

**Oracle® Database**

Companion CD Installation Guide

10g Release 2 (10.2) for Apple Mac OS X (Intel)

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Oracle Database Companion CD Installation Guide, 10g Release 2 (10.2) for Apple Mac OS X (Intel)

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# Preface

This guide describes how to install and configure the products available on the Oracle Database 10g Companion CD installation media.

## Audience

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

## Documentation Accessibility

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

### Accessibility of Code Examples in Documentation

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

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### TTY Access to Oracle Support Services

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## 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 (Intel)*
  - *Oracle Database Installation Guide for Apple Mac OS X (Intel)*
  - *Oracle Database Administrator's Reference for UNIX-Based Operating Systems*
- Oracle Database Client
  - *Oracle Database Client Installation Guide for Apple Mac OS X (Intel)*

Refer to *Oracle Database Release Notes for Apple Mac OS X (Intel)* 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 Oracle Technology Network at

<http://www.oracle.com/technology/documentation/index.html>

## Conventions

The following text conventions are used in this document:

Convention	Meaning
<b>boldface</b>	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	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.

## 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.

Convention	Description
backslash \	A backslash indicates a command that is too long to fit on a single line. Enter the line as displayed (with a backslash) or enter it on a single line without a backslash: <pre>dd if=/dev/rdisk/c0t1d0s6 of=/dev/rst0 bs=10b \ count=10000</pre>
braces { }	Braces indicate required items: <code>.DEFINE {macro1}</code>
brackets [ ]	Brackets indicate optional items: <code>cvtcrt termname [outfile]</code>
ellipses ...	Ellipses indicate an arbitrary number of similar items: <code>CHKVAL fieldname value1 value2 ... valueN</code>
<i>italics</i>	Italic type indicates a variable. Substitute a value for the variable: <code>library_name</code>

Convention	Description
vertical line	A vertical line indicates a choice within braces or brackets: <i>SIZE filesize [K M]</i>

## Terminology

In this guide, the term `Companion CD products` has been used to refer to the products available on the Oracle Database Companion CD installation media. In contrast, the term `Oracle Database 10g Companion Products` has been used to refer to the products available in the Oracle Database 10g Companion Products installation type.

## Accessing Documentation

The documentation for Oracle Database 10g release 2 (10.2) 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 the disc:

1. Use a Web browser to open the `welcome.htm` file in the top-level directory of the disc.
2. 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 Oracle Database 10g Release 2 (10.2) Online Documentation Library. This library is on the Oracle Technology Network Web site at

<http://www.oracle.com/technology/documentation/index.html>



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# Oracle Database Companion CD Installation Overview

This chapter provides an overview of the products available on the Oracle Database Companion CD installation media and describes issues that you must consider before installing them. It includes the following sections:

- [Overview of Oracle Database Companion CD Installation](#)
- [Products Available in the Oracle Database 10g Products Installation Type](#)

## 1.1 Overview of Oracle Database Companion CD Installation

The installation process consists of the following steps:

1. **Read the release notes:** Read *Oracle Database Release Notes for Apple Mac OS X (Intel)* before you begin the installation. The release notes are available with the platform-specific documentation. The latest version of the release notes is available on Oracle Technology Network at <http://www.oracle.com/technology/documentation/index.html>
2. **Plan the installation:** This chapter describes the products that you can install and provides information that you must know before installing the software.  
  
**See Also:** The "Frequently Asked Questions About Installation" appendix of *Oracle Database Installation Guide for Apple Mac OS X (Intel)* for information about the best way to install Oracle products depending on the requirements of your site
3. **Verify system requirements:** [Chapter 2](#) describes the minimum system requirements for installing Companion CD products.
4. **Installing the software:** The following chapter and appendixes provide information about installing Companion CD products:
  - [Chapter 3, "Installing the Oracle Database Companion CD Software"](#)
  - [Appendix A, "Troubleshooting the Oracle Database Companion CD Installation"](#)
  - [Appendix B, "Installing Oracle Database Companion CD Products in Noninteractive Mode"](#)
5. **Completing postinstallation tasks:** [Chapter 4](#) describes required and recommended postinstallation tasks.

6. **Getting started on using the Companion CD products:** [Chapter 5](#) provides information about using the Companion CD products.

## 1.2 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 release 2 (10.2) Oracle home:

- [Oracle JDBC Development Drivers](#)
- [Oracle SQLJ](#)
- [JPublisher](#)

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**Note:** The Summary screen of Oracle Universal Installer provides a detailed list of the products available in the Oracle Database 10g Products installation type.

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### 1.2.1 Oracle JDBC Development Drivers

Oracle provides a set of JDBC drivers that you can use for debugging your code and other deployment scenarios. These drivers can access Oracle Database release 8.1.7 or later.

### 1.2.2 Oracle SQLJ

Oracle SQLJ enables application programmers to embed SQL operations in Java code in a way that is compatible with the Java design philosophy. A SQLJ program is a Java program containing embedded SQL statements. Oracle SQLJ offers extensions to support dynamic SQL operations, which are operations that can change in real time. It is also possible to use dynamic SQL operations through JDBC code or PL/SQL code within a SQLJ application. Typical applications contain much more static SQL than dynamic SQL. SQLJ consists of both a translator and a run-time component and is smoothly integrated into your development environment.

