# Oracle® Application Server Metadata Repository Creation Assistant

User's Guide 10*g* Release 2 (10.1.2) for Microsoft Windows B14130-03

August 2005



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

B14130-03

Copyright © 2005 Oracle. All rights reserved.

The Programs (which include both the software and documentation) contain proprietary information; they are provided under a license agreement containing restrictions on use and disclosure and are also protected by copyright, patent, and other intellectual and industrial property laws. Reverse engineering, disassembly, or decompilation of the Programs, except to the extent required to obtain interoperability with other independently created software or as specified by law, is prohibited.

The information contained in this document is subject to change without notice. If you find any problems in the documentation, please report them to us in writing. This document is not warranted to be error-free. Except as may be expressly permitted in your license agreement for these Programs, no part of these Programs may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose.

If the Programs are delivered to the United States Government or anyone licensing or using the Programs on behalf of the United States Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the Programs, including documentation and technical data, shall be subject to the licensing restrictions set forth in the applicable Oracle license agreement, and, to the extent applicable, the additional rights set forth in FAR 52.227-19, Commercial Computer Software—Restricted Rights (June 1987). Oracle Corporation, 500 Oracle Parkway, Redwood City, CA 94065

The Programs are not intended for use in any nuclear, aviation, mass transit, medical, or other inherently dangerous applications. It shall be the licensee's responsibility to take all appropriate fail-safe, backup, redundancy and other measures to ensure the safe use of such applications if the Programs are used for such purposes, and we disclaim liability for any damages caused by such use of the Programs.

Oracle, JD Edwards, PeopleSoft, and Retek are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

The Programs may provide links to Web sites and access to content, products, and services from third parties. Oracle is not responsible for the availability of, or any content provided on, third-party Web sites. You bear all risks associated with the use of such content. If you choose to purchase any products or services from a third party, the relationship is directly between you and the third party. Oracle is not responsible for: (a) the quality of third-party products or services; or (b) fulfilling any of the terms of the agreement with the third party, including delivery of products or services and warranty obligations related to purchased products or services. Oracle is not responsible for any loss or damage of any sort that you may incur from dealing with any third party.

## Contents

Preface	vii
Intended Audience	vii
Documentation Accessibility	vi
Related Documents	. viii
Conventions	. viii

# 1 OracleAS Metadata Repository Creation Assistant Overview and Requirements

1.1 (	OracleAS Metadata Repository Creation Assistant Overview	1-2
1.1.1	Support for Different Database Storage Types	1-2
1.1.2	Support for Local and Remote Databases	1-2
1.2 9	Steps for Running OracleAS Metadata Repository Creation Assistant	1-2
1.3	Requirements for the Computer Running OracleAS Metadata Repository	
(	Creation Assistant	
1.4	Installing OracleAS Metadata Repository Creation Assistant	1-3
1.5	Requirements for the Database	1-5
1.5.1	Run the Prerequisite Check Tool	1-5
1.5.2	Database Version	1-6
1.5.2.1	Oracle9 <i>i</i> Release 2 (9.2.x) Databases	1-7
1.5.2.2	Oracle9i Release 2 (9.2.0.6) Real Application Clusters Databases	1-8
1.5.2.3	Oracle Database 10g (10.1.x) Databases	1-8
1.5.3	Standard Edition Databases: Notes	1-8
1.5.4	Swap Space Requirement	1-8
1.5.5	Disk Space Needed for SYSTEM and UNDO Tablespaces	1-8
1.5.6	Disk Space Needed for OracleAS Metadata Repository Tablespaces	1-9
1.5.7	Initialization Parameters	1-9
1.5.8	Database Options	1-12
1.5.9	PL/SQL Packages	1-13
1.5.10	DBMS_LDAP Package	1-13
1.5.11	Knowledge Base Required (Oracle Database 10g Only)	1-15
1.5.12	Password File Authentication	1-16
1.5.13	Schemas and Tablespaces	1-18
1.5.13.1	List of Schemas and Tablespaces	1-18
1.5.13.2	Schema Name Already In Use	1-19
1.5.13.3	Tablespace Name Already In Use	1-20
1.5.13.4	Tablespace Sizes	1-20

1.5.14	Registration with Oracle Internet Directory	1-23
1.6	Requirements for Oracle Internet Directory	1-23
1.7	Starting OracleAS Metadata Repository Creation Assistant	1-24
1.8	Which Section to Read Next?	1-25

## 2 Loading the OracleAS Metadata Repository into an Existing Database

2.1	Installing in a Database that Uses the File System	. 2-1
2.2	Installing in a Database that Uses Raw Devices	. 2-4
2.3	Installing in a Real Application Clusters Database	. 2-7
2.3.1	Installation Overview	. 2-8
2.3.2	Installation Steps for Real Application Clusters Databases that Use a Cluster File System or Volume Manager	. 2-9
2.3.3	Installation Steps for Real Application Clusters Databases that Use	
	Raw Devices	2-11
2.4	Installing in a Database that Uses Automatic Storage Management	2-14
2.4.1	Installing on a Disk Group	2-14
2.4.2	Installing on Regular Files	2-16
2.5	Installing in a Database that Uses Oracle-Managed Files	2-17
2.6	Harmless Errors in the Log File	2-19
2.6.1	SP2-0332 Errors	2-19
2.6.2	SP2-0606 Errors	2-19
2.7	Post-Installation Steps	2-19
2.7.1	Update sqlnet.ora File	2-20
2.7.2	Copy Idap.ora File to the Database Oracle Home	2-20
2.7.3	Unlock the DCM Schema and Set Its Password	2-20
2.7.4	Create Instance for Oracle Ultra Search	2-21
2.8	If Loading Failed	2-21
2.9	If Registration Failed	2-21
2.10	Re-Installing the OracleAS Metadata Repository in the Same Database	2-22

## 3 Registering OracleAS Metadata Repository with Oracle Internet Directory

3.1	Registering with Oracle Internet Directory	3-1
3.2	Post-Registration Step	3-3
3.3	If You Exit Before Registration Is Completed, or If Registration Fails	3-3

## 4 Deregistering and Removing OracleAS Metadata Repository

4.1	Oracle Internet Directory Objects Not Removed	4-2
4.2	If the Database Is an Oracle Internet Directory Database	4-2
4.3	If Middle Tiers Are Using the OracleAS Metadata Repository	4-2
4.4	Deregistering and Removing OracleAS Metadata Repository Using the Wizard	4-2
4.5	Removing the OracleAS Metadata Repository	4-5
4.6	Deregistering the OracleAS Metadata Repository	4-7
4.7	Removing OracleAS Metadata Repository Using the cleanMR Script	4-10
4.8	Harmless Errors in the Log File	4-12
4.9	Removing Oracle Internet Directory Objects	4-12
4.10	Cleaning up the Database If You Cancelled a Deregistration Operation	4-12

## A Deinstalling OracleAS Metadata Repository Creation Assistant

## **B** Silent Installation

Silent Installation	B-1
Create the Response File and Map File	B-1
Creating Response Files and Map Files from Templates	B-1
Example Response Files	B-2
Example Files for Loading OracleAS Metadata Repository in a Database that Uses a File System	B-2
Example Response File for Registering with Oracle Internet Directory	B-4
Start the Installation	B-5
Post-Installation	B-5
Security Tips for Silent Installations	B-5
	Create the Response File and Map File Creating Response Files and Map Files from Templates Example Response Files Example Files for Loading OracleAS Metadata Repository in a Database that Uses a File System Example Response File for Registering with Oracle Internet Directory Start the Installation Post-Installation

## C Installing Java Access Bridge

C.1	Introduction	C-1
C.2	Setup for JRE 1.4.2	C-1
C.3	Setup for Oracle Installed Components	C-1
C.3.1	Installing Java Access Bridge	C-1
C.3.2	Configuring Oracle Components to Use Java Access Bridge	C-2
C.3.2.1	Configuring for Windows 2000 or Windows Server 2003	C-2

## D Troubleshooting OracleAS Metadata Repository Creation Assistant

D.1	Unable to Connect to the Database	D-1
D.2	Unable to Connect as "sys" User	D-2
D.3	No Space	D-2
D.4	Loading Fails on Real Application Clusters Database After Specifying Multiple Nodes	D-3
D.5	Manual Steps: Cleaning Up a Failed Registration or Deregistering OracleAS Metadata Repository	D-3
D.6	ORA-01403: No Data Found	D-5
D.7	ORA-06510: PL/SQL: Unhandled User-Defined Exception	D-5
D.8	Need More Help?	D-6

## Index

## Preface

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

## Intended Audience

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

## **Documentation Accessibility**

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

http://www.oracle.com/accessibility/

#### Accessibility of Code Examples in Documentation

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

#### Accessibility of Links to External Web Sites in Documentation

This documentation may contain links to Web sites of other companies or organizations that Oracle does not own or control. Oracle neither evaluates nor makes any representations regarding the accessibility of these Web sites.

