

Oracle® Database

Companion CD Installation Guide

10g Release 2 (10.2) for Microsoft Windows (x64)

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Oracle Database Companion CD Installation Guide 10g Release 2 (10.2) for Microsoft Windows (x64)

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Preface

This guide explains how to install and configure the products available on the Oracle Database Companion CD for Microsoft Windows (x64). The supported Windows operating systems for this product is Windows Server 2003, Windows XP, Windows Vista, and Windows Server 2008.

This Preface contains these topics:

- [Audience](#)
- [Documentation Accessibility](#)
- [Related Documentation](#)
- [Conventions](#)

Audience

Oracle Database Companion CD Installation Guide for Microsoft Windows (x64) is intended for anyone responsible for installing the following products available on the Oracle Database Companion CD for Microsoft Windows (x64):

- Oracle JDBC Development Drivers
- Oracle SQLJ
- Oracle Database Examples
- JPublisher
- Natively Compiled Java Libraries
- Oracle Text Supplied Knowledge Bases
- Oracle Ultra Search

To use this manual, you must have administrative privileges on the computer where you installed your Oracle Database and familiarity with object-relational database management concepts.

See Also: *Oracle Database Companion CD Quick Installation Guide for Microsoft Windows (x64)* if you want to perform a quick installation using the default settings

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

Accessibility of Code Examples in Documentation

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

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TTY Access to Oracle Support Services

Oracle provides dedicated Text Telephone (TTY) access to Oracle Support Services within the United States of America 24 hours a day, 7 days a week. For TTY support, call 800.446.2398. Outside the United States, call +1.407.458.2479.

Related Documentation

For more information, see these Oracle resources:

- *Oracle Database Release Notes for Microsoft Windows (x64)*
- *Oracle Database Installation Guide for Microsoft Windows (x64)*
- *Oracle Database Client Installation Guide for Microsoft Windows (x64)*
- *Oracle Database Concepts*

For information about Oracle error messages, see *Oracle Database Error Messages*. Oracle error message documentation is available only in HTML. If you only have access to the Oracle Database 10g release 2 (10.2) Online Documentation Library, you can browse the error messages by range. Once you find the specific range, use your browser's "find in page" feature to locate the specific message. When connected to the Internet, you can search for a specific error message using the error message search feature of the Oracle online documentation.

Many of the examples in this book use the sample schemas, which are installed by default when you select the Basic Installation option with an Oracle Database installation. Refer to *Oracle Database Sample Schemas* for information on how these schemas were created and how you can use them yourself.

Printed documentation is available for sale in the Oracle Store at

<http://oraclestore.oracle.com/>

To download free release notes, installation documentation, white papers, or other collateral, please visit the Oracle Technology Network (OTN). You must register online before using OTN; registration is free and can be done at

<http://www.oracle.com/technology/membership/>

If you already have a username and password for OTN, then you can go directly to the documentation section of the OTN Web site at

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

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Support for Windows Vista and Windows Server 2008

Oracle Database is supported on Windows Vista and Windows Server 2008 with the 10.2.0.4 release. Use the Oracle Database 10g Release 2 (10.2.0.4.0) for Microsoft Windows Vista x64 and Microsoft Windows Server 2008 x64 media available in the 10.2.0.4 media pack and the Oracle Technology Network site. Do not install Oracle Database on Windows Vista or Windows Server 2008 using the media for Oracle Database 10g Release 2 (10.2) for Microsoft Windows.

Note: Oracle HTTP Server and Oracle Workflow are not supported on any of the Windows x64 operating systems.

Managing User Accounts with User Account Control on Windows Vista and Windows Server 2008

To ensure that only trusted applications run on your computer, Windows Vista provides User Account Control. If you have enabled this security feature, then, depending on how you have configured it, Oracle Universal Installer prompts you for either your consent or your credentials when installing Oracle Database. Provide either the consent or your Windows Administrator credentials as appropriate.

