Oracle® Database

Quick Installation Guide

10*g* Release 1 (10.1.0.3) for Linux x86

Part No. B15521-01

October 2004

ORACLE®

Oracle Database Quick Installation Guide, 10*g* Release 1 (10.1.0.3) for Linux x86
Part No. B15521-01

This guide describes how to quickly install Oracle Database 10*g* on Linux x86 systems. It includes information about the following:

1 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 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.

2 Review Information About this Guide

This guide describes how to install Oracle Database 10*g* using the default installation options.

Tasks Described in this Guide

The procedures in this guide describe how to:

- Configure your system to support Oracle Database 10*g*
- Install the Oracle Database 10*g* software on a local file system
- Configure a general-purpose Oracle database that uses the local file system for database file storage
- Install software from the Oracle Database 10*g* Companion CD which improves the performance of Oracle Database 10*g* on your system

Results of a Successful Installation

After you successfully install Oracle Database 10*g*:

- The database that you created and the default Oracle Net listener process are running on the system
- Oracle Enterprise Manager Database Control and *i*SQL*Plus are running and can be accessed using a Web browser

- A single-node version of the Oracle Cluster Synchronization Services (CSS) daemon is running and is configured to start automatically when your system boots

Tasks Not Described in this Guide

This guide does **not** describe how to complete the following tasks:

- Installing the software on a system that has an existing Oracle software installation
- Installing Oracle Cluster Ready Services (CRS) and Oracle Real Application Clusters (RAC) on a cluster
- Enabling Enterprise Manager e-mail notifications or automated backups
- Using alternative storage options such as Automatic Storage Management (ASM) or raw devices for database storage

Where to Get Additional Installation Information

For more detailed information about installing Oracle Database 10*g*, including information about the tasks not described in this guide, see one of the following guides:

- If you are installing the software on a single system, see the *Oracle Database Installation Guide for UNIX Systems*.

- If you are installing Oracle Real Application Clusters, see the *Oracle Real Application Clusters Installation and Configuration Guide*

  This guide also describes how to install Oracle Cluster Ready Services, which is a prerequisite for RAC installations.

Both of these guides are available on the product disc. To access them, use a Web browser to open the `welcome.htm` file, either in the top-level directory of the CD-ROM or in the `db` directory on the DVD-ROM, then select the **Documentation** tab.

3 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, complete one of the following procedures:

Note: You must install the software from an X window workstation, an X terminal, or a PC or other system with X server software installed.

- If you are installing the software from an X Window System workstation or X terminal:

  1. Start a local terminal session, for example, an X terminal (`xterm`).
  2. If you are not installing the software on the local system, enter the following command to enable remote hosts to display X applications on the local X server:

     ```
     $ xhost +
     ```

  3. If you are not installing the software on the local system, use the `ssh`, `rlogin`, or `telnet` command to connect to the system where you want to install the software:

     ```
     $ telnet remote_host
     ```

  4. If you are not logged in as the `root` user, enter the following command to switch user to `root`:

     ```
     $ su - root
     password:
     #
     ```

- If you are installing the software from a PC or other system with X server software installed:

Note: If necessary, see your X server documentation for more information about completing this procedure. Depending on the X server software that you are using, you may need to complete the tasks in a different order.

---

1. Start the X server software.
2. Configure the security settings of the X server software to permit remote hosts to display X applications on the local system.
3. Connect to the remote system where you want to install the software and start a terminal session on that system, for example, an X terminal (`xterm`).
4. If you are not logged in as the `root` user on the remote system, enter the following command to switch user to `root`:

   ```
   $ su - root
   password:
   ```

4 Check the Hardware Requirements

The system must meet the following minimum hardware requirements:

Requirement	Minimum Value
Physical memory (RAM)	512 MB (524288 KB)
Swap space	1 GB (1048576 KB) or twice the size of RAM On systems with 2 GB or more of RAM, the swap space can be between one and two times the size of RAM
Disk space in `/tmp`	400 MB (409600 KB)
Disk space for software files	2.5 GB (2621440 KB) This value includes 1 GB (1048576 KB) of disk space required to install the Oracle Database 10*g* Products from the Companion CD (optional, but recommended).
Disk space for database files	1.2 GB (1258290 KB)

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

1. To determine the physical RAM size, enter the following command:

   ```
   # grep MemTotal /proc/meminfo
   ```

   If the size of the physical RAM installed in the system is less than 512 MB, you must install more memory before continuing.