### **TTY Access to Oracle Support Services**

Oracle provides dedicated Text Telephone (TTY) access to Oracle Support Services within the United States of America 24 hours a day, seven days a week. For TTY support, call 800.446.2398.

## **Related Documents**

For more information, see the following manuals:

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

## Conventions

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.

1

## OracleAS Metadata Repository Creation Assistant Overview and Requirements

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

#### Notes:

- This guide does not cover upgrading an existing OracleAS Metadata Repository. For upgrade instructions, see the Oracle Application Server Upgrade and Compatibility Guide.
- You cannot use OracleAS Metadata Repository Creation Assistant to register a metadata repository from Release 2 (9.0.2) with an Oracle Internet Directory from 10g (9.0.4).
- You can only register the OracleAS Metadata Repository with supported versions of Oracle Internet Directory. See Section 1.6, "Requirements for Oracle Internet Directory" for details.
- You cannot load the OracleAS Metadata Repository into a database that contains an Oracle E-Business Suite instance. This is currently not supported.

#### Contents:

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

## 1.1 OracleAS Metadata Repository Creation Assistant Overview

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

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

## 1.1.1 Support for Different Database Storage Types

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

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

## 1.1.2 Support for Local and Remote Databases

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

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

## 1.2 Steps for Running OracleAS Metadata Repository Creation Assistant

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

1. Install OracleAS Metadata Repository Creation Assistant.

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

During the installation, you specify the directory where you want to install OracleAS Metadata Repository Creation Assistant.

**2.** Run OracleAS Metadata Repository Creation Assistant from the installed directory.

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

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

Item	Requirement	
Operating system	Windows 2000 with Service Pack 3 or later	
	Windows 2003	
	Solaris 8	
	Solaris 9	
	HP-UX 11i (11.11) PA-RISC	
	HP-UX 11i (11.23) PA-RISC	
	Red Hat Enterprise Linux AS/ES 2.1, Update 5	
	Red Hat Enterprise Linux AS/ES 3.0, Update 3	
	SUSE Linux Enterprise Server 8, SP3	
	SUSE Linux Enterprise Server 9	
	For hardware requirements, see the Oracle Application Server Installation Guide.	
Disk space	For installing OracleAS Metadata Repository Creation Assistant software, you need at least 670 MB.	
	<b>Note:</b> Each time you run OracleAS Metadata Repository Creation Assistant to perform the loading operation, you need approximately 10 MB of disk space for log files.	
	For disk space required for the database, see Section 1.5.5, "Disk Space Needed for SYSTEM and UNDO Tablespaces" and Section 1.5.6, "Disk Space Needed for OracleAS Metadata Repository Tablespaces".	
Memory	512 MB	
Virtual memory	1535 MB	
Display	256 colors	

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

 Creation Assistant
 Provide Assistant

## 1.4 Installing OracleAS Metadata Repository Creation Assistant

To install OracleAS Metadata Repository Creation Assistant:

- 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 Metadata Repository Creation Assistant installation. The name of the Oracle home must be 128 characters or fewer, and can contain only alphanumeric characters and the underscore character. Example: repcal0\_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 Metadata Repository Creation Assistant. This guide refers to this directory as the Oracle home for OracleAS Metadata Repository Creation Assistant.

Click Next.

 Language Selection screen: By default, the installer installs OracleAS Metadata Repository Creation Assistant 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 Metadata Repository Creation Assistant immediately after installation. Otherwise, select **No**. In either case, you can always run OracleAS Metadata Repository Creation Assistant anytime after installation.

**Note:** If you need to use assistive technologies, you must install Java Access Bridge before using the the OracleAS Metadata Repository Creation Assistant. If you plan to install Java Access Bridge, you should select **No** on the Launch Repository Creation Assistant screen. After installing OracleAS Metadata Repository Creation Assistant, see Appendix C, "Installing Java Access Bridge" 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 Metadata Repository Creation Assistant.

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

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

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

## 1.5 Requirements for the Database

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

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

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

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

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

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

Table 1–2 Database Requirements

### 1.5.1 Run the Prerequisite Check Tool

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

You should run this tool before running OracleAS Metadata Repository Creation Assistant.

**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

## 1.5.2 Database Version

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

Database Series	Supported Versions	See This Section for Details
Oracle9 <i>i</i> Release 2 (9.2.x)	9.2.0.6 with some patches, or later	<ul> <li>Section 1.5.2.1, "Oracle9i Release 2 (9.2.x) Databases"</li> </ul>
		<ul> <li>Section 1.5.2.2, "Oracle9i Release 2 (9.2.0.6) Real Application Clusters Databases"</li> </ul>
Oracle Database 10g Release 1 (10.1.x)	10.1.0.4.2 or later	<ul> <li>Section 1.5.2.3, "Oracle Database 10g (10.1.x) Databases"</li> </ul>

Table 1–4 Supported Database Versions

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.

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

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

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

#### **Patches Required**

For Oracle9*i* Release 2 (9.2.0.6) database, you need to apply patch 4015165 before you can load OracleAS Metadata Repository into the database. You can download this patch from Oracle*MetaLink* (http://metalink.oracle.com).

#### Upgrading to 9.2.0.6

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

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

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

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

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	9.2.0.6.0	Valid

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

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

### 1.5.2.2 Oracle9*i* Release 2 (9.2.0.6) Real Application Clusters Databases

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

You can download the patch from OracleMetaLink (http://metalink.oracle.com).

### 1.5.2.3 Oracle Database 10g (10.1.x) Databases

Before you run Oracle Application Server Metadata Repository Creation Assistant on an Oracle Database 10g (10.1.x) database, you must install the 10.1.0.4.2 patch. This patch is only available on the Oracle Database 10g (10.1.0.4.2) Patchset CD in the Oracle Application Server 10g Release 2 (10.1.2.0.2) CD pack.

## 1.5.3 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.

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.

## 1.5.4 Swap Space Requirement

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

## 1.5.5 Disk Space Needed for SYSTEM and UNDO Tablespaces

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

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

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

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

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

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

## 1.5.6 Disk Space Needed for OracleAS Metadata Repository Tablespaces

Make sure that you have at least 1.3 GB of disk space for the OracleAS Metadata Repository tablespaces. This is in addition to the space needed for the SYSTEM and UNDO tablespaces (see previous section).

## 1.5.7 Initialization Parameters

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

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

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

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

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

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

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

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 Wireles requires this value.
query_rewrite_ integrity	trusted or enforced	Dynamic	Do not change this parameter after installation, because OracleAS Wireles 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. S it to true to enable system triggers.

Parameter	Required Value	Parameter Class	Notes
db_create_file_dest	The directory where OracleAS Metadata Repository Creation Assistant should create the data files for OracleAS Metadata Repository	Dynamic	This initialization parameter is needed only if you are installing the OracleAS Metadata Repository in a database that uses Oracle-managed files.
max_enabled_roles	100 or greater	Static	This initialization parameter is needed only if you are using a Oracle9 <i>i</i> Release 2 (9.2.x) database.
compatible	If you are using Oracle9 <i>i</i> Release 2 (9.2.x) database:	Static	Do not set this parameter to a value lower than 9.2.0.0.0.
	9.2.0.0.0 or higher		
	If you are using Oracle Database 10g:		
	10.1.0.2.0 or higher		
sga_target	600 MB or greater	Dynamic	This initialization parameter is needed only if you are using Oracle Database 10g.