### 1.2.3 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

You can use JPublisher 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. You can also use PL/SQL conversion functions between such types. With such type correspondences in place, JPublisher can automatically generate the required Java and PL/SQL code.

Just like SQL and PL/SQL entities publish to Java, you can also 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 lets you 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 calls the Oracle SQLJ translator during the code generation process, as required. The translator converts embedded SQL statements into JDBC calls.

### **Oracle SQLJ Runtime**

Oracle SQLJ Runtime is used during program run time to run 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:** *Oracle Database JPublisher User's Guide*



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# Oracle Database Companion CD Requirements

This chapter describes the requirements for installing the products from the Oracle Database 10g Companion CD installation media. It contains the following sections:

- [Hardware and Software Certification](#)
- [General Requirements for Installing Oracle Software](#)
- [Requirements for Installing Oracle Database 10g Products](#)
- [Network Setup](#)

## 2.1 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 may be certified after this guide is published, you must review the certification information on the *OracleMetaLink* Web site. This Web site provides the most up-to-date list of certified hardware platforms and operating system versions. You can visit the *OracleMetaLink* Web site at

<https://metalink.oracle.com>

If you do not have a current Oracle Support Services contract, then you can access the same information on the Oracle Technology Network Web site at

<http://www.oracle.com/technology/support/metalink/content.html>

## 2.2 General Requirements for Installing Oracle Software

The following sections describe the general requirements for installing Oracle software:

- [Logging In to the System as root](#)
- [Creating Required Operating System Groups and Users](#)
- [Required Software Directories](#)
- [Configuring the oracle User's Environment](#)

### 2.2.1 Logging 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, complete one of the following procedures:

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.

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**Note:** Alternatively, if you are logged in as a user who is a member of the `admin` group, you can use the `sudo` command to run commands as the `root` user, as follows:

```
$ sudo /usr/sbin/sysctl -a
```

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## 2.2.2 Creating Required Operating System Groups and Users

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 several operating system groups and users.

The following operating system groups and user are required if you are installing Oracle Database:

- The OSDBA group (`dba`)

You must create this group the first time you install Oracle Database software on the system. It identifies operating system user accounts that have database administrative privileges (the `SYSDBA` privilege). The default name for this group is `dba`.

If you want to specify a group name other than the default `dba` group, then you must choose the Custom installation type to install the software or start Oracle Universal Installer as a user that is not a member of this group. In this case, Oracle Universal Installer prompts you to specify the name of this group.

- The OSOPER group (`oper`)

This is an optional group. Create this group if you want a separate group of operating system users to have a limited set of database administrative privileges (the `SYSOPER` privilege). By default, members of the OSDBA group also have the `SYSOPER` privilege.

If you want to specify a separate OSOPER group, other than the default `dba` group, then you must choose the Custom installation type to install the software or start Oracle Universal Installer as a user that is not a member of the `dba` group. In this case, Oracle Universal Installer prompts you to specify the name of this group. The usual name chosen for this group is `oper`.

- An unprivileged user

Verify that the unprivileged user `nobody` exists on the system. The `nobody` user must own the external jobs (`extjob`) executable after the installation.

The following operating system group and user are required for all installations:

- The Oracle Inventory group (typically, `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.

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**Note:** If Oracle software is already installed on the system, then the existing Oracle Inventory group must be the primary group of the operating system user that you use to install new Oracle software.

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- The Oracle software owner user (typically, `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. This user must have the Oracle Inventory group as its primary group. It must also have the OSDBA and OSOPER groups as secondary groups.

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**Note:** In Oracle documentation, this user is referred to as the `oracle` user.

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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, OSDBA groups, and OSOPER groups (other than `oracle`, `dba`, and `oper`) for separate installations. By using different groups for different installations, members of these different groups have DBA privileges only on the associated databases rather than on all databases on the system.

**See Also:** *Oracle Database Administrator's Reference for UNIX-Based Operating Systems* and *Oracle Database Administrator's Guide* for more information about the OSDBA and OSOPER groups and the SYSDBA and SYSOPER privileges

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**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, Network Information Services (NIS). For information about using directory services, contact your system administrator or refer to your operating system documentation.

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The following sections describe how to create the required operating system users and groups:

- [Creating the Oracle Inventory Group](#)
- [Creating the OSDBA Group](#)
- [Creating an OSOPER Group \(Optional\)](#)
- [Creating the Oracle Software Owner User](#)

### 2.2.2.1 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.

### Determining Whether the Oracle Inventory Group Exists

When you install Oracle software on the system for the first time, Oracle Universal 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:

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

If the output of this command shows the `oinstall` group name, then the group already exists.

