps for upgrading your database to 9.2.0.7 are performed. These steps are documented in the README file for the 9.2.0.7 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:

```
C:\> sqlplus "sys/password as sysdba"
SQL> select comp_name, version, status from dba_registry
 where comp_id = 'CATPROC';
```

You should get the following results:

```
COMP_NAME                      VERSION     STATUS
---------------------------- ----------- --------
Oracle9i Packages and Types  9.2.0.7.0   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 9.2.0.7, 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 RepCA.

1.6.2.2 Oracle Database 10*g* (10.1.x) Databases

Before you run Oracle Application Server Repository Creation Assistant on an Oracle Database 10g (10.1.x) database, you must install the 10.1.0.5 patch set, which is patch set number 4505133. You can download the patch set from Oracle*MetaLink* (http://metalink.oracle.com).

1.6.2.3 Oracle Database 10*g* Release 2 (10.2.x) Databases

Before you run Oracle Application Server Repository Creation Assistant on an Oracle Database 10g (10.2.x) database, you must install the 10.2.0.2 patch set, which is patch set number 4547817. You can download the patch set from Oracle*MetaLink* (http://metalink.oracle.com).

1.6.3 Standard Edition Databases: Notes

If you are using the Standard Edition of a supported database, you must run the `sdopatch.sql` script as part of the database's post-install procedure before you run the Oracle Application Server Metadata Repository Creation Assistant. The `sdopatch.sql` script is located at:

```
Oracle_Home\md\admin\sdopatch.sql
```

where `Oracle_Home` is the Oracle Home for the database.

Note that 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.

1.6.4 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.

1.6.5 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

Table 1–5   (Cont.) Free Space Required for the SYSTEM and UNDO Tablespaces

Tablespace	Free Space Required
UNDO	367,001,600 bytes

If these tablespaces are set to autoextend, OracleAS RepCA cannot check the space for you because the tablespaces may use up available space in the file system, and OracleAS RepCA 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 RepCA can check the free space for you, because OracleAS RepCA can query the database to find out how much space is available in the tablespace.

For directions on enabling and disabling autoextend, see the *Oracle Database Administrator's Guide*.

1.6.6 Disk Space Needed for OracleAS Metadata Repository Tablespaces

If you are installing OracleAS Metadata Repository on a database that uses Automatic Storage Management (ASM), make sure the disk group has at least 2 GB of disk space for the OracleAS Metadata Repository tablespaces. Otherwise, make sure that you have at least 1.3 GB of disk space for the OracleAS Metadata Repository tablespaces.

This disk space requirement is in addition to the space needed for the SYSTEM and UNDO tablespaces (see previous section).

1.6.7 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 RepCA. You have to check these parameters yourself.

- Table 1–7 lists the parameters that are checked by OracleAS RepCA. If OracleAS RepCA finds parameters that do not meet the requirements, it displays an alert. You need to change the value of the parameter before OracleAS RepCA 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.

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

Parameter	Required Value	Parameter Class	Notes
nls_length_semantics	BYTE	Dynamic	**Note:** OracleAS RepCA 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 RepCA 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.

Table 1–7   Initialization Parameters: Required Values (Checked by OracleAS RepCA)

Parameter	Required Value	Parameter Class	Notes
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 Wireless requires this value.
query_rewrite_integrity	trusted or enforced	Dynamic	Do not change this parameter after installation, because OracleAS Wireless requires this value.
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.

Table 1–7   (Cont.) Initialization Parameters: Required Values (Checked by OracleAS RepCA)

Parameter	Required Value	Parameter Class	Notes
db_create_file_dest	The directory where OracleAS RepCA 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.
max_enabled_roles	100 or greater	Static	This initialization parameter is needed only if you are using a Oracle9*i* Release 2 (9.2.x) database.
compatible	If you are using Oracle9*i* Release 2 (9.2.x) database: 9.2.0.0.0 or higher If you are using Oracle Database 10*g*: 10.1.0.2.0 or higher	Static	Do not set this parameter to a value lower than 9.2.0.0.0.
sga_target	600 MB or greater	Dynamic	This initialization parameter is needed only if you are using Oracle Database 10*g*.

Checking Parameter Values

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

```
C:\> 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:

```
C:\> sqlplus "sys/password as sysdba"
SQL> 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:

```
C:\> 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:

```
C:\> 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:

```
C:\> 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:

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

1.6.8 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 is Installed in the Database

OLAP Window Functions
Parallel load
	To check if the database has these options, query the V$OPTION view (*password* specifies the password for the SYS user):
	
	```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 TRUE```
	```Parallel load TRUE```

Java	```prompt> sqlplus "sys/password as sysdba"```
	```SQL> select count(*) from dba_objects```
	``` where object_type like 'JAVA%' and```
	``` owner = 'SYS' and status = 'VALID';```
	
	The count returned should be greater than 0.

Table 1–8 (Cont.) Required Database Options

Required Option	How to Check if the Option is Installed in the Database
Intermedia	prompt> **sqlplus "sys/**_password_ **as sysdba"** SQL> **select count(name) from sys.props$** **where name = 'EXPORT_VIEWS_VERSION';** The count returned should be greater than 0.
Oracle Text	prompt> **sqlplus "sys/**_password_ **as sysdba"** SQL> **select count(*) from dba_views** **where owner = 'CTXSYS' and** **view_name = 'CTX_VERSION';** The count should be greater than 0.
Oracle Spatial	prompt> **sqlplus "sys/**_password_ **as sysdba"** SQL> **select value from v$option** **where parameter = 'Spatial'** The value returned should be true.

1.6.9 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.

1.6.10 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.

```
C:\> sqlplus "sys/password as sysdba"
```

```
SQL> select dbms_ldap_utl.check_interface_version('2') from dual;

DBMS_LDAP_UTL.CHECK_INTERFACE_VERSION('2')
------------------------------------------
                                         0
```

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'
) OR
( 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'
) OR
( object_name = 'DBMS_LDAP' and
object_type = 'SYNONYM' and
status = 'VALID' and owner = 'PUBLIC'
) OR
( object_name = 'DBMS_LDAP_UTL' and
object_type = 'SYNONYM' and
status = 'VALID' and owner = 'PUBLIC'
) OR
( object_name = 'DBMS_LDAP_API_FFI' and
object_type = 'PACKAGE' and
status = 'VALID' and owner = 'SYS'
) OR
( object_name = 'DBMS_LDAP_API_FFI' and
object_type = 'PACKAGE BODY' and
status = 'VALID' and owner = 'SYS'
) OR
( 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:

```
C:\> sqlplus "sys/password as sysdba"
```

```
SQL> @test_ldap.sql

  COUNT(*)
----------
         9
```

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.

   ```
   C:\> cd ORACLE_HOME\rdbms\admin
   C:\> sqlplus "sys/password as sysdba"
   SQL> @catldap.sql
   ```

1.6.11 Knowledge Base Required (Oracle Database 10*g* Only)

If you plan to install the OracleAS Metadata Repository on Oracle Database 10*g* 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 RepCA checks if your database contains the knowledge base. If your database does not contain it, OracleAS RepCA 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
CD.

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);
  l_test_table constant varchar2(30) := 'WWSRC_INSO_TEST';
  l_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())';
           begin
              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';
              else
                 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 10*g* Companion CD-ROM. See the *Oracle Database Companion CD Installation Guide* for details.

1.6.12 Oracle Ultra Search Required (Oracle Database 10*g* Release 2 (10.2.x) only)

If you plan to install the OracleAS Metadata Repository on Oracle Database 10*g* Release 2 (10.2.x), then you must install Oracle Ultra Search on the database.

OracleAS RepCA checks if your database contains the WKSYS and WKPROXY schema. If your database does not contain them, OracleAS RepCA displays the following warning:

```
"The Database does not contain Ultra Search Schemas WKSYS and/or
WKPROXY. Please install them and try again. Refer to the
```

```
Database Install Guide and Ultra Search User Guide for more
information."
```

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

After installing Oracle Ultra Search, you need to load the schemas onto the database using the Database Configuration Assistant (DBCA). Refer to Oracle*MetaLink* (http://www.metalink.oracle.com) Note 337992.1 for loading Oracle Ultra Search schemas.

1.6.13 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 RepCA. 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 ways.

- Look up the value of the `remote_login_passwordfile` initialization parameter by running the following command in SQL*Plus:

  ```
  C:\> sqlplus "sys/password as sysdba"
  SQL> show parameters remote_login_passwordfile
  NAME                            TYPE        VALUE
  ------------------------------ ---------- ------------
  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.

  ```
  C:\> 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.

