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Oracle Database Companion CD Installation Guide, 10g Release 1 (10.1) for Apple Mac OS X
Part No. B13957-01

Oracle welcomes your comments and suggestions on the quality and usefulness of this publication. Your input is an important part of the information used for revision.

- Did you find any errors?
- Is the information clearly presented?
- Do you need more information? If so, where?
- Are the examples correct? Do you need more examples?
- What features did you like most about this manual?

If you find errors or have other suggestions for improvement, you can e-mail them to us at osdwrite_us@oracle.com. Please indicate the title and part number of the document and the chapter, section, and page number if available. Please indicate whether you would like a reply.

If you have problems with the software, please contact your local Oracle Support Services Center.
This guide describes how to install and configure the products available on the Oracle Database 10g Companion CD.

**Audience**

This guide is intended for anyone responsible for installing the products available on the Oracle Database 10g Companion CD.

**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. 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 additional information, visit the Oracle Accessibility Program Web site at

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

**Accessibility of Code Examples in Documentation**

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

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

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

**Typographic Conventions**

The following typographic conventions are used in this guide:
Command Syntax

UNIX command syntax appears in monospace font. The dollar character ($), number sign (#), or percent character (%) are UNIX command prompts. Do not enter them as part of the command.

<table>
<thead>
<tr>
<th>Convention</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>monospace</td>
<td>Monospace type indicates UNIX commands, directory names, user names, pathnames, and file names.</td>
</tr>
<tr>
<td>italics</td>
<td>Italic type indicates a variable, including variable portions of file names. It is also used for emphasis and for book titles.</td>
</tr>
<tr>
<td>UPPERCASE</td>
<td>Uppercase letters indicate Structured Query Language (SQL) reserved words, initialization parameters, and environment variables.</td>
</tr>
</tbody>
</table>

Accessing Documentation

The documentation for Oracle Database 10g Companion CD includes platform-specific documentation and generic product documentation.

Platform-Specific Documentation

Platform-specific documentation includes information about installing and using Oracle products on particular platforms. The platform-specific documentation for this product is available in both Adobe portable document format (PDF) and HTML format on the product disc. To access the platform-specific documentation on disc:

1. Use a Web browser to open the welcome.htm file in the top-level directory of the disc.
2. For DVD-ROMs only, select the appropriate product link.
3. Select the Documentation tab.

If you prefer paper documentation, then open and print the PDF files.
Product Documentation

Product documentation includes information about configuring, using, or administering Oracle products on any platform. The product documentation for Oracle Database 10g products is available in both HTML and PDF formats in the following locations:

- On the Oracle Database 10g Documentation Library CD-ROM
  To access the documentation from the CD-ROM, use a Web browser to view the index.htm file in the top-level directory on the disc.

- In the doc subdirectory on the Oracle Database 10g DVD-ROM
  To access the documentation from the DVD-ROM, use a Web browser to view the welcome.htm file in the top-level directory on the disc, then select the Oracle Database 10g Documentation Library link.

- Online on the Oracle Technology Network (OTN) Web site:
  http://www.oracle.com/technology/documentation

Related Documentation

The platform-specific documentation for Oracle Database 10g products includes the following manuals:

- Oracle Database:
  - Oracle Database Release Notes for Apple Mac OS X
  - Oracle Database Quick Installation Guide for Apple Mac OS X
  - Oracle Database Installation Guide for Apple Mac OS X
  - Oracle Real Application Clusters Installation and Configuration Guide
  - Oracle Database Administrator’s Reference for UNIX Systems

- Oracle Client:
  - Oracle Database Client Quick Installation Guide for Apple Mac OS X
  - Oracle Database Client Installation Guide for Apple Mac OS X

- Oracle Database 10g Companion CD:
  - Oracle Database Companion CD Quick Installation Guide for Apple Mac OS X
  - Oracle Database Companion CD Installation Guide for Apple Mac OS X

Refer to the Oracle Database release notes for your platform for important information that was not available when this book was released. The release notes for Oracle Database 10g are updated regularly. You can get the most-recent version from OTN:

http://www.oracle.com/technology/documentation
This chapter provides an overview of the products available on the Oracle Database 10g Companion CD and describes issues that you must consider before installing them. It includes information about the following topics:

- Installation Overview
- Products Available in the Oracle Database 10g Products Installation Type
- Products Available in the Oracle Database 10g Companion Products Installation Type
Installation Overview

This section describes the installation types available from the Oracle Database 10g Companion CD and provides an overview of the installation process.

Installation Types
The Oracle Database 10g Companion CD contains two installation types:

- Oracle Database 10g Products
- Oracle Database 10g Companion Products

Oracle Database 10g Products
The Oracle Database 10g Products installation type includes the following products, which must be installed in an existing Oracle Database 10g Oracle home:

- Oracle Database Examples
- JPublisher
- Natively Compiled Java Libraries
- Oracle Text Supplied Knowledge Bases

Oracle Database 10g Companion Products
The Oracle Database 10g Companion Products installation type includes the following products:

- Oracle HTTP Server
- Oracle HTML DB

You must install Oracle HTTP Server in a new Oracle home. You must install Oracle HTML DB in an Oracle HTTP Server Oracle home. This can be an existing Oracle home that contains Oracle HTTP Server which you installed from the Companion CD, or you can choose to install both products at the same time.

Installation Process
Regardless of which products you choose to install, the installation process consists of four parts:

1. Planning your installation: This chapter describes the products that you can install and describes information that you must know before installing the software.

2. Completing pre-installation tasks: Depending on where you want to install the software, one of the following chapters describes pre-installation tasks that you must complete before installing the software:

   - Chapter 2, "Pre-installation Tasks for Installations in an Existing Oracle Home"
   - Chapter 3, "Pre-installation Tasks for Installations in a New Oracle Home"

3. Installing software: Chapter 4 describes how to use the Oracle Universal Installer to install the software.

Products Available in the Oracle Database 10g Products Installation Type

The following sections describe the products that are installed by the Oracle Database 10g Products installation type. You must install these products in an existing Oracle Database 10g Oracle home:

- Oracle Database Examples
- JPublisher
- Natively Compiled Java Libraries
- Oracle Text Supplied Knowledge Bases

Oracle Database Examples

Oracle Database Examples include a wide range of examples and product demonstrations that you can use to learn about the products, options, and features of Oracle Database 10g. Many of these examples are designed to work with the Sample Schemas which you can optionally install in any Oracle Database 10g database. Many of the documents in the Oracle product-specific documentation library use the example programs and scripts provided with the Oracle Database Examples.

Required Products

To use many of the examples, you must also install the Sample Schemas into an Oracle database. When you install Oracle Database 10g, or use the Database Configuration Assistant (DBCA) to create a new database, you can choose to include the Sample Schemas when you create the database. You can also manually install the Sample Schemas into an existing database. Note that the scripts required to install the sample schemas are installed with the Oracle Database 10g Products installation type.

See Also: For information about manually installing the Sample Schemas into an existing database, see the Oracle Database Sample Schemas manual.