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

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

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

### Creating the Oracle Inventory Group

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

- 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):

```
# dscl . -list /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:

```
# dscl . -create /groups/oinstall
# dscl . -append /groups/oinstall gid gid_number
# dscl . -append /groups/oinstall passwd ""
```

#### 2.2.2.2 Creating the OSDBA Group

You must create an OSDBA group in the following circumstances:

- An OSDBA group does not exist, for example, if this is the first installation of Oracle Database software on the system
- An OSDBA group exists, but you want to give a different group of operating system users database administrative privileges in a new Oracle installation

If the OSDBA group does not exist or if you require a new OSDBA group, then create it as follows. In the following command, use the group name `dba` unless a group with that name already exists.

- Use Workgroup Manager to create a group called `dba`.

- Use command-line utilities to create the OSDBA group:

1. Enter the following command to list existing groups and GIDs:

```
# dscl . -list /groups gid name | more
```

2. Identify an unused GID for the new OSDBA group.
3. Enter commands similar to the following to create the dba group:

```
# dscl . -create /groups/dba
# dscl . -append /groups/dba gid gid_number
# dscl . -append /groups/dba passwd "*"

```

### 2.2.2.3 Creating an OSOPER Group (Optional)

Create an OSOPER group only if you want to identify a group of operating system users with a limited set of database administrative privileges (SYSOPER operator privileges). For most installations, it is sufficient to create only the OSDBA group. If you want to use an OSOPER group, then you must create it in the following circumstances:

- If an OSOPER group does not exist, for example, if this is the first installation of Oracle Database software on the system
- If an OSOPER group exists, but you want to give a different group of operating system users database operator privileges in a new Oracle installation

If you require a new OSOPER group, then create it as follows. In the following command, use the group name `oper` unless a group with that name already exists.

- Use Workgroup Manager to create a group called `oper`.
- Use command-line utilities to create the OSOPER group:
  1. Enter the following command to list existing groups and GIDs:

```
# dscl . -list /groups gid name | more

```

2. Identify an unused GID for the new OSOPER group.
3. Enter commands similar to the following to create the `oper` group:

```
# dscl . -create /groups/oper
# dscl . -append /groups/oper gid gid_number
# dscl . -append /groups/oper passwd "*"

```

### 2.2.2.4 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 operating system user

**2.2.2.4.1 Determining Whether an 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, then 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, then determine whether you want to use the existing user or create another `oracle` user. If you want to use the existing user, then ensure that the user's primary group is the Oracle Inventory group. Refer to one of the following sections for more information:

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

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- To modify an existing user, refer to the "[Modifying an Oracle Software Owner User](#)" on page 2-7.
- To create a user, refer to the following section.

**2.2.2.4.2 Creating an Oracle Software Owner User** If the Oracle software owner user does not exist or if you require a new Oracle software owner user, then create it as follows. In the following procedure, use the user name `oracle` unless a user with that name already exists.

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

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

- Use command-line utilities to create the Oracle software owner user:
  1. Enter the following command to list existing users and user IDs (UIDs):
 

```
# dscl . -list /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:
 

```
# dscl . -create /users/oracle
# dscl . -append /users/oracle uid uid_number
# dscl . -append /users/oracle gid oinstall_gid
# dscl . -append /users/oracle shell /bin/bash
# dscl . -append /users/oracle home /Users/oracle
# dscl . -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:oinstall /Users/oracle
```
  5. Set the password for the `oracle` user:
 

```
# passwd oracle
```

**2.2.2.4.3 Modifying an Oracle Software Owner User** If the `oracle` user exists, but its primary group is not `oinstall`, then 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:

```
# dscl . -list /groups/oinstall gid name | more
```

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

```
# dscl . -delete /users/oracle gid
# dscl . -append /users/oracle gid oinstall_gid
```

## 2.2.3 Required Software Directories

This section describes the following directories, which you must identify or create for the Oracle software:

- Oracle base directory
- Oracle Inventory directory
- Oracle home directory

### 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 Microsoft Windows systems. On UNIX-based 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 `/u01` for the mount point directory. However, you can choose another mount point directory. For example, `/oracle` or `/opt/oracle`.

- *oracle\_sw\_owner* is the operating system 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 operating system users install Oracle software on the same system, then each user must create a separate Oracle base directory. For example, the following Oracle base directories can exist on the same system at the same time:

```
/u01/app/oracle
/u01/app/orauser
/opt/oracle/app/oracle
```

Regardless of whether you create an 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.

---

---

**Note:** You can create an Oracle base directory even if other Oracle base directories exist on the system.

---

---

### Identifying an Existing Oracle Base Directory

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

- Identify an existing Oracle Inventory directory

Enter the following command to view the contents of the `oraInst.loc` file:

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

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

```
inventory_loc=/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, `/u01/app/oracle` is an Oracle base directory.

- Identifying existing Oracle home directories

Enter the following command to view the contents of the `oratab` file:

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

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

```
*/u03/app/oracle/product/10.2.0/db_1:N
*/opt/orauser/infra_904:N
*/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, then you can choose one of the following directories from the previous example:

```
/u03/app/oracle
/oracle
```

---

---

**Note:** If possible, choose a directory path similar to the first (`/u03/app/oracle`). This path complies with the OFA guidelines.

---

---

To continue:

- If an Oracle base directory exists and you want to use it, then refer to the ["Configuring the oracle User's Environment"](#) section on page 2-10.

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 an Oracle base directory, then refer to the following section.