  ```
  C:\> 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).

   ```
   C:\> cd ORACLE_HOME\bin
   C:\> 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 `PWDsid.ora`. Typically, the password file is stored in the `ORACLE_HOME\database` 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":

   ```
   C:\> cd oracle\ora92\bin
   C:\oracle\ora92\bin> orapwd
       file=C:\oracle\ora92\database\PWDmydb.ora
       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`.

3. Restart the database.

1.6.14 Schemas and Tablespaces

OracleAS RepCA 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.

1.6.14.1 List of Schemas and Tablespaces

Table 1–9 lists the OracleAS Metadata Repository schemas and tablespaces that OracleAS RepCA 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

Table 1–9   (Cont.) Schemas and Tablespaces

Component	Schema	Tablespace	Default Database File
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
OracleBI Discoverer	DISCOVERER5	DISCO_PTM5_META	discopltm1.dbf
OracleBI Discoverer	DISCOVERER5	DISCO_PTM5_CACHE	discopltc1.dbf
OracleAS Distributed Configuration Management (DCM)	DCM	DCM	dcm.dbf
Oracle Enterprise Manager 10*g*	OEM_REPOSITORY	SYS_AUX	sysaux01.dbf
Oracle Application Server Web Clipping	WCRSYS	WCRSYS_TS	wcrsys01.dbf
OracleAS Integration B2B	IP[1]	N/A	N/A
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
Oracle BPEL Process Analytics	BAM	BAM	bam.dbf
Oracle BPEL Process Manager	ORABPEL	ORABPEL	orabpel.dbf
OCA	OCA	OCATS	oca.dbf
OCA	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	ODSSM	OLTS_SVRMGSTORE	svrmg1_oid.dbf
Oracle Ultra Search	WK_TEST	SYS_AUX	sysaux01.dbf
N/A	DSGATEWAY[2]	DSGATEWAY_TAB	oss_sys01.dbf
Metadata Repository Version	INTERNET_APPSERVER_REGISTRY	IAS_META	ias_meta01.dbf

[1] In Oracle Application Server 10*g* (10.1.4.0.1), the IP schema does not contain any data. It has been replaced by the B2B schema and is provided only for backward compatibility.

[2] In Oracle Application Server 10*g* (10.1.4.0.1), the DSGATEWAY schema is not used. It is provided for backward compatibility.

1.6.14.2 Schema Name Already In Use

If OracleAS RepCA 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 RepCA. 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:

```
C:\> 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 RepCA to remove schemas and tablespaces used by OracleAS Metadata Repository.

1.6.14.3 Tablespace Name Already In Use

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

1. Dismiss the error dialog and exit OracleAS RepCA.

2. Back up the data in the tablespace (if desired).

3. Drop the tablespace.

4. Rerun OracleAS RepCA.

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

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

password specifies the password for the SYS user.

> **Note:** If you run OracleAS RepCA 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 RepCA.
>
> See Chapter 4, "Deregistering and Removing OracleAS Metadata Repository" if you want to run OracleAS RepCA 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 RepCA 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 RepCA.

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

   ```
   C:\> 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.

1.6.14.4 Tablespace Sizes

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

OracleAS RepCA 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.

Table 1–10   Initial Sizes for Tablespaces

Component	Tablespace	Initial Sizes (in MB)		
		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
OracleAS Single Sign-On OracleAS Wireless Oracle Workflow INTERNET_APPSERVER_ REGISTRY (schema for storing information about the OracleAS Metadata Repository version)	IAS_META	200	300	500
Oracle Ultra Search	SYS_AUX	200	300	500
OracleBI Discoverer	DISCO_PTM5_META	5	10	15
OracleBI 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 Integration B2B	B2B_RT	50	75	90
OracleAS Integration B2B	B2B_DT	60	75	90
OracleAS Integration B2B	B2B_IDX	20	40	60
OracleAS Integration B2B	B2B_LOB	20	40	60

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

Component	Tablespace	Initial Sizes (in MB)		
		Small	Medium	Large
Oracle BPEL Process Analytics	BAM	175	200	250
Oracle BPEL Process Manager	ORABPEL	80	100	120
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
N/A	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
ORSYS tablespace	64 MB

Table 1–12   Logical Drives for the OracleAS Metadata Repository

Logical Drive for	Minimum Size	Recommended Symbolic Link 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

Table 1–12   (Cont.) Logical Drives for the OracleAS Metadata Repository

Logical Drive for	Minimum Size	Recommended Symbolic Link Name
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`
IP_DT tablespace	128 MB	*dbname*`_raw_ipdt_128m`
IP_RT tablespace	128 MB	*dbname*`_raw_iprt_128m`
IP_LOB tablespace	128 MB	*dbname*`_raw_iplob_128m`
IP_IDX tablespace	128 MB	*dbname*`_raw_ipidx_128m`
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.

1.6.15 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.

        Select **Start** > **Programs** > **Oracle** - *OracleHomeName* > **Integrated Management Tools** > **Oracle Directory Manager**.

    b. In the Connect screen, enter the connect information. Log in as the Oracle Internet Directory superuser (`cn=orcladmin`).

2. 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 C.5, "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 C.5, "Manual Steps: Cleaning Up a Failed Registration or Deregistering OracleAS Metadata Repository".

1.7 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:

```
C:\> 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.

1.8 Starting OracleAS RepCA

To start OracleAS RepCA:

1. Check that you have installed OracleAS RepCA. See Section 1.4, "Installing OracleAS RepCA" 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`.

   You can set the environment variable using the System Properties dialog box.

   If `NLS_LANG` is set to a non-English locale, OracleAS RepCA will fail to load the Workflow schema.

   You can set `NLS_LANG` back to its original value after running OracleAS RepCA.

4. Start up OracleAS RepCA from the Oracle home for OracleAS RepCA (this is the directory where you installed OracleAS RepCA):

   ```
   prompt> cd ORACLE_HOME_RepCA
   prompt> runRepca.bat
   ```
   You can also start up OracleAS RepCA from the Start menu: Start > Programs > OracleAS Infrastructure - *OracleHomeName* > Repository Creation Assistant.

Running from a Shared Drive

If you are running OracleAS RepCA from a shared drive, you need to map the drive first. You cannot run OracleAS RepCA using a universal naming convention (UNC) path, due to a Microsoft Windows restriction on running batch files from UNC directories.

For example, if you installed OracleAS RepCA at `\\myserver\repca`, you cannot run OracleAS RepCA with the command:

```
C:> \\myserver\repca\runRepca -- UNC format: Will not work.
```

You have to map the shared drive first, then run OracleAS RepCA using the drive letter. The following example maps the shared drive to F:

```
C:> net use F: \\myserver\repca          -- Map the shared drive to F:
C:> F:\runRepca.bat [parameters]         -- Run OracleAS RepCA.
```

> **Note:** Before running the `runRepca` script, make sure that *REPCA_ HOME*/JRE is pointing to an existing JRE location.

1.9 Which Section to Read Next?

The remaining sections in this chapter describe the procedures for using OracleAS RepCA.

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".

2

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:

1. Ensure that the database meets the requirements listed in Section 1.6, "Requirements for the Database".

2. Start up OracleAS RepCA. See Section 1.8, "Starting OracleAS RepCA" 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	**Oracle Home**: 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).
		Log File Directory: Enter the full path of the directory where you want OracleAS RepCA to write its log files. This path is on the computer where you are running OracleAS RepCA.
		Note that once you click **Next** to move to the next screen, you cannot change the log file directory. If you click **Back** to return to this screen, the **Log File Directory** field becomes read-only. This is to prevent OracleAS RepCA from writing log files in different directories.
		Click **Next**.
3.	Select Operation	Select **Load** 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 **Load and Register** if you want to load the OracleAS Metadata Repository into the database and register it with Oracle Internet Directory.
		Click **Next**.
4.	Specify Database Connection Information	Enter connect information for the existing database.
		SYS Password: Enter the password for the SYS user.
		Single node instance: Select this option, and complete the fields under it:
		■ **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: `orcl.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
6.	Specify Tablespace Information	Specify where OracleAS RepCA 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 RepCA.
- 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**.

	Screen	Action
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.
8.	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 RepCA to connect to Oracle Internet Directory using SSL when performing the registration.

Click **Next**.

	Screen	Action
9.	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.

Click **Next**.

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.
		Root Oracle Context (cn=OracleContext): Select this option to register OracleAS Metadata Repository in the root Oracle context.
		Custom Oracle Context: 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 RepCA creates and populates the tablespaces and schemas.
12.	Success	Click **OK** to exit OracleAS RepCA.

4. 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:

1. Ensure that the database meets the requirements listed in Section 1.6, "Requirements for the Database".

2. Create logical drives for the OracleAS Metadata Repository, and assign a symbolic link name to each logical drive. Windows uses logical drives to represent raw file systems.

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

If you need help creating logical drives and assigning symbolic link names, see the *Oracle Database Installation Guide for Windows*.

3. (optional) Create a file to map the tablespaces to the symbolic link names representing your logical drives, and set the DBCA_RAW_CONFIG environment variable to point to this file.

OracleAS RepCA 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 RepCA to install the OracleAS Metadata Repository in a database that uses logical drives. 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 symbolic link names representing your logical drives.

Each line in the file has the following format:

```
tablespace_name=symbolic_link_name
```

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

```
PORTAL1=\\.\mydb_raw_portal_128m
PORTAL_DOC1=\\.\mydb_raw_portal_doc_64m
PORTAL_IDX1=\\.\mydb_raw_portal_idx_64m
PORTAL_LOG1=\\.\mydb_raw_portal_log_64m
IAS_META1=\\.\mydb_raw_ias_meta_256m
DISCO_PTM5_META1=\\.\mydb_raw_disco_meta_64m
DISCO_PTM5_CACHE1=\\.\mydb_raw_disco_cache_64m
DCM1=\\.\mydb_raw_dcm_256m
DSGATEWAY_TAB1=\\.\mydb_raw_synd_64m
WCRSYS_TS1=\\.\mydb_raw_clip_64m
B2B_DT1=\\.\mydb_raw_b2b_dt_256m
B2B_RT1=\\.\mydb_raw_b2b_rt_256m
B2B_LOB1=\\.\mydb_raw_b2b_lob_256m
B2B_IDX1=\\.\mydb_raw_b2b_idx_256m
BAM1=\\.\mydb_raw_bam_175m
ORABPEL1=\\.\mydb_raw_orapbel_80m
OCATS1=\\.\mydb_raw_oca_64m
UDDISYS_TS1=\\.\mydb_raw_uddi_64m
OLTS_ATTRSTORE1=\\.\mydb_raw_olts_attr_128m
OLTS_BATTRSTORE1=\\.\mydb_raw_olts_battr_64m
OLTS_CT_STORE1=\\.\mydb_raw_olts_ct_store_256m
OLTS_DEFAULT1=\\.\mydb_raw_olts_default_128m
OLTS_SVRMGSTORE1=\\.\mydb_raw_olts_svrmgstore_64m
```

See Section 1.6.14, "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.

You can use the System Variables dialog to set the environment variable.

4. Start up OracleAS RepCA. See Section 1.8, "Starting OracleAS RepCA" for details.

5. Follow the screens:

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

	Screen	Action
1.	Welcome	Click **Next**.
2.	Specify Oracle Home	**Oracle Home**: 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).
		Log File Directory: Enter the full path of the directory where you want OracleAS RepCA to write its log files. This path is on the computer where you are running OracleAS RepCA.
		Note that once you click **Next** to move to the next screen, you cannot change the log file directory. If you click **Back** to return to this screen, the **Log File Directory** field becomes read-only. This is to prevent OracleAS RepCA from writing log files in different directories.
		Click **Next**.

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

	Screen	Action
3.	Select Operation	Select **Load** 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 **Load and Register** if you want to load the OracleAS Metadata Repository into the database and register it with Oracle Internet Directory.
		Click **Next**.
4.	Specify Database Connection Information	Enter connect information for the existing database.
		SYS Password: Enter the password for the SYS user.
		Single node instance: Select this option, and complete the fields under it:
		■ **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: `orcl.mydomain.com`
		Click **Next**.
5.	Specify Storage Options	Select **Raw File System**.
6.	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 **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**.
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.
8.	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 RepCA to connect to Oracle Internet Directory using SSL when performing the registration.
		Click **Next**.
9.	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.
		Click **Next**.

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.
		Root Oracle Context (cn=OracleContext): Select this option to register OracleAS Metadata Repository in the root Oracle context.
		Custom Oracle Context: 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 RepCA creates and populates the tablespaces and schemas.
12.	Success	Click **OK** to exit OracleAS RepCA.

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

2.3 Installing in a Real Application Clusters Database

You can use OracleAS RepCA 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 Oracle Identity Management components separately, as described in Table 2–3.

*Figure 2–1   OracleAS Infrastructure with the OracleAS Metadata Repository in a Real Application Clusters Database*
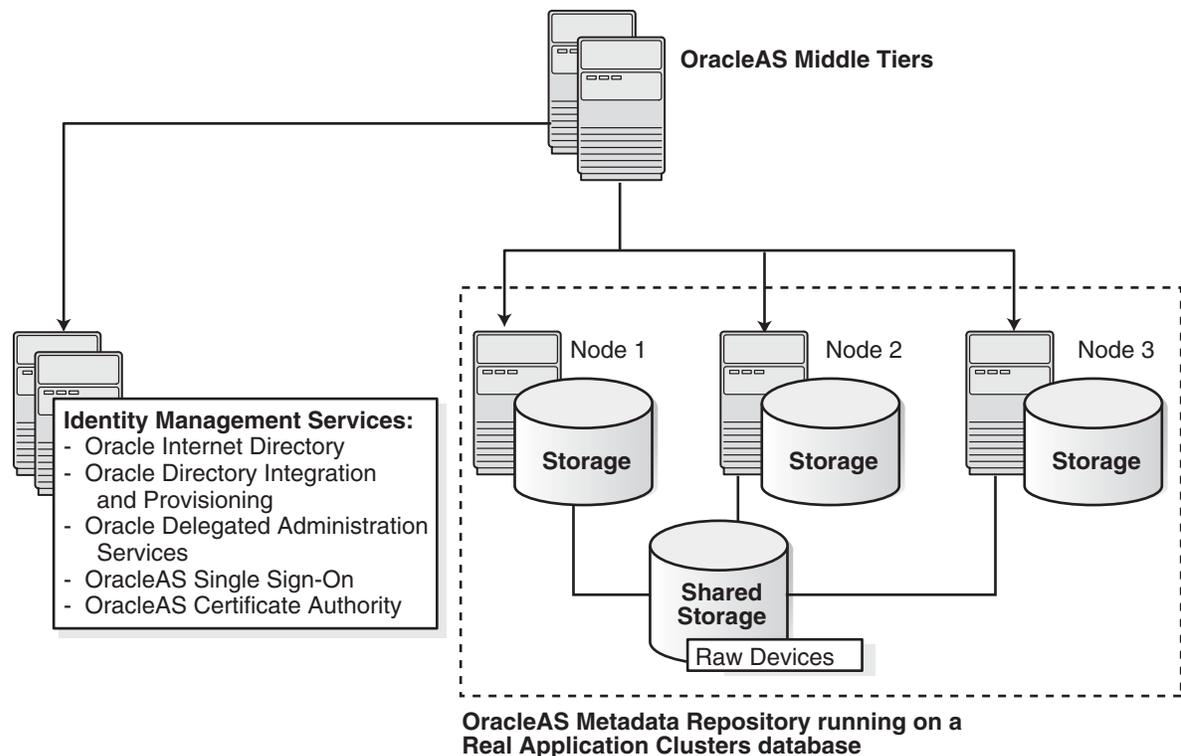
Table 2–3   OracleAS Infrastructure with Real Application Clusters

Component	Where Installed
OracleAS Metadata Repository	Installed in an existing Real Application Clusters database
Oracle 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 RepCA 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 yet.

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

   You can install all the Oracle 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
   ```

3. 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 1.6, "Requirements for the Database".

2. Start up OracleAS RepCA. See Section 1.8, "Starting OracleAS RepCA" for details.

3. Follow the screens:

> **Note:** The on-screen instructions for the Specify Database Connection Information screen are different from the instructions in this guide. This guide has the correct instructions.

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	**Oracle Home**: 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).
		Log File Directory: Enter the full path of the directory where you want OracleAS RepCA to write its log files. This path is on the computer where you are running OracleAS RepCA.
		Note that once you click **Next** to move to the next screen, you cannot change the log file directory. If you click **Back** to return to this screen, the **Log File Directory** field becomes read-only. This is to prevent OracleAS RepCA from writing log files in different directories.
		Click **Next**.
3.	Select Operation	**Oracle Home**: Enter the full path of the Oracle home directory for the database.
		Select **Load** 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 **Load and Register** if you want to load the OracleAS Metadata Repository into the database and register it with Oracle Internet Directory.
		Click **Next**.

