# **Oracle® Database**

Quick Installation Guide

10g Release 2 (10.2) for HP-UX PA-RISC (64-Bit)

#### B28054-01

February 2006

This guide describes how to quickly install Oracle Database 10g on HP-UX PA-RISC (64-Bit) systems. It includes information about the following:

- 1. Reviewing Information About This Guide
- **2.** Logging In to the System as root
- 3. Checking the Hardware Requirements
- 4. Checking the Software Requirements
- 5. Creating Required Operating System Groups and User
- **6.** Creating Required Directories
- 7. Configuring the oracle User's Environment
- **8.** Mounting the Product Disc
- 9. Installing Oracle Database
- 10. Installing Products from the Oracle Database 10g Companion CD
- 11. What to Do Next?
- 12. Additional Information
- **13.** Documentation Accessibility

# 1 Reviewing Information About This Guide

This guide describes how to install Oracle Database by 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
- Install Oracle Database on a local file system by using the Basic Installation option
- Configure a general-purpose Oracle Database installation that uses the local file system for database file storage

## Results of a Successful Installation

After you successfully install Oracle Database:



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

#### Tasks Not Described in This Guide

This guide covers the Basic Installation scenario and does *not* describe how to complete the following tasks:

- Using the Advanced Installation option to install the software
- Installing the software on a system that has an existing Oracle software installation
- Installing Oracle Clusterware 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 or raw devices for database storage

#### Where to Get Additional Installation Information

For more information about installing Oracle Database, including information about the tasks not described in this guide, refer to one of the following guides:

- If you want to install the software on a single system, then refer to *Oracle Database Installation Guide for hp-ux PA-RISC* (64-Bit).
- If you want to perform a RAC installation, then refer to *Oracle Database Oracle Clusterware and Oracle Real Application Clusters Installation Guide for hp-ux*. This guide also describes how to install Oracle Clusterware, which is a prerequisite for RAC installations.

Both these guides are available on the product disc. To access them, use a Web browser to open the welcome.htm file located in the top-level directory of the installation media, and then select the **Documentation** tab.

# 2 Logging In to the System as root

Before you install Oracle Database, 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 System 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, then:
  - **1.** Start a local terminal session, for example, an X terminal (xterm).
  - **2.** If you are not installing the software on the local system, then enter the following command to enable the remote host to display X applications on the local X server:

\$ xhost fully\_qualified\_remote\_host\_name

## For example:

```
$ xhost somehost.us.acme.com
```

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

```
$ telnet fully_qualified_remote_host_name
```

4. If you are not logged in as the root user, then 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, then:

**Note:** If necessary, refer to 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, then enter the following command to switch user to root:

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

# 3 Checking the Hardware Requirements

The system must meet the following minimum hardware requirements:

- At least 1024 MB of physical RAM
- The following table describes the relationship between installed RAM and the configured swap space requirement.

RAM	Swap Space
Between 512 MB and 2048 MB	1.5 times the size of RAM
Between 2049 MB and 8192 MB	Equal to the size of RAM
More than 8192 MB	0.75 times the size of RAM

400 MB of disk space in the /tmp directory

- Up to 2.5 GB of disk space for the Oracle software, depending on the installation type
- 1.2 GB of disk space for a preconfigured database that uses file system storage (optional)

**Note:** The disk space requirement for databases that use Automatic Storage Management or raw device storage is described later in this chapter.

Additional disk space, either on a file system or in an Automatic Storage Management disk group, is required for the flash recovery area if you choose to configure automated backups.

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

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

```
# grep "Physical:" /var/adm/syslog/syslog.log
```

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

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

```
# /usr/sbin/swapinfo -a
```

If necessary, refer to 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:

```
# bdf /tmp
```

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

- Delete unnecessary files from the /tmp directory.
- 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 required, 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:

```
# bdf
```

The following table shows the approximate disk space requirements for software files for each installation type.

Installation Type	Requirement for Software Files (GB)
Enterprise Edition	2.0
Standard Edition	2.5
Custom (maximum)	2.5

**5.** To determine whether the system architecture can run the software, enter the following command:

```
# /bin/getconf KERNEL_BITS
```

The following is the expected output of this command:

64

If you do not see the expected output, then you cannot install the software on this system.

# 4 Checking the Software Requirements

The system must meet the following minimum software requirements, depending on the distribution and version of your operating system:

**Note:** Oracle Universal Installer performs checks on your system to verify that it meets the listed requirements. To ensure that these checks pass, verify the requirements before you start Oracle Universal Installer.

■ The operating system version must be HP-UX 11i V1 (11.11) PA-RISC or HP-UX 11i V2 (11.23).