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

#### **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:

## 1.5.8 Database Options

The database must have the following database options enabled:

Required Option	How to Check if the Option is Installed in the Database		
OLAP Window Functions	To check if the database has these options, query the V\$OPTION view ( <i>password</i> specifies the password for the SYS user):		
Parallel load	prompt> <b>sqlplus "sys/</b> <i>password</i> <b>as sysdba"</b> SQL> <b>select * from v\$option;</b>		
	Among the rows returned by the query, you should see these two rows:		
	PARAMETER	VALUE	
	OLAP Window Functions Parallel load	TRUE TRUE	
Java	<pre>prompt&gt; sqlplus "sys/pa SQL&gt; select count(*) fr where object_type owner = 'SYS</pre>	om dba_objects	
	The count returned should be greater than 0.		

#### Table 1–8 Required Database Options

Required Option	How to Check if the Option is Installed in the Database	
Intermedia	<pre>prompt&gt; sqlplus "sys/password as sysdba" SQL&gt; select count(name) from sys.props\$ where name = 'EXPORT_VIEWS_VERSION';</pre>	
	The count returned should be greater than 0.	
Oracle Text	<pre>prompt&gt; sqlplus "sys/password as sysdba" SQL&gt; select count(*) from dba_views where owner = 'CTXSYS' and view_name = 'CTX_VERSION';</pre>	
	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.	

Table 1–8 (Cont.) Required Database Options

## 1.5.9 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\_FILE UTL\_RAW

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

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

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

## 1.5.10 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')
```

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
```

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

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

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

"Knowledge base not found.

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

If you are planning to use this repository for installing OracleAS Portal, you have to install Oracle Text Supplied Knowledge Base. Oracle Text Supplied Knowledge Base can be installed in the database using Oracle Database 10g Companion 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 )
  100p
     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 '||1_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 10g Companion CD-ROM. See the *Oracle Database Companion CD Installation Guide* for details.

## 1.5.12 Password File Authentication

/

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

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

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

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

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 PWD*sid*.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.

## 1.5.13 Schemas and Tablespaces

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

#### 1.5.13.1 List of Schemas and Tablespaces

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

Component	Schema	Tablespace	Default Database File
OracleAS Portal	PORTAL	PORTAL	portal.dbf
OracleAS Portal	PORTAL	PORTAL_DOC	ptldoc.dbf
OracleAS Portal	PORTAL	PORTAL_IDX	ptlidx.dbf
OracleAS Portal	PORTAL	PORTAL_LOG	ptllog.dbf
OracleAS Portal	PORTAL_APP	PORTAL	portal.dbf
OracleAS Portal	PORTAL_DEMO	PORTAL	portal.dbf
OracleAS Portal	PORTAL_PUBLIC	PORTAL	portal.dbf
OracleAS Single Sign-On	ORASSO	IAS_META	ias_meta01.dbf
OracleAS Single Sign-On	ORASSO_PA	IAS_META	ias_meta01.dbf
OracleAS Single Sign-On	ORASSO_DS	IAS_META	ias_meta01.dbf
OracleAS Single Sign-On	ORASSO_PS	IAS_META	ias_meta01.dbf
OracleAS Single Sign-On	ORASSO_PUBLIC	IAS_META	ias_meta01.dbf
OracleAS Wireless	WIRELESS	IAS_META	ias_meta01.dbf
Oracle Workflow	OWF_MGR	IAS_META	ias_meta01.dbf
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 10g	OEM_REPOSITORY	SYS_AUX	sysaux01.dbf
Oracle Application Server Web Clipping	WCRSYS	WCRSYS_TS	wcrsys01.dbf
OracleAS Integration B2B	IP <sup>1</sup>	N/A	N/A

Table 1–9 Schemas and Tablespaces

Component	Schema	Tablespace	Default Database File
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	ODS	OLTS_SVRMGSTORE	svrmg1_oid.dbf
Oracle Ultra Search	WKSYS	SYS_AUX	sysaux01.dbf
Oracle Ultra Search	WKPROXY	SYS_AUX	sysaux01.dbf
Oracle Ultra Search	WK_TEST	SYS_AUX	sysaux01.dbf
N/A	DSGATEWAY <sup>2</sup>	DSGATEWAY_TAB	oss_sys01.dbf
Metadata Repository Version	INTERNET_APPSERVER_ REGISTRY	IAS_META	ias_meta01.dbf

#### Table 1–9 (Cont.) Schemas and Tablespaces

<sup>1</sup> Beginning with Oracle Application Server 10g Release 2 (10.1.2), the IP schema does not contain any data. It has been replaced by the B2B schema and is provided only for backward compatibility.

<sup>2</sup> Beginning with Oracle Application Server 10g Release 2 (10.1.2), the DSGATEWAY schema is not used. It is provided for backward compatibility.

#### 1.5.13.2 Schema Name Already In Use

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

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

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

```
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 Metadata Repository Creation Assistant to remove schemas and tablespaces used by OracleAS Metadata Repository.

#### 1.5.13.3 Tablespace Name Already In Use

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

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

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

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

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

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

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

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.

#### 1.5.13.4 Tablespace Sizes

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

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

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

		Initial Sizes (in MB)		
Component	Tablespace	Small	Medium	Large
OracleAS Portal	PORTAL	75	100	150
OracleAS Portal	PORTAL_DOC	25	40	50
OracleAS Portal	PORTAL_IDX	30	50	60
OracleAS Portal	PORTAL_LOG	30	50	60
OracleAS Single Sign-On	IAS_META	200	300	500
OracleAS Wireless				
Oracle Workflow				
INTERNET_APPSERVER_ REGISTRY (schema for storing information about the OracleAS Metadata Repository version)				
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
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

Table 1–10Initial Sizes for Tablespaces

		Initial Sizes (in MB)		
Component	Tablespace	Small	Medium	Large
Oracle Internet Directory	OLTS_DEFAULT	10	15	20
Oracle Internet Directory	OLTS_SVRMGSTORE	10	15	20
N/A	DSGATEWAY_TAB	25	35	45

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

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	<i>dbname</i> _raw_portal_128m
PORTAL_DOC tablespace	64 MB	<i>dbname</i> _raw_portaldoc_64m
PORTAL_IDX tablespace	64 MB	<i>dbname_</i> raw_portalidx_64m
PORTAL_LOG tablespace	64 MB	<i>dbname</i> _raw_portallog_64m
DCM tablespace	256 MB	<i>dbname</i> _raw_dcm_256m
OCATS tablespace	64 MB	<i>dbname</i> _raw_ocats_64m
DISCO_PTM5_CACHE tablespace	64 MB	<i>dbname_</i> raw_discoptm5cache_64m
DISCO_PTM5_META tablespace	64 MB	<i>dbname</i> _raw_discoptm5meta_64m
WCRSYS_TS tablespace	64 MB	<i>dbname</i> _raw_wcrsysts_64m
UDDISYS_TS tablespace	64 MB	<i>dbname</i> _raw_uddisysts_64m
OLTS_ATTRSTORE tablespace	128 MB	<i>dbname</i> _raw_oltsattrstore_128m
OLTS_BTTRSTORE tablespace	64 MB	<i>dbname</i> _raw_oltsbttrstore_64m
OLTS_CT_STORE tablespace	256 MB	<i>dbname</i> _raw_oltsctstore_256m
OLTS_DEFAULT tablespace	128 MB	<i>dbname_</i> raw_oltsdefault_128m
OLTS_SVRMGSTORE tablespace	64 MB	<i>dbname_</i> raw_oltssvrmgstore_64m
IP_DT tablespace	128 MB	<i>dbname_</i> raw_ipdt_128m
IP_RT tablespace	128 MB	<i>dbname_</i> raw_iprt_128m
IP_LOB tablespace	128 MB	<i>dbname_</i> raw_iplob_128m

Logical Drive for	Minimum Size	Recommended Symbolic Link Name	
IP_IDX tablespace	128 MB	<i>dbname_</i> raw_ipidx_128m	
IAS_META tablespace	256 MB	dbname_raw_iasmeta1_256m	
DSGATEWAY_TAB tablespace	64 MB	<i>dbname</i> _raw_dsgatewaytab_64m	

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

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

### 1.5.14 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).
- 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 D.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 D.5, "Manual Steps: Cleaning Up a Failed Registration or Deregistering OracleAS Metadata Repository".

## **1.6 Requirements for Oracle Internet Directory**

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

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

 $C: \setminus >$  oidldapd -version

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

## 1.7 Starting OracleAS Metadata Repository Creation Assistant

To start OracleAS Metadata Repository Creation Assistant:

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

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

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

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

#### Running from a Shared Drive

If you are running OracleAS Metadata Repository Creation Assistant from a shared drive, you need to map the drive first. You cannot run OracleAS Metadata Repository Creation Assistant 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 Metadata Repository Creation Assistant at \\myserver\repca, you cannot run OracleAS Metadata Repository Creation Assistant with the command:

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

You have to map the shared drive first, then run OracleAS Metadata Repository Creation Assistant 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 Metadata Repository
Creation Assistant.
```