2. To determine the size of the configured swap space, enter the following command:

   ```
   # grep SwapTotal /proc/meminfo
   ```

   If necessary, see your operating system documentation for information about how to configure additional swap space.

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

   ```
   # 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 available on the system, enter the following command:

   ```
   # df -h
   ```

   This command displays the disk space usage on all mounted file systems. To complete the installation, the system must satisfy *either* of the following conditions:

   - 3.7 GB (3879731 KB) of free disk space is available on two file systems: one with at least 2.5 GB (2621440 KB) free for the Oracle software and another with at least 1.2 GB free for the preconfigured database

- 3.7 GB of free disk space is available for the Oracle software and database on a single file system

---

Note: While installing the Oracle database on a disk drive separate from the software does provide a performance improvement, for best performance, the Oracle database files should be distributed across three or more disks. The *Oracle Database Installation Guide for UNIX Systems* describes this more complex and time-consuming type of installation. However, this type of installation is recommended only for experienced users.

---

5 Check the Software Requirements

The system must meet the following minimum software requirements, depending on your Linux distribution and version.

Red Hat Enterprise Linux ES/AS 2.1 (Update 3 or higher)

- Kernel version 2.4.9 errata 34 (e.34) or higher must be installed
- The following packages (or later versions) must be installed:

```
make-3.79
openmotif-2.1.30
gcc-2.96-128
gcc-c++-2.96-128
libstdc++-2.96-128
glibc-2.2.4-32
```

Red Hat Enterprise Linux ES/AS 3 (Update 2 or higher)

- Kernel version 2.4.21-15 or higher must be installed
- The following packages (or later versions) must be installed:

```
gcc-3.2.3-34
gcc-c++-3.2.3-34
glibc-2.3.2-95.20
make-3.79.1
openmotif21-2.1.30-8
setarch-1.3-1
compat-db-4.0.14-5
compat-gcc-7.3-2.96.128
```

```
compat-gcc-c++-7.3-2.96.128
compat-libstdc++-7.3-2.96.128
compat-libstdc++-devel-7.3-2.96.128
```

SUSE Linux Enterprise Server 8 (Service Pack 3 or higher)

- Kernel version 2.4.21-138 or higher must be installed
- The following packages (or higher versions) must be also be installed:

```
gcc-3.2.2-38
gcc-c++-3.2.2-38
glibc-2.2.2-124
make-3.79.1
openmotif-2.2.2-124
```

SUSE Linux Enterprise Server 9

- Kernel version 2.6.5-7.5 or higher must be installed
- The following packages (or higher versions) must be also be installed:

```
gcc-3.3.3-43
gcc-c++-3.3.3-43
glibc-2.3.3-98
```

```
libaio-0.3.98-18
libaio-devel-0.3.98-18
make-3.80
openmotif-libs-2.2.2-519.1
```

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

1. To determine which distribution and version of Linux is installed, enter the following command:

   ```
   # cat /etc/issue
   ```

   Note: Only the listed distributions and versions are currently certified and supported.

   ---

2. To determine whether the required packages are installed, enter commands similar to the following:

   ```
   $ rpm -q package_name
   ```

   If a required package is not installed, or if the version is lower than the required version, install the package from your

operating system distribution media or download the required package version from your Linux vendor's Web site.

3. To determine whether the required kernel version is installed, enter the following command:

```
# uname -r
```

If the kernel version is lower than the required version, download and install the required version or a higher version from your Linux vendor's Web site.

6 Create Required UNIX Groups and User

The following local UNIX groups and user must exist on the system:

- The `oinstall` group (the Oracle Inventory group)
- The `dba` group (the OSDBA group)
- The `oracle` user (the Oracle software owner)

The `oinstall` and `dba` groups and the `oracle` user may already exist on your system. To determine whether they exist already, and if necessary, to create them, follow these steps:

1. To determine whether the `oinstall` and `dba` groups exist, enter the following commands:

   ```
   # grep oinstall /etc/group
   # grep dba /etc/group
   ```

   If the output from these commands shows the specified group name, that group already exists.

2. If necessary, enter the following commands to create the `oinstall` and `dba` groups:

   ```
   # /usr/sbin/groupadd oinstall
   # /usr/sbin/groupadd dba
   ```

3. To determine whether the `oracle` user exists and belongs to the correct groups, enter the following command:

   ```
   # id oracle
   ```

   If the `oracle` user exists, this command displays information about the groups to which the user belongs. The output

should be similar to the following, indicating that `oinstall` is the primary group and `dba` is a secondary group:

```
uid=502(oracle) gid=502(oinstall) groups=502(oinstall),503(dba)
```

4. If necessary, complete one of the following actions:

   - If the `oracle` user exists, but its primary group is not `oinstall` or it is not a member of the `dba` group, enter the following command:

     ```
     # /usr/sbin/usermod -g oinstall -G dba oracle
     ```

   - If the `oracle` user does not exist, enter the following command to create it:

     ```
     # /usr/sbin/useradd -g oinstall -G dba oracle
     ```

     This command creates the `oracle` user and specifies `oinstall` as the primary group and `dba` as the secondary group.

5. Enter the following command to set the password of the `oracle` user:

   ```
   # passwd oracle
   ```

7 Create Required Directories

Create directories with names similar to the following and specify the correct owner, group, and permissions for them:

- `/u01/app/oracle` (the Oracle base directory)
- `/u02/oradata` (an optional Oracle datafile directory)

The Oracle base directory must have 2.5 GB (2621440 KB) of free disk space, or 3.7 GB (3879731 KB) of free disk space if you choose not to create a separate Oracle datafile directory. The Oracle datafile directory must have 1.2 GB of free disk space.

Note: If you do not want to create a separate Oracle datafile directory, you can install the datafiles in a subdirectory of the Oracle base directory (not recommended for production databases).

To determine where to create these directories, follow these steps:

1. Enter the following command to display information about all mounted file systems:

   ```
   # df -h
   ```

This command displays information about all of the file systems mounted on the system, including:

- The physical device name
- The total amount, used amount, and available amount of disk space
- The mount point directory for that file system

2. From the display, identify either one or two file systems that meet the following requirements:

   - Two file systems:

     Identify one file system with 2.5 GB of free disk space, for the Oracle base directory, and another file system with 1.2 GB of free disk space for the Oracle datafile directory.

   - One file system:

     Identify one file system with 3.7 GB of free disk space, for both the Oracle base directory and the Oracle datafile directory.

3. Note the name of the mount point directory for each file system that you identified.

In the following examples, `/u01` is the mount point directory used for the software and `/u02` is the mount point directory used for the Oracle datafile directory. You must specify the appropriate mount point directories for the file systems on your system.

To create the required directories and specify the correct owner, group, and permissions for them, follow these steps:

Note: In the following procedure, replace `/u01` and `/u02` with the appropriate mount point directories that you identified in Step 3 previously.

---

1. Enter the following command to create subdirectories in the mount point directory that you identified for the Oracle base directory:

   ```
   # mkdir -p /u01/app/oracle
   ```

2. If you intend to use a second file system for the Oracle database files, create an `oradata` subdirectory in the mount

point directory that you identified for the Oracle datafile directory (shown as `/u02` in the examples):

```
# mkdir /u02/oradata
```

3. Change the owner and group of the directories that you created to the `oracle` user and the `oinstall` group:

```
# chown -R oracle:oinstall /u01/app/oracle
# chown -R oracle:oinstall /u02/oradata
```

4. Change the permissions on the directories that you created to 775:

```
# chmod -R 775 /u01/app/oracle
# chmod -R 775 /u02/oradata
```

8 Configure Kernel Parameters

Verify that the kernel parameters shown in the following table are set to values greater than or equal to the recommended value shown. The procedure following the table describes how to verify and set the values.

Parameter	Value	File
semmsl semmns semopm semmni	250 32000 100 128	/proc/sys/kernel/sem
shmall	2097152	/proc/sys/kernel/shmall
shmmax	Half the size of physical memory (in bytes)	/proc/sys/kernel/shmmax
shmmni	4096	/proc/sys/kernel/shmmni
file-max	65536	/proc/sys/fs/file-max
ip_local_port_range	1024 65000	/proc/sys/net/ipv4/ip_local_port_range

Note: If the current value for any parameter is higher than the value listed in this table, do not change the value of that parameter.

To view the current value specified for these kernel parameters, and to change them if necessary, follow these steps:

1. Enter commands similar to the following to view the current values of the kernel parameters:

Note: Make a note of the current values and identify any values that you must change.

Parameter	Command
semmsl, semmns, semopm, and semmni	`# /sbin/sysctl -a | grep sem` This command displays the value of the semaphore parameters in the order listed.
shmall, shmmax, and shmmni	`# /sbin/sysctl -a | grep shm`
file-max	`# /sbin/sysctl -a | grep file-max`
ip_local_port_range	`# /sbin/sysctl -a | grep ip_local_port_range` This command displays a range of port numbers.

2. If the value of any kernel parameter is different to the recommended value, complete the following steps:

   a. Using any text editor, create or edit the `/etc/sysctl.conf` file and add or edit lines similar to the following:

Note: Include lines only for the kernel parameter values that you want to change. For the semaphore parameters (`kernel.sem`), you must specify all four values. However, if any of the current values are larger than the recommended value, specify the larger value.

```
kernel.shmall = 2097152
kernel.shmmax = 2147483648
kernel.shmmni = 4096
kernel.sem = 250 32000 100 128
fs.file-max = 65536
net.ipv4.ip_local_port_range = 1024 65000
```

   By specifying the values in the `/etc/sysctl.conf` file, they persist when you reboot the system.

b. Enter the following command to change the current values of the kernel parameters:

```
# /sbin/sysctl -p
```

Review the output from this command to verify that the values are correct. If the values are incorrect, edit the `/etc/sysctl.conf` file, then enter this command again.

c. On SUSE systems only, enter the following command to cause the system to read the `/etc/sysctl.conf` file when it reboots:

```
# /sbin/chkconfig boot.sysctl on
```

Set Shell Limits for the oracle User

To improve the performance of the software on Linux systems, you must increase the following shell limits for the `oracle` user:

Shell Limit	Item in limits.conf	Hard Limit
Maximum number of open file descriptors	`nofile`	65536
Maximum number of processes available to a single user	`nproc`	16384

To increase the shell limits:

1. Add the following lines to `/etc/security/limits.conf` file:

```
oracle           soft    nproc   2047
oracle           hard    nproc   16384
oracle           soft    nofile  1024
oracle           hard    nofile  65536
```

2. Add the following line to the `/etc/pam.d/login` file, if it does not already exist:

```
session    required     /lib/security/pam_limits.so
```

3. Depending on the `oracle` user's default shell, make the following changes to the default shell start-up file:

   - For the Bourne, Bash, or Korn shell, add the following lines to the `/etc/profile` file (or the `/etc/profile.local` file on SUSE systems):

     ```
     if [ $USER = "oracle" ]; then
             if [ $SHELL = "/bin/ksh" ]; then
                   ulimit -p 16384
                   ulimit -n 65536
             else
                   ulimit -u 16384 -n 65536
             fi
     fi
     ```

   - For the C or tcsh shell, add the following lines to the `/etc/csh.login` file (or the `/etc/csh.login.local` file on SUSE systems):

     ```
     if ( $USER == "oracle" ) then
             limit maxproc 16384
             limit descriptors 65536
     endif
     ```

9 Mount the Product Disc

The Oracle Database 10*g* software is available on both CD-ROM and DVD-ROM. These discs are in ISO 9660 format with Rockridge extensions.

On most Linux systems, the product disc mounts automatically when you insert it into the drive. To verify that the disc is mounted correctly, follow these steps:

1. If necessary, enter a command similar to following to eject the currently mounted disc, then remove it from the drive:

   - Red Hat:

     ```
     # eject /mnt/cdrom
     ```

   - SUSE:

     ```
     # eject /media/cdrom
     ```

   In this example, `/mnt/cdrom` or `/media/cdrom` is the mount point directory for the CD-ROM drive, depending on your distribution.

2. Insert the disc into the CD-ROM or DVD-ROM drive.

3. To verify that the disc mounted automatically, enter a command similar to the following:

   - Red Hat:

     ```
     $ ls /mnt/cdrom
     ```

   - SUSE:

     ```
     $ ls /media/cdrom
     ```

4. If this command fails to display the contents of the disc, enter a command similar to the following, depending on your distribution:

   - Red Hat:

     ```
     # mount /mnt/cdrom
     ```

   - SUSE:

     ```
     # mount /media/cdrom
     ```

10 Log In as the oracle User and 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 DISPLAY, ORACLE_BASE, and ORACLE_SID environment variables.

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

1. Start another terminal session.
2. Enter the following command to ensure that X Window applications can display on this system:

   ```
   $ xhost +
   ```

3. Complete one of the following steps:
   - If the terminal session is not connected to the system where you want to install the software, log in to that system as the `oracle` user.

- If the terminal session is connected to the system where you want to install the software, 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`) on Red Hat:

     ```
     $ vi .bash_profile
     ```

   - Bourne shell (`sh`), Bash shell on SUSE, or Korn shell (`ksh`):

     ```
     $ vi .profile
     ```

   - C shell (`csh` or `tcsh`):

     ```
     % vi .login
     ```

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

   ```
   umask 022
   ```

7. Save the file and exit from the editor.
8. To run the shell startup script, enter the following command:
   - Bash shell on Red Hat:

     ```
     $ . ./.bash_profile
     ```

   - Bourne shell, Bash shell on SUSE, or Korn shell:

     ```
     $ . ./.profile
     ```

   - C shell:

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

9. If you determined that the `/tmp` directory had insufficient free disk space when checking the hardware requirements, enter the following commands to set the TEMP and TMPDIR environment variables. Specify a directory on a file system with sufficient free disk space.
   - Bourne, Bash, or Korn shell:

     ```
     $ TEMP=/directory
     $ TMPDIR=/directory
     $ export TEMP TMPDIR
     ```

- C shell:

  ```
  % setenv TEMP /directory
  % setenv TMPDIR /directory
  ```

10. If you are not installing the software on the local system, enter the following command to direct X applications to display on the local system:

- Bourne, Bash, or Korn shell:

  ```
  $ DISPLAY=local_host:0.0 ; export DISPLAY
  ```

- C shell:

  ```
  % setenv DISPLAY local_host:0.0
  ```

  In this example, *local_host* is the host name or IP address of the system that you want to use to display the Installer (your workstation or PC).

11. Enter commands similar to the following to set the ORACLE_BASE and ORACLE_SID environment variables:

    - Bourne, Bash, or Korn shell:

      ```
      $ ORACLE_BASE=/u01/app/oracle
      $ ORACLE_SID=sales
      $ export ORACLE_BASE ORACLE_SID
      ```

    - C shell:

      ```
      % setenv ORACLE_BASE /u01/app/oracle
      % setenv ORACLE_SID sales
      ```

    In these examples, `/u01/app/oracle` is the Oracle base directory that you created earlier and `sales` is the name that you want to call the database (typically no more than five characters).

12. Enter the following commands 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
```

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 `0022`, `022`, or `22` and that the environment variables you set in this section have the correct values.

11 Install Oracle Database 10*g*

After configuring the `oracle` user's environment, start the Installer and install the Oracle software, as follows:

Note: The following examples show paths to the `runInstaller` script on a CD-ROM. If you are installing the software from DVD-ROM, use a command similar to the following:

```
$ /mount_point/db/runInstaller
```

1. To start the Installer, enter the following commands:

   - Red Hat:

     ```
     $ cd /tmp
     $ /mnt/cdrom/runInstaller
     ```

   - SUSE:

     ```
     $ cd /tmp
     $ /media/cdrom/runInstaller
     ```

   If the Installer does not appear, see the *Oracle Database Installation Guide for UNIX Systems* for information about how to troubleshoot X display problems.

