## **Oracle® Content Database**

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Oracle Content Database Installation Guide, 10g Release 1 (10.2.0.0.1) for Microsoft Windows (32-Bit)

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# Preface

This document contains information necessary for the installation and configuration of Oracle Content Database (Oracle Content DB).

This Preface includes the following topics:

- Audience
- Documentation Accessibility
- Related Documents
- Conventions

# Audience

This document is intended for users who want to install Oracle Content DB. Experience installing Oracle products and experience as a system administrator is necessary.

# **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

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# **Related Documents**

For more information, refer to the following Oracle resources:

- The Oracle Application Server documentation set for your platform, specifically:
  - Oracle Application Server Installation Guide
  - Oracle Application Server Quick Installation Guide
  - Oracle Application Server Administrator's Guide
  - Oracle Application Server Enterprise Deployment Guide
  - Oracle Application Server High Availability Guide
  - Oracle Internet Directory Administrator's Guide
  - Oracle Identity Management Concepts and Deployment Planning Guide
- The Oracle Database 10g documentation set, specifically: for your platform
  - Oracle Database Installation Guide
  - Oracle Database Administrator's Guide
  - Oracle Clusterware Installation Guide for Microsoft Windows
- The Oracle Content Database documentation set, specifically:
  - Oracle Content Database Administrator's Guide
  - Oracle Content Database Application Administrator's Guide
  - Oracle Records Database Application Administrator's Guide
  - Oracle Content Database Release Notes for Microsoft Windows
  - Oracle Content Database developer documentation

# **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

# Introduction to Installing Oracle Content Database

**Note:** This document is accurate at the time of publication. Oracle will update the documentation periodically after the software release. You can access the latest information and additions to this document on the Oracle Technology Network (OTN) at:

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

Oracle Content Database (**Oracle Content DB**) uses Oracle Database for its content repository, and runs in Oracle Application Server. Oracle Content DB also uses Oracle Identity Management, part of Oracle Application Server Infrastructure (OracleAS Infrastructure), for user management and authentication. Because of these dependencies, installing Oracle Content DB typically involves the following:

- Installing a new Oracle Database, or adjusting the parameters of an existing Oracle Database
- Installing OracleAS Infrastructure (if you do not have one deployed already)
- Registering the Oracle Database you are using with Oracle Internet Directory
- Installing one or more Oracle Content DB middle tiers

This guide provides information about how to install Oracle Content DB middle tiers. It includes some of the information, but not all, you need to install Oracle Database and OracleAS Infrastructure. Links to specific guides in the Oracle Database and Oracle Application Server documentation sets are provided in key places in this guide to help you through the installation process for all of these components.

# **Deployment Configurations**

In a production environment, Oracle Content DB is typically deployed on multiple computers. This configuration enables you to separate the components, and configure failover, load balancers, and high availability options. With multiple-computer deployment, you can also use computers with lower hardware requirements than required for single-computer deployment.

Oracle Content DB can be installed on a single computer if the computer meets the recommended hardware and software requirements. If your computer does not meet the recommended requirements, the performance of this configuration might be less than satisfactory. A single-computer deployment does not allow you to use load

balancing or failover options. See "Installing Oracle Content DB on a Single Computer" on page 2-15 for more information.

**See Also:** Oracle Content Database Administrator's Guide for more information about planning for deployment, including information about sizing formulas for production systems

# Quick Installation of Oracle Content DB and Supporting Components

This chapter provides streamlined instructions for installing Oracle Content DB and supporting components, such as OracleAS Infrastructure (which contains Oracle Identity Management) and Oracle Database. It also provides information about installing Oracle Content DB and supporting components on a single computer.

To use this chapter effectively, first refer to the checklists to collect the information you will need during the installation. Then, refer to the procedures in "Quick Installation of Oracle Content DB and Supporting Components" on page 2-4 for step-by-step instructions.

This chapter includes the following topics:

- Installation Checklists for OracleAS Infrastructure, Oracle Database, and Oracle Content DB Middle Tier
- Quick Installation of Oracle Content DB and Supporting Components
- Installing Oracle Content DB on a Single Computer

# Installation Checklists for OracleAS Infrastructure, Oracle Database, and Oracle Content DB Middle Tier

This section provides checklists for installing OracleAS Infrastructure, Oracle Database, and the Oracle Content DB middle tier. Each checklist identifies the information you are prompted to enter for each installation.

Table 2–1 lists required information for installing OracleAS Infrastructure. Table 2–2 lists required information for installing Oracle Database. Table 2–3 lists required information for installing the Oracle Content DB middle tier. All the checklists provide blank table cells for writing in your information.

**Note:** Oracle recommends that you ensure the safety and confidentiality of the following checklists, as they contain sensitive information.

Information	Description	Example Values	Your Information
Inventory directory path	The full path to the inventory directory. This directory must be different from the Oracle home directory for the product files.	C:\Program Files\Oracle\Invent ory	
	This information is only required if this is the first installation of any Oracle product on this computer.		
Oracle home name	The name of the Oracle home for OracleAS Infrastructure.	OH_INFRA	
Oracle home path (destination path)	The directory path for the Oracle home.	C:\oracle\infra	
Global Database Name	The name for the Metadata Repository database in the form database_name.domain_name.	infra.mycompany.com	
SID	The Oracle system identifier for the Metadata Repository database.	infra	
Database character set	The character set to use for the Metadata Repository database. If you want to use the Metadata Repository as your Oracle Content DB database, you must choose AL32UTF8 (this is <b>not</b> the default).	AL32UTF8	
Database file location	The full path to the parent directory for the Metadata Repository database data files. This parent directory must already exist, and you must have write permissions in this directory.	C:\oracle\oradata	
Database schema passwords	Create passwords to use for the SYS, SYSTEM, SYSMAN, and DBSNMP schema users. You can use the same password for all four schemas, or create separate passwords.	your_passwords	
Application Server instance name	The name of the infrastructure instance. Do not use the hostname of the computer when naming Oracle Application Server instances.	infra	
ias_admin password	The administrative user for Oracle Application Server instances. Used to log in to the Application Server Control.	your_password	
	The minimum length of the password is five alphanumeric characters, and at least one of the characters must be a number.		

Table 2–1 Checklist for Installing OracleAS Infrastructure

Information	Description	Example Values	Your Information
Oracle home name	The name of the Oracle home for this database.	OraDb10g_home1	
Oracle home path	The directory path for the Oracle home.	C:\oracle\database	
Global database name	The name for the database.	orcl.mycompany.com	
Oracle system identifier (SID)	The Oracle system identifier for the database.	orcl	
Database passwords	Create passwords to use for the SYS, SYSTEM, SYSMAN, and DBSNMP schema users. You can use the same password for all four schemas, or create separate passwords.	your_passwords	
Database character set	The character set to use for the database. Make sure to set the character set to AL32UTF8 (this is <b>not</b> the default).	AL32UTF8	

 Table 2–2
 Checklist for Installing Oracle Database

 Table 2–3
 Checklist for Installing the Oracle Content DB Middle Tier

Information	Description	Example Values	Your Information
Oracle home name	The name of the Oracle home for this middle tier.	cdb_10_2	
Oracle home location	The directory path for the Oracle home.	C:\oracle\cdb	
Oracle Internet Directory host name	The fully-qualified host name for the Oracle Internet Directory instance you want to use with Oracle Content DB.	infra_ host.mycompany.com	
Oracle Internet	The port number for the Oracle	389 (non-SSL)	
Directory port	Internet Directory instance you want to use with Oracle Content DB.	636 (SSL)	
Oracle Internet Directory administrator user name	The user name for an Oracle Internet Directory account that has administrator privileges, such as cn=orcladmin. You can also use any Oracle Internet Directory user with the following privileges:	cn=orcladmin	
	<ul> <li>IAS &amp; User Management Application Admins</li> </ul>		
	<ul> <li>iAS Admins</li> </ul>		
Oracle Internet Directory administrator password	The password for the Oracle Internet Directory account that has administrator privileges.	your_password	
Oracle Internet Directory realm name	The realm to which the Oracle Internet Directory administrator belongs. Only required if the Oracle Internet Directory instance contains multiple realms.	ນຮ	

Information	Description	Example Values	Your Information
Oracle Database	If your Oracle Database is installed on a computer running Microsoft Windows, you must disable the firewall prior to installing Oracle Content DB, as follows:	NA	
	<ol> <li>Click Start &gt; Control Panel &gt; Security Center &gt; Windows Firewall.</li> </ol>		
	<b>2.</b> Select <b>O</b> ff.		
	<b>3.</b> Click <b>OK</b> and exit the Security Center and Control Panel.		
	Upon successful installation of Oracle Content DB, ensure that you enable your firewall.		
Database Connection String	The connect string to the Oracle Database that you want to use for this Oracle Content DB middle tier.	orcl.mycompany.com	
SYS password	The password for the database user SYS.	your_password	
Content schema password	The password for the CONTENT schema user.	your_password	
SMTP host (optional)	The full host name of the SMTP server you want to use with Oracle Content DB. You can also enter the IP address of the SMTP host.	email.company.com	
SMTP port (optional)	The port on which the SMTP server listens.	25	
Instance name	The name of the Oracle Application Server instance for the Oracle Content DB middle tier.	cdb_instance	
	Do not use the hostname of the computer when naming Oracle Application Server instances.		
ias_admin password	The password of the administrator for the Oracle Application Server instance for the Oracle Content DB middle tier.	your_password	

Table 2–3 (Cont.) Checklist for Installing the Oracle Content DB Middle Tier

# **Quick Installation of Oracle Content DB and Supporting Components**

The following sections provide streamlined instructions for installing Oracle Database, OracleAS Infrastructure, and the Oracle Content DB middle tier:

- Quick Installation of OracleAS Infrastructure 10.1.2.0.2
- Quick Installation of Oracle Database
- Quick Installation of the Oracle Content DB Middle Tier

#### **Quick Installation of OracleAS Infrastructure 10.1.2.0.2**

This section provides streamlined instructions for installing OracleAS Infrastructure 10.1.2.0.2 (which contains Oracle Identity Management, a required component for

Oracle Content DB). For complete information, see "Installing OracleAS Infrastructure" on page 3-2, as well as *Oracle Application Server Installation Guide*.

The following procedure may be slightly different from your actual installation, depending on which options you select and which version you are installing. This procedure installs the Metadata Repository and Oracle Identity Management components in a single Oracle home; refer to *Oracle Application Server Installation Guide* for information about other combinations.

**Tip:** When you refer to books in the Oracle Application Server documentation library, make sure that the version and platform of the book you are looking at matches the version and platform of the OracleAS Infrastructure you are installing.

**Note:** Prior to installing OracleAS Infrastructure, ensure that you have administrative privileges.

To install OracleAS Infrastructure:

**1.** Ensure that all hardware, software, and other requirements are met before installing.

**See Also:** Chapter 2, "Requirements" in *Oracle Application Server Installation Guide* for more information

**Tip:** Use the checklist in Table 2–1 to record the information you provide during OracleAS Infrastructure installation.

2. Start Oracle Universal Installer. The Welcome screen appears.

#### See Also:

- "Understanding Oracle Universal Installer" on page B-2
- "Starting Oracle Universal Installer" on page B-3
- 3. Click Next on the Welcome screen to display the Specify File Locations screen.
- **4.** On the Specify File Locations screen, enter a name for the Oracle home in the **Name** field. Then, in the **Path** field, provide the path where you want OracleAS Infrastructure to be installed.

When you have entered the Oracle home name and path, click Next.

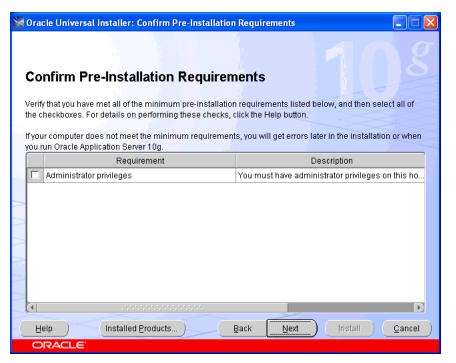
- **5.** On the Select a Product to Install screen, select **Oracle Application Server Infrastructure 10***g*, and click **Next**.
- 6. On the Select Installation Type screen, select **Identity Management and Metadata Repository** and click **Next**.

Refer to *Oracle Application Server Installation Guide* for details about the other options.

7. On the Confirm Pre-Installation Requirements screen, review any requirements that have been flagged with warnings, or that need to be checked manually. Be sure to fix any outstanding issues before proceeding. When you have finished reviewing the requirements, click **Next**.

Figure 2–1 shows the Confirm Pre-Installation Requirements screen.

Figure 2–1 OracleAS Infrastructure Installation: Product-Specific Prerequisite Checks Screen



- **8.** On the Confirm Pre-Installation Requirements screen, ensure that you have met the listed requirements. When you have verified the requirements, select each one and click **Next**.
- 9. On the Select Configuration Options screen, select the following:
  - Oracle Internet Directory
  - OracleAS Single Sign-On
  - OracleAS Delegated Administration Services
  - OracleAS Directory Integration and Provisioning

When you have selected these options, click Next.

10. On the Select Port Configuration Options screen, select Automatic and click Next.

Refer to *Oracle Application Server Installation Guide* for details about specifying ports manually.

- **11.** On the Specify Namespace in Internet Directory screen, accept the suggested namespace and click **Next**.
- **12.** On the Specify Database Configuration Options screen, provide the following information:
  - Global Database Name: Enter a name for the Metadata Repository database in the form database\_name.domain\_name.
  - SID: Enter the system identifier for the Metadata Repository database.
     Typically this is the same as the global database name, but without the domain name. The SID must not be longer than eight characters.
  - Database Character Set: Select the character set you want to use. If you want to use the OracleAS Infrastructure database as your Oracle Content DB database, you must choose AL32UTF8.

 Database File Location: Enter the full path to the parent directory for the data files directory.

After you have provided this information, click **Next**.

- **13.** On the Specify Database Schema Passwords screen, provide passwords for the SYS, SYSTEM, DBSNMP, and SYSMAN schema users. You can use the same password for all schemas, or use different passwords. When you have supplied the passwords, click **Next**.
- **14.** On the Specify Instance Name and ias\_admin Password screen, enter the following:
  - For **Instance Name**, enter a name for this infrastructure instance. You cannot change this name after installation.
  - For ias\_admin Password and Confirm Password, set the password for the ias\_admin user. This is the administrative user for the instance.

When you have entered this information, click Next.

15. On the Summary screen, verify your selections and click Install.

The Install Progress screen displays the progress of the installation.

**16.** On the End of Installation screen, click **Exit** to quit the installer.

**See Also:** Oracle Application Server Installation Guide for recommended post-installation tasks

If you want to use the OracleAS Infrastructure database as your Oracle Content DB database, you may need to upgrade your OracleAS Infrastructure database to a later version. For example, if your database is version 10.1.0.4, you will need to upgrade to 10.1.0.5. See "Upgrading an Existing Oracle Database" on page 3-6 for additional information.

Also, if you want to use the OracleAS Infrastructure database as your Oracle Content DB database, you need to set required database initialization parameters; see "Setting Required Database Initialization Parameters" on page 3-4 for more information.

#### Quick Installation of Oracle Database

This section provides streamlined instructions for installing an Oracle Database 10.2 for Oracle Content DB. For complete information, see "Installing Oracle Database" on page 3-3, as well as *Oracle Database Installation Guide for Microsoft Windows (32-Bit)* and *Oracle Database Client Quick Installation Guide for Microsoft Windows (32-Bit)*. The following procedure may be slightly different from your actual installation, depending on which option you select and which database version you are installing.

**Tip:** When you refer to books in the Oracle Database documentation library, make sure that the version and platform of the book you are looking at matches the version and platform of the Oracle Database you are installing.

To install Oracle Database:

**1.** Ensure that all hardware, software, and other requirements are met before installing.

**See Also:** Chapter 2, "Preinstallation Tasks" in *Oracle Database Installation Guide* for your platform for more information

**Tip:** Use the checklist in Table 2–2 to record the information you provide during Oracle Database installation.

2. Start Oracle Universal Installer. The Welcome screen appears.

See Also:

- "Understanding Oracle Universal Installer" on page B-2
- "Starting Oracle Universal Installer" on page B-3
- **3.** Click **Next** on the Welcome screen to display the Select Information Type screen.
- 4. Select Advanced Installation.
- 5. On the Select Installation Type screen, select Enterprise Edition and click Next.
- **6.** On the Specify Home Details screen, provide a name for the Oracle home and provide the path where you want the database to be installed, then click **Next**.
- 7. On the Product-Specific Prerequisite Checks screen, review any prerequisites that have been marked with warnings (as shown in Figure 2–2), or that need to be checked manually. Be sure to fix any outstanding issues before proceeding. When you have finished reviewing the prerequisites, click **Next**.