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

	Screen	Action
4.	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 name of **one** computer running the Real Application Clusters database and the port number used by the listener. The Real Application Clusters software will automatically replicate the data loaded by OracleAS RepCA onto all of the nodes. Use the format *host*:*port*:
		hostname1:*port1*
		■ **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: `orcl.mydomain.com`
		Click **Next**.
5.	Specify Storage Options	Select **Regular or Cluster File System**.
6.	Specify Tablespace Information	Enter the information for the tablespaces that OracleAS RepCA will create in your 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. 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.

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

	Screen	Action
8.	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 RepCA to connect to Oracle Internet Directory using SSL when performing the registration.
		Click **Next**.
9.	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.
		Click **Next**.
10.	Specify Oracle Context	Specify the location in Oracle Internet Directory where you want to register the OracleAS Metadata Repository.
		Root Oracle Context (cn=OracleContext): Select this option to register OracleAS Metadata Repository in the root Oracle context.
		Custom Oracle Context: 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 RepCA creates and populates the tablespaces and schemas.
12.	Success	Click **OK** to exit OracleAS RepCA.

4. 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:

1. Ensure that the database meets the requirements listed in Section 1.6, "Requirements for the Database".

2. Create logical drives for the OracleAS Metadata Repository, and assign a symbolic link name to each logical drive. Windows uses logical drives to represent raw file systems.

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

If you need help creating logical drives and assigning symbolic link names, see the *Oracle Database Installation Guide for Windows*.

3. (optional) Create a file to map the tablespaces to the symbolic link names representing your logical drives, and set the DBCA_RAW_CONFIG environment variable to point to this file.

OracleAS RepCA 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 RepCA to install the OracleAS Metadata Repository in a Real Application Clusters database that uses logical drives. 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 the symbolic link names representing your logical drives.

Each line in the file has the following format:

```
tablespace_name=symbolic_link_name
```

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

```
PORTAL1=\\.\mydb_raw_portal_128m
PORTAL_DOC1=\\.\mydb_raw_portal_doc_64m
PORTAL_IDX1=\\.\mydb_raw_portal_idx_64m
PORTAL_LOG1=\\.\mydb_raw_portal_log_64m
IAS_META1=\\.\mydb_raw_ias_meta_256m
DISCO_PTM5_META1=\\.\mydb_raw_disco_meta_64m
DISCO_PTM5_CACHE1=\\.\mydb_raw_disco_cache_64m
DCM1=\\.\mydb_raw_dcm_256m
DSGATEWAY_TAB1=\\.\mydb_raw_synd_64m
WCRSYS_TS1=\\.\mydb_raw_clip_64m
B2B_DT1=\\.\mydb_raw_b2b_dt_256m
B2B_RT1=\\.\mydb_raw_b2b_rt_256m
B2B_LOB1=\\.\mydb_raw_b2b_lob_256m
B2B_IDX1=\\.\mydb_raw_b2b_idx_256m
BAM1=\\.\mydb_raw_bam_175m
ORABPEL1=\\.\mydb_raw_orapbel_80m
OCATS1=\\.\mydb_raw_oca_64m
UDDISYS_TS1=\\.\mydb_raw_uddi_64m
OLTS_ATTRSTORE1=\\.\mydb_raw_olts_attr_128m
OLTS_BATTRSTORE1=\\.\mydb_raw_olts_battr_64m
OLTS_CT_STORE1=\\.\mydb_raw_olts_ct_store_256m
OLTS_DEFAULT1=\\.\mydb_raw_olts_default_128m
OLTS_SVRMGSTORE1=\\.\mydb_raw_olts_svrmgstore_64m
```

See Section 1.6.14, "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.

You can use the System Variables dialog to set the environment variable.

4. Start up OracleAS RepCA. See Section 1.8, "Starting OracleAS RepCA" for details.

5. Follow the screens:

> **Note:** The on-screen instructions for the Specify Database Connection Information screen are different from the instructions in this guide. This guide has the correct instructions.

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

	Screen	Action
1.	Welcome	Click **Next**.
2.	Specify Oracle Home	**Oracle Home**: 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).
		Log File Directory: Enter the full path of the directory where you want OracleAS RepCA to write its log files. This path is on the computer where you are running OracleAS RepCA.
		Note that once you click **Next** to move to the next screen, you cannot change the log file directory. If you click **Back** to return to this screen, the **Log File Directory** field becomes read-only. This is to prevent OracleAS RepCA from writing log files in different directories.
		Click **Next**.
3.	Select Operation	Select **Load** 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 **Load and Register** if you want to load the OracleAS Metadata Repository into the database and register it with Oracle Internet Directory.
		Click **Next**.
4.	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 name of **one** computer running the Real Application Clusters database and the port number used by the listener. The Real Application Clusters software will automatically replicate the data loaded by OracleAS RepCA onto all of the nodes. Use the format *host*:*port*:
		`hostname1`:`port1`
		■ **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: `orcl.mydomain.com`
		Click **Next**.
5.	Specify Storage Options	Select **Raw File System**.
6.	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**.
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.

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

	Screen	Action
8.	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 RepCA to connect to Oracle Internet Directory using SSL when performing the registration.
		Click **Next**.
9.	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.
		Click **Next**.
10.	Specify Oracle Context	Specify the location in Oracle Internet Directory where you want to register the OracleAS Metadata Repository.
		Root Oracle Context (cn=OracleContext): Select this option to register OracleAS Metadata Repository in the root Oracle context.
		Custom Oracle Context: 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 RepCA creates and populates the tablespaces and schemas.
12.	Success	Click **OK** to exit OracleAS RepCA.

6. 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:

1. Ensure that the database meets the requirements listed in Section 1.6, "Requirements for the Database".

2. Start up OracleAS RepCA. See Section 1.8, "Starting OracleAS RepCA" for details.

3. 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	**Oracle Home**: 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).
		Log File Directory: Enter the full path of the directory where you want OracleAS RepCA to write its log files. This path is on the computer where you are running OracleAS RepCA.
		Note that once you click **Next** to move to the next screen, you cannot change the log file directory. If you click **Back** to return to this screen, the **Log File Directory** field becomes read-only. This is to prevent OracleAS RepCA from writing log files in different directories.
		Click **Next**.
3.	Select Operation	Select **Load** 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 **Load and Register** if you want to load the OracleAS Metadata Repository into the database and register it with Oracle Internet Directory.
		Click **Next**.
4.	Specify Database Connection Information	Enter connect information for the existing database.
		SYS Password: Enter the password for the SYS user.
		Single node instance: Select this option, and complete the fields under it:
		■ **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: `orcl.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**.

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

	Screen	Action
7.	Specify Tablespace Information	This screen displays the tablespaces that OracleAS RepCA needs to create.
		In the **Size** 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 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 RepCA 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.
		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.
		Click **Next**.
11.	Specify Oracle Context	Specify the location in Oracle Internet Directory where you want to register the OracleAS Metadata Repository.
		Root Oracle Context (cn=OracleContext): Select this option to register OracleAS Metadata Repository in the root Oracle context.
		Custom Oracle Context: 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 RepCA creates and populates the tablespaces and schemas.
13.	Success	Click **OK** to exit OracleAS RepCA.

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:

1. Ensure that the database meets the requirements listed in Section 1.6, "Requirements for the Database".

   In particular, make sure the `db_create_file_dest` initialization parameter specifies the directory where OracleAS RepCA should create the data files for the OracleAS Metadata Repository. For example:

   ```
   C:\> sqlplus "sys/password as sysdba"
   SQL> alter system set db_create_file_dest ='C:\oracle\oradata';
   ```

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

2. Start up OracleAS RepCA. See Section 1.8, "Starting OracleAS RepCA" 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	**Oracle Home**: 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).
		Log File Directory: Enter the full path of the directory where you want OracleAS RepCA to write its log files. This path is on the computer where you are running OracleAS RepCA.
		Note that once you click **Next** to move to the next screen, you cannot change the log file directory. If you click **Back** to return to this screen, the **Log File Directory** field becomes read-only. This is to prevent OracleAS RepCA from writing log files in different directories.
		Click **Next**.
3.	Select Operation	Select **Load** 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 **Load and Register** if you want to load the OracleAS Metadata Repository into the database and register it with Oracle Internet Directory.
		Click **Next**.
4.	Specify Database Connection Information	Enter connect information for the existing database.
		SYS Password: Enter the password for the SYS user.
		Single node instance: Select this option, and complete the fields under it:
		■ **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: `orcl.mydomain.com`
		Click **Next**.
5.	Specify Storage Options	Select **Oracle-Managed Files**.