You must have Administrator privileges to run some Oracle tools, such as Database Configuration Assistant, Net Configuration Assistant, and OPatch, or to run any tool or application that writes to any directory within the Oracle home. If User Account Control is enabled, and you are logged in as the local Administrator, then you can successfully run each of these commands in the usual way. However, if you are logged in as "a member of the Administrator group," then you must explicitly invoke these tasks with Windows Administrator privileges.

See Also: "Starting Database Tools on Windows Vista and Windows Server 2008" in *Oracle Database Platform Guide for Microsoft Windows (x64)* for more information

To run a Windows shortcut with Windows Administrator privileges:

1. Click the **Start** menu button.
2. Navigate to Programs, then to Oracle - *HOME_NAME*.
3. Right-click the name of the command or application you want to run, then select **Run as administrator**.

To start a command prompt window with Windows Administrator privileges:

1. On your desktop, create a shortcut for the command prompt window. An icon for that shortcut appears on the desktop.
2. Right-click the icon for the newly created shortcut, and specify "Run as administrator."

When you open this window, the title bar reads Administrator: Command Prompt. Commands run from within this window are run with Administrator privileges.

Oracle Database Companion CD Installation Overview

This chapter provides an overview of the products available on the Oracle Database Companion CD and describes issues to consider before you install the products:

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

Overview of the Installation Process

The installation process consists of six steps:

1. **Read the release notes:** Read the Oracle Database 10g release 2 (10.2) release notes before you begin the installation. The release notes are available with the platform-specific documentation. The latest version of the release notes is available on Oracle Technology Network at:
<http://www.oracle.com/technology/documentation>
2. **Plan the installation:** This chapter describes the products in the installation types and provides information that you must understand before installing the software.
You also may want to refer to Appendix A, "Frequently Asked Questions about Installation," in *Oracle Database Installation Guide*. This appendix advises on the best way to install Oracle products depending on your site's requirements.
3. **Verify system requirements:** [Chapter 2](#) describes the minimum requirements that your system must meet before you install the software.
4. **Install the software:** Use the following sections to install the Oracle Database Companion CD products:
 - [Chapter 3](#) describes how to use Oracle Universal Installer to install the software.
 - [Appendix A](#) describes how to perform the installation using silent or noninteractive mode using response files.
 - ["Installing and Using Oracle Components in Different Languages"](#) on page B-1 describes how to install and use Oracle Database Companion CD components in different languages.
 - [Appendix D](#) provides installation troubleshooting advice.
5. **Get started using the Companion CD products:** Use the following sections to get started using Oracle Database Companion CD products:

- "[Configuring Locale and Character Sets with the NLS_LANG Parameter](#)" on page B-2 explains how to configure the Oracle Database Companion CD locale and character sets.
- [Appendix C](#) describes how to check and modify port numbers.

Products Available in the Oracle Database 10g Products Installation Type

The following products are available with the Oracle Database 10g Products installation type:

- [Oracle JDBC Development Drivers](#)
- [Oracle SQLJ](#)
- [Oracle Database Examples](#)
- [Oracle Text Supplied Knowledge Bases](#)
- [Oracle Ultra Search](#)
- [Natively Compiled Java Libraries](#)
- [JPublisher](#)

Note:

- The Summary window of Oracle Universal Installer provides a detailed list of the products available with the Oracle Database 10g Products installation type.
 - Legato Single Server Version (LSSV) is no longer supported on Oracle Database. Oracle Database Recovery Manager (RMAN), which is a backup and recovery tool integrated into Oracle Database. *Oracle Database Backup and Recovery Basics* covers RMAN in more detail.
-
-

Oracle JDBC Development Drivers

Oracle provides a set of JDBC drivers that you can use for debugging your code and other deployment scenarios. These drivers can access Oracle Database release 10.2.0.1 or later.