2. Use the following guidelines to complete the installation:

   - The following table describes the recommended action for each Installer screen.

Note: If you have completed the tasks listed previously, you can complete the installation by choosing the default values on most screens.

   - If you need more assistance, or if you want to choose an option that is not a default, click **Help** for additional information.
   - If you encounter errors while installing or linking the software, see the *Oracle Database Installation Guide for UNIX Systems* for information about troubleshooting.

Screen	Recommended Action
Welcome to the Oracle Database 10*g* Installation	Specify the following information, then click **Next**. **Oracle Home Location** Verify that the path shown is similar to the following: *oracle_base*/product/10.1.0/db_1 **Installation Type** Select **Enterprise Edition** or **Standard Edition**. **UNIX DBA Group** Select the name of the OSDBA group that you created earlier, for example dba. **Global Database Name** Specify a name for the database, followed by the domain name of the system: sales.*your_domain.com* **Database Password/Confirm Password** Specify and confirm the password that you want to use for the following administrative database accounts: SYS, SYSTEM, SYSMAN, and DBSNMP

Screen	Recommended Action
Specify Inventory Directory and Credentials	**Note:** This screen appears only during the first installation of Oracle products on a system. 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 that you created earlier: oinstall
Run orainstRoot.sh	If prompted, run the following script in a separate terminal window as the root user: oracle_base/oraInventory/orainstRoot.sh
Summary	Review the information displayed, then click **Install**.
Install	The Install screen displays status information while the product is being installed.

Screen	Recommended Action
Configuration Assistants	The Configuration Assistants screen displays status information for the configuration assistants that configure the software and create a database. After the Database Configuration Assistant finishes, click **OK** to continue.
Setup Privileges	When prompted, run the following script in a separate terminal window as the `root` user: *`oracle_home`*`/root.sh` In this example, *`oracle_home`* is the directory where you installed the software. The correct path is displayed on the screen. Press Return to accept the default values for each prompt displayed by the script. When the script finishes, click **OK**.

Screen	Recommended Action
End of Installation	The configuration assistants configure several Web-based applications, including Oracle Enterprise Manager Database Control. This screen displays the URLs configured for these applications. Make a note of the URLs used. The port numbers used in these URLs are also recorded in the following file: *oracle_home*/install/portlist.ini To exit from the Installer, click **Exit**, then click **Yes**.

12 Install Products from the Oracle Database 10*g* Companion CD

The Oracle Database 10*g* Companion CD contains products that improve the performance of or complement Oracle Database 10*g*. For most installations, Oracle recommends that you install Oracle Database 10*g* Products from the Companion CD.

Note: If you intend to use Oracle JVM or Oracle *inter*-Media, you *must* install Oracle Database 10*g* Products from the Companion CD. This installation optimizes the performance of those products on your system.

Products Included on the Companion CD

The Companion CD includes two sets of products:

- **Oracle Database 10*g* Products**

  Includes Oracle Database Examples, natively compiled Java libraries for Oracle JVM and Oracle *inter*Media, Oracle Text supplied knowledge bases, and Legato Single Server Version (LSSV)

  Note: You must install these products into the same Oracle home directory as Oracle Database 10*g* Release 1 (10.1.0).

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

  Includes Oracle HTTP Server and Oracle HTML DB

Note: You must install Oracle HTTP Server into its own Oracle home directory. You must install Oracle HTML DB either with Oracle HTTP Server, or into an Oracle home directory that contains Oracle HTTP Server.

The following subsection describes how to install Oracle Database 10*g* Products. For more information about the products on the Companion CD, and for more detailed information about installing them, see the *Oracle Database Companion CD Installation Guide* which is located on the Companion CD.

Installing Oracle Database 10*g* Products

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

1. As the `root` user, mount the Oracle Database 10*g* Companion CD CD-ROM or the Oracle Database 10*g* DVD-ROM.

   For more information about mounting discs, see Section 9, "Mount the Product Disc" on page 30.