For the Oracle products that you want to install, the system must meet the following product-specific requirements:

Oracle Messaging Gateway

This product supports the integration of Oracle Streams Advanced Queuing (AQ) with the following software:

- IBM WebSphere MQ V5.3, client and server:

```
MQSERIES.MQM-CL-HPUX
MQSERIES.MQM-SERVER
```

- TIBCO Rendezvous 7.2
- PL/SQL native compilation

HP C Compiler (B.11.11.12):

GCC compiler gcc 3.4.0 (64-Bit) for 11i V1 and 11i V2

 Pro\*C/C++, Oracle Call Interface, Oracle C++ Call Interface, and Oracle XML Developer's Kit (XDK)

HP C Compiler (B.11.11.12):

HP aC++ Compiler (aCC A.03.60):

Oracle JDBC/OCI Drivers

You can use the following optional Java SDK versions with the Oracle JDBC/OCI drivers, however they are not required for the installation:

- Java SDK 1.3.1.16 with the JNDI extension
- Java SDK 1.2.2.09
- Java SDK 1.4.2.08
- Java SDK 5.0

**Note:** Java SDK 1.4.2 is installed with this release.

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

**1.** To determine which version of HP-UX is installed, enter the following command:

```
# uname -a
HP-UX hostname B.11.11 U 9000/800 109444686 unlimited-user license
```

In this example, the version of HP-UX 11i is 11.11.

2. To determine whether a bundle, product, or fileset is installed, enter a command similar to the following, where <code>level</code> is bundle, product, or <code>fileset</code>:

```
# /usr/sbin/swlist -l level | more
```

If a required bundle, product, or fileset is not installed, then you must install it. Refer to your operating system or software documentation for information about installing products.

In addition, you need to verify that the following patches are installed on the system. The procedure following the table describes how to check these requirements.

**Note:** There may be more recent versions of the patches listed installed on the system. If a listed patch is not installed, determine whether a more recent version is installed before installing the version listed.

• For all installations on HP-UX, the following patches are required:

## Quality Pack bundle:

HP-UX 11i Quality Pack (GOLDQPK11i), Dec 2004 or later: GOLDOPK11i

#### Patches for HP-UX 11i V1 (11.11):

- PHNE\_31097: ONC/NFS general release/performance patch
- PHSS\_31221: HP aC++ -AA runtime libraries (aCC A.03.60)

## Patches for HP-UX 11i V2 (11.23):

- PHSS\_31849: linker + fdp cumulative patch
- PHSS\_31852: aC++ Runtime (PA A.03.61)

## None currently required

#### Patches for JDK on HP-UX 11i (11.11):

PHSS\_30970: ld(1) and linker tools cumulative patch

**Note:** Refer to the following Web site for information about additional patches that may be required by JDK 1.4.2:

http://www.hp.com/products1/unix/java/patches/index.
html

 For PL/SQL native compilation and installation of Pro\*C/C++, Oracle Call Interface, Oracle C++ Call Interface, or Oracle XML Developer's Kit (XDK), the following patches are required:

## Patches for HP-UX 11i V1 (11.11):

- PHSS\_32508: HP aC++ Compiler (A.03.63)
- PHSS\_32509: ANSI C compiler B.11.11.12 cumulative patch
- PHSS\_32510: +O4/PBO Compiler B.11.11.12 cumulative patch

## Patches for HP-UX 11i v2 (11.23):

- PHSS\_32511: HP aC++ Compiler (A.03.63)
- PHSS\_32512: ANSI C compiler B.11.11.12 cumulative patch
- PHSS\_32513: +O4/PBO Compiler B.11.11.12 cumulative patch
- For Oracle Messaging Gateway installation, the following corrective service diskettes (CSDs) for WebSphere MQ are required:

CSD05 or later for WebSphere MQ V5.3

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

 Enter the following command to determine whether the HP-UX 11i Quality Pack is installed:

```
# /usr/sbin/swlist -l bundle | grep GOLD
```

If the Quality Pack is not installed or if the date is before June 2003, then download the latest Quality Pack from the following Web site and install it:

```
http://www.software.hp.com/SUPPORT_PLUS/qpk.html
```

**2.** To determine whether a patch is installed, enter a command similar to the following:

```
# /usr/sbin/swlist -l patch | grep PHSS_28880
```

Alternatively, to list all installed patches, enter the following command:

```
# /usr/sbin/swlist -l patch | more
```

If a required patch is not installed, then download it from the following Web site and install it:

http://itresourcecenter.hp.com

If the Web site shows a more recent version of the patch, then download and install that version.

**3.** If you require a CSD for WebSphere MQ, refer to the following Web site for download and installation information:

http://www.ibm.com/software/integration/mqfamily/support/summar
y/hpx.html

# 5 Creating Required Operating System Groups and User

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

- The Oracle Inventory group (oinstall)
- The OSDBA group (dba)
- The Oracle software owner (oracle)
- An unprivileged user

To determine whether these groups and users already exist, and if necessary, to create them, follow these steps:

 To determine whether the oinstall 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.