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

	Screen	Action
6.	Directory for Oracle-Managed Files	This screen shows the directory where OracleAS RepCA 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 RepCA to create the data files in a different directory, edit the `db_create_file_dest` initialization parameter to specify the desired directory (using SQL*Plus or other database administration tool), go back one screen, and click **Next** to move forward until you return to this screen. You should see the new value of the parameter.
		Click **Next**.
7.	Specify Tablespace Information	This screen displays the tablespaces that OracleAS RepCA needs to create.
		In the **Size** 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 **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 RepCA 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.
		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.
		Click **Next**.
11.	Specify Oracle Context	Specify the location in Oracle Internet Directory where you want to register the OracleAS Metadata Repository.
		Root Oracle Context (cn=OracleContext): Select this option to register OracleAS Metadata Repository in the root Oracle context.
		Custom Oracle Context: 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 RepCA creates and populates the tablespaces and schemas.
13.	Success	Click **OK** to exit OracleAS RepCA.

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"
- Section 2.6.3, "Errors During Loading of Oracle Internet Directory Schema"

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.
```

You may also ignore an SP2-0332 error in the following context:

```
SQL> Connected.
SQL>
PL/SQL procedure successfully completed.
SP2-0332: Cannot create spool file.
DROP USER odscommon CASCADE
ERROR at line 1:
ORA-01918: user 'ODSCOMMON' does not exist
Package body created.
SP2-0332: Cannot create spool file.
Procedure created
```

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.
```

2.6.3 Errors During Loading of Oracle Internet Directory Schema

If the log file shows the following error during the loading of the Oracle Internet Directory schema, you may ignore it:

```
ERROR at line 1:
ORA-01403: no data found
ORA-06512: at "ODS.TSPURGE", line 220
ORA-06512: at line 3
```

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 ldap.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 ldap.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 step.

- 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 RepCA.

  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 RepCA.

  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.

1. 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.

   ```
   C:\> %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 User'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.

2. 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:

1. Run OracleAS RepCA, 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 RepCA, 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 RepCA 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 4.9, "Removing Oracle Internet Directory Objects".

2.9 If Registration Failed

If OracleAS RepCA 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.x databases. It does not apply for 10*g* databases.

If you want to remove and re-install OracleAS Metadata Repository in your 9.2.x database, follow these steps:

1. Remove OracleAS Metadata Repository from your database using OracleAS RepCA.

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 RepCA, 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 RepCA 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 4.9, "Removing Oracle Internet Directory Objects".

3. 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.

3

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 RepCA 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 RepCA 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 1.7, "Requirements for Oracle Internet Directory" for details.
>
> - You cannot use OracleAS RepCA to register a metadata repository from Release 2 (9.0.2) with an Oracle Internet Directory from 10*g* (9.0.4).
>
> - If OracleAS RepCA 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:

1. Start up OracleAS RepCA. See Section 1.8, "Starting OracleAS RepCA".

2. Follow the screens:

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

	Screen	Action
1.	Welcome	Click **Next**.
2.	Specify Oracle Home	**Oracle Home**: 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).
		Log File Directory: Enter the full path of the directory where you want OracleAS RepCA to write its log files. This path is on the computer where you are running OracleAS RepCA.
		Note that once you click **Next** to move to the next screen, you cannot change the log file directory. If you click **Back** to return to this screen, the **Log File Directory** field becomes read-only. This is to prevent OracleAS RepCA from writing log files in different directories.
		Click **Next**.
3.	Select Operation	Select **Register**.
		Click **Next**.
4.	Specify Database Connection Information	Enter connect information for the database.
		DBA Username and **Password**: Enter the username and password to log in to the database. The user must have DBA privileges.
		Select **Single Node Instance** or **Real Application Clusters database**, 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.
		■ **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: `orcl.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: `orcl.mydomain.com`
		Click **Next**.

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

	Screen	Action
5.	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 Registration Purposes: Select this option if you want OracleAS RepCA 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.
		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.
		Click **Next**.
7.	Specify Oracle Context	Specify the location in Oracle Internet Directory where you want to register the OracleAS Metadata Repository.
		Root Oracle Context (cn=OracleContext): Select this option to register OracleAS Metadata Repository in the root Oracle context.
		Custom Oracle Context: 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 **OK** to exit OracleAS RepCA.

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 RepCA home to the database home. See Section 2.7.2, "Copy ldap.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 RepCA before the registration is completed or if the registration fails, you must perform the following manual steps before you run OracleAS RepCA again to re-register.

1. 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.

   For a list of all schemas, see Table 1–9, " Schemas and Tablespaces".

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

3. Lock all schema passwords.

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

Once these steps are done, you can restart OracleAS RepCA to register the database.

4

Deregistering and Removing OracleAS Metadata Repository

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

Contents:

Earlier Versions Are Not Compatible

You cannot use this version of OracleAS RepCA to remove or deregister OracleAS Metadata Repository that was loaded or registered by an earlier version of OracleAS RepCA. For example, you cannot use this version of OracleAS RepCA to remove or deregister an OracleAS Metadata Repository that was loaded and registered by OracleAS RepCA from 9.0.4.x. To remove or deregister OracleAS Metadata Repository from 9.0.4.x, use the same version of OracleAS RepCA 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.x) database, OracleAS RepCA 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 RepCA 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 RepCA 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 "Oracle 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 RepCA), 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 RepCA 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:

1. 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:

   ```
   C:\> 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 RepCA will detect that some sessions from Oracle Application Server instances are still active, and it will display a warning.

2. Start up OracleAS RepCA. See Section 1.8, "Starting OracleAS RepCA" for details.

3. Follow these screens:

Table 4–1   Deregistering and Removing OracleAS Metadata Repository

	Screen	Action
1.	Welcome	Click **Next**.
2.	Specify Oracle Home	**Oracle Home**: 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).
		Log File Directory: Enter the full path of the directory where you want OracleAS RepCA to write its log files. This path is on the computer where you are running OracleAS RepCA.
		Note that once you click **Next** to move to the next screen, you cannot change the log file directory. If you click **Back** to return to this screen, the **Log File Directory** field becomes read-only. This is to prevent OracleAS RepCA from writing log files in different directories.
		Click **Next**.
3.	Select Operation	Select **Remove**.
		Click **Next**.
4.	Select Remove Option	**Deregister and Remove**: 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
5.	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: `orcl.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: `orcl.mydomain.com`
		Click **Next**.
6.	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 RepCA to connect to Oracle Internet Directory using SSL when performing the deregistration.
		Click **Next**.
7.	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.
		Click **Next**.

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.
		Root Oracle Context (cn=OracleContext): Select this option to deregister OracleAS Metadata Repository from the root Oracle context.
		Custom Oracle Context: 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.
		NOTE: Once you click **Next** on this screen, it is important that you **do not cancel** 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 4.10, "Cleaning up the Database If You Cancelled a Deregistration Operation".
		Click **Next**.
9.	Success	Click **OK** to exit OracleAS RepCA.

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:

1. 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:

```
C:\> 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 RepCA will detect that some sessions from Oracle Application Server instances are still active, and it will display a warning.

2. Start up OracleAS RepCA. See Section 1.8, "Starting OracleAS RepCA" for details.

3. Follow these screens:

Table 4–2   Removing OracleAS Metadata Repository

	Screen	Action
1.	Welcome	Click **Next**.
2.	Specify Oracle Home	**Oracle Home**: 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).
		Log File Directory: Enter the full path of the directory where you want OracleAS RepCA to write its log files. This path is on the computer where you are running OracleAS RepCA.
		Note that once you click **Next** to move to the next screen, you cannot change the log file directory. If you click **Back** to return to this screen, the **Log File Directory** field becomes read-only. This is to prevent OracleAS RepCA from writing log files in different directories.
		Click **Next**.
3.	Select Operation	Select **Remove**.
		Click **Next**.
4.	Select Remove Option	**Remove**: Select this option to remove the OracleAS Metadata Repository tablespaces and schemas from your database.
		Click **Next**.
5.	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: `orcl.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: `orcl.mydomain.com`
		Click **Next**.
6.	Success	Click **OK** to exit OracleAS RepCA.

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.

You cannot deregister a database if it is an Oracle Internet Directory database. See Section 4.2, "If the Database Is an Oracle Internet Directory Database" for details.

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".

1. 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:

   ```
   C:\> 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 RepCA will detect that some sessions from Oracle Application Server instances are still active, and it will display a warning.