Figure 2–2 shows the Product-Specific Prerequisite Checks screen, with some prerequisite checks that have been marked with warnings.

Figure 2–2 Oracle Database Installation: Product-Specific Prerequisite Checks Screen

🕷 Oracle Universal Installer: Product-Specific Prerequisite Check	s		
Product-Specific Prerequisite Checks The Installer verifies that your environment meets all of the minimum re configuring the products that you have chosen to install. You must man are flagged with warnings and items that require manual checks. For d checks, click the item and review the details in the box at the bottom of t	ually verify and etails about p	d confirm the	e items that
Check	Туре	Status	
Checking Network Configuration requirements	Automatic	🔲 Warnin	g 🔒
Validating ORACLE_BASE location (if set)	Automatic	🔽 Succes	eded
1 warnings, 0 requirements to be verified.		Re	etry Stop
Checking Network Configuration requirements Check complete. The overall result of this check is: Failed <<<< Problem: The install has detected that the primary IP address of the sy	stem is DHCF		
Help Installed Products Back	vext )	(nstall )	Cancel
ORACLE			

**8.** On the Select Configuration Option screen, choose a database configuration type and click **Next**.

For information about configuring Automatic Storage Management or installing database software only, refer to *Oracle Database Installation Guide* for your platform. The remainder of this procedure assumes that you selected **Create a database** on this screen.

9. On the Select Database Configuration screen, select Advanced and click Next.

Selecting the Advanced option will let you specify database initialization parameters and choose the database character set later in the installation. Both of these tasks are required in order to use this database with Oracle Content DB.

10. On the Summary screen, review your settings, then click Install.

The Install Progress screen displays the progress of the installation.

 During the Configuration Assistants phase of the installation, the Database Configuration Assistant (DBCA) appears. On the Database Templates screen of the DBCA, select General Purpose and click Next.

See *Oracle Database 2 Day DBA* for information about the other options on this screen, as well as general information about using DBCA.

12. On the Database Identification screen, provide the Global Database Name in the form database\_name.domain\_name. Then, in the SID box, enter the Oracle system identifier. The SID defaults to the database name and uniquely identifies the instance that runs the database.

When you have entered this information, click Next.

13. On the Management Options screen, select Configure the Database with Enterprise Manager. Choose whether to use Grid Control or Database Control for database management. You can only use Grid Control to manage your database if Grid Control has been installed and configured, and if the Management Agent has been installed on the database computer.

For information about the optional settings on this screen, see *Oracle Database Installation Guide* for your platform.

After you have made your selection, click Next.

- 14. On the Database Credentials screen, provide passwords for the SYS, SYSTEM, DBSNMP, and SYSMAN schema users. You can use the same password for all schemas, or use different passwords. When you have supplied the passwords, click Next.
- **15.** On the Storage Options screen, choose either **File System** or **Automatic Storage Management**, then click **Next**.

For more information about Automatic Storage Management, refer to *Oracle Database Installation Guide* for your platform.

- **16.** Choose the following options for the next three screens:
  - **a.** On the Database File Locations screen, select **Use Database File Locations from Template** and click **Next**.
  - **b.** On the Recovery Configuration screen, select **Specify Flash Recovery Area** and click **Next**.
  - c. On the Database Content screen, click Next.

See *Oracle Database 2 Day DBA* for information about the other options on these screens.

 On the Initialization Parameters screen, click the Character Sets tab, then select Use Unicode (AL32UTF8). Choosing AL32UTF8 is required in order to use this database with Oracle Content DB.

Figure 2–3 shows the Character Sets tab.

Database Configuration .	Assistant, Step 9 of 11	: Initialization Parameters 📃 🗖 🎗
	Memory	Sizing Character Sets Connection Mode
	Database Character Se Use the default The default characte operating system: W Use Unicode (AL32U	et er set for this database is based on the language setting of this VEBIS(\$3859P1. TTFB) t to Unicode (AL32UTF8) enables you to store multiple of character sets
	Default Language: Default Date Format: All Initialization Paramete	American
Cancel Help		S Back Next > Einish

Figure 2–3 DBCA: Character Sets Tab of Initialization Parameters Screen

**18.** Click **All Initialization Parameters**. The All Initialization Parameters screen appears.

Figure 2–4 shows the All Initialization Parameters screen.

Name	Value	Override D	Basic	Category
audit_file_dest	{ORACLE_BAS	×		Security and Auditin
audit_sys_operations	FALSE			Miscellaneous
audit_trail	NONE			Security and Auditin
background_core	partial			Diagnostics and Stat
background_dump	{ORACLE_BAS	×		Diagnostics and Stat
backup_tape_io_sla	FALSE			Backup and Restore
bitmap_merge_are	1048576			Sort, Hash Joins, Biti
blank_trimming	FALSE			ANSI Compliance
buffer_pool_keep				Cache and I/O
buffer_pool_recycle				Cache and I/O
circuits				Shared Server
cluster_database	FALSE		<ul> <li></li> </ul>	Cluster Database
cluster_database_i	1			Cluster Database
cluster_interconnects				Cluster Database
commit_point_stren	1			Distributed, Replica
compatible	10.2.0.1.0	× .	<ul> <li></li> </ul>	Miscellaneous
control_file_record	7	<b></b>		Redo Log and Reco
control_files	("{ORACLE_BA	×	<ul> <li>Image: A set of the set of the</li></ul>	File Configuration
core_dump_dest	{ORACLE_BAS	×		Diagnostics and Stat
cpu_count	1			Processes and Sessi
create_bitmap_are	8388608			Sort, Hash Joins, Biti
create_stored_outli				Miscellaneous
cursor_sharing	EXACT			Cursors and Library
cursor_space_for_ti	FALSE			Cursors and Library
db_16k_cache_size	0			Cache and I/O
(4)				D D

Figure 2–4 DBCA: All Initialization Parameters Screen

- Set all the initialization parameters listed in Table 3–2 on page 3-4, according to the minimum value listed in the table. If you do not see some parameters, click Show Advanced Parameters. When you are finished specifying parameters, click Close.
- 20. Click Next on the Initialization Parameters screen.
- **21.** On the Database Storage screen, review the storage structure of your database and click **Next**.
- 22. On the Creation Options screen, select Create Database, then click Finish.
- 23. On the End of Installation screen, click Exit, then click Yes to quit the installer.

**See Also:** *Oracle Database Installation Guide* for your platform for recommended post-installation tasks

After you install your database, you may need to upgrade to a later version in order to use it with Oracle Content DB. For example, if your database version is 10.1.0.4, you must upgrade to 10.1.0.5. Similarly, if your database version is 10.2.0.1 you must upgrade to 10.2.0.2.

**See Also:** "Upgrading an Existing Oracle Database" on page 3-6 for additional information

You also need to register this database with Oracle Internet Directory before you can use it with Oracle Content DB. See "Registering Oracle Database with Oracle Internet Directory" on page 3-7 for more information.

#### Quick Installation of the Oracle Content DB Middle Tier

This section provides streamlined instructions for installing an Oracle Content DB middle tier. See Chapter 5, "Installing the Oracle Content DB Middle Tier" for complete information.

**Notes:** If any of the database, infrastructure, or middle tiers are installed, or to be installed, on computers running Microsoft Windows, disable the firewall, if previously enabled on those computers prior to installing the Oracle Content DB middle tier. Installation of the Oracle Content DB middle tier will fail if the firewall is enabled.

Ensure that you enable the firewall upon successful completion of the Oracle Content DB middle tier.

To install an Oracle Content DB middle tier:

- 1. You must have Oracle Database and OracleAS Infrastructure already installed before installing the Oracle Content DB middle tier. In addition, your database must be registered with Oracle Internet Directory. See "Registering Oracle Database with Oracle Internet Directory" on page 3-7 for more information.
- 2. Ensure that all other prerequisites listed in Chapter 4, "Preinstallation Requirements for Oracle Content DB Middle Tier" are met prior to running Oracle Universal Installer.

**Tip:** Use the checklist in Table 2–3 to record the information you provide during Oracle Content DB middle-tier installation.

3. Start Oracle Universal Installer. The Welcome screen appears.

#### See Also:

- "Understanding Oracle Universal Installer" on page B-2
- "Starting Oracle Universal Installer" on page B-3
- 4. Click Next on the Welcome screen to display the Specify File Locations screen.
- Enter a name for the Oracle home in the Name field. Then, in the Path field, provide the path where you want the Oracle Content DB middle tier to be installed.

If the directory does not exist, the installer creates it.

When you have entered the Oracle home name and path, click Next.

**6.** On the Product-Specific Prerequisite Checks screen, review any prerequisites that have been flagged with warnings, or that need to be checked manually. Be sure to fix any outstanding issues before proceeding. When you have finished reviewing the prerequisites, click **Next**.

Figure 2–5 shows the Product-Specific Prerequisite Checks screen.

racle Universal Installer: Product-specific Prerequisite	r checks		
he installer will now verify that the system meets all the minim onfiguring the chosen product. You are required to manually ve s warnings or manual checks. For details on performing those etails at the bottom.	erify and confirm the i	tems that are flagged	
Check	Туре	Status	
Checking service pack	Automatic	🔽 Succeeded	
Checking available memory	Automatic	🔽 Succeeded	
Checking physical memory	Automatic	🖾 Succeeded	
Validating ORACLE_BASE location (if set)	Automatic	Succeeded	J
		D	
		Retry Sto	p)
0 requirements to be verified.			
/alidating ORACLE_BASE location (if set) Check complete. The overall result of this check is: Passed			
	Next	Install Can	col

Figure 2–5 Oracle Content DB Middle-Tier Installation: Product-Specific Prerequisite Checks Screen

- **7.** On the Language Selection screen, ensure that all languages appear on the right side (in the Selected Languages list), then click **Next**.
- **8.** On the Register with Oracle Internet Directory screen, provide the following information:
  - Host: Enter the name of the computer where Oracle Internet Directory is running.
  - Port: Enter the port number on which Oracle Internet Directory is listening. If you want to use Secure Sockets Layer (SSL) to connect to Oracle Internet Directory, specify the Oracle Internet Directory SSL port.

**Note:** You can obtain the port number using either the OracleAS Infrastructure Application Server Control or from the %ORACLE\_HOME%\install\portlist.ini file on the computer where the OracleAS Infrastructure resides, if Application Server Control is not running.

If the port numbers have been modified post-installation, the new port numbers *will not* be reflected in the portlist.ini file.

 Use SSL to connect to Oracle Internet Directory: Select this option if you want Oracle Content DB components to use only SSL to connect to Oracle Internet Directory.

To ensure secure communications, Oracle recommends that you enable this option and use SSL to connect to Oracle Internet Directory.

When you have provided this information, click Next.

9. On the Specify OID Login screen, provide the following information:

- Username: Enter the user name used to log in to Oracle Internet Directory. If you are an Oracle Internet Directory superuser, the username is cn=orcladmin. Alternatively, you can use another Oracle Internet Directory user, as long as the user has sufficient privileges, such as the following:
  - IAS & User Management Application Admins
  - iAS Admins
- **Password:** Enter the existing password for this user.
- In the Identity Management Realm field, specify the appropriate realm to which this user belongs. This field only appears if the Oracle Internet Directory you specified contains multiple realms.

When you have provided this information, click Next.

- **10.** On the Select Database Information screen, provide the following information:
  - Database Connection String: Select the connect string to the Oracle Database that you want to use for this Oracle Content DB middle tier. If this is the first middle tier you are installing, the Oracle Content DB schema will be created in this database. If this is a subsequent middle tier, this middle tier will be associated with the existing schema.
  - Password: Enter the existing password for the database user SYS.

When you have provided this information, click Next.

- **11.** On the Content Schema Password screen, choose or enter a schema password for Oracle Content DB:
  - If this is the first Oracle Content DB middle tier you are installing, enter the password you want to use for the Oracle Content DB schema, then confirm it. The Oracle Content DB schema name is **Content**. This schema will be created during this installation.
  - If this is a subsequent Oracle Content DB middle tier, enter the schema password for the existing Oracle Content DB schema.

When you have entered the schema password, click Next.

**12.** On the Specify SMTP Host and Port Values screen, you can optionally provide e-mail server information. This can be any valid Simple Mail Transport Protocol (SMTP) server.

If you choose to leave these values blank, you can specify this information after installation using the Application Server Control. The SMTP server is used to send quota e-mail notifications to Quota Administrators.

In the **Host** field, enter the full host name of the SMTP server, in the form hostname.domain. Alternatively, you can enter the IP address of the SMTP server.

In the **Port** field, enter the port number on which the SMTP server listens.

When you have provided this information, click Next.

**Note:** In subsequent Oracle Content DB middle-tier installations, you will not be prompted for SMTP information.

**13.** On the Specify Instance Name and ias\_admin Password screen, enter the following:

- For **Instance Name**, enter a name for this Oracle Content DB middle-tier instance. You cannot change this name after installation.
- For **ias\_admin Password** and **Confirm Password**, set the password for the ias\_admin user. This is the administrative user for the instance.

When you have entered this information, click **Next**.

14. On the Summary screen, verify your selections and click Install.

The Install Progress screen displays the progress of the installation.

15. Next, a list of configuration assistants will run, including the Oracle Content DB Configuration Assistant. If any configuration assistant fails, the error will appear in the Oracle Universal Installer console window. For additional details on the error, refer to the corresponding log file for the assistant in error. The Oracle Content DB Configuration Assistant log file (ContentConfig.log), as well as the cdbinstallactions.log file, can be found in the following location:

%ORACLE\_HOME%\content\log

**16.** When the End of Installation screen displays, click **Exit** to quit Oracle Universal Installer. Oracle Content DB starts and the Web client opens.

**Caution:** Ensure that you enable the firewall on computers running Microsoft Windows upon successful installation of Oracle Content DB.

#### Note:

- By default, Oracle Records DB is disabled. Refer to Chapter 5, "Choosing Oracle Content DB Options" in *Oracle Content Database Administrator's Guide* for information about how to enable Oracle Records DB.
- By default, FTP and FTPS are disabled. Refer to Chapter 4 "Oracle Content Database Protocol Support" in Oracle Content Database Administrator's Guide for information about how to enable FTP and FTPS Records DB.
- The information displayed at the end of the installation is also available in the %ORACLE\_HOME%\install\setupinfo.txt file. This file contains summarized information about Oracle Content DB and links to the URLs.

**Tip:** Proceed to Chapter 7, "Oracle Content DB Middle-Tier Postinstallation Tasks" to complete installation of Oracle Content DB

## Installing Oracle Content DB on a Single Computer

A single-computer installation is one that has Oracle Database, OracleAS Infrastructure (with Oracle Identity Management), and the Oracle Content DB middle tier on the same computer. This section provides information and recommendations for a single-computer configuration for Oracle Content DB.

### System Requirements for Single-Computer Installation

If you plan a single-computer installation of Oracle Content DB running a single database instance, ensure that the computer on which you plan to install the software meets the requirements listed in Table 2–4. These requirements are necessary to contain not only Oracle Content DB, but also Oracle Identity Management components and the Oracle Database.

If you are planning to run both an Oracle Content DB database and the OracleAS Infrastructure database on the same computer, look at the system requirements for both Oracle Database and OracleAS Infrastructure in *Oracle Database Installation Guide for Microsoft Windows (32-Bit)* and *Oracle Application Server Installation Guide* to determine what requirements to meet.

Item	Minimum Requirement
Processor Speed	2 GHz or faster
Number of CPUs	2
Memory	2 GB RAM
Disk Space	15 GB
Swap Space	4 GB

Table 2–4 System Requirements for Single-Computer Installation

#### **Single-Computer Installation Options**

In general, there are three different ways to install OracleAS Infrastructure, Oracle Database, and the Oracle Content DB middle tier on the same computer. The following sections provide information about each configuration option:

- Installing OracleAS Infrastructure, Oracle Database, and Oracle Content DB in Three Oracle Homes
- Using the OracleAS Infrastructure Database as the Oracle Content DB Database
- Using an Existing Database as Your Metadata Repository

# Installing OracleAS Infrastructure, Oracle Database, and Oracle Content DB in Three Oracle Homes

You can choose to install OracleAS Infrastructure, Oracle Database, and the Oracle Content DB middle tier in three separate Oracle homes. In this configuration, there are two databases running on the same computer: the database for Oracle Content DB, and the Metadata Repository database (part of OracleAS Infrastructure). Because of this, you may have port conflicts when you install the second database. See "Database Port Conflicts" on page 2-18 for additional information. Also, you should increase your hardware configuration proportionally to account for both database instances. See "System Requirements for Single-Computer Installation" on page 2-16.