**Note:** Before running the runRepca script, make sure that *REPCA\_HOME/JRE* is pointing to an existing JRE location.

## 1.8 Which Section to Read Next?

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

#### **Loading Operations**

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

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"

Table 1–13 Which Section to Read Next

#### **Registration Only Operations**

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

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

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

## Loading the OracleAS Metadata Repository into an Existing Database

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

### Contents:

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

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

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

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

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

	Screen	Action
6.	Specify Tablespace Information	Specify where OracleAS Metadata Repository Creation Assistant should create files for the tablespaces, and the tablespace sizes. The directory you specify must meet the following criteria:
		<ul> <li>The directory already exists on the computer running the database, which is not necessarily the computer where you are running OracleAS Metadata Repository Creation Assistant.</li> </ul>
		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.
		<b>Use Same Directory for All Tablespaces</b> : 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.
		<b>Use Individual Directories for Each Tablespace</b> : Select this option if you want to place the files for the tablespaces in different directories.
		<b>Tablespaces</b> : Expand the tree to view the tablespaces for each component. Select a tablespace to view or edit its associated datafile or size.
		<b>Size</b> : 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
		<b>Directory</b> : 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.
8.	Specify Oracle Internet Directory Connection	This and the next two screens appear only if you selected <b>Load and Register</b> earlier.
		<b>Internet Directory Hostname</b> : Enter the name of the computer that is running Oracle Internet Directory. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.
		Internet Directory Port: Enter the port number for Oracle Internet Directory.
		<b>Use SSL to Connect to Oracle Internet Directory for Registration Purposes</b> : Select this option if you want OracleAS Metadata Repository Creation Assistant to connect to Oracle Internet Directory using SSL when performing the registration.
		Click Next.
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.
		<b>Note:</b> If you log in as the Oracle Internet Directory superuser (cn=orcladmin), the realm value is not used because the superuser does not belong to any realm. The realm value is used only if you log in using a simple name.
		Click Next.

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

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

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

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

If you do not create this file, you can still run OracleAS Metadata Repository Creation Assistant to install the OracleAS Metadata Repository in a database that uses 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 1.5.13, "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 Metadata Repository Creation Assistant. See Section 1.7, "Starting OracleAS Metadata Repository Creation Assistant" 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	<b>Oracle Home</b> : Enter the full path of the Oracle home directory for the database. Be sure you use the conventions of the computer that is running the database (for example, use the proper slashes).
		<b>Log File Directory</b> : Enter the full path of the directory where you want OracleAS Metadata Repository Creation Assistant to write its log files. This path is on the computer where you are running OracleAS Metadata Repository Creation Assistant.
		Note that once you click <b>Next</b> to move to the next screen, you cannot change the log file directory. If you click <b>Back</b> to return to this screen, the <b>Log File Directory</b> field becomes read-only. This is to prevent OracleAS Metadata Repository Creation Assistant from writing log files in different directories.
		Click Next.

	Screen	Action
3.	Select Operation	Select <b>Load</b> if you want to load the OracleAS Metadata Repository into the database but without registering it with Oracle Internet Directory. Select this option if you do not have an Oracle Internet Directory yet.
		Select <b>Load and Register</b> if you want to load the OracleAS Metadata Repository into the database and register it with Oracle Internet Directory.
		Click Next.
4.	Specify Database 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:
		<ul> <li>Hostname: Enter the name of the computer that is running the database. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.</li> </ul>
		• <b>Port</b> : Enter the port number for the database.
		• <b>Service Name</b> : Enter the service name of the database. Note that the service name must include the database domain name.
		Example: 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 <b>Next</b> .
		If you did not create a mapping file, or if the DBCA_RAW_CONFIG environment variable is unset, you have to enter the information in this screen manually. Click <b>Next</b> .
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 <b>Load and Register</b> earlier.
		<b>Internet Directory Hostname</b> : Enter the name of the computer that is running Oracle Internet Directory. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.
		Internet Directory Port: Enter the port number for Oracle Internet Directory.
		<b>Use SSL to Connect to Oracle Internet Directory for Registration Purposes</b> : Select this option if you want OracleAS Metadata Repository Creation Assistant to connect to Oracle Internet Directory using SSL when performing the registration.
		Click Next.
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.
		<b>Note:</b> If you log in as the Oracle Internet Directory superuser (cn=orcladmin), the realm value is not used because the superuser does not belong to any realm. The realm value is used only if you log in using a simple name.
		Click Next.

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

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

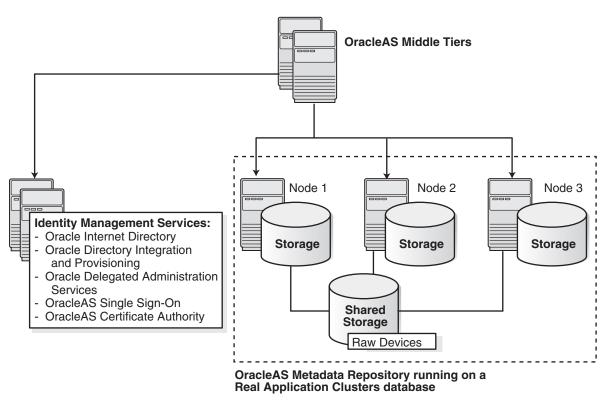
 Table 2–2 (Cont.) Installing OracleAS Metadata Repository in a Database that Uses Raw Devices

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 Metadata Repository Creation Assistant to load the OracleAS Metadata Repository into an existing Real Application Clusters database. Figure 2–1 shows how you can use this database with Oracle Application Server. In this environment, you install the OracleAS Metadata Repository and the 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



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

Table 2–3 OracleAS Infrastructure with Real Application Clusters

#### 2.3.1 Installation Overview

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

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

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

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

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

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

**Note:** Do not register the OracleAS Metadata Repository with Oracle Internet Directory, because you have not installed Oracle Internet Directory 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 1.5, "Requirements for the Database".
- 2. Start up OracleAS Metadata Repository Creation Assistant. See Section 1.7, "Starting OracleAS Metadata Repository Creation Assistant" for details.
- **3.** Follow the screens:

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

	Screen	Action
4.	Specify Database Connection Information	Enter connect information for the existing database.
		SYS Password: Enter the password for the SYS user.
		<b>Real Application Clusters Database</b> : 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 Metadata Repository Creation Assistant onto all of the nodes. Use the format <i>host</i> : <i>port</i> :
		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.
5.	Specify Tablespace Information	Enter the information for the tablespaces that OracleAS Metadata Repository Creation Assistant will create in your database.
		<b>Use Same Directory for All Tablespaces</b> : 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:
		<ul> <li>the directory already exists and is writable</li> </ul>
		the directory has enough free space
		<ul> <li>the path to the directory is correct and is consistent with the operating system that is running the database.</li> </ul>
		<b>Use Individual Directories for Each Tablespace</b> : Select this option if you want to place the files for the tablespaces in different directories.
		<b>Tablespaces</b> : Expand the tree to view the tablespaces for each component. Select a tablespace to view or edit its associated datafile or size.
		<b>Size</b> : 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
		<b>Directory</b> : 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 <b>Load and Register</b> earlier.
		<b>Internet Directory Hostname</b> : Enter the name of the computer that is running Oracle Internet Directory. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.
		Internet Directory Port: Enter the port number for Oracle Internet Directory.
		<b>Use SSL to Connect to Oracle Internet Directory for Registration Purposes</b> : Select this option if you want OracleAS Metadata Repository Creation Assistant to connect to Oracle Internet Directory using SSL when performing the registration.
		Click Next.
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.
		<b>Note:</b> If you log in as the Oracle Internet Directory superuser (cn=orcladmin), the realm value is not used because the superuser does not belong to any realm. The realm value is used only if you log in using a simple name.
		Click Next.
10.	Specify Oracle Context	Specify the location in Oracle Internet Directory where you want to register the OracleAS Metadata Repository.
		<b>Root Oracle Context (cn=OracleContext)</b> : Select this option to register OracleAS Metadata Repository in the root Oracle context.
		<b>Custom Oracle Context</b> : Select this option to register OracleAS Metadata Repository in a specific realm in Oracle Internet Directory. Enter the DN of the realm in the provided field.
		Click Next.
11.	Loading Repository	OracleAS Metadata Repository Creation Assistant creates and populates the tablespaces and schemas.
12.	Success	Click OK to exit OracleAS Metadata Repository Creation Assistant.