2. Start up OracleAS RepCA. See Section 1.8, "Starting OracleAS RepCA" for details.

3. Follow these screens:

Table 4–3   Deregistering OracleAS Metadata Repository

	Screen	Action
1.	Welcome	Click **Next**.
2.	Specify Oracle Home	**Oracle Home**: 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).
		Log File Directory: Enter the full path of the directory where you want OracleAS RepCA to write its log files. This path is on the computer where you are running OracleAS RepCA.
		Note that once you click **Next** to move to the next screen, you cannot change the log file directory. If you click **Back** to return to this screen, the **Log File Directory** field becomes read-only. This is to prevent OracleAS RepCA from writing log files in different directories.
		Click **Next**.
3.	Select Operation	Select **Remove**.
		Click **Next**.

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

	Screen	Action
4.	Select Remove Option	Select **Deregister**.
		Click **Next**.
5.	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: `orcl.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: `orcl.mydomain.com`
		Click **Next**.
6.	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 RepCA to connect to Oracle Internet Directory using SSL when performing the deregistration.
		Click **Next**.
7.	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.
		Click **Next**.

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.
		Root Oracle Context (cn=OracleContext): Select this option to deregister OracleAS Metadata Repository from the root Oracle context.
		Custom Oracle Context: 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.
		NOTE: Once you click **Next** on this screen, it is important that you **do not cancel** 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 4.10, "Cleaning up the Database If You Cancelled a Deregistration Operation".
		Click **Next**.
9.	Success	Click **OK** to exit OracleAS RepCA.

Schemas Locked and Passwords Expired After Deregistration

If you are only deregistering the OracleAS Metadata Repository (without removing the OracleAS Metadata Repository objects), OracleAS RepCA 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:

```
C:\> sqlplus "sys/password as sysdba"
SQL> alter user PORTAL account unlock;
```

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

```
C:\> 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.bat script is located in the *ORACLE_HOME*\repca\clean directory, where *ORACLE_HOME* specifies the directory where you installed OracleAS RepCA.

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

If you are running cleanMR.bat 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:

```
C:\> 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.bat

```
prompt> cleanMR.bat -HOST db_host -PORT db_port -SERVICE_NAME service_name
        [-DBUSER dbuser] -DBPASSWD password [-DBROLE dbrole]
```

Table 4–4   Parameters for cleanMR

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 orcl -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 4.9, "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 Harmless Errors in the Log File

If the database does not have an OracleAS Metadata Repository and you attempt to remove it, you may see the following error in the log file. You may ignore it.

```
ERROR - SQLFilterAction perform failed
java.sql.SQLException: ORA-00942: table or view does not exist
at oracle.jdbc.dbaccess.DBError.throwSqlException(DBError.java:134)
...
```

4.9 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 RepCA):

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

4.10 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:

1. Remove the database registration entries from Oracle Internet Directory manually. See Section C.5, "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.

```
C:\> 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' );
```

A

Deinstalling OracleAS RepCA

If you no longer need OracleAS RepCA, you can deinstall it using the procedure described in this appendix.

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

1. Stop any running Oracle Application Server instances connected to the OracleAS Metadata Repository.

2. Log in as the operating system user who installed OracleAS RepCA.

3. Start the installer.

   Select **Start > Programs > Oracle -** *OracleHomeName* **> Oracle Installation Products > Universal Installer**.

4. Follow these steps in the installer.

   a. Welcome screen: Click **Deinstall Products**.

   b. Inventory screen: Select the OracleAS RepCA 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.

   e. Exit the installer when the deinstallation is complete.

5. Delete any remaining files in the Oracle home directory.

   ```
   C:\> del %ORACLE_HOME%
   ```

B

Silent Installation

This appendix describes how to install OracleAS Metadata Repository in silent mode. This appendix contains the following topics:

- Section B.1, "Silent Installation"
- Section B.2, "Create the Response File and Map File"
- Section B.3, "Start the Installation"
- Section B.4, "Post-Installation"
- Section B.5, "Security Tips for Silent Installations"

B.1 Silent Installation

Silent installation eliminates the need to monitor OracleAS RepCA because there is no graphical output and no input by the user.

Silent installation of OracleAS Metadata Repository is accomplished by supplying the `runRepca` command with a response file. The response file is a text file containing variables and parameter values which provide answers to the installer prompts.

Use silent installation of OracleAS Metadata Repository when there are similar installations on more than one computer. Additionally, use silent install when performing the OracleAS Metadata Repository installation from a remote location using the command line.

B.2 Create the Response File and Map File

Before doing a silent installation, you must provide information specific to your installation in a response file. The installer will fail if you attempt an installation using a response file that is not configured correctly. If you are loading OracleAS Metadata Repository, you must also provide a map file to specify tablespace information. Response files and map files are text files that you can create or edit in a text editor.

B.2.1 Creating Response Files and Map Files from Templates

Templates for response files and map files are available in the *ORACLE_HOME*\repca\config directory. The directory contains the following templates:

Table B–1   Templates in the ORACLE_HOME/repca/config Directory

FileType	Filename
Response File for OracleAS RepCA	`repca.rsp`
Map File for Database that Uses File System	`file_tablespace.map`
Map File for Database that Uses Raw Devices	`raw_tablespace.map`
Map File for Database that Uses Oracle-Managed Files or Automatic Storage Management	`omf_asm_tablespace.map`

See the template files for descriptions of the parameters in the file.

> **Note:**   For Boolean parameters, specify either "true" or "false".

B.2.2 Example Response Files

The following sections shows example response files for the following OracleAS Metadata Repository installation types:

- Section B.2.2.1, "Example Files for Loading OracleAS Metadata Repository in a Database that Uses a File System"

- Section B.2.2.2, "Example Response File for Registering with Oracle Internet Directory"

> **Note:**   Be sure that you read the description of each *parameter=value* in the provided sample files, and edit *value* accordingly for your environment.

B.2.2.1 Example Files for Loading OracleAS Metadata Repository in a Database that Uses a File System

The following shows an example of a response file and a map file for a **silent** installation of OracleAS Metadata Repository into a file-based database as described in Section 2.1, "Installing in a Database that Uses the File System".

B.2.2.1.1   Example Response File for Loading OracleAS Metadata Repository in a Database that Uses a File System

The following shows an example of a response file for a silent installation. Note that for the loading operation, you only need to complete the sections named `[GENERAL]`, `[INSTALL_TYPE]`, `[ORACLE_HOME]`, `[DATABASE_CONNECT]`, and `[STORAGE_MECHANISM]`. You must also complete the section named `[STORAGE_MECHANISM_FILE]` because you are installing in database that uses a file system. Optionally, you may fill out the section named `[ADVANCED]`. You must include the other sections, but the information in them will be ignored.

```
[GENERAL]
RESPONSEFILE_VERSION=10.1.2.0.1

[INSTALL_TYPE]
OPERATION=LOAD

[ORACLE_HOME]
```

```
DATABASE_ORACLE_HOME="C:\oracle\repcadb"
LOG_DIRECTORY="C:\oracle\log"

[DATABASE_CONNECT]
DATABASE_TYPE=SINGLE
DATABASE_HOST_PORT = dbhost.oracle.com:1521
DATABASE_SERVICE_NAME = orcl
DATABASE_USER = SYS
DATABASE_PASSWORD = welcome1

[STORAGE_MECHANISM]
STORAGE_TYPE=FILE

[STORAGE_MECHANISM_FILE]
SAME_DIRECTORY_FOR_ALL = false
TABLESPACE_LOCATION ="C:\oradata\orcl"
TABLESPACE_LOCATION_FILE_SPEC_FILE ="C:\temp\file_tablespace.map"

[STORAGE_MECHANISM_OMF]
TABLESPACE_LOCATION_OMF_SPEC_FILE ="default"

[STORAGE_MECHANISM_ASM]
DISK_GROUP ="datadisk1"
TABLESPACE_LOCATION_ASM_SPEC_FILE ="default"

[STORAGE_MECHANISM_RAW]
TABLESPACE_LOCATION_RAW_SPEC_FILE ="default"

[ORACLE_INTERNET_DIRECTORY]
ORACLE_INTERNET_DIRECTORY_HOST ="default"
ORACLE_INTERNET_DIRECTORY_PORT =389
ORACLE_INTERNET_DIRECTORY_SSL = false
ORACLE_INTERNET_DIRECTORY_USER ="cn=orcladmin"
ORACLE_INTERNET_DIRECTORY_PASSWORD=default
ORACLE_INTERNET_DIRECTORY_REALM ="default"
ORACLE_INTERNET_DIRECTORY_CONTEXT ="cn=OracleContext"

[ADVANCED]
PROCEED_ON_KNOWLEDGEBASE_FAILURE=false
DROP_CONFLICTING_SCHEMAS =false
SYSTEM_UNDO_TABLESPACE_REQUIREMENT_MET =true
```