For this configuration, you should install the components in the following order:

- OracleAS Infrastructure
- Oracle Database
- Oracle Content DB middle tier

#### See Also:

- Chapter 3, "Installing OracleAS Infrastructure and Oracle Database"
- Chapter 5, "Installing the Oracle Content DB Middle Tier"

#### Using the OracleAS Infrastructure Database as the Oracle Content DB Database

You can install OracleAS Infrastructure first, then use the OracleAS Infrastructure database as your Oracle Content DB database. In this configuration, there is only one database running on the computer.

To use the OracleAS Infrastructure database as your Oracle Content DB database, you must ensure the following requirements are met:

You may need to upgrade the version of the OracleAS Infrastructure database.
 Oracle Content DB requires an Oracle Database version 10.2.0.2 or 10.1.0.5. For the most up-to-date certification information, refer to OracleMetaLink at:

http://metalink.oracle.com

See "Upgrading an Existing Oracle Database" on page 3-6 for more information.

- When you install the OracleAS Infrastructure database, be sure to choose AL32UTF8 as the database character set. AL32UTF8 is not the default character set. See "Setting the Required Database Character Set" on page 3-4 for more information.
- Make sure to set the required database initialization parameters before installing the Oracle Content DB middle tier. See "Setting Required Database Initialization Parameters" on page 3-4 for more information.

After you install OracleAS Infrastructure and then configure the Metadata Repository database to be your Oracle Content DB database, install the Oracle Content DB middle tier. See Chapter 5, "Installing the Oracle Content DB Middle Tier" for more information.

#### Using an Existing Database as Your Metadata Repository

You can choose to install Oracle Database first, then use that database for your Metadata Repository. In this configuration, there is only one database running on the computer. See *Oracle Application Server Metadata Repository Creation Assistant User's Guide* for information about using an existing database as your Metadata Repository.

This database must meet all the requirements listed in "Installing Oracle Database" on page 3-3 in order to be used with Oracle Content DB.

After you have configured your database to be the Metadata Repository database, and after you have installed Oracle Identity Management components, install the Oracle Content DB middle tier. Be sure that you have installed the following Oracle Identity Management components:

- Oracle Internet Directory
- OracleAS Single Sign-On
- OracleAS Delegated Administration Services
- OracleAS Directory Integration and Provisioning

#### See Also:

- Section 6.23, "Installing Oracle Identity Management Components Only (Including Oracle Internet Directory) in Oracle Application Server Installation Guide
- Chapter 5, "Installing the Oracle Content DB Middle Tier"

#### **Database Port Conflicts**

If you are installing both Oracle Database and the Metadata Repository on the same computer, you may have a port conflict when you install the second database (typically the Metadata Repository) because port 1521 will already be in use by the first database you installed.

#### If Port 1521 Is Being Used by an Existing Oracle Database

If you are installing both Oracle Database and the Metadata Repository on the same computer, you may have a port conflict when you install the second database (typically the Metadata Repository) because port 1521 will already be in use by the first database you installed.

As long as the first Oracle Database is version 10.1.0.2 or later, the existing listener will support both the existing database and the new Oracle Database. Oracle Universal Installer will perform this configuration automatically. You must stop the existing listener during installation.

#### If Port 1521 Is Being Used by Another Application

If another application is listening on port 1521, you must reconfigure it to listen on a different port. If that is not possible, shut it down while you install the Oracle Database. After installation, you can reconfigure the Oracle Database to use a port other than 1521.

**See Also:** Oracle Database Administrator's Guide for information about reconfiguring the database to use another port

# Installing OracleAS Infrastructure and Oracle Database

Before you install the Oracle Content DB middle tier, you must first install OracleAS Infrastructure (which contains Oracle Identity Management) for use by Oracle Content DB. You can use an existing OracleAS Infrastructure, or create a new one.

The Oracle Content DB schema may be installed into the same database instance as the OracleAS Metadata Repository database, or the Oracle Content DB schema may be installed into a separate database instance. If the Oracle Content DB schema is to be installed into a separate database instance, the instance may be an existing instance or a new instance.

You can also install OracleAS Infrastructure, Oracle Database, and the Oracle Content DB middle tier on one computer, as long as the computer meets the recommended hardware requirements.

#### See Also:

- "Installing Oracle Content DB on a Single Computer" on page 2-15 for information about installing OracleAS Infrastructure, Oracle Database, and the Oracle Content DB middle tier on the same computer, as well as information about using the OracleAS Infrastructure database as your Oracle Content DB database
- Oracle Application Server Metadata Repository Creation Assistant User's Guide for information about using an existing Oracle Database as your Metadata Repository

This chapter provides important information and tips about how to install OracleAS Infrastructure and Oracle Database for Oracle Content DB. It also provides links to key places in the Oracle Application Server and Oracle Database documentation sets to help you proceed smoothly through the installation process.

**Tip:** When you refer to books in the Oracle Database and Oracle Application Server documentation libraries, make sure that the version and platform of the book you are looking at matches the version and platform of the Oracle Database or OracleAS Infrastructure you are installing.

This chapter contains the following topics:

- Installing OracleAS Infrastructure
- Installing Oracle Database

Registering Oracle Database with Oracle Internet Directory

# Installing OracleAS Infrastructure

Refer to Oracle Application Server Installation Guide for complete information about how to install OracleAS Infrastructure (which includes Oracle Identity Management). In particular, refer to Chapter 6, "Installing OracleAS Infrastructure" in Oracle Application Server Installation Guide for step-by-step instructions, as well as information about different OracleAS Infrastructure install types.

Review the information about installation types closely to determine which configuration best suits your needs. For example, you can install all OracleAS Infrastructure components, then use the OracleAS Infrastructure database as your Oracle Content DB repository. Or, you may decide to use an existing database as your Metadata Repository database, and install Oracle Identity Management components only.

Although Oracle recommends that you review the entire *Oracle Application Server Installation Guide* before installing, Table 3–1 highlights particularly important sections and chapters that you should read.

**Note:** The chapter and section numbers referred to in Table 3–1 may change, depending on the version of the Oracle Application Server documentation library you are using. If you cannot find the information you are looking for at the listed chapter or section number, search for the chapter or section by name rather than by number.

 Table 3–1
 Sections and Chapters to Read in Oracle Application Server Installation

 Guide
 Image: Comparison of Comparison

Section or Chapter Name	
Section 4.2, "System Requirements"	
Section 4.3, "Software Requirements"	
Section 5.18, "Setting the Mount Point for the CD-ROM or DVD"	
Section 5.19, "Starting Oracle Universal Installer"	
Chapter 6, "Installing OracleAS Infrastructure"	
Section 6.23, "Installing Oracle Identity Management Components Only (Including Oracle Internet Directory)"	
Section 6.26, "Installing OCA and OracleAS Metadata Repository Only"	

#### **OracleAS Infrastructure Hardware and Software Requirements**

Oracle Content DB requires an OracleAS Infrastructure version 10.1.2.0.2. For the most up-to-date certification information, refer to Oracle*MetaLink* at:

#### http://metalink.oracle.com

Refer to Section 4.2, "System Requirements" and Section 4.3, "Software Requirements" in *Oracle Application Server Installation Guide* for information about hardware and software requirements for OracleAS Infrastructure.

#### **Oracle Identity Management Component Requirements**

Oracle Content DB requires the following Oracle Identity Management components:

- Oracle Internet Directory
- OracleAS Single Sign-On
- OracleAS Delegated Administration Services
- OracleAS Directory Integration and Provisioning

# Installing Oracle Database

Refer to Oracle Database Installation Guide for your platform or Oracle Database Client Quick Installation Guide for Microsoft Windows (32-Bit) for your platform for complete information about how to install Oracle Database. Choose the **Advanced** installation type so that you can specify required initialization parameters and the required database character set during installation.

In addition, read the following sections for information about how to install Oracle Database (or adjust an existing Oracle Database) so that it can be used with Oracle Content DB.

This section contains the following topics:

- Oracle Database Hardware and Software Requirements
- The Database Character Set and Setting Required Initialization Parameters
- Data Types and Storage Requirements
- Upgrading an Existing Oracle Database
- Using the Raw Storage Type with Oracle Content DB

#### Oracle Database Hardware and Software Requirements

Oracle Content DB requires an Oracle Database version 10.2.0.2 or 10.1.0.5. Oracle Database version 9.2 and Oracle Database Express Edition version 10.2 are not supported. For the most up-to-date certification information, refer to Oracle*MetaLink* at:

http://metalink.oracle.com

Refer to Chapter 2, "Preinstallation Tasks" in *Oracle Database Installation Guide for Microsoft Windows (32-Bit)* for complete information about hardware, software, and other requirements. In particular, refer to the following sections:

- Section 2.1, "Oracle Database Hardware Requirements"
- Section 2.2, "Oracle Database Software Requirements"

For additional information about database computer sizing requirements for Oracle Content DB, see Chapter 2, "Planning for Oracle Content DB Deployment" in *Oracle Content Database Administrator's Guide*.

#### The Database Character Set and Setting Required Initialization Parameters

This section describes how to set required database initialization parameters, and how to set the required database character set (AL32UTF8).

This section contains the following topics:

- Setting the Required Database Character Set
- Setting Required Database Initialization Parameters

#### Setting the Required Database Character Set

You must set the database character set to AL32UTF8 in order to use the database with Oracle Content DB.

To set the database character set during installation, choose the **Advanced** installation type (recommended). To set the database character set for an existing database, you can use the Database Configuration Assistant (DBCA) to re-create the database with the correct character set.

**See Also:** "Changing the Character Set After Database Creation" in Chapter 2 and Chapter 11, "Character Set Migration" of *Oracle Database Globalization Support Guide* for more information about setting the database character set in an existing database

#### Setting Required Database Initialization Parameters

You must set initialization parameters for the Oracle Database you want to use with Oracle Content DB.

To set initialization parameters during installation, choose the **Advanced** installation type. Then, select **Advanced** on the Select Database Configuration screen. You can set the initialization parameters after the Database Configuration Assistant (DBCA) launches.

To set initialization parameters for an existing database, you can use Oracle Enterprise Manager Database Control to update the server parameter file. See Section 5.2, "Logging In to Oracle Enterprise Manager Database Control" in Oracle Database Installation Guide for Microsoft Windows (32-Bit) for information about how to access the Database Control.

Alternatively, you can use the following SQL command to set individual parameters:

SQL> alter system set parameter\_name=parameter\_value scope=both;

#### For example:

SQL> alter system set shared\_pool\_size=184549376 scope=both;

Table 3–2 lists the required database initialization parameters for Oracle Content DB.

Parameter Name	Minimum Value
aq_tm_processes	1
db_block_size	8192
db_cache_size	150994944
db_file_multiblock_read_count	32
db_recovery_file_dest_size	2147483648
dispatchers	(PROTOCOL=TCP)=(SERVICE={SID}XDB)
dml_locks	200
java_pool_size	125829120
job_queue_processes	10

Table 3–2 Database Initialization Parameters for Oracle Content DB

Parameter Name	Minimum Value
large_pool_size	4194304
max_commit_propagation_delay	1
	This parameter was deprecated in Oracle Database 10.2. If you are using a 10.2 database, you do not need to set this parameter.
open_cursors	400
pga_aggregate_target	203423744
processes	250
remote_login_passwordfile	EXCLUSIVE
session_max_open_files	50
sessions	400
sga_max_size	629145600
sga_target	629145600
shared_pool_size	184549376
star_transformation_enabled	TRUE
undo_management	AUTO
db_create_file_dest	Set this parameter to identify the default location for the database server to create the following files:
	Datafiles
	Tempfiles
	Redo log files
	Control files
	Block change tracking files
	The following example sets C:\oracledb\oradata as the default directory to use when creating Oracle-managed files:
	DB_CREATE_FILE_DEST = 'C:\oracledb\oradata'

 Table 3–2 (Cont.) Database Initialization Parameters for Oracle Content DB

## **Data Types and Storage Requirements**

Table 3–3 shows the different types of data stored in Oracle Content DB and describes the purpose of each tablespace. These tablespaces are created for you automatically during Oracle Content DB configuration.

For additional information, see "Oracle Content DB Tablespaces" in *Oracle Content Database Administrator's Guide*.

Tablespace Type	Tablespace Name	Description
File Storage	CONTENT_IFS_LOB_I	Stores the Large Object (LOB) data for files that can be indexed by Oracle Text, such as text and word processing files.
File Storage	CONTENT_IFS_LOB_N	Stores the LOB data for files that are not indexed by Oracle Text, such as zip files.

Table 3–3 Tablespace Definitions

Tablespace	Tableanage Name	Description
Туре	Tablespace Name	Description
File Storage	CONTENT_IFS_LOB_M	Stores the LOB data for files that can be indexed by Oracle <i>inter</i> Media, such as image, audio, and video files.
Oracle Text	CONTENT_IFS_CTX_I	Stores words (tokens) extracted by Oracle Text from Oracle Content DB files (the Oracle table DR\$IFS_ TEXT\$I).
Oracle Text	CONTENT_IFS_CTX_X	Stores the Oracle B*tree index on the Oracle Text tokens (the Oracle index DR\$IFS_TEXT\$X).
Oracle Text	CONTENT_IFS_CTX_K	Stores miscellaneous Oracle Text tables (the Oracle tables DR\$IFS_TEXT\$K, DR\$IFS_TEXT\$N, DR\$IFS_TEXT\$R).
Metadata	CONTENT_IFS_MAIN	Stores metadata for files, information about users and groups, and other Oracle Content DB object data.
Oracle Workflow	WORKFLOW_IFS_MAIN	Stores data for Oracle Workflow.
General Oracle Storage	Various	SYSTEM, ROLLBACK, TEMP, and other tablespaces that store the Oracle data dictionary, temporary data during transactions, and so on.

Table 3–3 (Cont.) Tablespace Definitions

### Upgrading an Existing Oracle Database

You may need to upgrade your Oracle Database to one of the versions certified with Oracle Content DB. If you upgrade, make sure to read the upgrade documentation carefully, follow all instructions, and perform all required post-upgrade tasks. Otherwise, you may encounter problems. Post-upgrade tasks may include running the following scripts:

- catupgrd.sql (10.2.0.2)
- utlrp.sql (10.2.0.2)
- catpatch.sql (10.1.0.5)

Refer to the database upgrade documentation for additional details.

#### **Downloading and Applying Database Patches**

You can download database patches from OracleMetaLink at:

http://metalink.oracle.com

If you have a support contract with Oracle, the steps to download a patch from the OracleMetaLink site are:

- 1. Log in to Oracle*MetaLink*.
- 2. Click Patches & Updates.
- **3.** Ensure that **Patch Number** is selected in the **Simple Search** list, then enter the required patch number in the adjacent field.

If you do not know the patch number that you need to download, select **Product** or Family in the Simple Search list.

- 4. Select the appropriate operating system from the Platform or Language list.
- 5. Click Go.

6. Under Results, click **View Readme** to go through the information in the readme before downloading the patch. Then, return to the Results page and click **Download** to download the patch.

Refer to the patch upgrade documentation for additional details; follow all instructions, and perform all required post-upgrade tasks.

### Using the Raw Storage Type with Oracle Content DB

If you choose to use raw devices for database file storage, you must create tablespaces manually. Table 3–4 shows the minimum size of each tablespace.

Tablespace Name	Minimum Size
CONTENT_IFS_MAIN	60MB
CONTENT_IFS_LOB_N	270MB
CONTENT_IFS_LOB_I	270MB
CONTENT_IFS_LOB_M	10MB
CONTENT_IFS_CTX_I	10MB
CONTENT_IFS_CTX_K	15MB
CONTENT_IFS_CTX_X	130MB
WORKFLOW_IFS_MAIN	10MB

Table 3–4 Minimum Tablespace Sizes

To create tablespaces manually, you can issue the create tablespace SQL command. Example 3–1 shows a command to create the CONTENT\_IFS\_MAIN tablespace, with a size of 270 MB.