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

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

If you do not create this file, you can still run OracleAS Metadata Repository Creation Assistant to install the OracleAS Metadata Repository in a Real Application Clusters database that uses 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 1.5.13, "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 Metadata Repository Creation Assistant. See Section 1.7, "Starting OracleAS Metadata Repository Creation Assistant" 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
 Provide State Sta

	Screen	Action
1.	Welcome	Click Next.
2.	Specify Oracle Home	<b>Oracle Home</b> : Enter the full path of the Oracle home directory for the database. Be sure you use the conventions of the computer that is running the database (for example, use the proper slashes).
		<b>Log File Directory</b> : Enter the full path of the directory where you want OracleAS Metadata Repository Creation Assistant to write its log files. This path is on the computer where you are running OracleAS Metadata Repository Creation Assistant.
		Note that once you click <b>Next</b> to move to the next screen, you cannot change the log file directory. If you click <b>Back</b> to return to this screen, the <b>Log File Directory</b> field becomes read-only. This is to prevent OracleAS Metadata Repository Creation Assistant from writing log files in different directories.
		Click Next.
3.	Select Operation	Select <b>Load</b> if you want to load the OracleAS Metadata Repository into the database but without registering it with Oracle Internet Directory. Select this option if you do not have an Oracle Internet Directory yet.
		Select <b>Load and Register</b> if you want to load the OracleAS Metadata Repository into the database and register it with Oracle Internet Directory.
		Click Next.
4.	Specify Database	Enter connect information for the existing database.
	Connection Information	SYS Password: Enter the password for the SYS user.
		<b>Real Application Clusters Database</b> : Select this option, and complete the fields under it:
		<ul> <li>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 Metadata Repository Creation Assistant onto all of the nodes. Use the format <i>host</i>: <i>port</i>:</li> </ul>
		hostname1:port1
		• <b>Service Name</b> : Enter the service name of the database. The service name must include the database domain name. The service name must be the same for all instances in the cluster.
		Example: 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 2-12 for details. Correct the values, if necessary, and click <b>Next</b> .
		If you did not create a mapping file, or if the DBCA_RAW_CONFIG environment variable is unset, you have to enter the information in this screen manually. Click <b>Next</b> .
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.

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

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

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

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

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

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

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

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 1.5, "Requirements for the Database".

In particular, make sure the db\_create\_file\_dest initialization parameter specifies the directory where OracleAS Metadata Repository Creation Assistant should create the data files for the OracleAS Metadata Repository. For example:

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

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

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

Specify Storage Options Select **Oracle-Managed Files**.

	ectory for cle-Managed Files	This screen shows the directory where OracleAS Metadata Repository Creation Assistant will create the data files for OracleAS Metadata Repository. This value is
		read from the db_create_file_dest initialization parameter.
		If this parameter is not set, you will get an error message.
		If you want OracleAS Metadata Repository Creation Assistant to create the data files in a different directory, edit the 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 <b>Next</b> to move forward until you return to this screen. You should see the new value of the parameter.
		Click Next.
	cify Tablespace ormation	This screen displays the tablespaces that OracleAS Metadata Repository Creation Assistant needs to create.
		In the <b>Size</b> column, select the appropriate size for the tablespaces. Select the largest size for a tablespace if you have applications that use the component heavily. If not, select the smallest size.
		Click Next.
8. War Spac	rning: Check Disk ce	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.
	cify Oracle Internet ectory Connect	This and the next two screens appear only if you selected <b>Load and Register</b> earlier.
		<b>Internet Directory Hostname</b> : Enter the name of the computer that is running Oracle Internet Directory. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.
		Internet Directory Port: Enter the port number for Oracle Internet Directory.
		<b>Use SSL to Connect to Oracle Internet Directory for Registration Purposes</b> : Select this option if you want OracleAS Metadata Repository Creation Assistant to connect to Oracle Internet Directory using SSL when performing the registration.
		Click Next.
	cify Login for Oracle ernet Directory	Enter the Username and Password to log in to Oracle Internet Directory. The user must belong to the iASAdmins group. You can use the user's simple name (for example, jdoe) or the user's DN (for example, cn=orcladmin).
		If your Oracle Internet Directory contains more than one realm, you need to enter the realm that contains the specified user.
		<b>Note:</b> If you log in as the Oracle Internet Directory superuser (cn=orcladmin), the realm value is not used because the superuser does not belong to any realm. The realm value is used only if you log in using a simple name.
		Click Next.
<b>11.</b> Spec	cify Oracle Context	Specify the location in Oracle Internet Directory where you want to register the OracleAS Metadata Repository.
		<b>Root Oracle Context (cn=OracleContext)</b> : Select this option to register OracleAS Metadata Repository in the root Oracle context.
		<b>Custom Oracle Context</b> : Select this option to register OracleAS Metadata Repository in a specific realm in Oracle Internet Directory. Enter the DN of the realm in the provided field.
		Click Next.
<b>12.</b> Loa	ding Repository	OracleAS Metadata Repository Creation Assistant creates and populates the tablespaces and schemas.
13. Suco	cess	Click <b>OK</b> to exit OracleAS Metadata Repository Creation Assistant.