If the oraInst.loc file does not exist, then create the Oracle Inventory group by entering the following command:

- # /usr/sbin/groupadd oinstall
- 2. If the OSDBA group does not exist or if you require a new OSDBA group, then create it as follows:
  - # /usr/sbin/groupadd dba

In this command, use the group name dba unless a group with that name already exists.

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

- **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, then 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

# 6 Creating Required Directories

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

- The Oracle base directory
- An optional Oracle data file directory (optional)

The Oracle base directory must have 3 GB of free disk space, or 4 GB of free disk space if you choose not to create a separate Oracle data file directory.

**Note:** If you do not want to create a separate Oracle data file directory, you can install the data files in a subdirectory of the Oracle base directory. However, this is not recommended for production databases.

To determine where to create these directories:

- **1.** Enter the following command to display information about all mounted file systems:
  - # bdf

This command displays information about all 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 disk space requirements.

The file system that you identify can be a local file system, a cluster file system, or an NFS file system on a certified NAS device.

**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 data file 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:

**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, then create an oradata subdirectory in the mount point directory that you identified for the Oracle data file 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
```

# 7 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 and environment variable.

To set the oracle user's environment:

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

```
$ xhost fully_qualified_remote_host_name
```

**3.** Complete one of the following steps:

- If the terminal session is not connected to the system where you want to install the software, then 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, 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:

```
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.** If the ORACLE\_SID, ORACLE\_HOME, or ORACLE\_BASE environment variable is set in the file, then remove the corresponding lines from the file.
- **8.** Save the file, and exit from the editor.
- **9.** To run the shell startup script, enter the following command:
  - Bash shell:

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

■ Bourne shell, or Korn shell:

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

C shell:

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

- **10.** If you are not installing the software on the local system, then enter a command similar to the following 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, <code>local\_host</code> is the host name or IP address of the system that you want to use to display Oracle Universal Installer (your workstation or PC).

11. If you determined that the /tmp directory had insufficient free disk space when checking the hardware requirements, then enter the following commands to set the TMP and TMPDIR environment variables. Specify a directory on a file system with sufficient free disk space.

Bourne, Bash, or Korn shell:

```
$ TMP=/directory
$ TMPDIR=/directory
$ export TMP TMPDIR
```

C shell:

```
% setenv TMP /directory
% setenv TMPDIR /directory
```

- **12.** 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).

- **13.** 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
```

**14.** 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.

# 8 Mounting the Product Disc

On most hp-ux PA-RISC systems, the product disc mounts automatically when you insert it into the drive. If the disc does not mount automatically, then follow these steps to mount it:

**1.** Switch user to root:

```
$ su - root
```

- **2.** If necessary, enter a command similar to the following to eject the currently mounted disc, then remove it from the drive:
  - # /usr/sbin/umount /SD\_DVD
- **3.** Insert the disc into the disc drive.
- **4.** Enter a command similar to the following:
  - # /usr/sbin/mount -F cdfs -o rr /dev/dsk/cxtydz /SD\_DVD

In this example, /SD\_DVD is the disc mount point directory and /dev/dsk/cxtydz is the device name for the disc device, for example /dev/dsk/c0t2d0.

**5.** If Oracle Universal Installer displays the Disk Location dialog box, then enter the disc mount point directory path. For example:

/SD\_DVD

# 9 Installing Oracle Database

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

**Note:** If you are installing the software from a DVD, then use a command similar to the following:

- \$ /mount\_point/db/runInstaller
- **1.** To start Oracle Universal Installer, enter the following commands:
  - \$ cd /tmp
  - \$ /directory\_path/runInstaller

If Oracle Universal Installer does not start, then refer to *Oracle Database Installation Guide for hp-ux PA-RISC (64-Bit)* for information about how to troubleshoot X Window display problems.

- **2.** The following table describes the recommended action for each Oracle Universal Installer screen. Use the following guidelines to complete the installation:
  - If you need more assistance, or if you want to choose an option that is not a default, then click **Help** for additional information.
  - If you encounter errors while installing or linking the software, then refer to *Oracle Database Installation Guide for hp-ux PA-RISC* (64-Bit) for information about troubleshooting.

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

Screen	Recommended Action
Select Installation Method	The Basic Installation option is selected by default.
	Specify the directory path of the Oracle home. Ensure that the UNIX DBA group oinstall is selected. If you want to create a starter database, then specify a name and password for it. Then, click <b>Next</b> .
Specify Inventory Directory and Credentials	This screen is displayed only during the first installation of Oracle products on a system.
	Specify the full path of the Oracle Inventory directory. Ensure that the operating system group selected is oinstall. Then, click <b>Next</b> .
Product-Specific Prerequisite Checks	Verify that all of the prerequisite checks succeed, then click <b>Next</b> .
	Oracle Universal Installer checks the system to verify that it is configured correctly to run Oracle software. If you have completed all of the preinstallation steps in this guide, all of the checks should pass.
	If a check fails, then 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, then you can select the check box for the failed check to manually verify the requirement.
Summary	Review the information displayed on this screen, and then click <b>Install</b> .
Install	This screen displays status information while the product is being installed.
Configuration Assistants	This screen displays status information for the configuration assistants that configure the software and create a database. When the message is displayed at the end of this process, click <b>OK</b> to continue.
Execute Configuration Scripts	When prompted, read the instructions and then run the scripts mentioned on this screen. Click <b>OK</b> to continue.
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 Oracle Universal Installer, click <b>Exit</b> and then click <b>Yes</b> .

# 10 Installing Products from the Oracle Database 10*g* Companion CD

The Oracle Database 10g Companion CD contains additional products that you can install. Whether you need to install these products depends on which Oracle Database products or features you plan to use. If you plan to use the following products or features, then you must complete the Oracle Database 10g Products installation from the Companion CD:

JPublisher

- Oracle JVM
- Oracle interMedia
- Oracle JDBC development drivers
- Oracle SQLJ
- Oracle Database Examples
- Oracle Text supplied knowledge bases
- Oracle Ultra Search
- Oracle HTML DB
- Oracle Workflow server and middle-tier components

For more information about installing software from the Companion CD, refer to *Oracle Database Companion CD Quick Installation Guide for hp-ux PA-RISC (64-Bit)*.

# 11 What to Do Next?

To become familiar with this release of Oracle Database, it is recommended 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 installation. The default URL for Database Control is similar to the following:

```
http://host.domain:1158/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.

- Refer to *Oracle Database Installation Guide for hp-ux PA-RISC (64-Bit)* for information about required and optional postinstallation tasks, depending on the products that you want to use.
- Refer to Oracle Database Installation Guide for hp-ux PA-RISC (64-Bit) for information about how to use Database Control to learn about the configuration of your installed database.
- To learn more about using Oracle Enterprise Manager Database Control to administer a database, refer to *Oracle Database 2 Day DBA*.

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.

# 12 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 this documentation, see the welcome. htm file located in the top-level directory of the installation media.
  - Generic product documentation is available in the Oracle Documentation Library.
- From the Oracle Technology Network Web site:

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

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

http://www.adobe.com

# 13 Documentation Accessibility

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

#### **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.

## 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.

#### TTY Access to Oracle Support Services

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 TTY support, call 800.446.2398.

Oracle Database Client Quick Installation Guide, 10g Release 2 (10.2) for HP-UX PA-RISC (64-Bit)

Copyright © 2006, Oracle. All rights reserved.

The Programs (which include both the software and documentation) contain proprietary information; they are provided under a license agreement containing restrictions on use and disclosure and are also protected by copyright, patent, and other intellectual and industrial property laws. Reverse engineering, disassembly, or decompilation of the Programs, except to the extent required to obtain interoperability with other independently created software or as specified by law, is prohibited.

The information contained in this document is subject to change without notice. If you find any problems in the documentation, please report them to us in writing. This document is not warranted to be error-free. Except as may be expressly permitted in your license agreement for these Programs, no part of these Programs may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose.

If the Programs are delivered to the United States Government or anyone licensing or using the Programs on behalf of the United States Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the Programs, including documentation and technical data, shall be subject to the licensing restrictions set forth in the applicable Oracle license agreement, and, to the extent applicable, the additional rights set forth in FAR 52.227-19, Commercial Computer Software—Restricted Rights (June 1987). Oracle USA, Inc., 500 Oracle Parkway, Redwood City, CA 94065

The Programs are not intended for use in any nuclear, aviation, mass transit, medical, or other inherently dangerous applications. It shall be the licensee's responsibility to take all appropriate fail-safe, backup, redundancy and other measures to ensure the safe use of such applications if the Programs are used for such purposes, and we disclaim liability for any damages caused by such use of the Programs. Oracle, JD Edwards, and PeopleSoft are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

The Programs may provide links to Web sites and access to content, products, and services from third parties. Oracle is not responsible for the availability of, or any content provided on, third-party Web sites. You bear all risks associated with the use of such content. If you choose to purchase any products or services from a third party, the relationship is directly between you and the third party. Oracle is not responsible for: (a) the quality of third-party products or services; or (b) fulfilling any of the terms of the agreement with the third party, including delivery of products or services and warranty obligations related to purchased products or services. Oracle is not responsible for any loss or damage of any sort that you may incur from dealing with any third party.