B.2.2.1.2 Map File For File-Based Database

The following is an example of the tablespace file that you specified in the response file in the line `TABLESPACE_LOCATION_FILE_SPEC_FILE ="C:\temp\file_tablespace.map"`.

```
PORTAL=HEAVY:C:\oradata\portal
PORTAL_DOC=HEAVY:C:\oradata\portal
PORTAL_IDX=HEAVY:C:\oradata\portal
PORTAL_LOG=HEAVY:C:\oradata\portal
IAS_META=MEDIUM:C:\oradata\iasmeta
DISCO_PTM5_META=MEDIUM:C:\oradata\disco1
DISCO_PTM5_CACHE=MEDIUM:C:\oradata\disco2
DCM=MEDIUM:C:\oradata\dcm
DSGATEWAY_TAB=MEDIUM:C:\oradata\dsgateway
WCRSYS_TS=MEDIUM:C:\oradata\wcrsys
B2B_RT=MEDIUM:C:\oradata\b2b_rt
B2B_DT=MEDIUM:C:\oradata\b2b_dt
```

```
B2B_IDX=MEDIUM:C:\oradata\b2b_idx
B2B_LOB=MEDIUM:C:\oradata\b2b_lob
BAM=MEDIUM:C:\oradata\bam
ORABPEL=MEDIUM:C:\oradata\orabpel
OCATS=SMALL:C:\oradata\oca
UDDISYS_TS=SMALL:C:\oradata\uddisys
OLTS_ATTRSTORE=SMALL:C:\oradata\oid1
OLTS_BATTRSTORE=SMALL:C:\oradata\oid2
OLTS_CT_STORE=SMALL:C:\oradata\oid3
OLTS_DEFAULT=SMALL:C:\oradata\oid4
OLTS_SVRMGSTORE=SMALL:C:\oradata\oid4
```

B.2.2.2 Example Response File for Registering with Oracle Internet Directory

The following shows an example of a response file for a **silent** registration of OracleAS
Metadata Repository with an Oracle Internet Directory as described in Section 3.1,
"Registering with Oracle Internet Directory".

Note that for the registering operation, you only need to complete the sections named
[GENERAL], [INSTALL_TYPE], [ORACLE_HOME], [DATABASE_CONNECT], and
[ORACLE_INTERNET_DIRECTORY]. Optionally, you may fill out the section named
[ADVANCED]. You must include the other sections, but the information in them will be
ignored.

```
[GENERAL]
RESPONSEFILE_VERSION=10.1.2.0.1

[INSTALL_TYPE]
OPERATION=REGISTER

[ORACLE_HOME]
DATABASE_ORACLE_HOME="C:\oracle\repcadb"
LOG_DIRECTORY="C:\oracle\log"

[DATABASE_CONNECT]
DATABASE_TYPE=SINGLE
DATABASE_HOST_PORT = dbhost.oracle.com:1521
DATABASE_SERVICE_NAME = orcl
DATABASE_USER = SYS
DATABASE_PASSWORD = welcome1

[STORAGE_MECHANISM]
STORAGE_TYPE=FILE

[STORAGE_MECHANISM_FILE]
SAME_DIRECTORY_FOR_ALL = false
TABLESPACE_LOCATION ="default"
TABLESPACE_LOCATION_FILE_SPEC_FILE ="default"

[STORAGE_MECHANISM_OMF]
TABLESPACE_LOCATION_OMF_SPEC_FILE ="default"

[STORAGE_MECHANISM_ASM]
DISK_GROUP ="datadisk1"
TABLESPACE_LOCATION_ASM_SPEC_FILE ="default"

[STORAGE_MECHANISM_RAW]
TABLESPACE_LOCATION_RAW_SPEC_FILE ="default"

[ORACLE_INTERNET_DIRECTORY]
ORACLE_INTERNET_DIRECTORY_HOST ="foo.acme.com"
```

```
ORACLE_INTERNET_DIRECTORY_PORT =389
ORACLE_INTERNET_DIRECTORY_SSL = false
ORACLE_INTERNET_DIRECTORY_USER ="cn=orcladmin"
ORACLE_INTERNET_DIRECTORY_PASSWORD=welcome123
ORACLE_INTERNET_DIRECTORY_REALM ="foobar"
ORACLE_INTERNET_DIRECTORY_CONTEXT ="cn=OracleContext"

[ADVANCED]
PROCEED_ON_KNOWLEDGEBASE_FAILURE=false
DROP_CONFLICTING_SCHEMAS =false
SYSTEM_UNDO_TABLESPACE_REQUIREMENT_MET =true
```

B.3 Start the Installation

To make the installer use the response file, specify the location of the response file that you want to use as a parameter when running the `runRepca` command using the `-SILENT` option.

To perform a silent installation, run the following command:

```
E:\> ORACLE_HOME\runRepca.bat -SILENT -RESPONSEFILE absolute_path_and_filename
```

Note: The options for the `runRepca` command are case sensitive.

B.4 Post-Installation

The success or failure of silent installations is logged in the `repca_<time_stamp>.log` file. The log file is created in the directory specified in the response file by the `LOG_DIRECTORY` parameter.

B.5 Security Tips for Silent Installations

One of the pieces of information in the response file is the database password and the Oracle Internet Directory password. The password information is in clear text.

To minimize security issues regarding the password in the response file, follow these guidelines:

- Set the permissions on the response files so that they are readable only by the operating system user who will be performing the silent installation.

- If possible, remove the response files from the system after the silent installation is completed.

C

Troubleshooting OracleAS RepCA

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

- Section C.1, "Unable to Connect to the Database"

- Section C.2, "Unable to Connect as "sys" User"

- Section C.3, "No Space"

- Section C.4, "Loading Fails on Real Application Clusters Database After Specifying Multiple Nodes"

- Section C.5, "Manual Steps: Cleaning Up a Failed Registration or Deregistering OracleAS Metadata Repository"

- Section C.6, "ORA-01403: No Data Found"

- Section C.7, "ORA-06510: PL/SQL: Unhandled User-Defined Exception"

- Section C.8, "ORA-01031: Insufficient Privileges"

- Section C.9, "Invalid Object in the DSGATEWAY Schema After Loading OracleAS Metadata Repository"

- Section C.10, "Need More Help?"

C.1 Unable to Connect to the Database

Problem
OracleAS RepCA 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:

a. Rename the file to something else.

b. Exit OracleAS RepCA.

c. Restart OracleAS RepCA.

d. Try connecting again.

e. When OracleAS RepCA is done, rename the file back.