#### Example 3–1 Create Tablespace Command

SQL > create tablespace CONTENT\_IFS\_MAIN logging datafile size 270M autoextend on next 27M maxsize unlimited extent management local segment space management auto;

# **Registering Oracle Database with Oracle Internet Directory**

After you install OracleAS Infrastructure and Oracle Database, you must register the database with Oracle Internet Directory before you can install the Oracle Content DB middle tier. Typically, registering the database with Oracle Internet Directory involves the following two steps:

- Running the Net Configuration Assistant (NetCA)
- Running the Database Configuration Assistant (DBCA)

If you are using the OracleAS Infrastructure database as your Oracle Content DB database, you do not need to perform these tasks.

### Running the Net Configuration Assistant (NetCA)

Run the Net Configuration Assistant (NetCA) from the database Oracle home to create a Directory Usage Configuration for the database. Performing this step creates an ldap.ora file that points to the Oracle Internet Directory you want to use with Oracle Content DB. If you already have an ldap.ora file with the correct Oracle Internet Directory information, you do not need to perform this step. **Tip:** For additional information on the parameters described in the following procedure, click **Help** on any NetCA page.

To create a Directory Usage Configuration for the database:

- On the database computer, click Start and then select Programs, Oracle -ORACLE\_HOME, Configuration and Migration Tools, and then Net Configuration Assistant.
- 2. On the Welcome page, choose Directory Usage Configuration and click Next.
- 3. For Directory Type, choose Oracle Internet Directory and click Next.
- **4.** Provide the fully-qualified **Hostname**, **Port**, and **SSL Port** for your Oracle Internet Directory instance and click **Next**. You can verify the port numbers using the Application Server Control for the OracleAS Infrastructure Oracle home.
- 5. Select the appropriate Oracle Context and click Next.
- 6. Click Next on the summary page.
- 7. Click **Finish** on the Welcome page to exit.

### Running the Database Configuration Assistant (DBCA)

Run the Database Configuration Assistant (DBCA) from the database Oracle home to register the database with Oracle Internet Directory.

**Tip:** For additional information on the parameters described in the following procedure, click **Help** on any DBCA page.

To register the database with Oracle Internet Directory:

- 1. On the database computer, click **Start** and then select **Programs**, **Oracle** *ORACLE\_HOME*, **Configuration and Migration Tools**, and then **Database Configuration Assistant**.
- 2. In the Welcome window, click Next.
- **3.** In the DBCA Operations window, celect **Configure Database Options** and click **Next**.
- 4. Select the name of your database and click Next.
- **5.** On the Directory Service tab, select **Yes, register the database**. You must also provide the following values:
  - User DN and Password: Enter the credentials of the Oracle Internet Directory super user (for example, cn=orcladmin).
  - Wallet Password and Confirm Password: Enter and confirm a password for the database wallet. The database requires the wallet even if SSL is not used to secure the connection between the database and Oracle Internet Directory. The wallet will be created if required.
- 6. Click Next, then click Next again on the Database Components page.
- 7. Click Finish.

# Preinstallation Requirements for Oracle Content DB Middle Tier

**Note:** Prior to installing Oracle Content DB middle tier, you must first install OracleAS Infrastructure (which contains Oracle Identity Management) and Oracle Database. Refer to Chapter 3, "Installing OracleAS Infrastructure and Oracle Database" for more details.

This chapter discusses necessary requirements that must be met prior to installing Oracle Content DB.

#### See Also:

- Appendix B, "Basic Installation Information" for other preinstallation requirements
- Chapter 2, "Planning for Oracle Content DB Deployment" in the Oracle Content Database Administrator's Guide for information about deployment configurations, sizing guidelines, and tablespaces for Oracle Content DB.

This chapter includes the following topics:

- Oracle Content DB Hardware Requirements
- Oracle Content DB Software Requirements
- Ports Used by Oracle Content DB
- Environment Variables
- Network Topics
- Prerequisite Checks Performed by Oracle Universal Installer
- Running Prerequisite Checks from the Command Line

# **Oracle Content DB Hardware Requirements**

This section lists the hardware configurations required to install Oracle Content DB.

Oracle Universal Installer checks these requirements at the start of the installation process and warns you if any of these requirements are not met. Therefore, to save time, you can manually check only the remaining requirements.

You can also run the system checks performed by Oracle Universal Installer without doing an installation by running the following command, where the setup.exe executable is on the Oracle Content DB DVD.

SYSTEM\_DRIVE:\> setup.exe -executeSysPrereqs

The results are displayed on the screen as well as written to a log file.

**See Also:** "Prerequisite Checks Performed by Oracle Universal Installer" on page 4-5 for more information about the subset of checks performed

Item	Minimum Requirement	Checked by Oracle Universal Installer
Processor speed	450 MHz or faster; 2 GHz or faster recommended	Yes
Network	You can install Oracle Content DB on a computer that is not connected to a network. When you later change the network configuration, refer to the <i>Oracle Content Database Administrator's Guide</i> for information on reconfiguring Oracle Content DB.	No
IP	The IP address of a computer can be static or allocated using DHCP.	No
	<b>Note:</b> It is recommended that you install Oracle Content DB on systems with static IP addresses.	
	If you later change the IP configuration, refer to the <i>Oracle Content Database Administrator's Guide</i> for information on reconfiguring Oracle Content DB.	
Physical memory	Oracle Universal Installer checks the amount of physical memory on your computer and will not allow you to proceed if your computer does not meet the minimum memory requirements.	Yes
	Oracle recommends having at least 1 GB RAM of physical memory at the time of installation.	
Available memory	Oracle Universal Installer checks the amount of available memory on your computer and will not allow you to proceed if your computer does not meet the minimum memory requirements.	Yes
	Oracle recommends having at least 512 MB of available memory at the time of installation.	
Disk space	The disk space requirement for Oracle Content DB is 2 GB.	No
	To determine the amount of free disk space, in Windows Explorer, right click the drive into which you want to install Oracle Content DB and click <b>Properties</b> .	
Space in TEMP directory	150 MB	Yes
Swap space	1535 MB of available swap space	Yes
	If necessary, refer to your operating system documentation for information about how to configure additional swap space.	
Monitor	256-color display	Yes

Table 4–1 Hardware Requirements for Microsoft Windows Systems

### **Running Multiple Instances of Oracle Content DB on One Computer**

If you are running multiple instances of Oracle Content DB on one computer, each corresponding instance of Application Server Control can consume significant

memory. To free up memory, configure a single instance of Application Server Control to manage multiple instances of Oracle Content DB.

### Oracle Content DB Software Requirements

Oracle Content DB depends upon Oracle Identity Management (part of OracleAS Infrastructure) and Oracle Database 10g. The Oracle Database must be registered with Oracle Internet Directory.

**See Also:** Chapter 3, "Installing OracleAS Infrastructure and Oracle Database"

Oracle Universal Installer checks that your computer includes any required operating system patches. If Oracle Universal Installer determines that some required patches are missing, it displays an error.

The Oracle Content DB middle tier runs in Oracle Application Server 10g Release 2 (10.1.2.0.2).

# Ports Used by Oracle Content DB

Oracle Content DB and components of Oracle Application Server (such as Oracle HTTP Server, Oracle Application Server Web Cache, and Oracle Enterprise Manager 10*g*) use ports. Oracle Universal Installer assigns default port numbers or you can specify port numbers, including the port numbers under 1024.

**See Also:** Appendix D, "Default Port Numbers for Oracle Content DB" for a complete list of default port numbers

If a port is in use, Oracle Universal Installer chooses an available port.

To use the default port numbers for Oracle Application Server components, such as Oracle HTTP Server, Oracle Application Server Web Cache, and Oracle Enterprise Manager 10*g*, you do not have to do anything.

#### Notes:

- Oracle Universal Installer assigns the default ports only if the ports are not in use by other applications. If a default port is in use, Oracle Universal Installer tries other ports in the port number range for the component. For example, the default, non-SSL port on this middle tier for Oracle HTTP Server is port 80. If this port is in use by another application, Oracle Universal Installer assigns a port in the 7777 7877 range.
- If you plan to install multiple instances of Oracle products on the same computer, only the first instance that you install on the computer will use the default ports. When you install additional instances, Oracle Universal Installer will detect that the default ports are already in use by the first instance, and it will assign other ports to the additional instances.

# **Environment Variables**

The operating system user who installs Oracle Content DB must set or unset certain environment variables.

This section discusses the following environment variables and whether they must be set or unset:

- ORACLE\_HOME, ORACLE\_SID, and NLS\_LANG
- PATH, CLASSPATH, and Shared Library Path Environment Variables
- TEMP

### ORACLE\_HOME, ORACLE\_SID, and NLS\_LANG

ORACLE\_HOME, ORACLE\_SID, and NLS\_LANG must not be set.

#### PATH, CLASSPATH, and Shared Library Path Environment Variables

Edit your PATH, CLASSPATH, and shared library path environment variables so that they do not reference any Oracle home directories.

#### TEMP

Oracle Universal Installer uses a temporary directory for swap space and checks for the TEMP environment variable to locate the temporary directory. By default, Oracle Universal Installer uses whatever directory you set for the TEMP environment variable. The directory must meet the requirements listed in Table 4–1 on page 4-2.

If you do not set this environment variable, and the default directory does not have enough space, Oracle Universal Installer displays an error message that says the environment variable is not set. You can either set the environment variable to point to a different directory or free up enough space in the default directory. In either case, you must restart the installation.

### **Network Topics**

Typically, the computer on which you want to install Oracle Content DB is connected to a network, has local storage to contain the Oracle Content DB installation, has a display monitor, and has an appropriate disk drive.

This section describes how to install Oracle Content DB on computers that do not meet the typical requirements and includes the following topics:

- Installing Oracle Content DB on Computers with Multiple Network Cards
- Copying the DVD to a Hard Drive and Installing from the Hard Drive
- Installing Oracle Content DB from a Remote DVD-ROM Drive

#### Installing Oracle Content DB on Computers with Multiple Network Cards

If you are installing Oracle Content DB on a computer with multiple network cards, Oracle Universal Installer uses the first names in the /etc/hosts file to determine the host name to use for IP address lookup.

If this is not the name you want to use, you can:

Start up Oracle Universal Installer with the OUI\_HOSTNAME parameter, if you do
not want to edit the /etc/hosts file. Specify the host name that you want to use
in this parameter, as in the following example:

SYSTEM\_DRIVE:\> setup.exe OUI\_HOSTNAME=myserver.domain.com

### Copying the DVD to a Hard Drive and Installing from the Hard Drive

Instead of installing from the Oracle Content DB DVD, you can copy the contents of the DVD to a hard drive and install the product from there. This provides for an easier solution if you plan to install many instances of Oracle Content DB on your network, or if the computers where you want to install Oracle Content DB do not have DVD-ROM drives.

You can also install Oracle Content DB from remote DVD-ROM drives.

**See Also:** "Installing Oracle Content DB from a Remote DVD-ROM Drive" on page 4-5 for more information

#### **Checking the Space Requirement**

Ensure that the hard drive contains enough space to hold the contents of the Oracle Content DB DVD.

### Installing Oracle Content DB from a Remote DVD-ROM Drive

If the computer where you want to install Oracle Content DB does not have a DVD-ROM drive, you can perform the installation from a remote drive. You must share the remote DVD-ROM drive through Network File System.

On the remote computer, which has the DVD-ROM drive:

- 1. Insert the Oracle Content DB DVD in to the DVD-ROM drive.
- **2.** Ensure that the DVD-ROM drive is shared and create a mapped network drive.

On the local computer, access the DVD-ROM and click setup.exe to run Oracle Universal Installer.

# Prerequisite Checks Performed by Oracle Universal Installer

Table 4–2 lists prerequisite checks performed by Oracle Universal Installer.

Item	Description
Operating system version	See "Oracle Content DB Software Requirements" on page 4-3 for supported versions
Operating system service packs	Oracle Universal Installer checks that your computer includes any required operating system patches. If Oracle Universal Installer determines that some required patches are missing, it displays an error.
Monitor	See Table 4–1, "Hardware Requirements for Microsoft Windows Systems" on page 4-2 for monitor requirements
Physical memory	See Table 4–1, "Hardware Requirements for Microsoft Windows Systems" on page 4-2 for physical memory requirements
Available memory	See Table 4–1, "Hardware Requirements for Microsoft Windows Systems" on page 4-2 for available memory requirements

 Table 4–2
 Prerequisite Checks Performed by Oracle Universal Installer

Item	Description
Swap space	See Table 4–1, " Hardware Requirements for Microsoft Windows Systems" on page 4-2 for swap space requirements
TEMP space	See Table 4–1, " Hardware Requirements for Microsoft Windows Systems" on page 4-2 for \tmp directory space requirements
Oracle home directory name	Oracle Universal Installer checks that the Oracle home directory name does not contain any spaces.
Path to the Oracle home directory	Oracle Universal Installer checks that the path to the Oracle home directory is not longer than 127 characters.
Oracle home directory contents	Oracle Universal Installer checks that the Oracle home directory does not contain any files that might interfere with the installation.
Oracle home directory	Always install Oracle Content DB in a new directory. Do not install Oracle Content DB in an existing Oracle home directory. For example, do not install Oracle Content DB into in an existing Oracle Application Server.
Cluster file system	Oracle Universal Installer checks that you are not installing Oracle Content DB in a cluster file system (CFS).
Application Server Control directories are writable	Oracle Universal Installer runs this check only if you are expanding Oracle Content DB or if you are reinstalling Oracle Content DB. Oracle Universal Installer checks that these directories are writable by the operating system user running the installer.
Application Server Control files exist	Oracle Universal Installer runs this check only if you are expanding Oracle Content DB or if you are reinstalling Oracle Content DB. Oracle Universal Installer checks that these files exist.
Database initialization parameters	Oracle Universal Installer checks to make sure that the database you want to use with Oracle Content DB has the required minimum values. See "Setting Required Database Initialization Parameters" on page 3-4 for additional information.
Database character set	Oracle Universal Installer checks to make sure that the database character set is AL32UTF8.
Database version	Oracle Universal Installer checks that the version of the Oracle Database is 10.1.0.5, or later.

Table 4–2 (Cont.) Prerequisite Checks Performed by Oracle Universal Installer

# **Running Prerequisite Checks from the Command Line**

You can run the prerequisite checks without having to install Oracle Content DB by using the following single command:

SYSTEM\_DRIVE:\> setup.exe -prereqChecker PREREQ\_CONFIG\_LOCATION=<DVD\_SHARED\_ DIRECTORY>\stage\prereq -entryPoint oracle.contentdb.top\_Core

# Installing the Oracle Content DB Middle Tier

This chapter discusses the procedure for installing Oracle Content DB middle tiers.

Prior to installing Oracle Content DB, however, ensure that your system meets all of the preinstallation requirements outlined in Chapter 4, "Preinstallation Requirements for Oracle Content DB Middle Tier".

This chapter includes the following topics:

- Installing Oracle Content DB Middle Tier from the Media Pack
- Installing Oracle Content DB Middle Tier from a Hard Drive
- Oracle Content DB Middle-Tier Installation Procedure

# Installing Oracle Content DB Middle Tier from the Media Pack

You can either choose to install Oracle Content DB directly from the DVD contained in the media pack, or copy the content of the DVD and then install Oracle Content DB from your system hard drive. You must complete the procedures required for the installation method you choose before starting Oracle Universal Installer.

**Notes:** If any of the database, infrastructure, or middle tiers are installed, or to be installed, on computers running Microsoft Windows, disable the firewall, if previously enabled on those computers prior to installing the Oracle Content DB middle tier. Installation of the Oracle Content DB middle tier will fail if the firewall is enabled.

Ensure that you enable the firewall upon successful completion of the Oracle Content DB middle tier.

To install Oracle Content DB middle tier from the media pack:

- 1. Share the Oracle Content DB DVDs using the method supported by your operating system.
- 2. Start Oracle Universal Installer. The Welcome screen appears. Continue with "Oracle Content DB Middle-Tier Installation Procedure" on page 5-2.

#### See Also:

- "Understanding Oracle Universal Installer" on page B-2
- "Starting Oracle Universal Installer" on page B-3

# Installing Oracle Content DB Middle Tier from a Hard Drive

You can avoid the need to share DVD-ROMs during installation by copying the contents of each DVD to your system hard drive. You must ensure that enough disk space is available.

To install Oracle Content DB middle tier from a hard drive:

- Copy the content of each DVD to your system hard drive under a directory named Disk1 for the first DVD, and so on (depending upon the number of the DVDs in the sequence of disks that comprises the set).
- 2. Start Oracle Universal Installer. The Welcome screen appears. Continue with "Oracle Content DB Middle-Tier Installation Procedure" on page 5-2.