### Creating an Oracle Base Directory

To identify an appropriate file system:

1. Use the `df -k` command to determine the free disk space on each mounted file system.
2. From the display, identify a file system that has sufficient 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:

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 for them:

```
# 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, then the recommended Oracle base directory path is as follows:

```
/u01/app/oracle
```

2. When you configure the `oracle` user's environment later in this chapter, set the `ORACLE_BASE` environment variable to specify 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, Oracle Universal Installer prompts you to specify the path to this directory. Oracle recommends that you choose the following path:

```
oracle_base/oraInventory
```

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

---

**Caution:** All Oracle software installations rely on this directory. Ensure 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 in which 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 Oracle Universal 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/10.2.0/companion_1
```

Oracle Universal 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.

## 2.2.4 Configuring the oracle User's Environment

You run Oracle Universal Installer from the `oracle` account. However, before you start Oracle Universal 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 `DISPLAY` 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 on which you want to install the software, then log in to that system as the `oracle` user.
3. If you are not logged in as the `oracle` user, then 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:
  - Bash shell:

```
$ . ~/.bash_profile
```
  - Bourne shell (`sh`), or Korn shell (`ksh`):

```
$ vi .profile
```
  - C shell (`csh` or `tcsh`):

```
% vi .login
```
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 variable are set in the file, then 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
```

- C shell:

```
% source ~/.login
```

10. If you determined that the `/tmp` directory has less than 400 MB of free disk space, then 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. To do this:

- 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 to set the appropriate permissions on the directory:

```
$ sudo mkdir /mount_point/tmp
$ sudo chmod a+wr /mount_point/tmp
```

- c. Enter commands similar to the following to set the `TEMP` and `TMPDIR` environment variables:

- \* Bourne, Bash, or Korn shell:

```
$ TMPDIR=/mount_point/tmp
$ TEMP=/mount_point/tmp
$ export TEMP TMPDIR
```

- \* C shell:

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

11. Enter the following command to ensure that the `ORACLE_HOME` and `TNS_ADMIN` environment variables are not set:

- Bourne, Bash, or Korn shell:

```
$ unset ORACLE_HOME
$ unset TNS_ADMIN
```

- C shell:

```
% unsetenv ORACLE_HOME
% unsetenv TNS_ADMIN
```

12. 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.

## 2.3 Requirements for Installing Oracle Database 10g Products

The requirements for the Oracle Database 10g Products installation type are as follows:

- [Oracle Database Requirement](#)

- [Disk Space Requirements](#)

### 2.3.1 Oracle Database Requirement

Before you install products from the Oracle Database 10g Products installation type, you must ensure that your system has access to an Oracle Database 10g release 2 (10.2) Oracle home. If required, you must first install or upgrade to this release of Oracle Database.

**See Also:** *Oracle Database Installation Guide* for information about installing Oracle Database

Identify the Oracle home directory used by the Oracle Database installation. To do this, you can check the contents of the `oratab` file by using the following command:

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

### 2.3.2 Disk Space Requirements

Verify that the file system that contains the Oracle home directory has at least 1194 MB of free disk space.

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

```
# df -k oracle_home_path
```

## 2.4 Network Setup

Typically, the computer on which you want to install Oracle Database is connected to the network, has local storage to contain the Oracle Database installation, has a display monitor, and has a CD-ROM or DVD drive.

This section describes how to install Oracle Database on computers that do not meet the typical scenario. It covers the following cases:

- [Installing on DHCP Computers](#)
- [Installing on Multihomed Computers](#)
- [Installing on Computers with Multiple Aliases](#)

### 2.4.1 Installing on DHCP Computers

Dynamic Host Configuration Protocol (DHCP) assigns dynamic IP addresses on a network. Dynamic addressing enables a computer to have a different IP address each time it connects to the network. In some cases, the IP address can change while the computer is still connected. You can have a combination of static and dynamic IP addressing in a DHCP system.

In a DHCP setup, the software tracks IP addresses, which simplifies network administration. This lets you add a new computer to the network without having to manually assign that computer a unique IP address.

### 2.4.2 Installing on Multihomed Computers

You can install Companion CD products on a multihomed computer. A multihomed computer is associated with multiple IP addresses. This is typically achieved by having multiple network cards on the computer. Each IP address is associated with a

host name. In addition, you can set up aliases for the host name. By default, Oracle Universal Installer uses the `ORACLE_HOSTNAME` environment variable setting to find the host name. If `ORACLE_HOSTNAME` is not set and you are installing on a computer that has multiple network cards, then Oracle Universal Installer determines the host name by using the first entry in the `/etc/hosts` file.

Clients must be able to access the computer either by using this host name or by using aliases for this host name. To verify this, ping the host name from the client computers using the short name (host name only) and the full name (host name and domain name). Both tests must be successful.

### Setting the `ORACLE_HOSTNAME` Environment Variable

Use the following procedure to set the `ORACLE_HOSTNAME` environment variable.

If, for example, the fully qualified host name is `somehost.us.acme.com`, then enter one of the following commands:

Bourne, Bash, or Korn shell:

```
$ ORACLE_HOSTNAME=somehost.us.acme.com
$ export ORACLE_HOSTNAME
```

C shell:

```
% setenv ORACLE_HOSTNAME somehost.us.acme.com
```

## 2.4.3 Installing on Computers with Multiple Aliases

A computer with multiple aliases is registered with the naming service under a single IP but with multiple aliases. The naming service resolves any of those aliases to the same computer. Before installing Oracle Database on such a computer, set the `ORACLE_HOSTNAME` environment variable to the computer whose host name you want to use.



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# Installing the Oracle Database Companion CD Software

This chapter describes how to start Oracle Universal Installer and install the products available on the Oracle Database Companion CD installation media. It contains the following sections:

- [General Steps for Installing Companion CD Products](#)
- [Accessing the Installation Software](#)
- [Installing Oracle Database 10g Products](#)

## 3.1 General Steps for Installing Companion CD Products

After completing the tasks in [Chapter 1](#) and [Chapter 2](#), follow these general steps to install the Companion CD products:

1. Consider the following issues:
  - **Installing in interactive or noninteractive mode:** The instructions in this chapter are written for interactive installations. If you prefer to perform the installation in noninteractive mode (for example, if your site requires multiple installations) refer to "[Installing Oracle Components in Noninteractive Mode](#)" on page B-1 for more information.
  - **Installing in a Different Language:** Refer to "[Installing and Using Oracle Components in Different Languages](#)" on page C-1 for language considerations.
2. Follow the procedures described in "[Accessing the Installation Software](#)" on page 3-1, if you want to install the software from a hard drive or install remotely.

## 3.2 Accessing the Installation Software

The Oracle Database Companion CD software is available on the installation media, or you can download it from the Oracle Technology Network Web site.

When you are ready to install the software, you can access it by using any of the following methods:

- Download the software to the hard disk
- Copy the software from the installation media to the hard disk
- Access the software by using a remote drive
- Install on a remote computer by using remote access software

## 3.3 Installing Oracle Database 10g Products

You must install Oracle Database 10g Products in an existing Oracle Database 10g release 2 (10.2) Oracle home.

**See Also:** ["Products Available in the Oracle Database 10g Products Installation Type"](#) on page 1-2 for information about the products that can be installed from this installation type

To install Oracle Database 10g Products, you first run Oracle Universal Installer.

To install Oracle Database 10g Products:

1. If you are installing from the installation media, then mount the disc if it is not already mounted.
2. If required, log in as the Oracle software owner user (`oracle`) and set the `DISPLAY` environment variable.
3. To start Oracle Universal Installer, enter the following commands:

```
$ cd /tmp
$ /directory_path/runInstaller
```

In the preceding command, *directory\_path* is the path of the companion directory on the installation media or the hard drive.

4. On the Welcome screen, click **Next**.
5. If this is the first installation of Oracle products on this system, then Oracle Universal Installer displays the Specify Inventory Directory and Credentials screen. Specify the following information, and 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`.
6. On the Select a Product to Install screen, select **Oracle Database 10g Products** and then click **Next**.
7. On the Specify Home Details screen, enter the following:
  - **Name:** In this field, the default Oracle home is displayed. Verify that the Oracle home specified is the Oracle Database Oracle home.
  - **Path:** In this field, the directory of the default Oracle home is displayed. Enter the directory location of the Oracle Database Oracle home in which you want to install the Oracle home files.

**See Also:** ["Oracle Database Requirement"](#) on page 2-12 for information about finding the Oracle home
8. On the Product-specific Prerequisite Checks screen, check for and correct any errors that may have occurred while Oracle Universal Installer was checking your system.

9. When the installation completes, click **Exit**, and then click **Yes** to exit from Oracle Universal Installer.

**See Also:** [Chapter 4, "Oracle Database Companion CD Postinstallation Tasks"](#)



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# Oracle Database Companion CD Postinstallation Tasks

This chapter describes the tasks that you may need to perform after you install the software.

## 4.1 Patch Set Information

Oracle recommends installing the latest patch set release after you have successfully installed the Oracle Companion CD components. Doing so ensures that you have the latest update of Oracle Database Companion CD.

You must register online before using *OracleMetaLink*. After logging in to *OracleMetaLink*, select Patches from the left-hand column.

To find and download patches:

1. Log in to *OracleMetaLink* at  
<https://metalink.oracle.com>

---

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

---

---

2. On the main *OracleMetaLink* page, click **Patches**.
3. Select **Simple Search**.
4. Specify the following information, and then click **Go**:
  - In the **Search By** field, select **Product** or **Family**, and 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.
5. Under **Results for Platform**, search for the latest patch set for Oracle Database using *OracleMetaLink*.
6. From the list of available patches, click the number of the patch that you want to download.
7. Click **View Readme** to review the README before proceeding with the download.

---

---

**Note:** Each patch has a README file with installation requirements and instructions. Some patches install with Oracle Universal Installer; others require special procedures. Oracle recommends that you always read the README file before proceeding.

---

---

8. Return to the Patch Set page, and then click **Download** to download and save the file on your system.
9. Use an unzip utility to uncompress the patch ZIP file.

---

# Getting Started with the Oracle Database Companion CD Products

This chapter describes how to check the installation contents after you have installed the software and completed the postinstallation tasks.

## 5.1 Checking the Installation Contents

You can check the installation contents of your Oracle software by using Oracle Universal Installer:

1. Start Oracle Universal Installer.
2. When the Welcome screen appears, click **Installed Products**.

The Inventory screen appears, listing all the Oracle homes on the system and the products installed in each Oracle home. To check the paths of the products, click the **Environment** tab.



---

---

# Removing Oracle Database Companion CD Products

This chapter describes how to remove Oracle software from the system.

## 6.1 Removing Oracle Software Files

To remove Oracle software by using Oracle Universal Installer, you must perform the following steps:

---

---

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

---

---

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