See Also:

- [Oracle Technology Network](http://www.oracle.com/technology/index.html) (<http://www.oracle.com/technology/index.html>) for more information on Oracle JDBC Drivers and Oracle Call Interface
- *Oracle Call Interface Programmer's Guide*

Oracle SQLJ

Oracle SQLJ enables applications programmers to embed SQL operations in Java code in a way that is compatible with the Java design philosophy. A SQLJ program is a Java program containing embedded SQL statements. Oracle SQLJ offers extensions to support dynamic SQL operations—those that are not predefined, where the operations themselves can change in real-time. It is also possible to use dynamic SQL operations through JDBC code or PL/SQL code within a SQLJ application. Typical applications

contain much more static SQL than dynamic SQL. SQLJ has both a translator and a runtime component and is smoothly integrated into your development environment.

Oracle Database Examples

Oracle Database Examples include a variety of examples and product demonstrations that you can use to learn about the products, options, and features of Oracle Database. Many of these examples are designed to work with the Sample Schemas which you can optionally install in any Oracle database. Many of the documents in the Oracle Online Documentation Library use the example programs and scripts provided with the Oracle Database Examples.

Required Products

Before you can use the Oracle Database Examples, you must install the Sample Schemas into an Oracle database. When you install Oracle Database, or use Database Configuration Assistant (DBCA) to create a new database, you can choose to include the Sample Schemas when you create the database. You can also manually install the Sample Schemas into an existing database.

See Also: *Oracle Database Sample Schemas* for information about manually installing the Sample Schemas into an existing database

Oracle Text Supplied Knowledge Bases

The Oracle Database 10g Products installation type installs two Oracle Text knowledge bases, English and French. You can extend the supplied knowledge bases depending on your requirements. Alternatively, you can create your own knowledge bases, in languages other than English and French.

See Also: *Oracle Text Reference* for more information about creating and extending knowledge bases

Oracle Ultra Search

You can use Oracle Ultra Search to build different kinds of search applications. It lets you index and search Web sites, database tables, files, mailing lists, Oracle Application Server Portals, and user-defined data sources.

Natively Compiled Java Libraries

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

JPublisher

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

- SQL object types
- Object reference types (REF types)
- SQL collection types (VARRAY types or nested table types)
- PL/SQL packages

- Server-side Java classes
- SQL queries and DML statements

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

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

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

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

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

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

Oracle SQLJ Translator

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

Oracle SQLJ Runtime

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

See Also: *Oracle Database JPublisher User's Guide*

Oracle Database Companion CD Requirements

This chapter describes the requirements for installing the Oracle Database 10g Companion CD products:

- [Requirements for Oracle Database 10g Products](#)
- [Hardware and Software Certifications](#)
- [Network Topics](#)

Requirements for Oracle Database 10g Products

This section covers the following topics:

- [Disk Space Requirements](#)
- [Browser Requirements](#)
- [Oracle Database Requirement](#)

See Also: ["Products Available in the Oracle Database 10g Products Installation Type"](#) on page 1-2

Disk Space Requirements

The following disk space sizes reflect the sizes required by Oracle Database 10g Products only. They do not include the sizes in an existing Oracle Database installation.

- TEMP space: 100 MB
- *SYSTEM_DRIVE*: \Program Files\Oracle directory: 100 MB
- *SYSTEM_DRIVE*: \ORACLE_BASE\ORACLE_HOME directory: 950 MB (approx.)
- *SYSTEM_DRIVE*: \ORACLE_BASE\oradata: 40 MB
- Total: 1 GB (approx.)

Browser Requirements

Oracle Database 10g Companion Products require a Web browser that supports frames, JavaScript, Java Development Kit (JDK) version 1.4, and AWT, such Microsoft Internet Explorer version 6.0 with Service Pack 1. Windows Vista and Windows Server 2008 require Microsoft Internet Explorer version 7.0.

Oracle Database Requirement

Your system must have access to Oracle Database release 2 (10.2) before you can install the Oracle Database 10g Products installation type.

See Also: *Oracle Database Companion CD Quick Installation Guide for Microsoft Windows (x64)*

Hardware and Software Certifications

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

<https://metalink.oracle.com/>

You must register online before using *OracleMetaLink*. After logging in, select **Certify & Availability** from the left-hand column. From the Product Lifecycle page, select the **Certifications** button. Other Product Lifecycle options include **Product Availability**, **Desupport Notices**, and **Alerts**.