#### See Also:

- "Understanding Oracle Universal Installer" on page B-2
- "Starting Oracle Universal Installer" on page B-3

# **Oracle Content DB Middle-Tier Installation Procedure**

This section includes the Oracle Content DB middle tier installation procedure, including a step by step description of the Oracle Universal Installer screens and necessary input for each.

The following procedure is for the initial Oracle Content DB middle tier installation. Subsequent Oracle Content DB middle tier installations follow this same procedure with few exceptions, as noted in this procedure.

**Tip:** Use the checklist for the Oracle Content DB middle tier in Chapter 2, "Quick Installation of Oracle Content DB and Supporting Components" to record pertinent information used during Oracle Content DB installation

To install Oracle Content DB middle tier:

- 1. You must have Oracle Database and OracleAS Infrastructure already installed before installing the Oracle Content DB middle tier. In addition, your database must be registered with Oracle Internet Directory. See "Registering Oracle Database with Oracle Internet Directory" on page 3-7 for more information.
- 2. Ensure that all other prerequisites listed in Chapter 4, "Preinstallation Requirements for Oracle Content DB Middle Tier" are met prior to running Oracle Universal Installer.

**Tip:** Use the checklist in Table 2–3 on page 2-3 to record the information you provide during Oracle Content DB middle-tier installation.

3. Start Oracle Universal Installer. The Welcome screen appears.

#### See Also:

- "Understanding Oracle Universal Installer" on page B-2
- "Starting Oracle Universal Installer" on page B-3
- 4. Click Next on the Welcome screen to display the Specify File Locations screen.

**5.** In the **Path** field in the **Source** section of the Specify File Locations screen, enter the full path of the source directory.

For example:

C:\ContentDBInstall\Disk1\stage\products.xml

If you copied the contents of the DVD to your hard drive, click **Browse** and navigate to the location in which you copied the data. If you are installing Oracle Content DB from the DVD, navigate to the DVD-ROM drive.

**6.** In the **Name** field in the **Destination** section, enter a name to identify this Oracle home. The name cannot contain spaces, and has a maximum length of 16 characters.

For example:

cdb\_10\_2

In the **Path** field in the **Destination** section, enter the full path to the directory in which you want to install Oracle Content DB. This is the Oracle home.

For example:

 $C:\cdb_10.2$ 

If the directory does not exist, Oracle Universal Installer creates it using the name you entered in the **Name** field.

When you have entered the Oracle home name and path, click **Next**.

**7.** On the Product-Specific Prerequisite Checks screen, review any prerequisites that have been flagged with warnings, or that need to be checked manually. Be sure to fix any outstanding issues before proceeding.

When you have finished reviewing the prerequisites, click Next.

- **8.** On the Language Selection screen, select all the languages in the Available Languages list box (left side), move them to the Selected Languages list box (right side) using the buttons provided, and then click **Next**.
- **9.** On the Register with Oracle Internet Directory screen, provide the following information:
  - Host: Enter the name of the computer where Oracle Internet Directory is running.

For example:

hostname.yourcompany.com

Port: Enter the port number on which Oracle Internet Directory is listening.

**Note:** You can obtain the port number using either the OracleAS Infrastructure Application Server Control or from the %ORACLE\_HOME%\install\portlist.ini file on the computer where the OracleAS Infrastructure resides, if Application Server Control is not running.

If the port numbers have been modified post-installation, the new port numbers *will not* be reflected in the portlist.ini file.

For example:

389

If you want to use SSL to connect to Oracle Internet Directory, specify the Oracle Internet Directory SSL port.

For example:

636

Use SSL to connect to Oracle Internet Directory: Select this option if you
want Oracle Content DB components to use only SSL to connect to Oracle
Internet Directory. To ensure secure communications, Oracle recommends that
you enable this option and use SSL to connect to Oracle Internet Directory.

When you have provided this information, click Next.

- **10.** On the Specify OID Login screen, provide the following information:
  - Username: Enter the user name used to log in to Oracle Internet Directory. If you are an Oracle Internet Directory superuser, the username is cn=orcladmin. Alternatively, you can use another Oracle Internet Directory user, as long as the user has sufficient privileges such as the following:
    - IAS & User Management Application Admins
    - iAS Admins
  - Password field, enter the current password for the administrator user.
  - If the **Identity Management Realm** field appears, specify the appropriate realm to which this user belongs. This field only appears if the Oracle Internet Directory you specified contains multiple realms.

For example:

us

When you have provided this information, click Next.

- 11. On the Select Database Information screen, provide the following information:
  - Database Connection String: Select the connect string to the Oracle Database that you want to use for this Oracle Content DB middle tier.

For example:

orcl.mycompany.com

If this is the first middle tier you are installing, the Oracle Content DB schema will be created in this database. If this is a subsequent middle tier, this middle tier will be associated with the existing schema.

**Note:** This list only shows databases that have been registered with Oracle Internet Directory. If the database you want to use does not appear in this list, exit this installation session, and register the database with Oracle Internet Directory first. See "Registering Oracle Database with Oracle Internet Directory" on page 3-7 for more information.

Password: Enter the current password for the database user SYS.

When you have provided this information, click Next.

- **12.** On the Content Schema Password screen, choose or enter a schema password for Oracle Content DB:
  - If this is the first Oracle Content DB middle tier you are installing, enter the password you want to use for the Oracle Content DB schema, then confirm it. The Oracle Content DB schema name is **Content**. This schema will be created during this installation.
  - If this is a subsequent Oracle Content DB middle tier, enter the schema password for the existing Oracle Content DB schema.

When you have entered the schema password, click **Next**.

**13.** On the Specify SMTP Host and Port Values screen, you can optionally provide e-mail server information. The SMTP server that you specify is used to send quota e-mail notifications to Oracle Content DB Quota Administrators. This can be any valid SMTP server. If you choose to leave these values blank, you can specify this information after installation using the Application Server Control.

In the **Host** field, enter the full host name of the SMTP server, in the form hostname.domain. Alternatively, you can enter the IP address of the SMTP server.

For example:

email.company.com

In the **Port** field, enter the port number on which the SMTP server listens.

For example:

25

When you have provided this information, click Next.

**Note:** In subsequent Oracle Content DB middle-tier installations, you will not be prompted for SMTP information.

- **14.** On the Specify Instance Name and ias\_admin Password screen, enter the following:
  - For Instance Name, enter a name for this Oracle Content DB middle-tier instance. You cannot change this name after installation.

For example:

cdb\_instance

• For ias\_admin Password and Confirm Password, set the password for the ias\_admin user. This is the administrative user for the instance. The password must be between 5 and 30 alphanumeric characters and must contain at least one number.

When you have entered this information, click **Next**.

15. On the Summary screen, verify your selections and click Install.

The Install Progress screen displays the progress of the installation.

**Note:** If the installation fails after this point, you will need to deinstall the Oracle Content DB middle tier, then reinstall it. See Appendix G, "Deinstalling the Oracle Content DB Middle Tier" for complete instructions on how to deinstall the Oracle Content DB middle tier.

16. Next, a list of configuration assistants will run, including the Oracle Content DB Configuration Assistant. If any configuration assistant fails, the error will appear in the Oracle Universal Installer console window. For additional details on the error, refer to the corresponding log file for the assistant in error. The Oracle Content DB Configuration Assistant log file (ContentConfig.log), as well as the cdbinstallactions.log file, can be found in the following location:

%ORACLE\_HOME%\content\log

**17.** When the End of Installation screen displays, click **Exit** to quit Oracle Universal Installer. Oracle Content DB starts and the Web client opens

**Caution:** Ensure that you enable the firewall on computers running Microsoft Windows upon successful installation of Oracle Content DB.

#### Note:

- By default, Oracle Records DB is disabled. Refer to Chapter 5, "Choosing Oracle Content DB Options" in *Oracle Content Database Administrator's Guide* for information about how to enable Oracle Records DB.
- By default, FTP and FTPS are disabled. Refer to Chapter 4 "Oracle Content Database Protocol Support" in *Oracle Content Database Administrator's Guide* for information about how to enable FTP and FTPS.
- The information displayed at the end of the installation is also available in the <code>%ORACLE\_HOME%\install\setupinfo.txt</code> file. This file contains summarized information about Oracle Content DB and links to the URLs.

**Tip:** Proceed to Chapter 7, "Oracle Content DB Middle-Tier Postinstallation Tasks" to complete installation of Oracle Content DB

# Silent Installation of the Oracle Content DB Middle Tier

This chapter discusses silent and noninteractive installation of Oracle Content DB. This chapter includes the following topics:

- Introduction to Oracle Content DB Noninteractive Installations
- Silent or Noninteractive Installation Requirements
- Response Files
- Postinstallation Tasks
- Security Tips for Silent and Noninteractive Installations
- Error Handling
- Silent Deinstallation of Oracle Content DB

# Introduction to Oracle Content DB Noninteractive Installations

Oracle Content DB features the following two noninteractive methods of installation:

- Silent Installation of Oracle Content DB Middle Tier
- Noninteractive Installation of Oracle Content DB Middle Tier

### Silent Installation of Oracle Content DB Middle Tier

Silent installation eliminates the need to monitor the Oracle Content DB installation because there is no graphical output and no input by the user. It is accomplished by supplying Oracle Universal Installer with a response file and specifying the -silent flag on the command line.

You can use silent installation of Oracle Content DB when you want similar installations on more than one computer. Additionally, you can use silent installation when performing the Oracle Content DB installation from a remote location using the command line.

The response file used in a silent installation is a text file. Oracle Universal Installer uses variables and values specified in the response file to provide answers to all of its user prompts. Therefore, you must include responses for all of the prompts in the response file.

### Noninteractive Installation of Oracle Content DB Middle Tier

Noninteractive installations of Oracle Content DB display a graphical output. If you have not provided responses to all of the user prompts, you may need to enter information during the installation.

Noninteractive installation of Oracle Content DB is also accomplished by supplying the Oracle Universal Installer with a response file, but without specifying the -silent flag on the command line. Oracle Universal Installer uses the variables and values contained in the response file to provide answers to some or all of its user prompts.

Use noninteractive installation of Oracle Content DB when there are specific screens you want to observe during installation.

**See Also:** "Specifying a Response File and Starting the Installation" on page 6-3 for more information

# Silent or Noninteractive Installation Requirements

The installation requirements for these types of installations are the same as those described in Chapter 4, "Preinstallation Requirements for Oracle Content DB Middle Tier".

# **Response Files**

Before performing a silent or noninteractive installation, you must provide information specific to your installation in a **response file**. Oracle Universal Installer fails if you attempt an installation using a response file that is not configured correctly. Response files are text files that you can create or edit with a text editor.

The Oracle Content DB Media Pack provides a template for the Oracle Universal Installer response file.

Response files are located in the \response directory on Disk 1 of the Oracle Content DB Media Pack. You must edit the response file according to your requirements for silent or noninteractive installation.

To use a response file, first copy it from the DVD to your system, as follows:

- 1. Go to the \response directory on the first DVD of the Oracle Content DB Media Pack.
- 2. Copy the contentdb.rsp file to your system hard drive.

This section includes the following topics:

- Editing a Response File
- Creating a Response File Using the Record Mode in the Installer
- Specifying a Response File and Starting the Installation

### Editing a Response File

Use any text editor to edit the response file to include information specific to your system. The response file text identifies information that you must provide.

You must specify values for variables in your response file. Each variable listed in the response file is associated with a comment, which identifies the variable type. For example:

```
string = "Sample Value"
Boolean = True or False
Number = 1000
StringList = {"StringValue 1", "String Value 2"}
```

The values that are given as <Value Required> must be specified for silent installation.

**Note:** Ensure that you use forward slashes (/) when you enter directory paths.

Delete the given sample values in the response file and enter your specific values before starting the Oracle Content DB installation.

#### Creating a Response File Using the Record Mode in the Installer

You can run Oracle Universal Installer in record mode to save your inputs to a file that you can use later as a response file. This feature is useful if you need to perform the same installation on different computers.

To run Oracle Universal Installer in record mode:

1. Start Oracle Universal Installer with the -record and -destinationFile parameters, as follows:

SYSTEM\_DRIVE: \> setup.exe -record -destinationFile new\_response\_file

Replace *new\_response\_file* with the full path to the response file that you want Oracle Universal Installer to create, such as C:\temp\contendb.rsp.

2. Enter the values for the Oracle Universal Installer screens. Oracle Universal Installer writes these values to the file specified in the -destinationFile parameter.

When you get to the Summary screen, Oracle Universal Installer automatically writes all the values that you supplied to the specified file. At this point, you can complete the installation on this computer, or you can exit without performing the installation.

#### Specifying a Response File and Starting the Installation

Before you specify a response file, ensure that all the values in the response file are correct.

To set up Oracle Universal Installer to use the response file at the time of installation, specify the location of the response file as a parameter when starting Oracle Universal Installer, as follows:

SYSTEM\_DRIVE: > setup.exe -responseFile absolute\_path\_to\_file\_name

To perform a noninteractive installation:

SYSTEM\_DRIVE:\> setup.exe -responseFile absolute\_path\_and\_file\_name

To perform a silent installation, use the -silent parameter:

SYSTEM\_DRIVE:\> setup.exe -silent -responseFile absolute\_path\_and\_file\_name

The success or failure of the noninteractive installation is logged in the installActions.log file. The success or failure of the silent installation is logged in the silentInstall.log file. Both log files are created in subdirectory logs in the

logs directory, under the oraInventory directory, during installation and typically contain timestamps in their file names.

For example:

installActions2006-07-28\_11-35-45AM.log

**Caution:** During installation, response files may be copied to subdirectories under %ORACLE\_HOME% to install some Oracle Content DB components. When the installation completes successfully, these copies are removed. If the installation fails, however, these copies may not be removed. In both cases, if you have provided passwords or other sensitive information in your response files, Oracle recommends that you ensure their security and, if needed, delete any copies of the response files that remain in your file system.

# **Postinstallation Tasks**

The success or failure of the noninteractive and silent installations is logged in the installActions.log file. Additionally, the silent installation creates the silentInstall.log file. The log files are typically created in the C:\Program Files\Oracle\Inventory\logs directory.

The silentInstall.log file contains the following line if the installation was successful:

The installation of Oracle Content DB was successful.

The installActions.log file contains specific information for each Oracle Content DB installation.

## Security Tips for Silent and Noninteractive Installations

One of the pieces of information in the response file is the installation password. The password information is *not* encrypted.

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 or noninteractive installation.
- If possible, remove the response files from the system after the silent or noninteractive installation is complete, or clear the password entries.

# Error Handling

If the silent or noninteractive installation fails, you must deinstall the Oracle Content DB middle tier, then reinstall it. See Appendix G, "Deinstalling the Oracle Content DB Middle Tier" for complete instructions on how to deinstall the Oracle Content DB middle tier.

#### **Response File Error Handling**

Oracle Universal Installer or most of the configuration assistants validate the response file at run time. If the validation fails, the noninteractive installation or configuration process ends. Oracle Universal Installer treats values for parameters that are of the wrong context, format, or type as if no value was specified in the file. Variables that are outside any section are also ignored.

# Silent Deinstallation of Oracle Content DB

If your silent or noninteractive installation fails, you must completely deinstall any files remaining from your Oracle Content DB installation attempt.

**See Also:** Appendix G, "Deinstalling the Oracle Content DB Middle Tier" for deinstallation instructions

You can perform a silent deinstallation of Oracle Content DB by supplying a silent deinstallation parameter to the response file you used for installation. Add the following parameter to your installation response file:

REMOVE\_HOMES={"ORACLE\_HOME\_to\_be\_removed"}

To perform a silent deinstallation, use the -silent parameter when you enter the following command:

SYSTEM\_DRIVE: > setup.exe -silent -responseFile absolute\_path\_and\_file\_name

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# Oracle Content DB Middle-Tier Postinstallation Tasks

This chapter discusses necessary tasks to perform after installation of Oracle Content DB is complete.

In addition to the tasks described in this chapter, Oracle recommends that upon successful installation of Oracle Content DB, you read *Oracle Content Database Administrator's Guide*.

This chapter includes the following topics:

- Verifying Oracle Content DB Configuration
- Getting Started with Oracle Content DB
- Enabling SSL
- Backup and Recovery

# Verifying Oracle Content DB Configuration

To ensure that the Oracle Content DB node and HTTP node are running, run the following opmnctl command:

%ORACLE\_HOME%\opmn\bin\opmnctl status

In opmnctl commands, the Oracle Content DB node typically has the ias-component=Content and process-type=Node parameters. The Oracle Content DB HTTP node typically has the ias-component=Content and process-type=OC4J\_Content parameters.