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

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

# 2.6 Harmless Errors in the Log File

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

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

#### 2.6.1 SP2-0332 Errors

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

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

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.
```

### 2.7 Post-Installation Steps

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

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

Section 2.7.4, "Create Instance for Oracle Ultra Search"

#### 2.7.1 Update sqlnet.ora File

Configure SQL\*Net settings so that the ORASSO\_PS schema in the OracleAS Metadata Repository can be contacted. To do this, update the ORACLE\_ HOME\network\admin\sqlnet.ora file (ORACLE\_HOME specifies the database home where you installed the OracleAS Metadata Repository) by adding LDAP to the NAMES.DIRECTORY PATH entry as follows:

NAMES.DIRECTORY\_PATH= (LDAP, TNSNAMES, ONAMES, HOSTNAME)

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

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

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

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

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

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

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

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

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

- 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 Administrator's Guide.

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

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

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

To delete the Oracle Internet Directory objects, see Section 4.9, "Removing Oracle Internet Directory Objects".

# 2.9 If Registration Failed

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

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

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

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

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

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

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

To delete the Oracle Internet Directory objects, see Section 4.9, "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.

# Registering OracleAS Metadata Repository with Oracle Internet Directory

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

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

Contents:

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

# 3.1 Registering with Oracle Internet Directory

#### Notes:

- You can only register the OracleAS Metadata Repository with supported versions of Oracle Internet Directory. See Section 1.6, "Requirements for Oracle Internet Directory" for details.
- You cannot use OracleAS Metadata Repository Creation Assistant to register a metadata repository from Release 2 (9.0.2) with an Oracle Internet Directory from 10g (9.0.4).
- If OracleAS Metadata Repository Creation Assistant finds the same service name already registered with Oracle Internet Directory, it will just display an error message saying that the service name is already registered with the Oracle Internet Directory. In order to continue, you need to remove the registration first.

To register the OracleAS Metadata Repository with Oracle Internet Directory:

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

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

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

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

#### 3.2 Post-Registration Step

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

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

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

- 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 Metadata Repository Creation Assistant to register the database.

4

# Deregistering and Removing OracleAS Metadata Repository

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

Contents:

- Section 4.1, "Oracle Internet Directory Objects Not Removed"
- Section 4.2, "If the Database Is an Oracle Internet Directory Database"
- Section 4.3, "If Middle Tiers Are Using the OracleAS Metadata Repository"
- Section 4.4, "Deregistering and Removing OracleAS Metadata Repository Using the Wizard"
- Section 4.5, "Removing the OracleAS Metadata Repository"
- Section 4.6, "Deregistering the OracleAS Metadata Repository"
- Section 4.7, "Removing OracleAS Metadata Repository Using the cleanMR Script"
- Section 4.8, "Harmless Errors in the Log File"
- Section 4.9, "Removing Oracle Internet Directory Objects"
- Section 4.10, "Cleaning up the Database If You Cancelled a Deregistration Operation"

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

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

#### Use the Wizard or the Script?

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

# 4.1 Oracle Internet Directory Objects Not Removed

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

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

### 4.2 If the Database Is an Oracle Internet Directory Database

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

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

- If you install an "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 Metadata Repository Creation Assistant), the database is an Oracle Internet Directory database.

# 4.3 If Middle Tiers Are Using the OracleAS Metadata Repository

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

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

# 4.4 Deregistering and Removing OracleAS Metadata Repository Using the Wizard

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

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

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

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

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 Metadata Repository Creation Assistant will detect that some sessions from Oracle Application Server instances are still active, and it will display a warning.

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

 Table 4–1
 Deregistering and Removing OracleAS Metadata Repository

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

	Screen	Action
5.	Specify Database	Enter connect information for the existing database.
	Connection Information	SYS Password: Enter the password for the SYS user.
		Select either <b>Single Node Instance</b> or <b>Real Application Clusters Database</b> , depending on the type of your database, and complete the appropriate fields.
		Fields for <b>Single Node Instance</b> :
		• <b>Hostname</b> : Enter the name of the computer that is running the database. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.
		• <b>Port</b> : Enter the port number for the database.
		• <b>Service Name</b> : Enter the service name of the database. Note that the service name must include the database domain name.
		Example:orcl.mydomain.com
		Fields for Real Application Clusters Database:
		• <b>Hostname and Port</b> : Enter the names of all the computers running the Real Application Clusters database and the port numbers used by the listener. Use the format <i>host</i> : <i>port</i> , and separate each <i>host</i> : <i>port</i> with a comma character:
		<pre>hostname1:port1,hostname2:port2,hostname3:port3,</pre>
		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.
5.	Specify Oracle Internet Directory Connection	Enter connect information for the Oracle Internet Directory from which you want to deregister the OracleAS Metadata Repository.
		<b>Internet Directory Hostname</b> : Enter the name of the computer that is running Oracle Internet Directory. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.
		Internet Directory Port: Enter the port number for Oracle Internet Directory.
		<b>Use SSL to Connect to Oracle Internet Directory for Deregistration Purposes</b> : Select this option if you want OracleAS Metadata Repository Creation Assistant to connect to Oracle Internet Directory using SSL when performing the deregistration.
		Click Next.
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.
		<b>Note:</b> If you log in as the Oracle Internet Directory superuser (cn=orcladmin), the realm value is not used because the superuser does not belong to any realm. The realm value is used only if you log in using a simple name.
		Click Next.

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

	Screen	Action
8.	Specify Oracle Context	Specify the location in Oracle Internet Directory from which you want to deregister the OracleAS Metadata Repository.
		<b>Root Oracle Context (cn=OracleContext)</b> : Select this option to deregister OracleAS Metadata Repository from the root Oracle context.
		<b>Custom Oracle Context</b> : Select this option to deregister OracleAS Metadata Repository from a specific realm in Oracle Internet Directory. Enter the DN of the realm in the provided field.
		<b>NOTE:</b> Once you click <b>Next</b> on this screen, it is important that you <b>do not cancel</b> the operation. If you cancel the operation before it completes, you will not be able to register or deregister the database. If you do cancel it, you will have to perform some manual steps to clean up the database before you can proceed. See Section 4.10, "Cleaning up the Database If You Cancelled a Deregistration Operation".
		Click Next.
9.	Success	Click <b>OK</b> to exit OracleAS Metadata Repository Creation Assistant.

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

#### 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 Metadata Repository Creation Assistant will detect that some sessions from Oracle Application Server instances are still active, and it will display a warning.

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

Table 4–2 Removing OracleAS Metadata Repository

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

	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 <b>Single Node Instance</b> or <b>Real Application Clusters Database</b> , depending on the type of your database, and complete the appropriate fields.
		Fields for <b>Single Node Instance</b> :
		• <b>Hostname</b> : Enter the name of the computer that is running the database. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.
		• <b>Port</b> : Enter the port number for the database.
		• <b>Service Name</b> : Enter the service name of the database. Note that the service name must include the database domain name.
		Example: orcl.mydomain.com
		Fields for Real Application Clusters Database:
		• <b>Hostname and Port</b> : Enter the names of all the computers running the Real Application Clusters database and the port numbers used by the listener. Use the format <i>host</i> : <i>port</i> , and separate each <i>host</i> : <i>port</i> with a comma character:
		<pre>hostname1:port1,hostname2:port2,hostname3:port3,</pre>
		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 mus include the database domain name. The service name must be the same for al instances in the cluster.
		Example: orcl.mydomain.com
		Click Next.
	Success	Click <b>OK</b> to exit OracleAS Metadata Repository Creation Assistant.
		1 2

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

# 4.6 Deregistering the OracleAS Metadata Repository

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

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

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

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 Metadata Repository Creation Assistant will detect that some sessions from Oracle Application Server instances are still active, and it will display a warning.

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

Table 4–3 Deregistering OracleAS Metadata Repository

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

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

	Screen	Action
5.	Specify Database	Enter connect information for the existing database.
	Connection Information	<b>DBA Username</b> and <b>Password</b> : Enter the username and password to log in to the database. The user must have DBA privileges.
		Select either <b>Single Node Instance</b> or <b>Real Application Clusters Database</b> , depending on the type of your database, and complete the appropriate fields.
		Fields for <b>Single Node Instance</b> :
		<ul> <li>Hostname: Enter the name of the computer that is running the database. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.</li> </ul>
		• <b>Port</b> : 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:
		• <b>Hostname and Port</b> : Enter the names of all the computers running the Real Application Clusters database and the port numbers used by the listener. Use the format <i>host</i> : <i>port</i> , and separate each <i>host</i> : <i>port</i> with a comma character:
		<pre>hostname1:port1,hostname2:port2,hostname3:port3,</pre>
		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.
5.	Specify Oracle Internet Directory Connection	<b>Internet Directory Hostname</b> : Enter the name of the computer that is running Oracle Internet Directory. If your middle tier instances are located in a different domain, you need to append the domain name to the hostname.
		Internet Directory Port: Enter the port number for Oracle Internet Directory.
		<b>Use SSL to Connect to Oracle Internet Directory for Deregistration Purposes</b> : Select this option if you want OracleAS Metadata Repository Creation Assistant to connect to Oracle Internet Directory using SSL when performing the deregistration.
		Click Next.
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.
		<b>Note:</b> If you log in as the Oracle Internet Directory superuser (cn=orcladmin), the realm value is not used because the superuser does not belong to any realm. The realm value is used only if you log in using a simple name.
		Click Next.

Table 4–3	(Cont.)	Deregistering	OracleAS	Metadata	n Reposi	tory
-----------	---------	---------------	----------	----------	----------	------

	Screen	Action
8.	Specify Oracle Context	Specify the location in Oracle Internet Directory from which you want to deregister the OracleAS Metadata Repository.
		<b>Root Oracle Context (cn=OracleContext)</b> : Select this option to deregister OracleAS Metadata Repository from the root Oracle context.
		<b>Custom Oracle Context</b> : Select this option to deregister OracleAS Metadata Repository from a specific realm in Oracle Internet Directory. Enter the DN of the realm in the provided field.
		<b>NOTE:</b> Once you click <b>Next</b> on this screen, it is important that you <b>do not cancel</b> the operation. If you cancel the operation before it completes, you will not be able to register or deregister the database. If you do cancel it, you will have to perform some manual steps to clean up the database before you can proceed. See Section 4.10, "Cleaning up the Database If You Cancelled a Deregistration Operation".
		Click Next.
9.	Success	Click OK to exit OracleAS Metadata Repository Creation Assistant.

#### Schemas Locked and Passwords Expired After Deregistration

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

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

```
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 Metadata Repository Creation Assistant.