The following sections list the following certification information:

- [Windows Telnet Services Support](#)
- [Windows Terminal Services and Remote Desktop Support](#)

Windows Telnet Services Support

All the Windows x64 operating systems include a Telnet Service that allows remote users to log on to the operating system and run console programs using the command line. Oracle supports the use of command line utilities using this feature, but does not support the database GUI tools such as Oracle Universal Installer, Database Configuration Assistant, and Oracle Net Configuration Assistant.

Note: Make sure that the Telnet service is started on the Windows **Services** utility.

Windows Terminal Services and Remote Desktop Support

Oracle supports installing, configuring, and running Oracle Database through Terminal Services on Windows 2003, Windows XP, Windows Vista, and Windows Server 2008. If you encounter problems with the installation through Terminal Server, Oracle recommends that you try connecting to the Terminal Services console session of the server (using `mstsc/console`).

You can configure Windows 2003 to use Terminal Services in Remote Desktop for Administration Mode or Terminal Server Mode. For Windows XP and Windows Vista, the Remote Desktop is only available in Single User Mode. You can have multiple Remote Desktop sessions on Windows Server 2008.

See Also:

- The Microsoft Web site for more information about terminal services

<http://www.microsoft.com/>

- The Oracle*MetaLink* Web site for the latest Terminal Server certification information

<https://metalink.oracle.com/>

Network Topics

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

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

- [Installing on DHCP Computers](#)
- [Installing on Computers with Multiple IP Addresses](#)
- [Installing on Computers with Multiple Aliases](#)
- [Installing a Loopback Adapter](#)

Installing on DHCP Computers

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

In a DHCP setup, the software tracks IP addresses, which simplifies network administration. This lets you add a new computer to the network without having to manually assign that computer a unique IP address. However, before installing the Oracle Database Companion CD products onto a computer that uses the DHCP protocol, you need to install a loopback adapter to assign a local IP address to that computer.

See also: "[Checking if a Loopback Adapter Is Installed on Your Computer](#)" on page 2-5

Installing on Computers with Multiple IP Addresses

You can install Oracle Database on a computer that has multiple IP addresses, also known as multihomed computer. Typically, a multihomed computer has multiple network cards. This is typically achieved by having multiple network cards on the computer. Each IP address is associated with a host name; additionally, you can set up aliases for the host name. By default, Oracle Universal Installer uses the `ORACLE_HOSTNAME` environment variable setting to find the host name. If `ORACLE_HOSTNAME` is not set and you are installing on a computer that has multiple network cards, Oracle Universal Installer determines the hostname by using the first name in the `hosts` file (typically located in `SYSTEM_DRIVE:\WINDOWS\system32\drivers\etc` on Windows 2003, Windows XP, Windows Vista, and Windows Server 2008).

Clients must be able to access the computer using this hostname (or using aliases for this hostname). To check, ping the hostname from the client computers using the short name (hostname only) and the full name (hostname and domain name). Both must work.

Setting the ORACLE_HOSTNAME Environment Variable

To set the ORACLE_HOSTNAME environment variable:

1. Display **System** in the Windows Control Panel.
2. In the System Properties dialog box, click **Advanced**.
3. In the **Advanced** tab, click **Environment Variables**.
4. In the Environment Variables dialog box, under System Variables, click **New**.
5. In the New System Variable dialog box, enter the following information:
 - **Variable name:** ORACLE_HOSTNAME
 - **Variable value:** The hostname of the computer that you want to use.
6. Click **OK**, then in the the Environment Variables dialog box, click **OK**.
7. Click **OK** in the Environment Variables dialog box, then in the System Properties dialog box, click **OK**.

Installing on Computers with Multiple Aliases

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

Installing a Loopback Adapter

When you install a loopback adapter, the loopback adapter assigns a local IP for your computer. After you install a loopback adapter on your computer, you have at least two network adapters on your computer: your own network adapter and the loopback adapter. The Oracle Database Companion CD products need to have Windows using the loopback adapter as the primary adapter.