Table 7–1 lists access URLs used with Oracle Content DB basic functionality.

 Table 7–1
 Expected Oracle Content DB Basic Functionality

Access Method	Access URL
Oracle Content DB Web Client	http://middle_tier_host:port/content
Oracle Records DB Web Client	http://middle_tier_host:port/rm
WebDAV	http://middle_tier_host:port/content/dav

**Note:** The FTP and FTPS protocols, as well as the Oracle Records DB application, are not enabled by default after you install and configure Oracle Records DB.

See Chapter 5, "Choosing Oracle Content DB Options" in *Oracle Content Database Administrator's Guide* for information about how to enable Oracle Records DB, FTP, and FTPS.

# **Getting Started with Oracle Content DB**

This section discusses how to get started using Oracle Content DB after completing the installation.

This section includes the following topics:

- Choosing Deployment Options for Oracle Content DB
- Signing In to Oracle Content DB for the First Time
- Creating Additional Sites
- Designating an Administrator E-mail Address for Site Quota Notifications

#### Choosing Deployment Options for Oracle Content DB

After you install and configure Oracle Content DB, you can choose various deployment options, depending on your requirements. For example, you can enable Oracle Records DB, integrate Oracle Content DB with an antivirus solution, deploy Oracle Drive, or enable the FTP or FTPS protocols.

#### See Also:

- "Using Oracle Drive with Oracle Content DB" in Chapter 4 of Oracle Content Database Administrator's Guide for more information about deploying Oracle Drive
- Chapter 5, "Choosing Oracle Content DB Options" of Oracle Content Database Administrator's Guide for information about choosing deployment options

### Signing In to Oracle Content DB for the First Time

When you first sign on to Oracle Content DB, use the orcladmin user for the default realm. This user has all of the Oracle Content DB access roles. Once you have signed on, you can delegate access roles to additional users, as well as set defaults for the Site.

**Note:** This user is the orcladmin user within the default realm, or in other words, the user with the DN cn=orcladmin, cn=users, dc=xxxxx, dc=yyyyy. Do not confuse this user with the super user cn=orcladmin. They are two separate

users.

**See Also:** Oracle Content Database Application Administrator's Guide for more information about delegating access roles and setting Site defaults

### **Creating Additional Sites**

In Oracle Content DB, a Site is a discrete organizational entity whose users can collaborate on files and folders. Users in one Site do not have access to the content of users in another Site. Sites are based on identity management realms.

A default Site, based on the default realm in Oracle Internet Directory, is created during installation. You can create additional Sites using Application Server Control.

**Note:** You must create additional identity realms in Oracle Internet Directory and enable multirealm support in OracleAS Single Sign-On.

#### See Also:

- Chapter 11, "Managing Oracle Content DB Sites" in Oracle Content Database Administrator's Guide for more information about creating Sites
- Chapter 19, "Deployment of Oracle Identity Management Realms" in Oracle Internet Directory Administrator's Guide for information about creating additional identity realms

### Designating an Administrator E-mail Address for Site Quota Notifications

Each Site has an allocated quota that specifies the amount of content (in MB, GB, or TB) that can be stored in the Site. When the quota consumed by any given Site reaches 95% of the allocated quota, an e-mail notification is sent to any users of that Site with the Quota Administrator role, as well as to the administrator e-mail address specified in the IFS.DOMAIN.EMAIL.AdministratorAddress property.

This property is empty by default. To designate an administrator e-mail address at which to receive the quota notifications, use the Application Server Control.

To designate an administrator e-mail address for Site quota notifications:

- **1.** Access Application Server Control and navigate to the Application Server Home page.
- 2. Click the name of the Oracle Content DB domain (typically **Content**) to access the Content DB Home page. See *Oracle Content Database Administrator's Guide* for more information about the Oracle Content DB domain.
- **3.** In the **Administration** section, click **Domain Properties**.
- On the Domain Properties page, click IFS.DOMAIN.EMAIL.AdministratorAddress. You may need to move to the next page to find this property, or you can use the Search field.
- **5.** Provide the e-mail address you want to use for receiving error reports in the **Value** field and click **OK**.
- 6. Return to the Content DB Home page and click **Restart Domain**.

### Enabling SSL

Depending on your security requirements, you can enable Secure Sockets Layer (SSL) for the Oracle Content DB middle tier. You can also enable SSL for the connection between Oracle Content DB and Oracle Internet Directory.

**See Also:** \*Chapter 3, "Oracle Content DB Security" in *Oracle Content Database Administrator's Guide* for information about configuring SSL for Oracle Content DB, as well as configuring SSL for Oracle Content DB communication with Oracle Internet Directory

# **Backup and Recovery**

Oracle recommends performing a complete Oracle Content DB environment backup after installing Oracle Content DB. This enables you to restore a working environment in case an error occurs from which you cannot recover.

**See Also:** Oracle Content Database Administrator's Guide for information on how to perform a complete Oracle Content DB environment backup

You should also perform a complete Oracle Content DB environment backup after each successful patch set upgrade and after each successful configuration change.

A

# Troubleshooting Oracle Content DB Installation

This appendix discusses solutions to common installation problems.

This appendix includes the following topics:

- Verifying Oracle Content DB Requirements
- Troubleshooting Oracle Content DB Installation Errors
- Oracle Content DB Installation Problems and Solutions
- Troubleshooting Configuration Assistants
- Troubleshooting Oracle Real Application Clusters

# Verifying Oracle Content DB Requirements

Review the following information before performing any of the troubleshooting steps in this appendix:

- Ensure that the computer meets the hardware and software requirements specified in Chapter 4, "Preinstallation Requirements for Oracle Content DB Middle Tier".
- Ensure that you have completed all of the preinstallation tasks specified in Chapter 4, "Preinstallation Requirements for Oracle Content DB Middle Tier".
- When installing Oracle Content DB, check that the Oracle Application Server Infrastructure with which you want to associate Oracle Content DB is running during installation.

# **Troubleshooting Oracle Content DB Installation Errors**

If you encounter an error while running Oracle Universal Installer during the installation of the Oracle Content DB middle tier:

- If you entered incorrect information in one of the Oracle Universal Installer screens, return to that screen by clicking **Back** until the screen displays.
- If you encounter an error while Oracle Universal Installer is copying or linking files, perform the following tasks:
  - 1. Note the error and review the following installation logs for causes:
    - oraInventory\_location\logs\installActionstimestamp.log
    - oraInventory\_location\logs\oraInstalltimestamp.err
    - oraInventory\_location\logs\oraInstalltimestamp.out

- **2.** Remove the failed installation by following the steps in Appendix G, "Deinstalling the Oracle Content DB Middle Tier".
- **3.** Correct the issue that caused the error and restart the installation.

**See Also:** "Oracle Content DB Installation Problems and Solutions" on page A-2

# **Oracle Content DB Installation Problems and Solutions**

This section includes the following topics:

- Location of Installation Log Files
- Linking Fails and ORA Errors Occur
- Prerequisite Checks Fail at the Start of Installation
- Message About Installing in a Non-Empty Directory
- Unable to Clean Up a Failed Installation
- Forgot the Password for the cn=orcladmin Account
- OPMN Configuration Assistant—Start HTTP Server Failures
- WARNING: DCM Service May Not be Available at This Time

### Location of Installation Log Files

Oracle Universal Installer writes the following log:

- oraInventory\_location\logs\installActionstimestamp.log
- oraInventory\_location\logs\oraInstalltimestamp.err

In addition, the Oracle Content DB configuration assistant log (ContentConfig.log) can be found in the following location:

%ORACLE\_HOME%\content\log

### Linking Fails and ORA Errors Occur

#### Problem

Linking fails, and ORA errors are displayed during installation.

#### Solution

Exit Oracle Universal Installer and check the log files for any error message.

Remove the failed installation. Before attempting to reinstall Oracle Content DB, make sure that your computer meets all the requirements listed in Chapter 4, "Preinstallation Requirements for Oracle Content DB Middle Tier".

Check especially the following requirements:

Ensure that you are installing Oracle Content DB in a valid directory. For example, you cannot install Oracle Content DB in a database Oracle home.

**See Also:** "Prerequisite Checks Performed by Oracle Universal Installer" on page 4-5 for a list of valid directories

### Prerequisite Checks Fail at the Start of Installation

#### Problem

The prerequisite checks that are run at the start of installation, fail.

#### Solution

If the prerequisite checks display warnings, address the problems displayed in the warnings.

### Message About Installing in a Non-Empty Directory

#### Problem

Oracle Universal Installer displays a message that you are installing into a non-empty directory.

#### Solution

If you start and later terminate an installation of Oracle Content DB that proceeds beyond the Specify File Locations screen, Oracle Universal Installer creates the Oracle home directory that you specified. If you later try to install Oracle Content DB again in the same directory, the directory contains files created by Oracle Universal Installer and it gives a warning that the directory is not empty.

You must perform the following tasks:

- 1. In the warning dialog, click No to return to the Specify File Locations screen.
- **2.** In the Specify File Locations screen, click **Installed Products** to display the Inventory screen.

If your Oracle home is listed in the Inventory screen, you have to deinstall the Oracle home.

**See Also:** Appendix G, "Deinstalling the Oracle Content DB Middle Tier" for information about deinstalling the Oracle home

If your Oracle home is not listed in the Inventory screen, you can delete the files from the Oracle home and continue with the installation.

### Unable to Clean Up a Failed Installation

If your installation was not successful, you must first deinstall it before you can reinstall Oracle Content DB.

**See Also:** Appendix G, "Deinstalling the Oracle Content DB Middle Tier" for more information

#### Forgot the Password for the cn=orcladmin Account

#### Problem

You forgot or do not know the password for the cn=orcladmin account.

#### Solution

You can reset the password in the database. The DSE root attribute name is orclsupassword.

**Note:** After a certain number of failed attempts to connect, the cn=orcladmin account becomes locked. In this case, you must unlock the account. The account can also become locked if the password has expired.

**See Also:** Oracle Content Database Administrator's Guide for information about unlocking and setting the default password expiration time for the cn=orcladmin account

### **OPMN Configuration Assistant—Start HTTP Server Failures**

#### Problem

The OPMN Configuration Assistant - Start HTTP Server fails when you rerun it.

#### Solution

The problem is that Oracle HTTP Server is already running. Before rerunning the configuration assistant, stop Oracle HTTP Server, as follows:

SYSTEM\_DRIVE: > %ORACLE\_HOME% opmn/bin/opmnctl stopproc ias-component=HTTP\_Server

Rerun the OPMN Configuration Assistant - Start HTTP Server.

### WARNING: DCM Service May Not be Available at This Time

#### Problem

When installing the first node of a cluster, the Java Security Configuration Assistant may return the following message:

WARNING: DCM service may not be available at this time to synchronize %ORACLE\_ HOME%\j2ee\home\config\jazn-data.xml file.

This is due to a failure in updating the DCM repository and could happen if your load balancer virtual server is not configured to return immediately to the calling client when the backend services to which it forwards traffic are unavailable.

#### Solution

To correct the problem:

**1.** Run the following command after installation completes:

SYSTEM\_DRIVE:\> %ORACLE\_HOME%\dcm\bin\dcmctl updateConfig -ct jazn

2. Verify that the dcmctl updateConfig command did not return any errors.

# **Troubleshooting Configuration Assistants**

This section includes the following topics:

- Configuration Assistant Result Codes
- Irrecoverable Errors

### **Configuration Assistant Result Codes**

Configuration assistant failures are noted at the bottom of the installation screen. The configuration assistant interface displays additional information, if applicable. The execution status of the configuration assistant is identified by the result codes listed in Table A–1.

Table A–1 Configuration Assistant Result Codes

Status	Result Code	
Configuration Assistant Succeeded	0	
Configuration Assistant Failed	1	
Configuration Assistant Cancelled	-1	

Result codes are written to the *oraInventory\_ location*\logs\installActionstimestamp.log file.

### **Irrecoverable Errors**

Some configuration assistant failures are irrecoverable (fatal). You cannot recover from an irrecoverable error by correcting the problem and continuing. You must remove the current installation and reinstall Oracle Content DB. The following tasks describe the recovery procedure:

- **1.** Deinstall the failed installation as described in Appendix *G*, "Deinstalling the Oracle Content DB Middle Tier".
- 2. Correct the cause of the irrecoverable error.
- 3. Reinstall Oracle Content DB.
- **4.** If the error reoccurs, then you must remove all Oracle installations from your computer.

# **Troubleshooting Oracle Real Application Clusters**

To ensure that the installation succeeds on the remote nodes you choose, select a path for Oracle home that is the same on all chosen nodes and is writable. Otherwise, installation on the remote nodes fails. No error message indicates this failure.

## **Need More Help?**

For more help troubleshooting Oracle Content DB installation, go to Oracle*MetaLink* at:

#### http://metalink.oracle.com

If you have a support contract with Oracle, the steps to download any Oracle Content DB patches from Oracle*MetaLink* are:

- **1.** Log into Oracle*MetaLink*.
- 2. Click Patches & Updates.
- 3. Ensure that Patch Number is selected in the Simple Search list.

Enter the required patch number in the adjacent box.

If you do not know the patch number, select **Product or Family** in the **Simple Search** list.

- 4. Select the appropriate operating system from the Platform or Language list.
- 5. Click Go.
- **6.** Under **Results**, click **Download** to download the patch or click **View Readme** to go through the information in the readme before downloading the patch.

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

# **Basic Installation Information**

This appendix discusses necessary installation information associated with installing Oracle Content DB, and includes the following topics:

- Installation Basics
- Installation of the Oracle Content DB Middle Tier
- Understanding Oracle Universal Installer
- Installing Support for Additional Languages
- Oracle Content DB Instances and Instance Names
- The ias\_admin User and Restrictions On Its Password
- Where Does Oracle Universal Installer Write Files?
- Connecting to Oracle Internet Directory Through SSL
- Modifying Other Oracle Content DB Instances During Installation
- Understanding the Order of Installation

# **Installation Basics**

This section discusses some of the basic principles regarding installing Oracle Content DB, including:

- Contents of the Oracle Content DB Media Pack
- Oracle Home Directory

### **Contents of the Oracle Content DB Media Pack**

The Oracle Content DB Media pack includes the following disks:

- Oracle Content DB software and Oracle Content DB documentation
- Oracle Drive client for Windows
- OracleAS Infrastructure components, including Oracle Internet Directory and OracleAS Single Sign-On

### **Oracle Home Directory**

The directory in which you install Oracle Content DB is referred to as the Oracle home in this document. During the installation, you must specify the full path and a name for the Oracle home.

For example, you can install Oracle Content DB in the C:\oracle\OraHome\_ ContentDB directory, and you can name it ContentDBHome.

**Note:** Spaces are not allowed in the Oracle home directory path. For example, you cannot install in the

C:\oracle\Content DB directory because of the space character in Content DB.

Oracle Universal Installer does not check for this until several screens after you have entered the path.

# Installation of the Oracle Content DB Middle Tier

Installation of the Oracle Content DB middle tier is done through Oracle Universal Installer. Before the Oracle Content DB middle tier can be installed, however, both OracleAS Infrastructure and Oracle Database must both be installed, and the database must be registered with Oracle Internet Directory.

# Understanding Oracle Universal Installer

Oracle Content DB uses Oracle Universal Installer to guide you through each step of the installation process. Oracle Universal Installer provides the following features:

- Detects preset environment variables and configuration settings
- Sets environment variables and configuration during installation
- Deinstalls Oracle products

This section describes the following Oracle Universal Installer features:

- Inventory Directory and Installation Session Log Files
- Subsequent Installations with Oracle Universal Installer
- Starting Oracle Universal Installer

### Inventory Directory and Installation Session Log Files

The log file of the most recent installation is located in the C:\Program Files\Oracle\Inventory\logs directory in the following format:

installActionstoday's\_date\_time.log

In the preceding format, *today*'s\_date\_time is the date and time of installation.

Do not delete or manually alter the Inventory directory or its contents. Doing so can prevent Oracle Universal Installer from locating products that you have installed on your system.

**Note:** The make.log file in the \$ORACLE\_HOME/install directory contains a log of every make file action executed during the installation process. The make.log file also records any link errors during installation. Do not delete or alter the make.log file.