C.2 Unable to Connect as "sys" User

Problem

You get the following message when running OracleAS RepCA:

```
RepCA unable to connect as sys. Error message:
*** Specify Database Connect ***
ERROR -SQLException on getting SID and SYSTEMNAME
informationjava.sql.SQLException:
@ 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 1.6.13, "Password File Authentication", step 1 on page 1-18, 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:

a. Rename the file to something else.

b. Exit OracleAS RepCA.

c. Restart OracleAS RepCA.

d. Try connecting again.

e. When OracleAS RepCA is done, rename the file back.

C.3 No Space

Problem

You load OracleAS RepCA in an existing Real Application Clusters database and you get a error.

Solution

If your database uses raw devices, perform the following steps:

1. Exit OracleAS RepCA.

2. Add another raw device to the database.

3. Restart OracleAS RepCA.

If your database uses a file system, perform the following steps:

1. Ensure that the file system has enough disk space.

2. Set tablespaces to AUTOEXTEND.

C.4 Loading Fails on Real Application Clusters Database After Specifying Multiple Nodes

Problem

You load OracleAS RepCA in an existing Real Application Clusters database and you get a error. On the Specify Database Connection Information screen, you specified multiple nodes of the Real Application Clusters database.

Solution

When you input the nodes of the Real Application Clusters database on the Specify Database Connection Information screen, only specify one node of the database. The Real Application Clusters software will automatically replicate the data loaded by OracleAS RepCA onto all of the nodes.

C.5 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 RepCA.

1. Connect to Oracle Internet Directory using Oracle Directory Manager.

    a. Start up Oracle Directory Manager.

       Select **Start** > **Programs** > **Oracle** - *OracleHomeName* > **Integrated Management Tools** > **Oracle Directory Manager**.

    b. In the Connect screen, enter the connect information. Log in as the Oracle Internet Directory superuser (cn=orcladmin).

2. Clean up the database registration entries in Oracle Internet Directory:

    a. Expand the following entries (shown in Figure C–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.

c. Right-click cn=*your_database_name* and delete it.

Figure C–1 Clean up Database Registration Entries
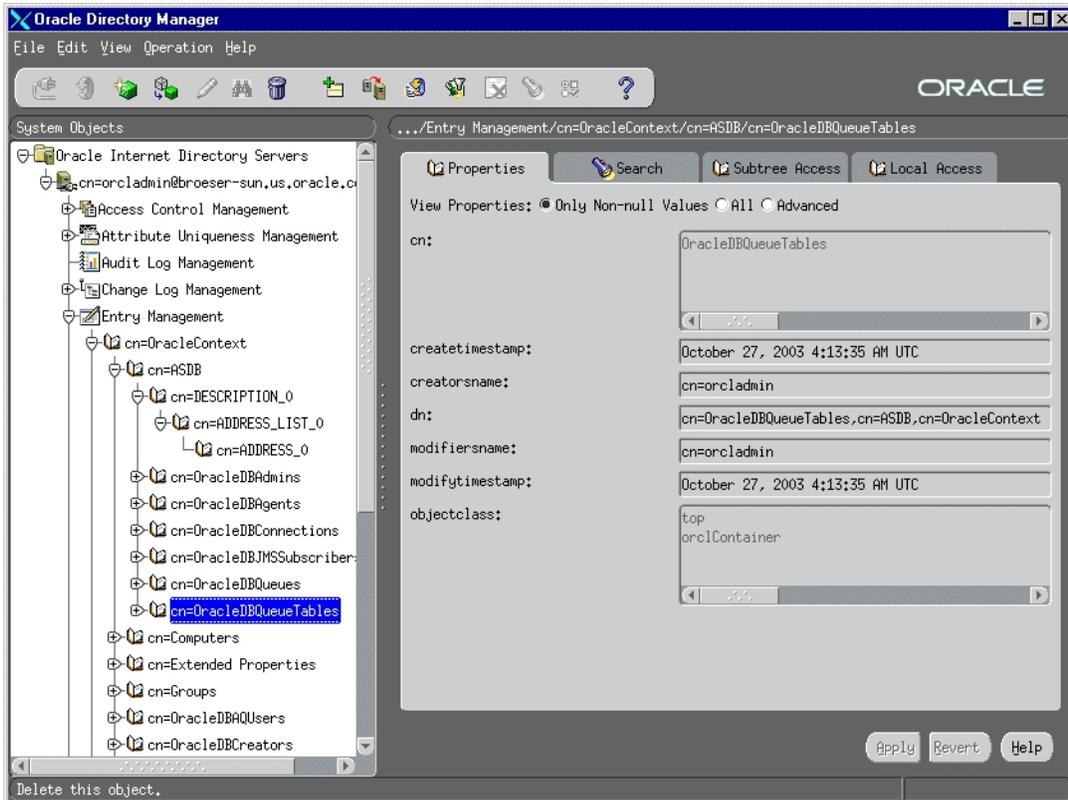
3. Clean up the metadata repository registration entries in Oracle Internet Directory:

a. Expand the following entries (shown in Figure C–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_ name*.

c. Delete the orclReferenceName=*your_database_name* entry.

Figure C–2   Clean up Metadata Repository Registration Entries
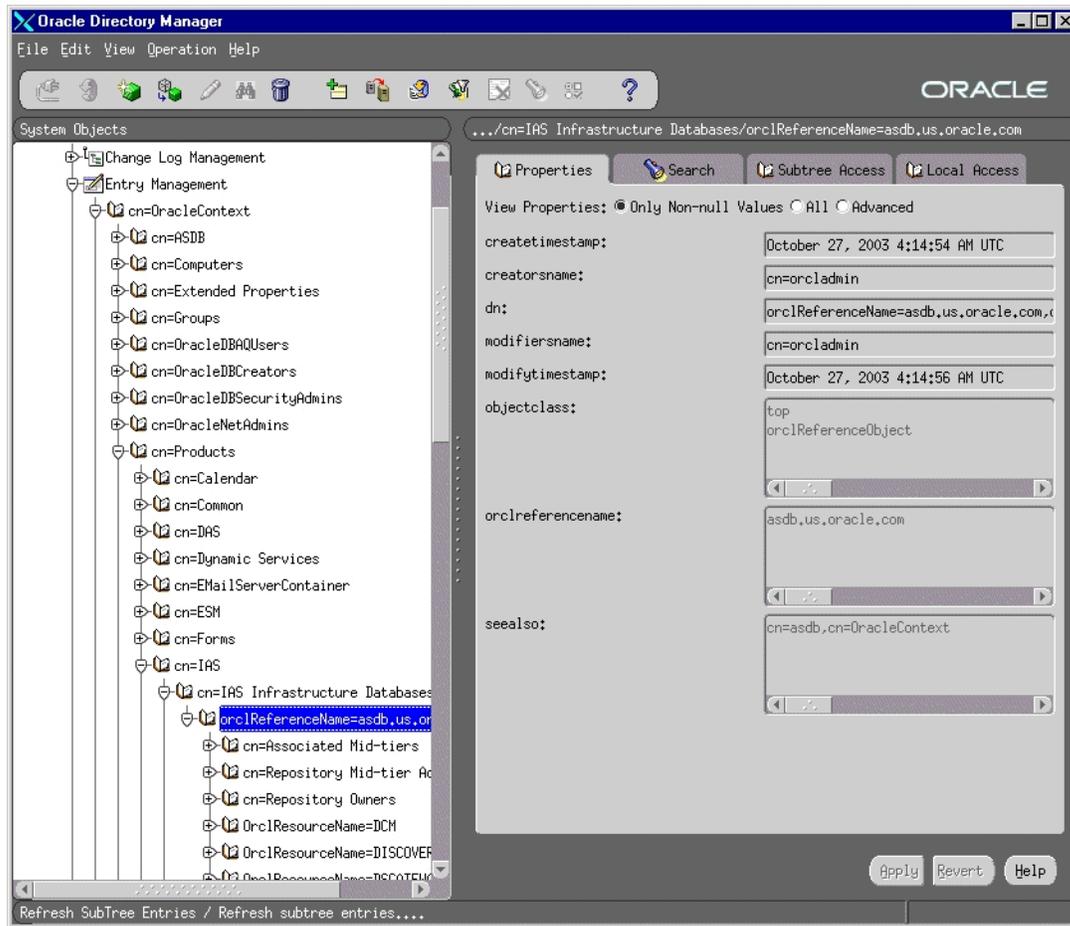
C.6 ORA-01403: No Data Found

Problem

When OracleAS RepCA 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 RepCA, you need to make sure that the NLS_LANG environment variable is unset or is set to american_america.us7ascii.

You can set the environment variable using the System Properties dialog box.

You can set NLS_LANG back to its original value after running OracleAS RepCA.

C.7 ORA-06510: PL/SQL: Unhandled User-Defined Exception

After OracleAS RepCA is loaded, the error ORA-06510: PL/SQL: unhandled user-defined exception" is found in the log file.

This error is caused when the loading scripts for the DSGATEWAY schema are run. These scripts belong to the OracleAS Syndication product, which is obsoleted. The DSGATEWAY schema is created for backward compatibility.

C.8 ORA-01031: Insufficient Privileges

Problem
After OracleAS RepCA is loaded, the log file contains the error ORA-01031: "insufficient privileges".

Solution
This error occurs during the loading of the OracleAS Syndication product, which is obsolete and is loaded for compatibility purposes. This error can safely be ignored.

C.9 Invalid Object in the DSGATEWAY Schema After Loading OracleAS Metadata Repository

Problem
After loading OracleAS Metadata Repository on Oracle Database 10*g*, there is an invalid object in the DSGATEWAY schema.

Solution
In Oracle Application Server 10*g* (10.1.4.0.1), the DSGATEWAY schema is not used. It is provided for backward compatibility. The invalid object can safely be ignored.

C.10 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)

- Oracle*MetaLink* (http://metalink.oracle.com)

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

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