The primary adapter is determined by the order in which you installed the adapters: it is the *last* adapter installed. If you install additional network adapters after you install the loopback adapter, you need to deinstall the loopback adapter and reinstall it.

A loopback adapter is required if you are installing on a DHCP computer.

See Also: ["Installing on DHCP Computers"](#) on page 2-3

The procedure for installing a loopback adapter depends on the version of Windows on which you plan to install the Oracle Database Companion CD products:

- [Checking if a Loopback Adapter Is Installed on Your Computer](#)
- [Installing a Loopback Adapter on Windows 2003 or Windows XP](#)
- [Installing a Loopback Adapter on Windows Vista or Windows Server 2008](#)
- [Removing a Loopback Adapter](#)

Checking if a Loopback Adapter Is Installed on Your Computer

To check if a loopback adapter is installed on your computer, run the `ipconfig /all` command:

```
c:\> ipconfig /all
```

If there is a loopback adapter installed, you would see a section that lists the values for the loopback adapter. For example:

```
Ethernet adapter Local Area Connection 2:
  Connection-specific DNS Suffix . . :
  Description . . . . . : Microsoft Loopback Adapter
  Physical Address. . . . . : 02-00-4C-4F-4F-50
  DHCP Enabled. . . . . : Yes
  Autoconfiguration Enabled . . . . : Yes
  Autoconfiguration IP Address. . . : 169.254.25.129
  Subnet Mask . . . . . : 255.255.0.0
```

Installing a Loopback Adapter on Windows 2003 or Windows XP

To install a loopback adapter on Windows 2003 or Windows XP:

1. Open the Windows Control Panel.
2. Double-click **Add Hardware** to start the Add Hardware wizard.
3. In the Welcome window, click **Next**.
4. In the Is the hardware connected? window, select **Yes, I have already connected the hardware**, and click **Next**.
5. In the The following hardware is already installed on your computer window, in the list of installed hardware, select **Add a new hardware device**, and click **Next**.
6. In the The wizard can help you install other hardware window, select **Install the hardware that I manually select from a list**, and click **Next**.
7. From the list of hardware types, select the type of hardware you are installing window, select **Network adapters**, and click **Next**.
8. In the Select Network Adapter window, make the following selections:
 - **Manufacturer:** select **Microsoft**.
 - **Network Adapter:** select **Microsoft Loopback Adapter**.
9. Click **Next**.
10. In the The wizard is ready to install your hardware window, click **Next**.
11. In the Completing the Add Hardware Wizard window, click **Finish**.
12. If you are using Windows 2003, restart your computer.
13. Right-click **My Network Places** on the desktop and choose **Properties**. This displays the Network Connections control panel.
14. Right-click the connection that was just created. This is usually named "Local Area Connection 2". Choose **Properties**.
15. On the **General** tab, select **Internet Protocol (TCP/IP)**, and click **Properties**.
16. In the Properties dialog box, click **Use the following IP address** and do the following:
 - a. **IP Address:** Enter a non-routable IP for the loopback adapter. Oracle recommends the following non-routable addresses:

- 192.168.x.x (x is any value between 0 and 255)
 - 10.10.10.10
 - b. Subnet mask:** Enter 255.255.255.0 for 192.68.x.x.
Enter 255.0.0.0 for 10.10.10.10.
 - c.** Record the values you entered, which you will need later in this procedure.
 - d.** Leave all other fields empty.
 - e.** Click **OK**.
17. Click **OK**.
18. Close **Network Connections**.
19. Restart the computer.
20. Add a line to the `SYSTEM_DRIVE:\WINDOWS\system32\drivers\etc\hosts` file with the following format, after the `localhost` line:
- ```
IP_address hostname.domainname hostname
```
- where:
- `IP_address` is the non-routable IP address you entered in step 16.
  - `hostname` is the name of the computer.
  - `domainname` is the name of the domain.
- For example:
- ```
10.10.10.10 mycomputer.mydomain.com mycomputer
```
21. Check the network configuration:
- a.** Open **System** in the Control Panel, and select the **Computer Name** tab. In **Full computer name**, make sure you see the host name and the domain name, for example, `sales.us.mycompany.com`.
 - b.** Click **Change**. In **Computer name**, you should see the hostname, and in **Full computer name**, you should see the host name and domain name. Using the previous example, the host name would be `sales` and the domain would be `us.mycompany.com`.
 - c.** Click **More**. In **Primary DNS suffix of this computer**, you should see the domain name, for example, `us.mycompany.com`.