### Subsequent Installations with Oracle Universal Installer

If you plan to install a subsequent Oracle Content DB or Oracle Application Server instance on the same host, Oracle recommends the following steps:

- 1. Review Chapter 4, "Preinstallation Requirements for Oracle Content DB Middle Tier".
- **2.** Stop Oracle Enterprise Manager 10g.
- **3.** Ensure that all other previously installed Oracle Content DB instances are running when you begin installation.
- 4. Specify a different Oracle home than the first Oracle Content DB installation.
- **5.** Use the same oraInventory directory for subsequent Oracle Content DB installations.

### Starting Oracle Universal Installer

To start Oracle Universal Installer:

- 1. Insert the first DVD into the DVD-ROM drive.
- 2. Double click setup.exe located in the Install folder.

#### Starting Oracle Universal Installer from the Command Line

This section includes information for running Oracle Universal Installer from the command line.

To start Oracle Universal Installer from the command line:

SYSTEM\_DRIVE:\> setup.exe [options] [CommandLineVariable=Value]

In the preceding syntax, [options] can have the following values:

- -help: Displays help topics for using the subsequent command
- -silent: Used for silent mode operations. The input parameters can include a
  response file name or list of command-line variable value pairs
- -responseFile path: Used for specifying the response file name and directory path to the response file
- -formCluster: Used for installing the Oracle Clusterware to form the cluster
- -remoteshell path: Used only for installing clusters, this parameter specifies the path to the remote shell program on the local cluster node
- -remotecp path: Used only for installing clusters, this parameter specifies the path to the remote copy program on the local cluster node
- -record -destinationFile *path*: Used for the record mode operation, this
  parameter specifies the destination file path, where information is recorded
- -deinstall: Used for deinstallation operations
- -debug: Used for retrieving debug information from Oracle Universal Installer
- -ignoreSysPrereqs: Used for ignoring the results of system prerequisite checks
- -executeSysPrereqs: Used for executing system prerequisite checks and exiting (a subset of the checks described in "Prerequisite Checks Performed by Oracle Universal Installer" on page 4-5 is performed by this option)

- -paramFile: Used for specifying the location of oraparam.ini file used by Oracle Universal Installer
- -clone: Used for creating an %ORACLE\_HOME% copy that matches its current environment
- force: Used for allowing silent mode installation in to a nonempty directory
- -noconsole: Used for suppressing the display of messages to console
- -addNode: Used for adding nodes to the installation
- -removeHome: Used for removing %ORACLE\_HOME% directories from the Oracle Universal Installer inventory

# Installing Support for Additional Languages

By default, Oracle Universal Installer installs Oracle Content DB with text in English and in the operating system language. However, you should install support for all languages during installation by selecting all of the languages provided in the **Available Languages** list and adding them to the **Selected Languages** list on the Language Selection screen.

**Note:** You cannot install support for additional languages after Oracle Content DB is installed. You must install support for additional languages during the installation.

If you install and run Oracle Content DB in an environment that uses a language that you did not install, the user interface may display text in that language or in English. It may also display square boxes, caused by missing fonts, instead of text.

To install Oracle Content DB in a language other than English, you must set the LANG variable to the appropriate language.

# **Oracle Content DB Instances and Instance Names**

This section includes the following topics:

- Restrictions on Oracle Content DB Instance Names
- How Oracle Content DB Uses Instance Names

When you install Oracle Content DB, an **instance** of Oracle Content DB is created and Oracle Universal Installer prompts you to provide a name for that instance. For example, you can name the instance cdbinstance. This name can be different from the Oracle home name. You cannot change the instance name after installation.

Oracle Content DB appends the host name and domain name to the given instance name to form a complete instance name. For example, if you are installing an instance on a computer named c1, and you name the instance cdb1, the full name of the instance is cdb1.c1.foo.com, assuming the domain name is foo.com.

Valid characters in instance names consist only of the following:

- Alphanumeric characters (A to Z; a to z; 0 to 9)
- The underscore character (\_)
- The dollar sign (\$)

There is no restriction for the length of instance names.

## **Restrictions on Oracle Content DB Instance Names**

Do not use the host name of the computer when naming Oracle Content DB instances.

If you are planning to install Oracle Content DB in a high availability cluster, the instance name cannot contain any of the following:

- Host name or IP address of any computer in the cluster
- Oracle home of any Oracle Content DB installation in the cluster

## How Oracle Content DB Uses Instance Names

Instance names are important because Oracle Content DB uses them to uniquely identify instances. So, if you install multiple Oracle Content DB instances on the same computer, you must give each instance a different name.

When you administer Oracle Content DB using Oracle Enterprise Manager 10*g*, the instance name displays on the screens. Click an instance name to see details about the instance, such as whether the instance is running or stopped, and the log files for the instance.

There is also a command-line tool called opmnctl used to administer Oracle Content DB instances, some commands of which require an instance name as a parameter.

**See Also:** Oracle Application Server Administrator's Guide for more details about opmnctl

# The ias\_admin User and Restrictions On Its Password

During installation of Oracle Content DB, Oracle Universal Installer prompts you to specify the password for the ias\_admin user. The ias\_admin user is the administrative user for Oracle Content DB instances. To manage Oracle Content DB instances using Oracle Enterprise Manager 10g, you log in as ias\_admin.

You can install multiple Oracle Content DB instances on a given computer with a unique name for each instance, but the name of the administrative user is ias\_admin for all instances. The password for the ias\_admin user can be different for each instance.

The password for the ias\_admin user must conform to the password policy of Oracle Internet Directory:

- The minimum length must be five alphanumeric characters
- At least one of the characters must be a number

**Note:** If you are using an existing Oracle Internet Directory, your Oracle Internet Directory administrator might have defined a different password policy. The password you enter for the ias\_admin user must conform to the password policy of the existing Oracle Internet Directory.

- In addition to the password policy defined in Oracle Internet Directory, the password for the ias\_admin user:
  - Must be shorter than 30 characters
  - Can contain only alphanumeric characters from the Database character set, the underscore (\_), the dollar sign (\$), and the number sign (#)

- Must begin with an alphabetic character
- Cannot be any of the Oracle reserved words

**Note:** *Oracle Database SQL Reference* lists the reserved words.

Avoid using words that sound like they might be Oracle reserved words

Remember this password because you must enter it in the following cases:

- When you log on to Oracle Enterprise Manager 10g to manage Oracle Content DB, you log on as the ias\_admin user
- If you install more instances of Oracle Content DB, you must enter the existing
  password during the installation

If you forget the ias\_admin password, it can be reset.

**See Also:** Oracle Application Server Administrator's Guide for more information about resetting the ias\_admin password

# Where Does Oracle Universal Installer Write Files?

Oracle Universal Installer writes files to the directories listed in Table B–1.

Directory	Description
Oracle home	This directory contains Oracle Content DB files. You specify this directory during installation.
Inventory	When you install the first Oracle product on a computer, you specify this directory. Oracle Universal Installer uses this directory to keep track of Oracle products that are installed on the computer. In subsequent installations, Oracle Universal Installer uses the same inventory directory.
C:\Temp	Oracle Universal Installer writes files needed during installation to a temporary directory. By default, the temporary directory is C:\Temp. To specify a different directory, set the TEMP environment variable.
	<b>See Also:</b> "TEMP" on page 4-4 for more information about setting a different temporary directory.

Table B–1 Directories to Which Oracle Universal Installer Writes Files

# Connecting to Oracle Internet Directory Through SSL

Oracle Content DB can communicate with Oracle Internet Directory using Secure Sockets Layer (SSL). The default setting during the installation does not use SSL. On screens where you specify the host name and port for Oracle Internet Directory, you can select Use Only SSL Connections with This Oracle Internet Directory and provide the Oracle Internet Directory SSL port.

# Modifying Other Oracle Content DB Instances During Installation

During the installation of an Oracle Content DB instance, you should not change the configuration or passwords of other Oracle Content DB installations in your environment.

# Understanding the Order of Installation

This section provides an overview of the order in which Oracle Content DB must be installed.

Certain Oracle products must be installed prior to installing Oracle Content DB. The order of installation of the various products, including Oracle Content DB, is as follows:

1. Install Oracle Application Server infrastructure.

**See Also:** Oracle Application Server Installation Guide for installation details

**2.** Install Oracle Database 10*g*.

**See Also:** *Oracle Database Installation Guide for Linux x86* for installation details

- **3.** Register the database with Oracle Internet Directory.
- 4. Install Oracle Content DB.

# Oracle Content DB In a High Availability Environment

This appendix explains where to find information about how to deploy Oracle Content DB in a high availability environment.

**Note:** OracleAS Web Cache clustering is not certified with Oracle Content DB. Additional information about using Oracle Content DB in a multiple middle tier environment is available in the white paper "Best Practices for Configuring Oracle Content Database Middle Tiers for Scalability and High Availability". You can find this white paper on Oracle Technology Network at

http://www.oracle.com/technology/products/contentdb/

This appendix includes the following topics:

- Installation Order for High Availability Configurations
- High Availability for Oracle Database
- High Availability for Oracle Identity Management Components
- High Availability for the Oracle Content DB Middle Tier

# Installation Order for High Availability Configurations

For all high availability configurations, install the components in the following order:

- **1.** Oracle Database 10g
- 2. Oracle Identity Management components

If you are distributing the Oracle Identity Management components, install them in the following order:

- a. Oracle Internet Directory and Oracle Directory Integration and Provisioning
- b. OracleAS Single Sign-On and Oracle Delegated Administration Services
- **3.** Oracle Content DB

# High Availability for Oracle Database

If you are using an Oracle RAC configuration for your Oracle Database, you must register each Oracle RAC node with Oracle Internet Directory. See "Registering Oracle Database with Oracle Internet Directory" on page 3-7 for more information.

For complete information about high availability for the Oracle Database, see the following books in the Oracle Database documentation set:

- Oracle Real Application Clusters Installation and Configuration Guide
- Oracle Database Oracle Clusterware and Oracle Real Application Clusters Installation Guide for Microsoft Windows
- Oracle Database High Availability Overview

# High Availability for Oracle Identity Management Components

For complete information about high availability for Oracle Application Server components, including Oracle Identity Management, see the following books in the Oracle Application Server documentation set:

- Oracle Application Server High Availability Guide
- Oracle Application Server Enterprise Deployment Guide

# High Availability for the Oracle Content DB Middle Tier

Chapter 2, "Planning for Oracle Content DB Deployment" in *Oracle Content Database Administrator's Guide* provides information about high availability considerations for the Oracle Content DB middle tier.

In addition, refer to *Oracle Application Server High Availability Guide* and *Oracle Application Server Enterprise Deployment Guide* for information about high availability for middle-tier applications, including setting up load balancers.

In order to use a load balancer, you must update two Oracle Content DB properties with the appropriate host and port of the load balancer:

- IFS.DOMAIN.APPLICATION.ApplicationHost
- IFS.DOMAIN.APPLICATION.ApplicationPort

See "Managing Domain Properties" in *Oracle Content Database Administrator's Guide* for information about how to update these properties.

# **Default Port Numbers for Oracle Content DB**

By default, Oracle Universal Installer assigns port numbers to components from a set of default port numbers. This appendix contains a list of these port numbers.

Oracle Universal Installer assigns default port numbers to Oracle Content DB, as follows:

- 1. Oracle Universal Installer checks if the default port number is in use. If it is not in use, Oracle Universal Installer assigns it to the component.
- **2.** If the default port number is already in use by an Oracle product or by any running application, Oracle Universal Installer tries the lowest number in the port number range. It keeps trying the port numbers in the range until it finds one that is available.

**Note:** Refer to *Oracle Content Database Administrator's Guide* if you want to change any of the port settings assigned by Oracle Universal Installer.

Table D–1 lists the default port numbers for components.

Component	Default Port	Port Number Range
Oracle Content DB	Not applicable	Not applicable
Oracle Content DB Node Manager	Dynamically assigned	53140 to 53899
Oracle Content DB HTTP Node Manager	Dynamically assigned	53140 to 53899
Oracle Process Manager and Notification Server (OPMN)	Not applicable	Not applicable
Oracle Notification Server Request Port	6003	6003 to 6099
Oracle Notification Server Local Port	6100	6100 to 6199
Oracle Notification Server Remote Port	6200	6200 to 6299
Oracle Containers for J2EE (OC4J)	Not applicable	Not applicable
ОС4Ј АЈР	3301	3301 to 3400
OC4J RMI	3201	3201 to 3300
JMS	3701	3701 to 3800
IIOP	3401	3401 to 3500
IIOPS1	3501	3501 to 3600

 Table D-1
 Default Port Numbers and Ranges Grouped by Component

Component	Default Port	Port Number Range
IIOPS2	3601	3601 to 3700
Oracle HTTP Server	Not applicable	Not applicable
Listener (OracleAS Web Cache not configured)	7778	7777 to 7787
Oracle HTTP Server Listener (SSL)	4443	4443 to 4543
Oracle HTTP Server Listener (non-SSL, OracleAS Web Cache configured)	801	7777 to 7787
Oracle HTTP Server Listener (SSL, OracleAS Web Cache configured)	4443	4443 to 4543
Java Object Cache	7000	7000 to 7099
DCM Java Object Cache	7100	7100 to 7199
SOAP server	9998	9998 to 9999
Port Tunneling	7501	7501 to 7599
Oracle HTTP Server Diagnostic port	7200	7200 to 7299
OracleAS Single Sign-On	Not applicable	Not applicable
OracleAS Single Sign-On	Uses the same port as Oracle HTTP Server	None
OracleAS Web Cache	Not applicable	Not applicable
OracleAS Web Cache - HTTP Listener	80 <sup>1</sup>	7777 to 7787
OracleAS Web Cache - HTTP Listener (SSL)	4443	4443 to 4543
OracleAS Web Cache Administration	4000	4000 to 4300
OracleAS Web Cache Invalidation	4001	4000 to 4300
OracleAS Web Cache Statistics	4002	4000 to 4300
Oracle Enterprise Manager 10g Application Server Control	Not applicable	Not applicable
Application Server Control	1156	1810 to 1829
Oracle Management Agent	1157	1830 to 1849
Application Server Control (RMI)	1850	1850 to 1869
Application Server Control (SSL)	1810	1810 to 1829
Application Server Control HTTP port (orcl)	5500	None
Oracle Enterprise Manager Agent port (orcl)	1831	None
Log Loader	44000	44000 to 44099
Oracle Internet Directory	Not applicable	Not applicable
Oracle Internet Directory	389	3060 to 3129
Oracle Internet Directory (SSL)	636	3130 to 3199

Table D–1 (Cont.) Default Port Numbers and Ranges Grouped by Component

<sup>1</sup> Port 80 is the default port only for the middle tier.

# Important Oracle Content DB URLs

Use the URLs and login IDs shown in Table E–1 to access Oracle Content DB components after installation.

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**Note:** The ports in Table E-1 are examples only. The components in your environment might use different ports. To determine the port numbers for the various components, refer to the <code>%ORACLE\_HOME%\install\portlist.ini</code> file.

Component	URL or Path	Entry in portlist.ini	Login and Password
Oracle Content DB Launch Page	http://middle_tier_host_ name:7777/content	Oracle HTTP Server port or Web Cache Listen port	Any valid Oracle Internet Directory user. If you do not have any additional users created, you can login to Content DB as the superuser (typically orcladmin).
			For the superuser of the default realm, the password is set during OracleAS Infrastructure installation. For the superuser of additional realms, the password is set when a realm is created.
Oracle Content DB HTTP/WebDAV URL	http://middle_tier_host_ name:7777/content/dav	Oracle HTTP Server port or Web Cache Listen port	Any valid Oracle Internet Directory user. If you do not have any additional users created, you can login to Content DB as the superuser (typically orcladmin).
			For the superuser of the default realm, the password is set during OracleAS Infrastructure installation. For the superuser of additional realms, the password is set when a realm is created.
Oracle Records DB Launch Page	http://middle_tier_host_ name:7777/rm	Oracle HTTP Server port or Web Cache Listen port	Any valid Oracle Internet Directory user. If you do not have any additional users created, you can login to Content DB as the superuser (typically orcladmin).
			For the superuser of the default realm, the password is set during OracleAS Infrastructure installation. For the superuser of additional realms, the password is set when a realm is created.
			Note: Oracle Records DB is disabled, by default, after Oracle Content DB installation. Refer to Oracle Content Database Administrator's Guide for information on how to enable Oracle Records DB.