```
$ su - oracle
```

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

- Bourne, Bash, or Korn shell:

```
$ ORACLE_HOME=oracle_home_path
$ export ORACLE_HOME
```

- C shell:

```
$ setenv ORACLE_HOME oracle_home_path
```

3. Start Oracle Universal Installer by entering the following command:

```
`${ORACLE_HOME}/oui/bin/runInstaller
```

4. On the Welcome screen, click **Deinstall Products**.

The Inventory screen lists all the Oracle homes on the system and the products installed in each Oracle home.

5. On the Inventory screen, select the Oracle home containing the products that you want to remove.
6. If you want to delete specific products, then select them in the tree window.
7. Click **Remove**.

Oracle Universal Installer displays a confirmation screen prompting you to confirm that you want to remove the selected products and their dependent components.

- 8. Click Yes.**

Oracle Universal Installer displays a progress indicator as it removes the software.

---

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# Troubleshooting the Oracle Database Companion CD Installation

This appendix contains information about troubleshooting. It contains the following sections:

- [Verifying 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](#)
- [Silent-Mode Response File Error Handling](#)

## A.1 Verifying 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 preinstallation tasks specified in [Chapter 2](#).

## A.2 What to Do If an Installation Error Occurs

If you encounter an error during installation, then:

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

## A.3 Reviewing the Log of an Installation Session

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

To view the contents of the log file, follow these steps:

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

```
The inventory_loc parameter in this file specifies the location of the
oraInventory directory.
```

2. Enter the following command to change directory to the Oracle Universal Installer log file directory, where `orainventory_location` is the location of the `oraInventory` directory:

```
$ cd /orainventory_location/logs
```

3. Enter the following command to determine the 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, in which information about a problem is most likely to appear, enter a command similar to the following:

```
$ tail -50 installActionsdate_time.log | more
```

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

5. If the error displayed by Oracle Universal Installer or listed in the log file indicates a relinking problem, then refer to the following file for more information:

```
$ORACLE_HOME/install/make.log
```

## A.4 Troubleshooting Configuration Assistants

To troubleshoot an installation error that occurred when a configuration assistant was 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, then look for the cause of the problem by reviewing the log files. Refer to the ["Fatal Errors"](#) section for more information.

### A.4.1 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`

## A.4.2 Fatal Errors

If you receive a fatal error while a configuration assistant is running, then 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.

## A.5 Cleaning Up After a Failed Installation

If an installation fails, then you must remove files that Oracle Universal Installer created during the attempted installation and remove the Oracle home directory. To do this:

1. Start Oracle Universal Installer as described in the "[Installing Oracle Database 10g Products](#)" section on page 3-2.
2. Click **Deinstall Products** on the Welcome screen, or click **Installed Products** on any Oracle Universal Installer screen.

The Inventory screen appears, listing installed products.

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

## A.6 Silent-Mode Response File Error Handling

To determine whether a silent-mode installation succeeds or fails, refer to the following log file:

`/oraInventory_location/logs/silentInstalldate_time.log`

If necessary, refer to the previous section for information about determining the location of the `oraInventory` directory.

A silent installation fails if:

- You do not specify a response file
- You specify an incorrect or incomplete response file

For example, a common problem is that while all the product-specific data is filled out correctly, the staging area location may be incorrect. If this is the case, check the `FROM_LOCATION` variable and ensure that it points to the `products.xml` file in the installation media. This `products.xml` file is in the `response/stage` directory of the installation media.

- Oracle Universal Installer encounters an error, such as insufficient disk space

Oracle Universal Installer or configuration assistant validates the response file at run time. If the validation fails, the silent-mode 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.



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## Installing Oracle Database Companion CD Products in Noninteractive Mode

This appendix describes the following advanced installation topics:

- [Installing Oracle Components in Noninteractive Mode](#)

### B.1 Installing Oracle Components in Noninteractive Mode

Typically, Oracle Universal Installer runs in interactive mode, which means that it prompts you to provide information on graphical user interface (GUI) screens. Alternatively, you can run Oracle Universal Installer in noninteractive mode. This mode is also referred to as silent mode, or silent installation.

You may want to use noninteractive mode to install the Oracle Database Companion CD products in the following scenarios:

- You need to perform an unattended deployment of Companion CD products to multiple nodes. You can schedule the noninteractive installation mode from the operating system scheduler or other job subsystem that your site normally uses. This method is particularly useful for large sites that require many Oracle Database installations in which you need to quickly perform multiple installations using similar settings for each computer.
- No interaction with the user is intended.
- A graphical facility to run Oracle Universal Installer in interactive mode is not available.

This section covers the following topics on how you can use response files to run Oracle Universal Installer in noninteractive mode:

- [Using Response Files to Install Oracle Components in Noninteractive Mode](#)
- [Creating the oraInst.loc File](#)
- [Editing a Response File Template](#)
- [Recording a Response File](#)
- [Running Oracle Universal Installer in Silent or Suppressed Mode](#)

#### B.1.1 Using Response Files to Install Oracle Components in Noninteractive Mode

To use the noninteractive mode, you run Oracle Universal Installer with a response file. A response file is a text file that contains variables and values that Oracle Universal Installer uses during the installation process. Oracle provides a set of sample

response files that you can customize, or you can create your own response file by recording your installation selections.

**See Also:** *Oracle Universal Installer and OPatch User's Guide* for more information about response file formats

## B.1.2 Creating the oraInst.loc File

If you plan to install Oracle products using Oracle Universal Installer in silent or suppressed mode, then you must manually create the `oraInst.loc` file if it does not exist. This file specifies the location of the Oracle Inventory directory where Oracle Universal Installer creates the inventory of Oracle products installed on the system.

---

---

**Note:** If Oracle software has been installed previously on the system, then the `oraInst.loc` file may exist. The `oraInst.loc` file is present at `/var/opt/oracle/oraInst.loc`. If the file exists, then you must not create a file.

---

---

To create the `oraInst.loc` file, follow these steps:

1. Switch user to root:

```
$ su - root
```

2. Change directory as follows:

```
# cd /var/opt/oracle/
```

3. Use a text editor to create the `oraInst.loc` file, containing the following lines:

```
inventory_loc=ORACLE_BASE/oraInventory
inst_group=
```

In this example, `ORACLE_BASE` is the path of the Oracle base directory, for example, `/01/app/oracle`.

4. Enter the following commands to set the appropriate owner, group, and permissions on the `oraInst.loc` file:

```
# chown oracle:oinstall oraInst.loc
# chmod 664 oraInst.loc
```

## B.1.3 Editing a Response File Template

A sample response file (`companionCD.db.rsp`) is provided on the installation media for the Oracle Database 10g Products installation type.

To modify the response file template:

1. Copy the response file from the response file directory to a directory on your system as follows:

```
$ cp /directory_path/response/response_file.rsp local_directory
```

In this example, `directory_path` is the path of the `companion` directory on the installation media or the hard drive. If you have copied the software to a hard drive, then you can also edit the file in the `response` directory.

2. Open the response file in a text editor:

```
$ vi /local_dir/response_file.rsp
```

In addition to editing settings specific to the Oracle Database installation, check that the `FROM_LOCATION` path is correct and points to the `products.xml` file in the `stage` directory in the installation media. You may want to set this variable to point to an absolute path, for example:

```
FROM_LOCATION="/directory_path/response/stage/products.xml"
```

Remember that you can specify sensitive information, such as passwords, at the command line rather than within the response file.

**See Also:** *Oracle Universal Installer and OPatch User's Guide* for detailed information on creating response files

3. To edit the file, follow the instructions in the file.

---

**Note:** Oracle Universal Installer or the configuration assistant fails if you do not correctly configure the response file.

---

4. Change the permissions on the file to 700:

```
$ chmod 700 /local_dir/response_file.rsp
```

---

**Caution:** A fully specified response file for an Oracle Database installation contains the passwords for database administrative accounts and for a user that is a member of the OSDBA group (required for automated backups). Ensure that only the Oracle software owner user can view or modify response files or consider deleting them after the installation succeeds.

---

## B.1.4 Recording a Response File

You can use Oracle Universal Installer in interactive mode to record a response file that you can edit and then use to complete silent-mode or suppressed-mode installations. When you are recording the response file, you can either complete the installation, or you can exit from Oracle Universal Installer on the Summary page, before it starts to copy the software to the system.

If you want to use Record mode during a noninteractive installation, then Oracle Universal Installer copies the variable values that were specified in the original source response file into the new response file.

To record a new response file:

1. Ensure that the computer on which you are creating the response file meets the requirements specified in [Chapter 2](#).

When you run Oracle Universal Installer to record a response file, it checks the system to verify that it meets the requirements to install the software.

2. Enter a command similar to the following to start Oracle Universal Installer:

---

**Note:** Do not specify a relative path to the response file. If you specify a relative path, then Oracle Universal Installer fails.

---

```
$ /directory_path/runInstaller -record -destinationFile filename
```

In this command:

- *directory\_path* is the path of the companion directory on the installation media or the hard drive
  - `-record` specifies that the responses that you enter in a response file must be recorded
  - *filename* is the full path and file name of the response file to be recorded
3. On each Oracle Universal Installer screen, specify the required information.
  4. When Oracle Universal Installer displays the Summary screen, perform one of the following steps:
    - Click **Install** to create the response file, and then continue with the installation.
    - Click **Cancel**, and then click **Yes** to create the response file but exit from Oracle Universal Installer without installing the software.

The response file is saved in the location that you specified using the `-destinationFile` option.

5. If you do not complete the installation, then delete the Oracle home directory that Oracle Universal Installer created using the path you specified on the Specify File Locations screen.
6. Before using the recorded response file on another system, use a text editor to edit the file and make any required changes.

Use the comments in the file as a guide when editing it.

7. Run the response file by following the instructions in the ["Running Oracle Universal Installer in Silent or Suppressed Mode"](#) section on page B-4.

## B.1.5 Running Oracle Universal Installer in Silent or Suppressed Mode

To run Oracle Universal Installer in silent or suppressed mode, follow these steps:

1. Complete the preinstallation tasks listed in [Chapter 2](#).
2. Log in as the Oracle software owner user (typically, `oracle`).
3. If you are completing a suppressed-mode installation, set the `DISPLAY` environment variable.

---

---

**Note:** You do not have to set the `DISPLAY` environment variable if you are completing a silent-mode installation.

---

---

4. To start Oracle Universal Installer in silent or suppressed mode, enter a command similar to the following:

---

---

**Note:** Do not specify a relative path to the response file. If you specify a relative path, then Oracle Universal Installer fails.

---

---