Installing a Loopback Adapter on Windows Vista or Windows Server 2008

To install a loopback adapter on Windows Vista or Windows Server 2008:

1. Open the Windows Control Panel.
2. Double-click **Add Hardware** to start the Add Hardware wizard.
3. In the Welcome window, click **Next**.
4. In the The wizard can help you install other hardware window, select **Install the hardware that I manually select from a list**, and click **Next**.
5. From the list of hardware types, select the type of hardware you are installing window, select **Network adapters**, and click **Next**.
6. In the Select Network Adapter window, make the following selections:

- **Manufacturer:** Select **Microsoft**.
 - **Network Adapter:** Select **Microsoft Loopback Adapter**.
7. Click **Next**.
 8. In the The wizard is ready to install your hardware window, click **Next**.
 9. In the Completing the Add Hardware Wizard window, click **Finish**.

The remaining steps are same as given for Windows XP.

Removing a Loopback Adapter

To remove the loopback adapter:

1. Display **System** in the Windows Control Panel.
2. In the Hardware tab, click **Device Manager**.
3. In the Device Manager window, expand **Network adapters**. You should see **Microsoft Loopback Adapter**.
4. Right-click **Microsoft Loopback Adapter** and select **Uninstall**.
5. Click **OK**.

Installing the Oracle Database Companion CD Software

This chapter covers the following topics:

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

General Steps for Installing Companion CD Products

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

1. Consider the following issues:
 - **Installing in interactive mode or in silent or noninteractive mode:** The instructions in this chapter are written for interactive installations. If you prefer to perform the installation in silent mode noninteractive mode using response files—for example, if your site requires multiple installations—read [Appendix A, "Installing Oracle Database Companion CD Using Response Files"](#) for more information.
 - **Installing in a Different Language:** See "[Installing and Using Oracle Components in Different Languages](#)" on page B-1 for language considerations.
2. Use the procedures under "[Accessing the Installation Software](#)" on page 3-1 if you need to install the software from a hard drive or install remotely.
3. Follow the instructions under "[Installing Oracle Database 10g Products](#)" on page 3-4 to install the Oracle Database 10g Products. If you have already installed these products, follow the instructions under "[Installing the Latest Patch Set Release](#)" on page 3-6 for the latest patch set updates.

Accessing the Installation Software

The Oracle Database software is available on DVD. Do not use Oracle Universal Installer from an earlier release to install components from this release.

If you need to install the Oracle Database Companion CD products using any of the following scenarios, follow the procedures in this section before continuing to the installation instructions.

- [Copying Oracle Database Software to Hard Disk](#)
- [Installing from a Remote DVD Drive](#)
- [Installing on Remote Computers Through Remote Access Software](#)

Copying Oracle Database Software to Hard Disk

Instead of installing from the Oracle Database Companion CD products DVD, you can copy the contents of the DVD to a hard drive and install from there. This might be easier if you plan to install many instances of the Oracle Database Companion CD products on your network, or if the computers where you want to install the products do not have DVD drives.

To copy the contents of the installation media to a hard disk:

1. Create a directory on your hard drive. For example:

```
c:\install\companion
```
2. Copy the contents of the installation media to the directory that you just created.
3. After you have copied all of the required installation files, you can install the Oracle Database Companion CD products.