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]

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".

Table 4–4 Parameters for cleanMR

#### 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 Metadata Repository Creation Assistant):

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 D.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' );
```

# Deinstalling OracleAS Metadata Repository Creation Assistant

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

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

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

C:\> **del %ORACLE\_HOME**%

# **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 Metadata Repository Creation Assistant 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:

FileType	Filename	
Response File for OracleAS Metadata Repository Creation Assistant	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	

Table B–1 Templates in the ORACLE\_HOME/repca/config Directory

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
```

## B.2.2.1.2 Map File For File-Based Database

SYSTEM\_UNDO\_TABLESPACE\_REQUIREMENT\_MET =false

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\discol

DISCO_PTM5_META=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\orabpel
OCATS=SMALL:C:\oradata\orabpel
OCATS=SMALL:C:\oradata\oradys
UDDISYS_TS=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 ="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 =false

# **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.

С

# **Installing Java Access Bridge**

This appendix describes how to install Java Access Bridge. Java Access Bridge enables use of a screen reader with Oracle components.

This appendix contains these topics:

- Section C.1, "Introduction"
- Section C.2, "Setup for JRE 1.4.2"
- Section C.3, "Setup for Oracle Installed Components"

# C.1 Introduction

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 and OracleAS Metadata Repository Creation Assistant.

Your OracleAS Metadata 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 install and configure Java Access Bridge after you install Oracle components, see Section C.3, "Setup for Oracle Installed Components" on page C-1.

# C.2 Setup for JRE 1.4.2

To set up Java Access Bridge with JRE 1.4.2, run the following batch file on Oracle installation media.

DRIVE LETTER: \install\access\_setup.bat

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

## C.3 Setup for Oracle Installed Components

This section describes how to install and configure Java Access Bridge for Windows after installing Oracle components. This section contains the following topics:

- Section C.3.1, "Installing Java Access Bridge"
- Section C.3.2, "Configuring Oracle Components to Use Java Access Bridge"

### C.3.1 Installing Java Access Bridge

To install Java Access Bridge, follow these steps:

- 1. On the Oracle installation media, go to the AccessBridge directory.
- 2. Select the accessbridge-1\_0\_4.zip file and extract its files to the system where you plan to install Access Bridge. For example:

C:\AccessBridge-1.0.4

**3.** Copy the Java Access Bridge files listed in Table C–1 into the JRE 1.4.2 directory used by Oracle components. By default, the JRE used by Oracle components is installed in:

ORACLE\_BASE\ORACLE\_HOME\jre\1.4.2

Table C–1 lists the files you need to copy from the Java Access Bridge location on your hard drive to the JRE directory used by Oracle components:

Table C–1 Copy Files to JRE Directory

Copy this file	To this directory
AccessBridge-1_0_4\installer\installerFiles\ jaccess-1_4.jar	ORACLE_BASE\ ORACLE_HOME\jre\1.4.2\ lib\ext
AccessBridge-1_0_4\installer\installerFiles\ access-bridge.jar	ORACLE_BASE\ ORACLE_HOME\jre\1.4.2\ lib\ext
AccessBridge-1_0_4\installer\installerFiles\ JavaAccessBridge.dll	windows_directory\ system32
AccessBridge-1_0_4\installer\installerFiles\ WindowsAccessBridge.dll	windows_directory\ system32
AccessBridge-1_0_4\installer\installerFiles\ JAWTAccessBridge.dll	windows_directory\ system32
AccessBridge-1_0_4\installer\installerFiles\ accessibility.properties	ORACLE_BASE\ ORACLE_HOME\jre\1.4.2\ lib

- **4.** Rename jaccess-1\_4.jar (now located in ORACLE\_BASE\ORACLE\_HOME\ jre\1.4.2\lib\ext) to jaccess.jar.
- **5.** Following a successful installation, you can access Java Access Bridge documentation located at:

C:\AccessBridge-1.0.4\doc

### C.3.2 Configuring Oracle Components to Use Java Access Bridge

You can configure Oracle components to use the Access Bridge after you complete the installation. To do so, you need to set the system variable ORACLE\_OEM\_CLASSPATH to point to the installed Java Access Bridge files.

### C.3.2.1 Configuring for Windows 2000 or Windows Server 2003

To configure Oracle components to use Access Bridge on Windows 2000 or Windows Server 2003, follow these steps:

- 1. Select **Start > Settings > Control Panel > System** to display the Windows System Control Panel.
- **2.** Select the Advanced tab.

- 3. Click the Environment Variables button.
- **4.** Click the **New** button under the System Variables list. The New System Variable dialog appears.
- 5. In the Variable Name field, enter ORACLE\_OEM\_CLASSPATH.
- 6. In the Variable Value field, enter the full path to jaccess.jar and access-bridge.jar.

Use a semicolon to separate the two paths. Do not use quotes or spaces. For example, if JRE 1.4.2 is installed in the default location, the setting would be:

C:\oracle\product\10.1.0\Db\_1\jre\1.4.2\lib\ext\jaccess.jar;C:\oracle\product\ 10.1.0\Db\_1\jre\1.4.2\lib\ext\access-bridge.jar

7. Click OK.

# Troubleshooting OracleAS Metadata Repository Creation Assistant

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

- Section D.1, "Unable to Connect to the Database"
- Section D.2, "Unable to Connect as "sys" User"
- Section D.3, "No Space"
- Section D.4, "Loading Fails on Real Application Clusters Database After Specifying Multiple Nodes"
- Section D.5, "Manual Steps: Cleaning Up a Failed Registration or Deregistering OracleAS Metadata Repository"
- Section D.6, "ORA-01403: No Data Found"
- Section D.7, "ORA-06510: PL/SQL: Unhandled User-Defined Exception"
- Section D.8, "Need More Help?"

# D.1 Unable to Connect to the Database

#### Problem

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

#### Solution

Check the following:

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

column db\_name new\_value db\_name noprint
select user ||' on ' || name "db\_name" from v\$database ;
set sqlprompt "&db\_name> "

If either file contains the user prompt lines:

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

# D.2 Unable to Connect as "sys" User

#### Problem

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

RepCA unable to connect as sys. Error message: \*\*\* Specify Database Connect \*\*\* ERROR -SQLException on getting SID and SYSTEMNAME informationjava.sql.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 1.5.12, "Password File Authentication", step 1 on page 1-17, for details.
- Check that the glogin.sql or the login.sql files, located in the ORACLE\_ HOME\sqlplus\admin directory, do not contain user prompt lines, which look like the following:

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

If either file contains these lines:

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

# D.3 No Space

#### Problem

You load OracleAS Metadata Repository Creation Assistant 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 Metadata Repository Creation Assistant.
- 2. Add another raw device to the database.
- **3.** Restart OracleAS Metadata Repository Creation Assistant.

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.

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

#### Problem

You load OracleAS Metadata Repository Creation Assistant 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 Metadata Repository Creation Assistant onto all of the nodes.

# D.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 Metadata Repository Creation Assistant.

- 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 D–1):

Entry Management > cn=OracleContext > cn=your\_database\_name

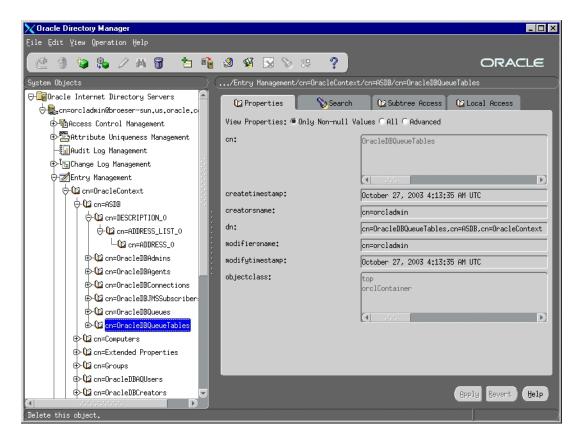
**b.** Delete all the child entries under cn=*your\_database\_name*, starting with the bottom-most child entry.