```
$ /directory_path/runInstaller [-silent] [-noconfig] -responseFile filename
```

In this example:

- *directory\_path* is the path of the companion directory on the installation media or the hard drive
- `-silent` indicates that you want to run Oracle Universal Installer in silent mode
- `-noconfig` suppresses running the configuration assistants during installation, and a software-only installation is performed instead
- *filename* is the full path and file name of the installation response file that you configured

---

---

**See Also:** For more information about other options for the `runInstaller` command, enter the following command:

```
$ /directory_path/runInstaller -help
```

---

---

5. After the installation is completed, log in as the `root` user and run the `root.sh` script:

```
$ su
# $ORACLE_HOME/root.sh
```

**See Also:**

- The "Installing Oracle Products" section in *Oracle Universal Installer and OPatch User's Guide* for more information about installing on using response files
- The "Deinstalling Products" section in *Oracle Universal Installer and OPatch User's Guide* for more information about removing software by using response files



---

---

# Configuring Oracle Database Companion CD Globalization Support

This appendix describes the following Globalization Support topics:

- [Installing and Using Oracle Components in Different Languages](#)
- [Configuring Locale and Character Sets by Using the NLS\\_LANG Environment Variable](#)

## C.1 Installing and Using Oracle Components in Different Languages

This section describes the following procedures:

- [Running Oracle Universal Installer in Different Languages](#)
- [Using Oracle Components in Different Languages](#)

### C.1.1 Running Oracle Universal Installer in Different Languages

Oracle Universal Installer runs by default in the selected language of your operating system. You can also run Oracle Universal Installer in the following languages:

- Brazilian Portuguese
- German
- Japanese
- Simplified Chinese
- Traditional Chinese
- French
- Italian
- Korean
- Spanish

To run Oracle Universal Installer in a different language, change the language in which your operating system is running before you run Oracle Universal Installer.

**See Also:** *Oracle Universal Installer and OPatch User's Guide* for information about running Oracle Universal Installer in different languages

## C.1.2 Using Oracle Components in Different Languages

You can specify the language in which you want to use Oracle components (such as Oracle Net Configuration Assistant and Oracle Database Configuration Assistant). Note that this does *not* change the language in which Oracle Universal Installer is run. For the Oracle component to run in the selected language, it must be the same as the language set for your operating system. You can change your operating system language in the Regional Settings window from the Control Panel.

To use components in different languages:

1. Start Oracle Universal Installer.
2. On the Select Installation Type screen, click **Product Languages**.
3. On the Language Selection screen, select the language in which you want to use Oracle components from the Available Languages field.
4. Use the > arrow to move the selected language to the Selected Languages field, and then click **OK**.
5. Select the products you want, and then click **Next**.

After installation is complete, the dialog box text, messages, and online Help for the installed components are displayed in the language you select.

## C.2 Configuring Locale and Character Sets by Using the NLS\_LANG Environment Variable

Oracle provides Globalization Support that enables users to interact with a database in their preferred locale and character set settings. Setting the NLS\_LANG environment variable specifies locale behavior for Oracle software. It sets the language and territory used by the client application and the database. It also sets the character set for entering and displaying data by a client program, such as SQL\*Plus.

The NLS\_LANG environment variable uses the following format:

```
NLS_LANG=language_territory.characterset
```

In this format:

- *language\_territory* specifies the language used for displaying Oracle messages, sorting, day names, and month names
- *territory* specifies the conventions for default date, monetary and numeric formats
- *characterset* specifies the encoding used by the client application

In most cases, this is the Oracle character set that corresponds to the character set of the user terminal or the operating system.

The NLS\_LANG environment variable is set as a local environment variable for the shell on all UNIX-based platforms. For example, if the operating system locale setting is `en_US.UTF-8`, then the corresponding NLS\_LANG environment variable should be set to `AMERICAN_AMERICA.AL32UTF8`.

**See Also:** *Oracle Database Globalization Support Guide* for information about the NLS\_LANG parameter and Globalization Support initialization parameters

The following table lists some of the valid values for the NLS\_LANG environment variable.

---

---

**Note:** Refer to the operating system documentation on how to determine the operating system locale environment setting.

---

---

<b>Operating System Locale</b>	<b>NLS_LANG Values</b>
French (France)	FRENCH_FRANCE.WE8ISO8859P15 FRENCH_FRANCE.WE8ISO8859P1 FRENCH_FRANCE.WE8MSWIN1252 FRENCH_FRANCE.AL32UTF8
Japanese (Japan)	JAPANESE_JAPAN.JA16EUC JAPANESE_JAPAN.JA16SJIS JAPANESE_JAPAN.AL32UTF8



---

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