JPublisher

JPublisher is a Java utility that generates Java classes to represent the following user-defined database entities in a Java program:

- SQL object types
- Object reference types ("REF types")
- SQL collection types (VARRAY types or nested table types)
- PL/SQL packages
- Server-side Java classes
- SQL queries and DML statements

JPublisher enables you to specify and customize the mapping of SQL object types, object reference types, and collection types (VARRAYs or nested tables) to Java classes in a strongly typed paradigm.

JPublisher can also generate classes for PL/SQL packages. These classes have wrapper methods to invoke the stored procedures in the PL/SQL packages.

In addition, JPublisher simplifies access to PL/SQL-only types from Java. You can employ predefined or user-defined mappings between PL/SQL and SQL types, as well as make use of PL/SQL conversion functions between such types. With such type
correspondences in place, JPublisher can automatically generate all of the required Java and PL/SQL code.

In a similar way that SQL or PL/SQL entities publish to Java, you can publish server-side Java classes to client-side Java classes. Doing this enables applications to make direct calls to Java classes in the database.

JPublisher enables you to expose generated Java classes as Web services, for example you can publish either SQL or PL/SQL entities or server-side Java entities.

JPublisher uses SQLJ code in most Java classes that it generates, so it includes Oracle SQLJ Translator and Oracle SQLJ Runtime. Oracle SQLJ is a standard way to embed SQL statements in Java programs.

**Oracle SQLJ Translator**
Because JPublisher uses SQLJ code in its generated classes, it automatically invokes the Oracle SQLJ translator during the code generation process, as necessary. The translator converts embedded SQL statements into JDBC calls.

**Oracle SQLJ Runtime**
Oracle SQLJ Runtime is used during program execution to execute most classes that were generated by JPublisher. SQLJ Runtime is a thin layer of pure Java code that runs above the JDBC driver. It acts as an intermediary that reads information about SQL operations and passes instructions to the JDBC driver.

**See Also:** For more information about JPublisher, see the Oracle Database JPublisher User’s Guide.

**Natively Compiled Java Libraries**
The Oracle Database 10g Products installation type installs JAccelerator and Oracle interMedia Image Accelerator which contain the natively compiled Java libraries (NCOMPs) for Oracle JVM and Oracle interMedia. These libraries are required to improve the performance of these products on your platform.

**Oracle Text Supplied Knowledge Bases**
An Oracle Text knowledge base is a hierarchical tree of concepts used for theme indexing, ABOUT queries, and deriving themes for document services. The Oracle Database 10g Products installation type installs two Oracle Text knowledge bases, English and French. You can extend the supplied knowledge bases depending on your requirements. Alternatively, you can create your own knowledge bases, possibly in languages other than English and French. For more information about creating and extending knowledge bases, see the Oracle Text Reference.

**Products Available in the Oracle Database 10g Companion Products Installation Type**
The following sections describe the products that you can install with the Oracle Database 10g Companion Products installation type:

- Oracle HTTP Server
- Oracle HTML DB
Oracle HTTP Server

Oracle HTTP Server is a Web server that is based on Apache HTTP Server. Use the Oracle Database 10g Companion Products installation type to install Oracle HTTP Server in a new Oracle home. This standalone release of Oracle HTTP Server provides the following features:

- A robust and reliable Web server that you can use to serve Web pages
- Support for Perl and Fast CGI scripts using mod_perl and mod_fastcgi
- Support for PL/SQL applications using mod_plsql
- Support for secure transactions using secure socket layer (SSL)
- Single sign-on capabilities using mod_osso

To enable single sign-on, you must use Oracle HTTP Server in conjunction with Oracle Internet Directory, which is available as part of Oracle Application Server 10g.

- Many standard Apache modules, in addition to modules provided by Oracle

Differences Between this Release and Other Oracle HTTP Server Releases

The standalone version of Oracle HTTP Server differs from the version shipped with other releases of Oracle software, as follows:

Note: On Mac OS X, the version of Oracle HTTP Server is 10.1.2.

- Oracle9i release 2 or earlier, and Oracle9iAS release 1:
  - Apache JServ is not shipped with this release of Oracle HTTP Server. Its use with this release is not supported.
  - Because Apache JServ is not supported, the mod_oprocmgr module is not loaded in the default configuration.
  - In this release, mod_ssl is replaced by mod_ossl, which is developed by Oracle.

- Oracle9iAS Release 2 or later:
  - You cannot configure the standalone release of Oracle HTTP Server in an Oracle9iAS or Oracle Application Server 10g cluster.
    For this reason, you cannot use the dcmctl utility to start, stop, or restart processes associated with this release of Oracle HTTP Server.
  - You cannot use the Oracle Enterprise Manager Application Server Control to administer this release of Oracle HTTP Server.

Where to Install Oracle HTTP Server

You must install Oracle HTTP Server in a new Oracle home directory. Do not install it in an existing Oracle home directory. You can install Oracle HTTP Server more than once on the same system, provided that each installation uses a separate Oracle home directory.
Oracle HTML DB

Oracle HTML DB is a hosted development environment that enables non-programmers to create database-centric Web applications. It provides developers with the productivity of a desktop database, but with the security, reliability, and performance of the Oracle database. Any IT organization can host Oracle HTML DB environments for departments in the company that do not have Oracle development skills available.

Where to Install Oracle HTML DB

You can choose to install Oracle HTML DB with Oracle HTTP Server in a new Oracle home directory. Alternatively, you can also install this product in an existing Oracle home that contains Oracle HTTP Server which you installed from the Companion CD. Do not install Oracle HTML DB in any other Oracle HTTP Server Oracle home.
This chapter describes the tasks that you must complete before you install the software in an existing Oracle home. It includes information about the following:

- Pre-installation Tasks for Oracle Database 10g Products
- Pre-installation Tasks for Oracle HTML DB
Pre-installation Tasks for Oracle Database 10g Products

When you select the Oracle Database 10g Products installation type, the Installer installs all of the products available through this installation type. Ensure that your system meets the requirements in the following sections before installing Oracle Database 10g Products.

Check the Oracle Database 10g Installation

Before using this installation type, make sure that your system has an Oracle Database 10g Oracle home. If it does not, you must install Oracle Database 10g before installing products with the Oracle Database 10g Products installation type.

See Also: For information about installing Oracle Database 10g, see the Oracle Database Installation Guide.

Identify the Oracle Database 10g Oracle Home Directories

If necessary, identify the Oracle home directory used by the Oracle Database 10g installation. If you do not know the path of the Oracle home directory, check the oratab file as follows:

```
# more /etc/oratab
```

Check Disk Space Requirements

Verify that the file system that contains the Oracle home directory contains at least 1 GB of free disk space.

To check that the Oracle home directory has enough space, enter the following command:

```
# df -h oracle_home_path
```

Pre-installation Tasks for Oracle HTML DB

Note: This section describes the pre-installation tasks that you must complete if you are installing Oracle HTML DB in an existing Oracle home directory that contains Oracle HTTP Server. See the following section for information about Oracle home directories that satisfy this requirement. Alternatively, you can install Oracle HTML DB with Oracle HTTP Server in a new Oracle home directory.

