Oracle® Database

Quick Installation Guide

10g Release 1 (10.1) for Linux x86

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

- 1. Review Information About this Guide
- 2. Log In to the System as root
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1 Review Information About this Guide

This guide describes how to install Oracle Database 10g 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 10g
- Install the Oracle Database 10g 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 10g Companion CD which improves the performance of Oracle Database 10g on your system

Results of a Successful Installation

After you successfully install Oracle Database 10g:

 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

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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.

2 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:
 - 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 +

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3. If you want to install the software on a remote system, enter a command similar to the following to connect to that system:

\$ 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.
- 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:
#
```

3 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 10g 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 -k /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.
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- 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 -k

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.

4 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 (x86)

- Gnu gcc package, gcc-2.96.108.1 or higher
- The following packages (or higher versions) must be also be installed:

```
make-3.79
binutils-2.11
openmotif-2.1.30
```

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- Kernel errata 25 (e.25) or higher (RHSA-2003:195-06)
- glibc 2.2.4-31 errata or higher (RHSA-2003:022-09)

Red Hat Enterprise Linux ES/AS 3 (x86)

- Gnu gcc package, gcc-3.2.3-2 or higher
- The following packages (or higher versions) must be also be installed:

```
make-3.79
binutils-2.11
openmotif-2.2.2-16
setarch-1.3-1
compat-db-4.0.14.5
compat-gcc-7.3-2.96.122
compat-gcc-c++-7.3-2.96.122
compat-libstdc++-0.3-2.96.122
compat-libstdc++-devel-7.3-2.96.122
```

No errata are currently required.

UnitedLinux 1.0 (x86)

- Service Pack 3 (SP3) or higher (kernel version 2.4.21-138)
- Gnu gcc package, gcc-3.2.2-38 or higher
- The following packages (or higher versions) must be also be installed:

make-3.79
binutils-2.12
openmotif-2.2.2-124

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 listed distributions and versions are currently certified and supported.

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

\$ rpm -q package_name

If a required package is not installed, install it from your operating system distribution media, or download it from the vendor's Web site.

- **3.** On Red Hat Enterprise Linux 2.1 systems only, follow these steps:
 - **a.** To determine whether kernel update RHSA-2003:195-06 or later is installed, enter the following command:

```
# uname -r
2.4.9-e.25
```

This command shows the kernel version (2.4.9) and errata level (e.25). If the errata level is less than 25, install the latest kernel update. See the following Web site for information on kernel update RHSA-2003:195-06:

https://rhn.redhat.com/errata/RHSA-2003-195.html

b. To determine whether fix RHSA-2003:022-09 is installed, enter the following command:

```
# rpm -q glibc
glibc-2.2.4-31
```

If the version shown is less than 2.2.4-31, see the following Web site for information on fix RHSA-2003:022-09:

```
https://rhn.redhat.com/errata/RHSA-2003-022.html
```

4. On UnitedLinux 1.0 systems only, enter the following command to determine whether Service Pack 3 is installed:

```
# uname -r
2.4.21-138-default
```

This command shows the kernel version (2.4.21-138) and type (default). If the kernel version is less than 2.4.21-138, contact your UnitedLinux vendor for information about obtaining and installing Service Pack 3.

5 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
- dba as the secondary group
- **5.** Enter the following command to set the password of the oracle user:

passwd oracle

6 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 -k

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, in kilobytes
- 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
```

 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 /u02/oradata

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4. Change the permissions on the directories that you created to 775: # chmod -R 775 /u01/app/oracle /u02/oradata

7 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	/proc/sys/kernel/shmmax

Parameter	Value	File
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	<pre># /sbin/sysctl -a grep sem This command displays the value of the semaphore parameters in the order listed.</pre>
shmall, shmmax, and shmmni	# /sbin/sysctl -a grep shm
file-max	# /sbin/sysctl -a grep file-max
ip_local_port_range	<pre># /sbin/sysctl -a grep ip_local_port_ range</pre>
	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/syscll.conf file, then enter this command again.