## Table E-1 URLs for Oracle Content DB Components

Component	URL or Path	Entry in portlist.ini	Login and Password
OracleAS Single Sign-On Administration Pages	http://infra_host_ name:7777/pls/orasso	Oracle HTTP Server Listen port	orcladmin
			For the superuser of the default realm, the password is set during OracleAS Infrastructure installation. For the superuser of any additional realms, the password is set when a realm is created.
Oracle Enterprise Manager 10g Application Server Control	http://host_name:1156	Application Server Control port	ias_admin
			Use the password for ias_admin that you supplied during installation.
Oracle Delegated	http://infra_host_name:7777/oiddas	Oracle HTTP Server Listen port	orcladmin
Administration Services			For the superuser of the default realm, the password is set during OracleAS Infrastructure installation. For the superuser of any additional realms, the password is set when a realm is created.
Oracle Directory Manager	%ORACLE_HOME%\bin\oidadmin	NA	cn=orcladmin
			The password was set during OracleAS Infrastructure installation.

 Table E-1 (Cont.) URLs for Oracle Content DB Components

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# Software Requirements for Microsoft Windows Distributions

This appendix provides information about software requirements for the Microsoft Windows distributions.

Oracle Content DB supports the following Microsoft Windows operating systems:

- Microsoft Windows 2000 Server SP4
- Microsoft Windows 2003 Server SP1
- Microsoft Windows 2003 R3

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# Deinstalling the Oracle Content DB Middle Tier

This appendix discusses deinstallation of Oracle Content DB middle tiers, and includes the following topics:

- Deinstalling the Oracle Content DB Middle Tier
- Additional Cleanup Tasks
- Deinstalling Oracle Content DB from a Single Computer

**Note:** To reinstall an Oracle Content DB middle tier, you must first deinstall any previous middle-tier instances that exist on the computer where you want to reinstall.

# Deinstalling the Oracle Content DB Middle Tier

To deinstall an Oracle Content DB middle tier:

- 1. Before beginning the deinstallation procedure, stop all Oracle processes.
- **2.** Log in as the operating system user who installed the middle tier you want to deinstall.
- **3.** Stop all processes associated with the middle tier you want to deinstall.

**See Also:** Oracle Content Database Administrator's Guide for more information about stopping Oracle Content DB processes

**4.** Run the following script on the middle tier. You only need to perform this step if this is the first middle tier that was configured.

**Tip:** Before you run the script, ensure that the %ORACLE\_HOME% variable is set, and that %ORACLE\_HOME%\jdk\bin appears in the \$PATH variable.

%ORACLE\_HOME%\jdk\bin\java -classpath %ORACLE\_ HOME%\content\lib\content.jar:%ORACLE\_HOME%\jlib\ldapjclnt10.jar oracle.ifs.ecm.tools.credential.CleanProvStatusFootprints OidUrl=ldap://infra\_ host\_name:oracle\_internet\_directory\_port OidSuperUserName=cn=orcladmin OidSuperUserPassword=password\_for\_cn=orcladmin\_user DomainDisplayName=oracle\_ content\_db\_domain\_display\_name

For example:

%ORACLE\_HOME%\jdk\bin\java -classpath %ORACLE\_ HOME%\content\lib\content.jar:%ORACLE\_HOME%\jlib\ldapjclnt10.jar oracle.ifs.ecm.tools.credential.CleanProvStatusFootprints OidUrl=ldap://myhost.mycompany.com:389 OidSuperUserName=cn=orcladmin OidSuperUserPassword=mypassword DomainDisplayName=CONTENT

**Tip:** The Oracle Content DB domain display name is typically CONTENT. If you are unsure of the display name for your Oracle Content DB domain, see *Oracle Content Database Administrator's Guide* for information about how to find this information in Oracle Directory Manager.

**5.** Run the Deconfig tool, as follows:

cd %ORACLE\_HOME%\perl\5.6.1\bin\MSWin32-x86 perl %ORACLE\_HOME%\bin\deconfig.pl

- 6. Start Oracle Universal Installer.
- **7.** When the Welcome screen displays, click **Deinstall Products** to display the Inventory screen.
- 8. Select the instance you want to deinstall, and click Remove.
- **9.** When the Confirmation screen displays, verify the components selected for deinstallation. Click **Yes** to continue and display the Deinstallation Progress screen.

Monitor the progress of the deinstallation. If you see a prompt asking you to run **deconfig.pl**, click **OK** to continue, because you have already run this tool as part of **Step 4**.

- 10. Exit Oracle Universal Installer when the deinstallation is complete.
- **11.** Delete the Oracle home directory and its contents.

# **Additional Cleanup Tasks**

If you are deinstalling the first Oracle Content DB middle tier that was configured, this section describes additional cleanup tasks. You should only perform the following tasks if you want to remove your entire Oracle Content DB installation.

# **Removing Oracle Content DB Information From Oracle Internet Directory**

If you are deinstalling the first Oracle Content DB middle tier that was configured, you should clean up Oracle Content DB entries from Oracle Internet Directory. You can do this by running the oidprovtool and ldapdelete commands on the OracleAS Infrastructure computer.

#### Note:

- Before you remove Oracle Content DB entries from Oracle Internet Directory, ensure that the %ORACLE\_HOME% variable is set on your OracleAS Infrastructure tier.
- The Oracle Content DB domain display name is typically CONTENT. If you are unsure of the display name for your Oracle Content DB domain, see *Oracle Content Database Administrator's Guide* for information about how to find this information in Oracle Directory Manager.

To remove Oracle Content DB entries from Oracle Internet Directory:

**1.** Run the following oidprovtool command:

%ORACLE\_HOME%\bin\oidprovtool operation=delete ldaphost=fully\_qualified\_infra\_ host\_name ldap\_port=Oracle\_Internet\_Directory\_port ldap\_user\_dn=cn=orcladmin ldap\_user\_password=password\_for\_cn=orcladmin\_user application\_ dn=orclApplicationCommonName=oracle\_content\_db\_domain\_display\_ name,cn=IFS,cn=Products,cn=oraclecontext organization\_dn=realm\_name interface\_ version=3.0

#### For example:

%ORACLE\_HOME%\bin\oidprovtool operation=delete ldaphost=myhost.mycompany.com ldap\_port=389 ldap\_user\_dn=cn=orcladmin ldap\_user\_password=mypassword application\_ dn=orclApplicationCommonName=CONTENT,cn=IFS,cn=Products,cn=oraclecontext

organization\_dn=dc=us,dc=oracle,dc=com interface\_version=3.0

If you have multiple Oracle Content DB Sites, you must run this command for each realm on which an Oracle Content DB Site is based.

2. Next, run the following ldapdelete command:

%ORACLE\_HOME%\bin\ldapdelete -h fully\_qualified\_infra\_host\_name -p Oracle\_ Internet\_Directory\_Port -D cn=orcladmin -w =password\_for\_cn=orcladmin\_user -v "cn=oracle\_content\_db\_domain\_display\_ name, cn=IFS, cn=Products, cn=OracleContext, realm\_name"

#### For example:

%ORACLE\_HOME%\bin\ldapdelete -h myhost.mycompany.com -p 389 -D cn=orcladmin -w mypassword -v "cn=CONTENT,cn=IFS,cn=Products,cn=OracleContext,dc=us,dc=oracle,dc=com"

# If you have multiple Oracle Content DB Sites, you must run this command for each realm on which an Oracle Content DB Site is based.

**3.** Next, run the following ldapdelete command:

%ORACLE\_HOME%\bin\ldapdelete -h fully\_qualified\_infra\_host\_name -p oracle\_ internet\_directory\_port -D cn=orcladmin -w =password\_for\_cn=orcladmin\_user -v "cn=Associated Mid-tiers,orclApplicationCommonName=oracle\_content\_db\_domain\_ display\_name,cn=IFS,cn=Products,cn=OracleContext"

#### For example:

%ORACLE\_HOME%\bin\ldapdelete -h myhost.mycompany.com -p 389 -D cn=orcladmin -w mypassword -v "cn=Associated

 $\verb|Mid-tiers, orclapplicationCommonName=CONTENT, cn=IFS, cn=Products, cn=OracleContext||example and example a statement of the statement of t$ 

#### 4. Next, run the following ldapdelete command:

%ORACLE\_HOME%\bin\ldapdelete -h fully\_qualified\_infra\_host\_name -p oracle\_ internet\_directory\_port -D cn=orcladmin -w =password\_for\_cn=orcladmin\_user -v "cn=Component Owners,orclApplicationCommonName=oracle\_content\_db\_domain\_ display\_name,cn=IFS,cn=Products,cn=OracleContext"

#### For example:

%ORACLE\_HOME%\bin\ldapdelete -h myhost.mycompany.com -p 389 -D cn=orcladmin -w mypassword -v "cn=Component Owners,orclApplicationCommonName=CONTENT,cn=IFS,cn=Products, cn=OracleContext"

#### 5. Next, run the final ldapdelete command:

%ORACLE\_HOME%\bin\ldapdelete -h fully\_qualified\_infra\_host\_name -p oracle\_ internet\_directory\_port -D cn=orcladmin -w =password\_for\_cn=orcladmin\_user -v "orclApplicationCommonName=oracle\_content\_db\_domain\_display\_ name, cn=IFS, cn=Products, cn=OracleContext"

#### For example:

%ORACLE\_HOME%/bin/ldapdelete -h myhost.mycompany.com -p 389 -D cn=orcladmin -w mypassword -v "orclApplicationCommonName=CONTENT, cn=IFS, cn=Products, cn=OracleContext"

6. Restart OC4J\_Security using the Application Server Control. Alternatively, you can use the following opmnctl command:

opmnctl restartproc process-type=OC4J\_SECURITY

You can find the opmnctl utility in %ORACLE\_HOME%\opmn\bin.

#### Removing Schemas and Tablespaces from the Database

If you are deinstalling the first Oracle Content DB middle tier that was configured, you should clean up Oracle Content DB entries from Oracle Internet Directory. You can do this by running the oidprovtool and ldapdelete commands on the OracleAS Infrastructure computer.

- 1. On the database computer, go to the Oracle home of the database.
- 2. Connect to SQL\*Plus as the database user SYS, with the SYSDBA option.
- 3. Drop the Oracle Content DB schemas (CONTENT, CONTENT\$ID, and CONTNET\$CM), the Oracle Workflow schema (OWF\_MGR), and the Oracle Content DB tablespaces by executing the following commands. The first command may take a few minutes to run.

```
drop user CONTENT cascade;
drop user content$ID cascade;
drop user CONTENT$CM cascade;
drop user OWF_MGR cascade;
drop tablespace CONTENT_IFS_MAIN including contents;
drop tablespace CONTENT_IFS_LOB_N including contents;
drop tablespace CONTENT_IFS_LOB_I including contents;
drop tablespace CONTENT_IFS_LOB_M including contents;
drop tablespace CONTENT_IFS_CTX_K including contents;
drop tablespace CONTENT_IFS_CTX_K including contents;
drop tablespace CONTENT_IFS_CTX_K including contents;
drop tablespace CONTENT_IFS_CTX_I including contents;
```

drop tablespace WORKFLOW\_IFS\_MAIN including contents;

**4.** If you are using raw devices for database file storage, you must recreate the dropped tablespaces manually. For more information, refer to "Using the Raw Storage Type with Oracle Content DB" on page 3-7.

# **Deinstalling Oracle Content DB from a Single Computer**

To deinstall Oracle Content DB, OracleAS Infrastructure, and Oracle Database from a single computer:

- **1.** Log in as the operating system user who installed the Oracle Content DB middle tier you want to deinstall.
- **2.** Start Oracle Universal Installer.
- **3.** On the Select Installation Method screen, select **Advanced Installation** and click **Next**.
- 4. On the Specify File Locations screen, click Installed Products.
- **5.** The Inventory dialog box appears. Under **Oracle Homes**, locate and remove the following items, in order:
  - a. Oracle Content DB
  - b. OracleAS Infrastructure, if you want to deinstall it
  - c. Oracle Database, if you want to deinstall it
- **6.** Exit Oracle Universal Installer.

# Glossary

#### domain

A logical grouping of Oracle Content DB nodes (middle-tier processes), and an Oracle Database instance that contains the Oracle Content DB data.

#### instance

A single, named installation of Oracle Content DB.

#### LDAP

An Internet protocol that applications use to look up contact information from a server, such as a central directory. LDAP servers index all the data in their entries, and filters can be used to select just the person or group you want, and return just the information you want. Full name: Lightweight Directory Access Protocol.

#### middle tiers

In a three-tier architecture, the middle tier is the application logic layer. The other tiers are the client tier and database tier. The middle tiers provide the computing power and resources for the clients.

In Oracle Application Server, middle-tier components include Oracle HTTP Server, OC4J, and OPMN. The Oracle Content DB application runs in the middle tier.

#### **Oracle Clusterware**

Oracle Clusterware contains the cluster management software required to support Oracle Real Application Clusters databases. Oracle Clusterware also provides high availability components that provide many system management features. The components of Oracle Clusterware interact with vendor clusterware, if present, to coordinate cluster membership information. In Oracle Database 10g Release 1 (10.1), this was known as Cluster Ready Services.

#### **Oracle Content DB**

A consolidated, database-centric content management application that provides a comprehensive, integrated solution for file and document lifecycle management. Oracle Content DB runs on Oracle Application Server and Oracle Database, and provides a scalable content management repository. Oracle Content DB also offers a comprehensive set of Web services that developers can use to build and enhance content management applications.

#### **Oracle Drive**

Oracle Drive is a native Windows application that lets users use Windows Explorer, Microsoft Office, and other Windows applications to access content in Oracle Content DB. Oracle Drive displays files and folders in Oracle Content DB as a mapped drive in Windows Explorer. Oracle Drive also provides an effective offline solution that lets users edit files on their computers when offline, and then synchronize with the server when they reconnect.

#### **Oracle Identity Management**

An integrated set of components that provide distributed security to Oracle products and make it possible to centrally and securely manage enterprise identities and their access to applications in the enterprise. It includes the following components: Oracle Internet Directory, Oracle Directory Integration and Provisioning, Oracle Delegated Administration Services, OracleAS Single Sign-On, and Oracle Application Server Certificate Authority.

#### **Oracle Internet Directory**

An LDAP service that combines Oracle Database technology with the LDAP v3 directory standard. Oracle Internet Directory is a component of Oracle Identity Management. It is also closely integrated with Oracle Database. All Oracle Content DB users are created and managed in Oracle Internet Directory.

#### **Oracle Net Services**

A suite of networking components that provide enterprise-wide connectivity solutions in distributed, heterogeneous computing environments. Oracle Net Services is comprised of Oracle Net, listener, Oracle Connection Manager, Oracle Net Configuration Assistant, and Oracle Net Manager. Oracle Net Services configuration files are usually stored in the <code>%ORACLE\_HOME%\network\admin</code> directory.

#### **Oracle Records DB**

A component of Oracle Content DB that provides support for compliance solutions such as enforced record creation and retention policies. Records Administrators can use Oracle Records DB to specify file plans and create record categories.

#### **OracleAS Infrastructure**

An application server installation type that provides centralized product metadata and security services, configuration information, and data repositories for Oracle Application Server middle tiers. Oracle Content DB middle tiers use the OracleAS Infrastructure for three main services: Product Metadata Service, Oracle Identity Management Services, and the Management Service. Full name: Oracle Application Server Infrastructure.

#### OUI

The installation wizard through which you can install Oracle products, including Oracle Database and Oracle Application Server. Full name: Oracle Universal Installer.

#### response file

A text file that is read by Oracle Universal Installer during silent or noninteractive installation. The file contains responses to prompts from Oracle Universal Installer and minimizes or negates interaction between the user and the Oracle Universal Installer interface.

#### schema

A collection of database objects, including logical structures such as tables, views, sequences, stored procedures, synonyms, indexes, clusters, and database links. A schema has the name of the database user who controls it. The Oracle Content DB schema is created in an Oracle database during the configuration process. The schema

owns all database objects, including metadata about Oracle Content DB and configuration information.

### Secure Sockets Layer (SSL)

An industry standard protocol designed by Netscape Communications Corporation for securing network connections. SSL provides authentication, encryption, and data integrity using public key infrastructure (PKI).

### Single Sign-On

A component of Oracle Application Server that enables users to log in to multiple applications using a single user name and password. Oracle Content DB users log in to Oracle Content DB using their SSO password. Full name: Oracle Application Server Single Sign-On.

### SSL

See Secure Sockets Layer (SSL)

### **SSO Password**

The password assigned to each Oracle Content DB user in Oracle Internet Directory. Users provide this password to authenticate against the OracleAS Single Sign-On server. Oracle Content DB users use the SSO password to sign in to Oracle Content DB. Full name: Single Sign-On password.

### tablespace

A database storage unit that groups related logical structures together.

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