When you select the Oracle Database 10g Companion Products installation type, you can choose to install Oracle HTML DB in an existing Oracle home that contains Oracle HTTP Server which you installed from the Companion CD. Before installing Oracle HTML DB, make sure your system meets the requirements described in the following sections.
Identify an Appropriate Oracle HTTP Server Installation

Before installing Oracle HTML DB, make sure that the system has an Oracle home directory that contains Oracle HTTP Server which you installed from the Companion CD. If it does not, you must install Oracle HTTP Server when you install Oracle HTML DB.

**Note:** If you do not have an Oracle home directory that contains Oracle HTTP Server installed from the Companion CD, you must install Oracle HTTP Server when you install Oracle HTML DB. See Chapter 3 for information about pre-installation tasks for Oracle HTTP Server.

Check Disk Space Requirements

Verify that the file system that contains the Oracle home directory contains at least 300 MB of free disk space.

To check that the Oracle home directory has enough space, enter the following command:

```
# df -h /httpserver_oracle_home_path
```

Check the Oracle Database Installation

Before installing Oracle HTML DB, identify the Oracle database that you want to use with Oracle HTML DB. The database must be Oracle9i release 9.2.0.3 or higher. The database can be on a different system from the system where you are installing Oracle HTML DB.

Check for Oracle XML DB

Oracle XML DB must be installed in the database that you want to use.

If you are using a preconfigured database created either during an installation or by the Database Configuration Assistant (DBCA), Oracle XML DB is already installed and configured. For information about manually adding Oracle XML DB to an existing database, see the *Oracle XML DB Developer’s Guide*.

Identify Database Information

During the installation, you must specify the following information about the database:

- The host name of the database system
- The port number of the Oracle Net listener
- The service name of the database
- The password of the SYS user

Make sure that you have this information before starting the installation.

See Chapter 4 for instructions on installing the Oracle Database 10g Companion Products installation type.
Pre-installation Tasks for Installations in a New Oracle Home

This chapter describes the tasks that you must complete before you start the Oracle Universal Installer and install Oracle products in a new Oracle home. It includes information about the following tasks:

- Installation Considerations
- Pre-installation Tasks for Oracle HTTP Server
- Pre-installation Tasks for Oracle HTML DB
Installation Considerations

Review the following sections before starting the installation.

**Hardware and Software Certification**

The platform-specific hardware and software requirements included in this installation guide were current at the time this guide was published. However, because new platforms and operating system software versions might be certified after this guide is published, review the certification matrix on the OracleMetaLink Web site for the most up-to-date list of certified hardware platforms and operating system versions. The OracleMetaLink Web site is available at the following URL:

http://metalink.oracle.com

If you do not have a current Oracle Support Services contract, you can access the same information from the following Web site:

http://otn.oracle.com/support/metalink/content.html

**Installing Oracle Database 10g Companion Products**

Before installing the products available with the Oracle Database 10g Companion Products installation type, complete the tasks described in the following sections, depending on the products that you want to install:

- Pre-installation Tasks for Oracle HTTP Server
- Pre-installation Tasks for Oracle HTML DB

---

**Note:** If you install Oracle HTML DB in a new Oracle home, you must install Oracle HTTP Server at the same time.

---

**See Also:** If you want to install Oracle HTML DB in an existing Oracle HTTP Server Oracle home, see Chapter 2, "Pre-installation Tasks for Installations in an Existing Oracle Home".

**Pre-installation Tasks for Oracle HTTP Server**

Perform the tasks described in the following sections before installing Oracle HTTP Server.

**Log in to the System as root**

Before you install the Oracle software, you must complete several tasks as the `root` user. To log in as the `root` user, follow these steps:

1. Log in to the system as a user that is a member of the `admin` group.
2. Start a local terminal session (`/Applications/Utilities/Terminal`).
3. If you are not logged in as the `root` user, enter the following command to start a shell session with `root` privileges:
   ```
   $ sudo sh
   ```
4. When prompted, enter your password.
Check the Hardware Requirements

The system must meet the following minimum hardware requirements:

- 256 MB of physical RAM
- 512 MB of swap space
- 400 MB of free disk space in the /tmp directory
- The amount of free disk space shown in the following table, depending on the products that you want to install:

<table>
<thead>
<tr>
<th>Products for Installation</th>
<th>Disk Space Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle HTTP Server</td>
<td>250 MB</td>
</tr>
<tr>
<td>Oracle HTTP Server and Oracle HTML DB</td>
<td>550 MB</td>
</tr>
</tbody>
</table>

To ensure that the system meets these requirements, follow these steps:

1. To determine the physical RAM size, use System Profiler (/Applications/Utilities/System Profiler) or enter the following command:

   ```bash
   # /usr/sbin/system_profiler SPHardwareDataType | grep Memory
   ``

   If the size of the physical RAM installed in the system is less than the required size, you must install more memory before continuing.

2. To ensure that the system has enough swap space, enter the following command:

   ```bash
   # df -h /
   ```

   **Note:** Mac OS X dynamically creates swap files as required in the /private/var/vm directory. Make sure that you have at least 512 MB of available disk space on the root (/) file system to accommodate newly created swap files.

3. To determine the amount of disk space available in the /tmp directory, enter the following command:

   ```bash
   # df -h /tmp
   ```

   If there is less than 400 MB of disk space available in the /tmp directory, complete one of the following steps:

   - Delete unnecessary files from the /tmp directory to achieve the required disk space.
Set the TEMP and TMPDIR environment variables when setting the oracle user’s environment (described later).

Extend the file system that contains the /tmp directory. If necessary, contact your system administrator for information about extending file systems.

4. To determine the amount of free disk space on the system, enter the following command:
   
   ```
   # df -h
   ```

Check the Software Requirements

Check that the required software and patches are installed on the system.

Check for Required Software

Depending on the products that you intend to install, verify that the following software is installed on the system. The procedure following the table describes how to check these requirements.

<table>
<thead>
<tr>
<th>Installation Type or Product</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>All installations</td>
<td>The following operating system version:</td>
</tr>
<tr>
<td></td>
<td>Apple Mac OS X Server 10.3.6</td>
</tr>
<tr>
<td>All Installations</td>
<td>The following software (or a higher version) must be installed:</td>
</tr>
<tr>
<td></td>
<td>- Xcode Tools 1.1 or higher</td>
</tr>
<tr>
<td></td>
<td>- GNU C compiler (gcc) version 3.3 20030304 (Apple Computer, Inc. build 1635)</td>
</tr>
<tr>
<td></td>
<td>This version of gcc is included in Xcode Tools 1.2 or higher or in the Dec 2003 gccLongBranch Tools update.</td>
</tr>
</tbody>
</table>

To ensure that the system meets these requirements, follow these steps:

1. To determine the version of the operating system, enter the following command:
   
   ```
   # sw_vers
   ```

   **Note:** Only Mac OS X Server is supported.

2. To determine whether the required version of gcc is installed, enter the following command:
   
   ```
   # gcc -v
   ```

   This command returns output similar to the following:

   ```
   Reading specs from /usr/libexec/gcc/darwin/ppc/3.3/specs
   Thread model: posix
   gcc version 3.3 20030304 (Apple Computer, Inc. build 1635) (-mlongcall)
   ```
If the required version (including the date and build number) or a later version is not installed, download and install either of the following:

- The Dec 2003 gccLongBranch Tools update
- Xcode Tools 1.2 or higher, which includes the correct version of gcc

You can download this software from the Apple Developer Connection Web site:
http://connect.apple.com

After you log in, choose Download Software, then Developer Tools to display the download page.

Create Required UNIX Group and User

Depending on whether this is the first time Oracle software is being installed on this system and on the products that you are installing, you may need to create the following UNIX group and user:

- The Oracle Inventory group (oinstall)
  
  You must create this group the first time you install Oracle software on the system. The usual name chosen for this group is oinstall. This group owns the Oracle inventory, which is a catalog of all Oracle software installed on the system.

  **Note:** If Oracle software is already installed on the system, the existing Oracle Inventory group must be the primary group of the UNIX user that you use to install new Oracle software. The following sections describe how to identify an existing Oracle Inventory group.

- The Oracle software owner user (oracle)
  
  You must create this user the first time you install Oracle software on the system. This user owns all of the software installed during the installation. The usual name chosen for this user is oracle. This user must have the Oracle Inventory group as its primary group.

  A single Oracle Inventory group is required for all installations of Oracle software on the system. After the first installation of Oracle software, you must use the same Oracle Inventory group for all subsequent Oracle software installations on that system. However, you can choose to create different Oracle software owner users for separate installations.

  The following sections describe how to create the required UNIX user and group.

  **Note:** The following sections describe how to create local users and groups. As an alternative to creating local users and groups, you could create the appropriate users and groups in a directory service, for example, lightweight directory access protocol (LDAP) or Network Information Services (NIS). For information about using directory services, contact your system administrator or see your operating system documentation.
Creating the Oracle Inventory Group

You must create the Oracle Inventory group if it does not already exist. The following subsections describe how to determine the Oracle Inventory group name, if it exists, and how to create it if necessary.

Determine Whether the Oracle Inventory Group Exists

When you install Oracle software on the system for the first time, the Installer creates the `oraInst.loc` file. This file identifies the name of the Oracle Inventory group and the path of the Oracle Inventory directory. To determine whether the Oracle Inventory group exists, enter the following command:

```bash
# more /var/opt/oracle/oraInst.loc
```

If the `oraInst.loc` file exists, the output from this command is similar to the following:

```plaintext
inventory_loc=/Volumes/u01/app/oracle/oraInventory
inst_group=oinstall
```

The `inst_group` parameter shows the name of the Oracle Inventory group (`oinstall`).

Create the Oracle Inventory Group

If the `oraInst.loc` file does not exist, use one of the following methods to create the Oracle Inventory group:

- Use Workgroup Manager (`/Applications/Server/Workgroup Manager`) to create a group called `oinstall`.
- Use command-line utilities to create the Oracle Inventory group:
  1. Enter the following command to list existing groups and group IDs (GIDs):
     ```bash
     # nireport /groups gid name | more
     ```
  2. Identify an unused GID for the new Oracle Inventory group.
  3. Enter commands similar to the following to create the `oinstall` group:
     ```bash
     # nicl -create /groups/oinstall
     # nicl -append /groups/oinstall gid gid_number
     # nicl -append /groups/oinstall passwd "*"
     ```

Creating the Oracle Software Owner User

You must create an Oracle software owner user in the following circumstances:

- If an Oracle software owner user does not exist, for example, if this is the first installation of Oracle software on the system
- If an Oracle software owner user exists, but you want to use a different UNIX user
Determine Whether an Existing Oracle Software Owner User Exists

To determine whether an Oracle software owner user named oracle exists, enter the following command:

```
# id oracle
```

If the oracle user exists, the output from this command is similar to the following:

```
uid=440(oracle) gid=200(oinstall) groups=201(dba),202(oper)
```

If the user exists, determine whether you want to use the existing user or create a new user. If you want to use the existing user, ensure that the user’s primary group is the Oracle Inventory group.

See one of the following sections for more information:

---

**Note:** If necessary, contact your system administrator before using or modifying an existing user.

- If you want to use the existing Oracle software owner user, and the user’s primary group is the Oracle Inventory group, see the "Identify Required Software Directories" section on page 3-8.
- To modify an existing user, see the "Modify an Existing Oracle Software Owner User" section on page 3-8.
- To create a new user, see the following section.

Create a New Oracle Software Owner User

If the Oracle software owner user does not exist or if you require a new Oracle software owner user, create it as follows. In the following procedures, use the user name oracle unless a user with that name already exists.

- Use Workgroup Manager to create a user with the following properties:

<table>
<thead>
<tr>
<th>Property</th>
<th>Recommended Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Oracle Software Owner</td>
</tr>
<tr>
<td>Short name</td>
<td>oracle</td>
</tr>
<tr>
<td>Password</td>
<td>Specify and verify a password for the oracle user</td>
</tr>
<tr>
<td>Primary group</td>
<td>oinstall</td>
</tr>
<tr>
<td>Default shell</td>
<td>Any supported shell, for example /bin/tcsh or /bin/bash</td>
</tr>
<tr>
<td>Home directory</td>
<td>A home directory consistent with other user home directories, for example /Users/oracle</td>
</tr>
</tbody>
</table>

- Use command-line utilities to create the Oracle software owner user:

1. Enter the following command to list existing users and user IDs (UIDs):
   ```
   # nireport . /users uid name | more
   ```
2. Identify an unused UID for the new Oracle software owner user.
3. Enter commands similar to the following to create the oracle user:

   # nicl -create /users/oracle
   # nicl -append /users/oracle uid uid_number
   # nicl -append /users/oracle gid oinstall_gid
   # nicl -append /users/oracle shell /bin/bash
   # nicl -append /users/oracle home /Users/oracle
   # nicl -append /users/oracle realname "Oracle software owner"

4. Create the home directory for the oracle user and change the owner and
   group on that directory:

   # mkdir /Users/oracle
   # chown oracle:install /Users/oracle

5. Set the password for the oracle user:

   # passwd oracle

   See the "Identify Required Software Directories" section on page 3-8 to continue.

Modify an Existing Oracle Software Owner User

If the oracle user exists, but its primary group is not oinstall, you can use one of
the following methods to modify it:

■ Use Workgroup Manager to modify the oracle user, specifying oinstall as the
  Primary group.

■ Use command-line utilities to modify the oracle user:

   1. Enter the following command to determine the GID of the oinstall group:

      # nireport /groups/oinstall gid name

   2. Enter the following command to change the GID of the oracle user to the
      GID of the oinstall group:

      # nicl -delete /users/oracle gid
      # nicl -append /users/oracle gid oinstall_gid

Identify Required Software Directories

You must identify or create three directories for the Oracle software, as follows:

■ Oracle base directory

■ Oracle Inventory directory

■ Oracle home directory

The following subsections describe the requirements for these directories.

Oracle Base Directory

The Oracle base directory acts as a top-level directory for Oracle software installations.
It is analogous to the C:\Oracle directory used for Oracle software installations on
Windows systems. On UNIX systems, the Optimal Flexible Architecture (OFA)
guidelines recommend that you use a path similar to the following for the Oracle base
directory:

/mount_point/app/oracle_sw_owner
In this example:

- **mount_point** is the mount point directory for the file system that will contain the Oracle software.
  The examples in this guide use /Volumes/u01 for the mount point directory. However, you could choose another mount point directory, /Volumes/oracle or /opt/oracle for example.

- **oracle_sw_owner** is the UNIX user name of the Oracle software owner, for example oracle.

You can use the same Oracle base directory for more than one installation or you can create separate Oracle base directories for different installations. If different UNIX users install Oracle software on the same system, each user must create a separate Oracle base directory. The following example Oracle base directories could all exist on the same system:

/Volumes/u01/app/oracle
/Volumes/u01/app/orauser
/opt/oracle/app/oracle

The following sections describe how to identify existing Oracle base directories that might be suitable for your installation and how to create a new Oracle base directory if necessary.

Regardless of whether you create a new Oracle base directory or decide to use an existing one, you must set the ORACLE_BASE environment variable to specify the full path to this directory.

**Oracle Inventory Directory**

The Oracle Inventory directory (oraInventory) stores an inventory of all software installed on the system. It is required by, and shared by, all Oracle software installations on a single system. The first time you install Oracle software on a system, the Installer prompts you to specify the path to this directory. Oracle recommends that you choose the following path:

oracle_base/oraInventory

The Installer creates the directory that you specify and sets the correct owner, group, and permissions on it. You do not need to create it.

---

**Note:** All Oracle software installations rely on this directory. Make sure that you back it up regularly.

Do not delete this directory unless you have completely removed all Oracle software from the system.

---

**Oracle Home Directory**

The Oracle home directory is the directory where you choose to install the software for a particular Oracle product. You must install different Oracle products, or different releases of the same Oracle product, in separate Oracle home directories. When you run the Installer, it prompts you to specify the path to this directory, as well as a name that identifies it. The directory that you specify must be a subdirectory of the Oracle base directory. Oracle recommends that you specify a path similar to the following for the Oracle home directory:

oracle_base/product/10.1.0/companion_1
The Installer creates the directory path that you specify under the Oracle base directory. It also sets the correct owner, group, and permissions on it. You do not need to create this directory.

**Identify or Create an Oracle Base Directory**

Before starting the installation, you must either identify an existing Oracle base directory or if required, create a new one. This section contains information about the following:

- Identifying an Existing Oracle Base Directory
- Creating a New Oracle Base Directory

---

**Note:** You can choose to create a new Oracle base directory, even if other Oracle base directories exist on the system.

---

**Identifying an Existing Oracle Base Directory**

Existing Oracle base directories might not have paths that comply with OFA guidelines. However, if you identify an existing Oracle Inventory directory or existing Oracle home directories, you can usually identify the Oracle base directories, as follows:

- Identify an existing Oracle Inventory directory
  
  ```bash
  # more /var/opt/oracle/oraInst.loc
  ```
  
  If the `oraInst.loc` file exists, the output from this command is similar to the following:

  ```
  inventory_loc=/Volumes/u01/app/oracle/oraInventory
  inst_group=oinstall
  ```

  The `inventory_loc` parameter identifies the Oracle Inventory directory (`oraInventory`). The parent directory of the `oraInventory` directory is typically an Oracle base directory. In the previous example, `/Volumes/u01/app/oracle` is an Oracle base directory.

- Identify existing Oracle home directories
  
  Enter the following command to view the contents of the `oratab` file:

  ```bash
  # more /etc/oratab
  ```

  If the `oratab` file exists, it contains lines similar to the following:

  ```
  */Volumes/u03/app/oracle/product/10.1.0/db_1:N
  */opt/orauser/infra_904:N
  */Volumes/oracle/9.2.0:N
  ```

  The directory paths specified on each line identify Oracle home directories. Directory paths that end with the user name of the Oracle software owner that you want to use are valid choices for an Oracle base directory. If you intend to use the `oracle` user to install the software, you could choose one of the following directories from the previous example:

  ```
  /Volumes/u03/app/oracle
  /Volumes/oracle
  ```
Pre-installation Tasks for Installations in a New Oracle Home

To continue:

- If an Oracle base directory exists and you want to use it, see the "Configure the oracle User’s Environment" section on page 3-11.

  When you are configuring the oracle user’s environment later in this chapter, set the ORACLE_BASE environment variable to specify the directory you chose.

- If an Oracle base directory does not exist on the system or if you want to create a new Oracle base directory, see the following section.

Creating a New Oracle Base Directory

To identify an appropriate file system, follow these steps:

1. Use the `df -h` command to determine the free disk space on each mounted file system.
2. From the display, identify a file system that has appropriate free space.
3. Note the name of the mount point directory for the file system that you identified.

To create the Oracle base directory and specify the correct owner, group, and permissions for it, follow these steps:

1. Enter commands similar to the following to create the recommended subdirectories in the mount point directory that you identified and set the appropriate owner, group, and permissions on them:

   ```bash
   # mkdir -p /mount_point/app/oracle_sw_owner
   # chown -R oracle:oinstall /mount_point/app/oracle_sw_owner
   # chmod -R 775 /mount_point/app/oracle_sw_owner
   ```

   If the mount point you identified is `/u01` and `oracle` is the user name of the Oracle software owner, the recommended Oracle base directory path is as follows:

   `/Volumes/u01/app/oracle`

2. When you are configuring the oracle user’s environment later in this chapter, set the ORACLE_BASE environment variable to specify this directory.

Configure the oracle User’s Environment

You run the Installer from the oracle account. However, before you start the Installer you must configure the environment of the oracle user. To configure the environment, you must:

- Set the default file mode creation mask (umask) to 022 in the shell startup file.
- Set the ORACLE_BASE environment variable.

To set the oracle user’s environment, follow these steps:

1. Start a new terminal session.
2. If you are not already logged in to the system where you want to install the software, log in to that system as the oracle user.
3. If you are not logged in as the oracle user, switch user to oracle:

   $ su - oracle

4. To determine the default shell for the oracle user, enter the following command:

   $ echo $SHELL

5. Open the oracle user’s shell startup file in any text editor:
   - Bourne shell (sh), Bash shell (bash), or Korn shell (ksh):
     $ vi .profile
   - C shell (csh or tcsh):
     % vi .login

   **Note:** If the oracle user’s shell is the Bash shell, open the .bash_profile file, if it exists.

6. Enter or edit the following line, specifying a value of 022 for the default file mode creation mask:

   umask 022

7. If the ORACLE_SID, ORACLE_HOME, or ORACLE_BASE environment variables are set in the file, remove the appropriate lines from the file.

8. Save the file and exit from the editor.

9. To run the shell startup script, enter one of the following commands:
   - Bash shell:
     $ . ./bash_profile
   - Bourne, Bash, or Korn shell:
     $ . ./profile
     If you edited the
   - C shell:
     % source ./login

10. If you determined that the /tmp directory has less than 400 MB of free disk space, identify a file system with at least 400 MB of free space and set the TEMP and TMPDIR environment variables to specify a temporary directory on this file system:
    a. Use the df -h command to identify a suitable file system with sufficient free space.
    b. If necessary, as a user that is a member of the admin group, enter commands similar to the following to create a temporary directory on the file system that you identified, and set the appropriate permissions on the directory:

       $ sudo mkdir /mount_point/tmp
       $ sudo chmod a+wr /mount_point/tmp
c. As the oracle user, enter commands similar to the following to set the TEMP and TMPDIR environment variables:

* Bourne, Bash, or Korn shell:
  
  $ TEMP=/mount_point/tmp
  $ TMPDIR=/mount_point/tmp
  $ export TEMP TMPDIR

* C shell:

  % setenv TEMP /mount_point/tmp
  % setenv TMPDIR /mount_point/tmp

11. Enter commands similar to the following to set the ORACLE_BASE environment variable:

   ■ Bourne, Bash, or Korn shell:
     
     $ ORACLE_BASE=/Volumes/u01/app/oracle
     $ export ORACLE_BASE

   ■ C shell:

     % setenv ORACLE_BASE /Volumes/u01/app/oracle

   In these examples, /Volumes/u01/app/oracle is the Oracle base directory that you created or identified earlier.

12. Enter the following command to ensure that the TNS_ADMIN environment variable is not set:

   ■ Bourne, Bash, or Korn shell:
     
     $ unset TNS_ADMIN

   ■ C shell:

     % unsetenv TNS_ADMIN

13. To verify that the environment has been set correctly, enter the following commands:

     $ umask
     $ env | more

     Verify that the umask command displays a value of 22, 022, or 0022 and the environment variables that you set in this section have the correct values.

Pre-installation Tasks for Oracle HTML DB

Perform the tasks in the following sections before installing Oracle HTML DB.

Check the Oracle Database Installation

Before installing Oracle HTML DB, identify the Oracle database that you want to use with Oracle HTML DB. The database must be Oracle9i release 9.2.0.3 or higher. The database can be on a different system from the system where you are installing Oracle HTML DB.
Check for Oracle XML DB

Oracle XML DB must be installed in the database that you want to use.

If you are using a preconfigured database created either during an installation or by the Database Configuration Assistant (DBCA), Oracle XML DB is already installed and configured. For information about manually adding Oracle XML DB to an existing database, see the Oracle XML DB Developer’s Guide.