- **c.** On UnitedLinux 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:

*	soft	nproc	2047
*	hard	nproc	16384
*	soft	nofile	1024
*	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 UnitedLinux systems):

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

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

8 Mount the Product Disc

The Oracle Database 10g 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

UnitedLinux:

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
 - UnitedLinux:
 - \$ ls /media/cdrom
- **4.** If this command fails to display the contents of the disc, enter commands similar to the following, depending on your distribution:
 - Red Hat:
 - \$ su root
 # mount /mnt/cdrom
 - UnitedLinux:
 - \$ su root
 - # mount /media/cdrom

9 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 UnitedLinux, 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 creation mask:
- 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 UnitedLinux, 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 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 022 and the environment variables that you set in this section have the correct values.

10 Install Oracle Database 10g

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

UnitedLinux:

- \$ 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	Click Next.
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 <i>oracle_base</i> is the value that 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
Run orainstRoot.sh	If prompted, run the following script in a separate terminal window as the root user: <i>oracle_base/oraInventory/orainstRoot.sh</i>

Screen	Recommended Action
Specify File Locations	In the Destination section, verify that the Path value for the Oracle home directory is similar to the following, then click Next :
	oracle_base/product/10.1.0/db_1
Select Installation Type	Select Enterprise Edition or Standard Edition, then click Next.
Product-Specific Prerequisite Checks	Verify that all of the prerequisite checks succeed, then click Next .
	The Installer checks the system to verify that it is configured correctly to run Oracle software. If you have completed all of the pre-installation steps in this guide, all of the checks should pass.
	In some circumstances, a check might fail even if you have completed all of the pre-installation steps. For example, you might have installed a later patch that obsoletes one of those listed in this guide.
	If a check fails, review the cause of the failure listed for that check on the screen. If possible, rectify the problem and rerun the check. Alternatively, if you are satisfied that your system meets the requirements, you can select the check-box for the failed check to manually verify the requirement.

Screen	Recommended Action
Select Database Configuration	Accept the default choices, then click Next.
Specify Database Configuration Options	Specify the following information, then click Next :
	Note: If you set the ORACLE_SID environment variable, its value is used as the default value for the global database name and SID.
	Global Database Name
	Specify a name for the database, followed by the domain name of the system:
	sales.your_domain.com
	The value that you specify, up to the first period, is also used for the SID value.
	Select Database Character Set
	Accept the default value, which is based on your system locale, or if you need to support more than one language, click Help for more information about the supported character sets.
	Create database with example schemas
	Choose this option to create the EXAMPLE tablespace that contains the Sample Schemas (optional, but recommended).

Screen	Recommended Action
Select Database Management Option	Accept the default values, then click Next . Note: You can enable e-mail notifications after you have installed the software.
Specify Database File Storage Option	Select the File System option and specify the database file location, then click Next .
	Specify database file location:
	Specify the Oracle datafiles directory, if you created it:
	/u02/oradata
	Alternatively, accept the default location:
	oracle_base/oradata
Specify Backup and	Accept the default values, then click Next.
Recovery Options	Note: You can enable automated backups after you have installed the software.
Specify Database Schema Passwords	Enter and confirm passwords for all of the privileged database accounts, then click Next .
	Note: Oracle recommends that you specify a different password for each account. You must remember the passwords that you specify.

Screen	Recommended Action
Summary	Review the information displayed, then click Install .
Install	The Install screen displays status information while the product is being installed.
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: <pre>oracle_home/root.sh</pre>
	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:
	<pre>oracle_home/install/portlist.ini</pre>
	To exit from the Installer, click Exit , then click Yes .

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

The Oracle Database 10g Companion CD contains products that improve the performance of or complement Oracle Database 10g. For most installations, Oracle recommends that you install Oracle Database 10g Products from the Companion CD. **Note:** If you intend to use Oracle JVM or Oracle *inter*Media, you *must* install Oracle Database 10g 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 10g 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 10g Release 1 (10.1.0).

Oracle Database 10g 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 10g Products

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

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

For more information about mounting discs, see Section 8, "Mount the Product Disc" on page 29.

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

Screen	Recommended Action
Summary	Review the information displayed, then click Install.
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, <i>oracle_home</i> 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 .

12 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 10g 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.

13 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:

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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/
```

14 Documentation Accessibility

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

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

Accessibility of Code Examples in Documentation

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

Accessibility of Links to External Web Sites in Documentation

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

Support for Hearing and Speech Impaired Customers

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

- For technical questions, call 1.800.446.2398
- For non-technical questions, call 1.800.464.233

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