2. If necessary, log in as the Oracle software owner user that you used to install Oracle Database 10*g* (typically `oracle`).

3. Enter a command similar to the following to start the Installer:

- CD-ROM installation:

  ```
  $ /mount_point/runInstaller
  ```

- DVD-ROM installation:

  ```
  $ /mount_point/companion/runInstaller
  ```

The following table describes the recommended action for each Installer screen:

Screen	Recommended Action
Welcome	Click **Next**.
Specify File Locations	In the **Destination** section, select the **Name** or **Path** value that specifies the Oracle home directory where you installed Oracle Database 10*g*, then click **Next**. The default Oracle home path is similar to the following: *oracle_base*/product/10.1.0/db_1
Select a Product to Install	Select **Oracle Database 10g Products**, then click **Next**.
Summary	Review the information displayed, then click **Install**.

Screen	Recommended Action
Install	The Install screen displays status information while the product is being installed.
Setup Privileges	When prompted, run the following script in a separate terminal window as the `root` user: *`oracle_home`*`/root.sh` In this example, *`oracle_home`* is the directory where you installed the software. The correct path is displayed on the screen. **Note:** Unless you want to install Legato Single Server Version, enter `3` to quit the installation of LSSV. When the script finishes, click **OK**.
End of Installation	To exit from the Installer, click **Exit**, then click **Yes**.

13 What to Do Next

To become familiar with this release of Oracle Database, Oracle suggests that you complete the following tasks:

- Log in to Oracle Enterprise Manager Database Control using a Web browser.

  Oracle Enterprise Manager Database Control is a Web-based application that you can use to manage a single Oracle database. The default URL for Database Control is:

  `http://host.domain:5500/em/`

  To log in, use the user name SYS and connect as SYSDBA. Use the password that you specified for this user during the Oracle Database 10*g* installation.

- See Chapter 4 of the *Oracle Database Installation Guide for UNIX Systems* for information about required and optional post-installation tasks, depending on the products that you want to use.

- Review Chapter 5 in the *Oracle Database Installation Guide for UNIX Systems* for information about how to use Database Control to learn about the configuration of your installed database.

- Read the *Oracle Database 2 Day DBA* guide, to learn more about using Oracle Enterprise Manager Database Control to administer a database.

  This guide, designed for new Oracle DBAs, describes how to use Database Control to manage all aspects of an Oracle database installation. It also provides information about how to enable e-mail notifications and automated backups, which you might not have configured during the installation.

14 Additional Information

This section contains information about the following:

- Product Licenses
- Purchasing Licenses, Version Updates, and Documentation
- Contacting Oracle Support Services
- Locating Product Documentation

Product Licenses

You are welcome to install and evaluate the products included in this media pack for 30 days under the terms of the Trial License Agreement. However, you must purchase a program license if you

want to continue using any product after the 30 day evaluation period. See the following section for information about purchasing program licenses.

Purchasing Licenses, Version Updates, and Documentation

You can purchase program licenses, updated versions of Oracle products, and printed versions of Oracle documentation from the Oracle Store Web site:

`http://oraclestore.oracle.com/`

Contacting Oracle Support Services

If you have purchased Oracle Product Support, you can call Oracle Support Services for assistance 24 hours a day, seven days a week. For information about purchasing Oracle Product Support or contacting Oracle Support Services, go to the Oracle Support Services Web site:

`http://www.oracle.com/support/`

Locating Product Documentation

Documentation for Oracle products is available in both HTML and Adobe portable document format (PDF) formats from several locations:

- On discs in the media pack:
  - Platform-specific documentation is available on the product discs. To access the documentation, see the `welcome.htm` file located in the top-level directory of the CD-ROM or DVD-ROM.
  - Generic product documentation is available on the Oracle Documentation Library CD-ROM and on the DVD-ROM.
- From the Oracle Technology Network Web site:

  `http://otn.oracle.com/documentation/`

To view PDF documents, download the free Adobe Acrobat Reader from the Adobe Web site, if necessary:

`http://www.adobe.com/`