Identify Database Information

During the installation, you must specify the following information about the database:

- The host name of the database system
- The port number of the Oracle Net listener
- The service name of the database
- The password of the SYS user

Make sure that you have this information before starting the installation.
Installing the Software

This chapter describes how to start the Oracle Universal Installer and install the products available on the Oracle Database 10g Companion CD. Before beginning the installation, review the information in Chapter 1, "Installation Overview" and complete the tasks listed in either Chapter 2, "Pre-installation Tasks for Installations in an Existing Oracle Home" or Chapter 3, "Pre-installation Tasks for Installations in a New Oracle Home". This chapter contains the following sections:

- Introduction
- Installing Oracle Database 10g Products
- Installing Oracle HTML DB in an Existing Oracle Home
- Installing Oracle Database 10g Companion Products in a New Oracle Home
Introduction

The Oracle Database 10g Companion CD software is available on disc (CD-ROM or DVD-ROM) or you can download it from the Oracle Technology Network Web site (OTN). This chapter describes how to install Oracle Database 10g Companion CD software from the product media.

The Oracle Database 10g Companion CD contains two installation types: Oracle Database 10g Products and Oracle Database 10g Companion Products. If you install Oracle Database 10g Products, the Installer installs all of the products available with that installation type. If you install Oracle Database 10g Companion Products, you can choose which products to install and whether you want to install them in a new Oracle home or an existing one. Depending on the products that you want to install, follow the instructions in one of the following sections:

- Installing Oracle Database 10g Products
- Installing Oracle HTML DB in an Existing Oracle Home
- Installing Oracle Database 10g Companion Products in a New Oracle Home

Installing Oracle Database 10g Products

To install Oracle Database 10g Products, follow these steps:

1. Mount the disc, if it is not already mounted.
2. Log in as the Oracle software owner user (oracle).
3. To start the Installer, enter the following command where directory_path is the CD-ROM mount point directory path or the path of the companion directory on the DVD-ROM:

   ```
   $ directory_path/runInstaller
   ```

4. On the Welcome screen, click Next.

5. On the Specify File Locations screen, verify that the Oracle home name and path specifies the Oracle home for an Oracle Database 10g installation, then click Next.

6. If Oracle Real Application Clusters (RAC) is installed in the Oracle home that you choose, the Installer displays the Selected Nodes screen. Click Next to continue.

   **Note:** The Installer installs the software on all cluster nodes.

7. On the Select a Product to Install screen, choose Oracle Database 10g Products, then click Next.

   For more information about the products that are installed with this installation type, see Chapter 1, "Installation Overview".

8. To complete the installation, follow the instructions displayed in the Installer screens. If you need additional information about any screen, click Help.
When the installation completes, click **Exit**, then click **Yes** to exit from the Installer. See Chapter 5 for information about tasks that you must complete after you have installed the software.

### Installing Oracle HTML DB in an Existing Oracle Home

To install Oracle HTML DB in an existing Oracle home directory, follow these steps:

1. Mount the disc, if it is not already mounted.
2. Log in as the Oracle software owner user *(oracle)*.
3. To start the Installer, enter the following command where `<directory_path>` is the CD-ROM mount point directory path or the path of the companion directory on the DVD-ROM:

   ```
   $ /directory_path/runInstaller
   ```

4. On the Welcome screen, click **Next**.
5. On the Specify File Locations screen, verify that the Oracle home name and path specifies the Oracle home for an existing installation that contains Oracle HTTP Server that you installed from the Companion CD, then click **Next**.
6. On the Select a Product to Install screen, choose **Oracle Database 10g Companion Products**.
7. On the Available Product Components screen, select Oracle HTML DB, then click **Next**.

   **Note:** Because you are installing Oracle HTML DB in an existing Oracle home directory, do not select Oracle HTTP Server. Oracle HTTP Server is listed as **Apache Standalone** in the Available Product Components screen.

For more information about Oracle HTML DB, see Chapter 1, "Installation Overview".

8. Enter the following information on the Enter HTML DB Configuration Information screen, then click **Next**:

   - **Hostname**
     Specify the host name of the system where the database is installed.

   - **Port**
     Specify the TCP/IP port number for the Oracle Net listener on the database system. The default port number is 1521.

   - **Database Service Name**
     Specify the database service name for the database where you want to install the Oracle HTML DB database objects. The database service name is usually the same as the global database name for the database, for example, `sales.us.oracle.com`.

   - **SYS Password**
     Specify the password for the SYS user in the database.
Installing Oracle Database 10g Companion Products in a New Oracle Home

- **HTML DB Password**
  Specify the password that you want to use for the HTML DB schemas (users), which are created in the database during the installation.

  After the installation, you can use this password to connect to Oracle HTML DB as the ADMIN user. The password that you specify is also used for the HTMLDB_PUBLIC_USER schema, which is used by mod_plsql to connect to the database.

- **Confirm HTML DB Password**
  Enter the password again to verify that you have specified it correctly.

- **TABLESPACE Name**
  Enter the name of the tablespace where you want to load the Oracle HTML DB database objects, or accept the default (SYSAUX).

9. To complete the installation, follow the instructions displayed in the Installer screens. If you need additional information about any screen, click Help.

10. When the installation completes, click Exit, then click Yes to exit from the Installer.

See Chapter 5 for information about tasks that you must complete after you have installed the software.

---

**Installing Oracle Database 10g Companion Products in a New Oracle Home**

To install Oracle Database 10g Companion Products in a new Oracle home, follow these steps:

1. Mount the disc, if it is not already mounted.

2. To start the Installer, enter the following command where `directory_path` is the CD-ROM mount point directory path or the path of the companion directory on the DVD-ROM:

```shell
$ /directory_path/runInstaller
```

3. On the Welcome screen click Next.

4. If this is the first installation of Oracle products on this system, the Installer displays the Specify Inventory Directory and Credentials screen. Specify the following information, then click Next:

   - **Enter the full path of the inventory directory:**
     Verify that the path is similar to the following, where `oracle_base` is the value you specified for the ORACLE_BASE environment variable:

       ```
       oracle_base/oraInventory
       ```
- Specify operating system group name:
  Verify that the group specified is the Oracle Inventory group:
  
oinstall

5. If prompted, run the following script in a separate terminal window as the root user:

# oracle_base/oraInventory/orainstRoot.sh

Alternatively, as a user that is a member of the admin group, use the sudo command to run the script:

$ sudo oracle_base/oraInventory/orainstRoot.sh

6. On the Specify File Locations screen, enter a name and path for a new Oracle home directory, similar to the following:

<table>
<thead>
<tr>
<th>Field</th>
<th>Sample Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>OraDb10g_Home2</td>
</tr>
<tr>
<td>Path</td>
<td>oracle_base/product/10.1.0/companion_1</td>
</tr>
</tbody>
</table>

7. If Cluster Ready Services (CRS) or Oracle Real Application Clusters (RAC) is installed on the system, the Installer displays the Specify Hardware Cluster Installation Mode screen. Choose Local Installation to install the software on the installation node only, then click Next.

    **Note:** If required, you must install the software separately on each node of the cluster.

8. On the Select a Product to Install screen, choose Oracle Database 10g Companion Products, then click Next.

9. On the Available Product Components screen, select the products that you want to install. For more information about the products installed with the Oracle Database 10g Companion Products installation type, see Chapter 1, "Installation Overview".

    **Note:** If you are installing Oracle HTML DB in a new Oracle home, you must choose Oracle HTTP Server. Oracle HTTP Server is listed as Apache Standalone in the Available Product Components screen.

10. If you selected Oracle HTML DB, enter the following information on the Enter HTML DB Configuration Information screen, then click Next:

    - **Hostname**
      Specify the host name of the system where the database is installed.

    - **Port**
      Specify the TCP/IP port number for the Oracle Net listener on the database system. The default port number is 1521.
■ Database Service Name
Specify the database service name for the database where you want to install the Oracle HTML DB database objects. The database service name is usually the same as the global database name for the database, for example, sales.us.oracle.com.

■ SYS Password
Specify the password for the SYS user in the database.

■ HTML DB Password
Specify the password that you want to use for the HTML DB schemas (users), which are created in the database during the installation.

After the installation, you can use this password to connect to Oracle HTML DB as the ADMIN user. The password that you specify is also used for the HTMLDB_PUBLIC_USER schema, which is used by mod_plsql to connect to the database.

■ Confirm HTML DB Password
Enter the password again to verify that you have specified it correctly.

■ TABLESPACE Name
Enter the name of the tablespace where you want to load the Oracle HTML DB database objects, or accept the default (SYSAUX).

11. To complete the installation, follow the instructions displayed in the Installer screens. If you need additional information about any screen, click Help.

12. If prompted, run the following script in a separate terminal window as the root user:

```
# oracle_home/root.sh
```

Alternatively, as a user that is a member of the admin group, use the sudo command to run the script:

```
$ sudo oracle_home/root.sh
```

When the script finishes, click OK.

13. On the End of Installation screen, make a note of the URLs used by Oracle HTTP Server.

---

**Note:** These URLs are also listed in the following file:

```
$ORACLE_HOME/install/setupinfo.txt
```

---

14. Click Exit, then click Yes to exit from the Installer.

See Chapter 5 for information about tasks that you must complete after you have installed the software.
This chapter describes tasks that you might need to complete after you install the software. It includes information about the following:

- Post-installation Tasks for Oracle HTTP Server
- Post-installation Tasks for Oracle HTML DB
Post-installation Tasks for Oracle HTTP Server

If you installed Oracle HTTP Server, complete the tasks described in the following sections.

Back Up the root.sh Script

Oracle recommends that you back up the root.sh script after you complete an installation. If you install other products in the same Oracle home directory, then the Oracle Universal Installer updates the contents of the existing root.sh script during the installation. If you require information contained in the original root.sh script, then you can recover it from the backed up root.sh file.

Download and Install Patches

Check the Oracle Metalink Web site for required patches for this product. To download required patches:

1. Use a Web browser to view the Oracle Metalink Web site:
   http://metalink.oracle.com
2. Log in to Oracle Metalink.

   **Note:** If you are not an Oracle Metalink registered user, click Register for MetaLink! and follow the registration instructions.

3. On the main Oracle Metalink page, click Patches.
4. Select Simple Search.
5. Specify the following information, then click Go:
   - In the Search By field, choose Product or Family, then specify RDBMS Server.
   - In the Release field, specify the current release number.
   - In the Patch Type field, specify Patchset/Minipack.
   - In the Platform or Language field, select your platform.

Starting, Stopping, and Restarting Oracle HTTP Server

Use the apachectl script to start, stop, or restart Oracle HTTP Server, as follows:

```
$ $ORACLE_HOME/Apache/Apache/bin/apachectl { start | startssl | stop | restart | restartssl }
```

Post-installation Tasks for Oracle HTML DB

If you installed Oracle HTML DB, complete the tasks listed in the following sections.

Restart Oracle HTTP Server

If you installed Oracle HTML DB, you must restart Oracle HTTP Server before you can access it. To restart Oracle HTTP Server, enter the following command:

```
$ $ORACLE_HOME/Apache/Apache/bin/apachectl restart
```
Verify the Installation

To verify the installation, open the Oracle HTML DB administration page in a Web browser. To complete this task, follow these steps:

1. Open the following URL in a Web browser:
   
   `http://hostname:port/pls/htmldb/htmldb_admin`
   
   In this example:
   
   - `hostname` is the Oracle HTTP Server host name
   - `port` is the Oracle HTTP Server port

2. Log in to Oracle HTML DB using the user name ADMIN and the password that you specified during the installation.

   **See Also:** For more information about using, developing applications with, and administering Oracle HTML DB, see the online help and the Oracle HTML DB User’s Guide.
This chapter describes how to remove Oracle software from the system. It includes information about the following tasks:

- Removing Oracle Software Files
- Removing Oracle HTML DB Database Objects
Removing Oracle Software Files

The following steps describe how to use the Installer to remove Oracle software from an Oracle home:

---

**Note:** Always use the Oracle Universal Installer to remove Oracle software. Do not delete any Oracle home directories without first using the Installer to remove the software.

---

1. If necessary, log in as the `oracle` user:

   ```bash
   $ su - oracle
   ```

2. Set the `ORACLE_HOME` environment variable to specify the path of the Oracle home directory that you want to remove:

   - Bourne, Bash, or Korn shell:
     ```bash
     $ ORACLE_HOME=oracle_home_path
     $ export ORACLE_HOME
     ```
   - C shell:
     ```bash
     $ setenv ORACLE_HOME oracle_home_path
     ```

3. Start the Installer as follows:

   ```bash
   $ $ORACLE_HOME/oui/bin/runInstaller
   ```

4. In the Welcome screen, click **Deinstall Products**.
   The Inventory screen appears, listing all of the Oracle homes on the system and the products installed in each Oracle home.

5. In the Inventory screen, select the Oracle home or the products that you want to remove.

6. Click **Remove**.
   The Installer displays a confirmation screen asking you to confirm that you want to deinstall the products and their dependant components.

7. Click **Yes**.
   The Installer displays a progress indicator as it removes the software.
Removing Oracle HTML DB Database Objects

When you install Oracle HTML DB, a configuration assistant creates database objects in the database that you specify during the installation. To completely remove Oracle HTML DB, you must remove the database objects from that database after you remove the software. To remove the Oracle HTML DB database objects from a database, follow these steps:

1. Using SQL*Plus, connect to the database as the SYS or SYSTEM user:
   
   $ sqlplus "SYS/SYS_password AS SYSDBA"

2. Enter the following commands to remove the database objects:

   SQL> ALTER SESSION SET CURRENT_SCHEMA = flows_010500;
   SQL> EXEC wwv_flow_upgrade.drop_public_synonyms;
   SQL> ALTER SESSION SET CURRENT_SCHEMA = SYSTEM;
   SQL> DROP USER flows_010500 CASCADE;
   SQL> DROP USER flows_files CASCADE;
   SQL> DROP USER htmldb_public_user CASCADE;
This appendix contains information about troubleshooting. It includes information about the following topics:

- Verify Requirements
- What to Do If an Installation Error Occurs
- Reviewing the Log of an Installation Session
- Troubleshooting Configuration Assistants
- Cleaning Up After a Failed Installation
- Alias for the HTML DB Image Directory
Verify Requirements

Before performing any of the troubleshooting steps in this appendix, ensure that the system meets the requirements and that you have completed all of the pre-installation tasks specified either in Chapter 2, "Pre-installation Tasks for Installations in an Existing Oracle Home" or in Chapter 3, "Pre-installation Tasks for Installations in a New Oracle Home".

What to Do If an Installation Error Occurs

If you encounter an error during installation:

- Do not exit the Installer.
- If you clicked Next after you entered incorrect information on one of the installation screens, click Back to return to the screen and correct the information.
- If you encounter an error while the Installer is copying or linking files, see the "Reviewing the Log of an Installation Session" section on page A-2.
- If you encounter an error while a configuration assistant is running, see the "Troubleshooting Configuration Assistants" section on page A-3.
- If you cannot resolve the problem, remove the failed installation by following the steps listed in the "Cleaning Up After a Failed Installation" section on page A-3.

Reviewing the Log of an Installation Session

During an installation, the Installer records all of the actions that it performs in a log file. If you encounter problems during the installation, review the log file for information about possible causes of the problem.

To view the log file, follow these steps:

1. If necessary, enter the following command to determine the location of the oroInventory directory:

   ```
   $ cat /etc/oraInst.loc
   
   The inventory_loc parameter in this file specifies the location of the oroInventory directory.
   ```

2. Enter the following command to change directory to the Installer log file directory, where oroinventory_location is the location of the oroInventory directory:

   ```
   $ cd /oroinventory_location/logs
   ```

3. Enter the following command to determine the file name of the log file:

   ```
   $ ls -ltr
   
   This command lists the files in the order of creation, with the most recent file shown last. Installer log files have names similar to the following, where date_time indicates the date and time that the installation started:

   installActionsdate_time.log
   ```

4. To view the most recent entries in the log file, where information about a problem is most likely to appear, enter a command similar to the following:

   ```
   $ tail -50 installActionsdate_time.log | more
   ```
Cleaning Up After a Failed Installation

This command displays the last 50 lines in the log file.

5. If the error displayed by the Installer or listed in the log file indicates a relinking problem, see the following file for more information:

$ORACLE_HOME/install/make.log

Troubleshooting Configuration Assistants

To troubleshoot an installation error that occurs when a configuration assistant is running:

- Review the installation log files listed in the "Reviewing the Log of an Installation Session" section on page A-2.
- Review the specific configuration assistant log file located in the $ORACLE_HOME/cfgtoollogs directory. Try to fix the issue that caused the error.
- If you see the Fatal Error: Reinstall message, look for the cause of the problem by reviewing the log files. Refer to the "Fatal Errors" section for further instructions.

Configuration Assistant Failure

Oracle configuration assistant failures are noted at the bottom of the installation screen. The configuration assistant interface displays additional information, if available. The configuration assistant execution status is stored in the following file:

oraInventory_location/logs/installActionsdate_time.log

The execution status codes are listed in the following table:

<table>
<thead>
<tr>
<th>Status</th>
<th>Result Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configuration assistant succeeded</td>
<td>0</td>
</tr>
<tr>
<td>Configuration assistant failed</td>
<td>1</td>
</tr>
<tr>
<td>Configuration assistant cancelled</td>
<td>-1</td>
</tr>
</tbody>
</table>

Fatal Errors

If you receive a fatal error while a configuration assistant is running, you must remove the current installation and reinstall the Oracle software, as follows:

1. Remove the failed installation as described in the "Cleaning Up After a Failed Installation" section on page A-3.
2. Correct the cause of the fatal error.
3. Reinstall the Oracle software.

Cleaning Up After a Failed Installation

If an installation fails, you must remove files that the Installer created during the attempted installation and remove the Oracle home directory. Perform the following steps to remove the files:

1. Start the Installer as described in the "Installing Oracle Database 10g Products" section on page 4-2.
2. Click **Deinstall Products** on the Welcome screen or click **Installed Products** on any Installer screen.
   The Inventory screen appears, listing installed products.

3. Select the products that you want to remove, then click **Remove**.
4. Manually remove the Oracle home directory created during the failed installation.
5. Reinstall the Oracle software.

**Alias for the HTML DB Image Directory**

The Oracle HTML DB configuration assistant defines the alias `/i/` for the Oracle HTML DB image directory. If the alias `/i/` is already defined, Oracle HTTP Server uses the first definition of the `/i/` alias. If the Oracle HTML DB images do not look correct, do one of the following:

- If possible, rename the first instance of `/i/` to a different alias name.
- Alternatively, copy the images from the `$ORACLE_HOME/marvel/images` directory to the directory defined by the first `/i/` alias.
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