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 D–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 D–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.

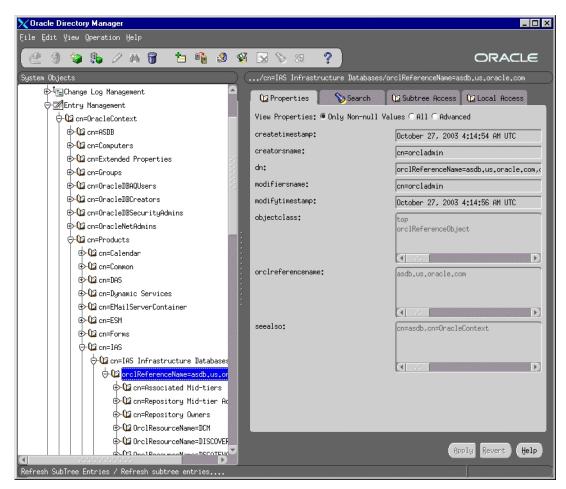


Figure D–2 Clean up Metadata Repository Registration Entries

# D.6 ORA-01403: No Data Found

#### Problem

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

#### Solution

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

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 Metadata Repository Creation Assistant.

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

After OracleAS Metadata Repository Creation Assistant 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 compatability.

# D.8 Need More Help?

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

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

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

# Index

#### **Numerics**

9.2.0.6 patch set for the database, 1-7

### Α

accessibility software, Java Access Bridge, C-1 Automatic Storage Management (ASM) instances using disk groups, 2-14 using for OracleAS Metadata Repository, 2-14 using regular files, 2-16

# С

catpatch.sql in 9.2.0.6 patch set, 1-7 checking registration with Oracle Internet Directory, 1-23 cleanMR script, 4-10 errors, 4-12 cluster file system, 2-9

## D

databases options required, 1-12 requirements, 1-5 standard edition, 1-8 storage types supported, 1-2 support for local and remote, 1-2 unable to connect, D-1 unable to connect as SYS, D-2 using existing, 1-5 using file system-based databases, 2-1 using raw device-based databases, 2-4 using Real Application Clusters database, 2-7 versions supported, 1-6 with Automatic Storage Management, 2-14 with Oracle-managed files, 2-17 db\_create\_file\_dest initialization parameter, 2-17 DBCA\_RAW\_CONFIG environment variable, 2-5 DBMS\_LDAP package, 1-13 DBPrereqChecker tool, 1-6 DCM schema, unlocking after installation, 2-20 deinstalling OracleAS Metadata Repository Creation Assistant, A-1 deregistering OracleAS Metadata Repository, 4-1, 4-7, D-3

cancelling, 4-12 using the wizard, 4-2 disk groups for ASM instances, 2-14 disk space requirements for running OracleAS Metadata Repository Creation Assistant, 1-3 for SYSTEM and UNDO tablespaces, 1-8 for tablespaces, 1-9 display requirement for running OracleAS Metadata Repository Creation Assistant, 1-3

## Ε

existing database, loading OracleAS Metadata Repository into, 2-1

### F

failed registration, cleaning up, D-3

### Η

harmless errors in log file, 2-19

### I

initialization parameters required, 1-9installActions.log, B-5installing OracleAS Metadata Repository Creation Assistant, 1-3

### J

Java Access Bridge about, C-1 configuring, C-2 installing, C-1 JRE 1.4.2, C-1

### Κ

Knowledge Base requirement, 1-15

### L

ldap.ora file, copying after installation, 2-20 loading failed, 2-21

local database support, 1-2 log files from non-interactive installations, B-5 log files, harmless errors in, 2-19 logical drives, 2-4

#### Μ

memory requirement for running OracleAS Metadata Repository Creation Assistant, 1-3

### Ν

non-interactive installations, B-1 log files, B-5 post-installation steps, B-5 security tips, B-5

### 0

operating system for running OracleAS Metadata Repository Creation Assistant, 1-3 ORA-01403 No Data Found, D-5 ORA-06510 PL/SQL Unhandled User-Defined Exception, D-5 ORA-2000 errors, 4-12 Oracle Database 10g, 1-6 Oracle Internet Directory checking registration with, 1-23 deregistering OracleAS Metadata Repository, D-3 registering OracleAS Metadata Repository with, 3-1 removing objects, 4-12 versions supported, 1-23 Oracle Ultra Search, creating instance for, 2-21 Oracle9i Release 2 (9.2.x) databases, 1-7 OracleAS Metadata Repository deregistering, 4-1, 4-7, D-3 installing in databases that use ASM, 2-14 installing in databases that use raw devices, 2-4 installing in databases that use the file system, 2-1 installing in Oracle-managed files, 2-17 installing in Real Application Clusters database, 2-7, 2-9 loading into existing database, 2-1 registering with Oracle Internet Directory, 3-1 re-installing, 2-22 removing, 4-1, 4-10 schemas, 1-18 tablespaces, 1-18 OracleAS Metadata Repository Creation Assistant deinstalling, A-1 installing, 1-3 overview, 1-2 requirements for running, 1-3 starting, 1-24 troubleshooting, D-1 Oracle-managed files

using for OracleAS Metadata Repository, 2-17 ORU-10027 errors, 4-12

### Ρ

password file authentication, 1-16 PL/SQL packages required, 1-13 post-installation steps, 2-19 copying ldap.ora file, 2-20 for silent or non-interactive installations, B-5 updating sqlnet.ora file, 2-20 post-registration step, 3-3 prerequisite check tool, 1-5

### R

raw devices minimum sizes for existing database, 1-22 used by non-Real Application Clusters databases, 2-4 used by Real Application Clusters databases, 2-11 Real Application Clusters database installation overview, 2-8 using for Oracle AS Metadata Repository, 2-7, 2-9 with cluster file system, 2-9 with raw devices, 2-11 with volume manager, 2-9 registering OracleAS Metadata Repository with Oracle Internet Directory, 3-1 checking in Oracle Internet Directory, 1-23 cleaning up failed registration, D-3 deregistering, 4-1, D-3 exiting before completion, 3-3 post-registration step, 3-3 registration failed, 2-21, 3-3 re-installing OracleAS Metadata Repository, 2-22 remote database support, 1-2 removing Oracle Internet Directory objects, 4-12 removing OracleAS Metadata Repository, 4-1 using the cleanMR script, 4-10 using the wizard, 4-5 requirements (for database), 1-5 database options, 1-12 database version, 1-6 DBMS\_LDAP package, 1-13 disk space, 1-8, 1-9 initialization parameters, 1-9 Knowledge Base, 1-15 password file authentication, 1-16 PL/SQL packages, 1-13 running the prerequisite check tool, 1-5 schemas, 1-18 swap space, 1-8 tablespaces, 1-18 requirements (for running OracleAS Metadata Repository Creation Assistant), 1-3 disk space, 1-3 display, 1-3 memory, 1-3

operating system, 1-3 virtual memory, 1-3 response files, B-1 creating, B-1 examples, B-2 specifying on command-line, B-5 templates, B-1 running against databases that use ASM, 2-14 running against databases that use Oracle-managed files, 2-17 running against Real Application Clusters database, 2-7 runRepca command, 1-24

### S

schemas, 1-18 dropping using cleanMR, 4-10 in OracleAS Metadata Repository, 1-18 security tips for silent and non-interactive installations, B-5 silent installations, B-1 creating the response file, B-1 post-installation steps, B-5 security tips, B-5 silentInstall.log, B-5 sqlnet.ora file, updating after installation, 2-20 standard edition databases, 1-8 starting OracleAS Metadata Repository Creation Assistant, 1-24 storage types supported, 1-2 swap space requirement for running OracleAS Metadata Repository Creation Assistant, 1-8 symbolic link names, 2-4 SYSTEM tablespace, disk space required for, 1-8

### Т

tablespaces, 1-18 AUTOEXTEND, 1-21 dropping using cleanMR, 4-10 in OracleAS Metadata Repository, 1-18 sizes of, 1-20 troubleshooting, D-1 loading failed, 2-21 registration failed, 2-21

### U

UNDO tablespace, disk space required for, 1-8

### V

virtual memory requirement for running OracleAS Metadata Repository Creation Assistant, 1-3 volume manager, 2-9