Installing from a Remote DVD Drive

If the computer where you want to install the Oracle Database Companion CD products does not have a DVD drive, you can perform the installation from a remote DVD drive. Check the following points:

- [On the Remote Computer, Share the DVD Drive](#)
- [On the Local Computer, Map the DVD Drive](#)

On the Remote Computer, Share the DVD Drive

The remote DVD drive that you want to use must allow shared access. To set this up, perform these steps on the remote computer that has the DVD drive:

1. Log in to the remote computer as an Administrator user.
2. Start Windows Explorer.
3. Right-click the DVD drive letter and choose **Sharing** (or **Sharing and Security**).
4. Click the **Sharing** tab and do the following:
 - a. Select **Share this folder**.
 - b. In **Share name**, give it a share name such as `dvd`. You will use this name when you map the DVD drive on the local computer. Under "[On the Local Computer, Map the DVD Drive](#)" on page 3-2 see Step d under Step 1.
 - c. Click **Permissions**. You need at least "read" permission for the user who will be accessing it to install Oracle Database.
 - d. Click **OK** when you are finished.
5. Insert the Oracle Database installation media into the DVD drive.

On the Local Computer, Map the DVD Drive

Perform these steps on the local computer to map a remote DVD drive and to run Oracle Universal Installer from the mapped drive:

1. Map the remote DVD drive.
 - a. Start Windows Explorer on the local computer.
 - b. From the **Tools** menu, select **Map Network Drive** to display the Map Network Drive dialog.
 - c. Select a drive letter to use for the remote DVD drive.
 - d. In **Folder**, enter the location of the remote DVD drive using the following format:


```
\\remote_hostname\share_name
```

 where:
 - *remote_hostname* is the name of the remote computer with the DVD drive.
 - *share_name* is the share name that you entered in Step 4 of the previous procedure. For example


```
\\computer2\dvd
```
 - e. If you need to connect to the remote computer as a different user, Click **different user name**, and enter the username.
 - f. Click **Finish**.
2. Run Oracle Universal Installer from the mapped DVD drive.

Installing on Remote Computers Through Remote Access Software

If you want to install and run the Oracle Database Companion CD products on a remote computer (that is, the remote computer has the hard drive and will run these components), but you do not have physical access to the computer, you still can perform the installation on the remote computer if it is running remote access software such as VNC or Symantec pcAnywhere. You also need the remote access software running on your local computer.

You can install the Oracle Database Companion CD products on the remote computer in one of two ways:

- If you have copied the contents of the Oracle Database Companion CD products DVD to a hard drive, you can install from the hard drive.
- You can insert the DVD into a drive on your local computer, and install from the DVD.

Installing on Remote Computers from a Hard Drive

If you have copied the contents of the Oracle Database Companion CD products DVD to a hard drive, you can install from the hard drive.

The steps that you have to complete are:

1. Make sure that the remote access software is installed and running on the remote and local computers.
2. Share the hard drive that contains the Oracle Database Companion CD products DVD.
3. On the remote computer, map a drive letter to the shared hard drive. You would use the remote access software to do this on the remote computer.

4. Through the remote access software, run Oracle Universal Installer on the remote computer. You access Oracle Universal Installer from the shared hard drive.

Installing on Remote Computers from a Remote DVD Drive

You can insert the DVD into a drive on your local computer, and install from the DVD. This is similar to the scenario described in "[Installing from a Remote DVD Drive](#)" on page 3-2.

The steps that you need to complete are:

1. Make sure that the remote access software is installed and running on the remote and local computers.
2. On the local computer, share the DVD drive.

On the remote computer, map a drive letter to the shared DVD drive. You would use the remote access software to do this on the remote computer.

These steps are described in "[Installing on Remote Computers from a Remote DVD Drive](#)" on page 3-4.

3. Through the remote access software, run Oracle Universal Installer on the remote computer. You access Oracle Universal Installer from the shared DVD drive.

Installing Oracle Database 10g Products

This section covers the following topics:

- [Oracle Home Location for the Oracle Database 10g Products](#)
- [Procedure for Installing Oracle Database 10g Products](#)

Oracle Home Location for the Oracle Database 10g Products

You need to install Oracle Database 10g Products in an existing Oracle Database 10g release 2 (10.2) Oracle home. These products are:

- Oracle JDBC Development Drivers
- Oracle SQLJ
- Database Examples
- Oracle Text Knowledge Base
- JAccelerator (NCOMP)
- Intermedia Image Accelerator

Identifying the Oracle Home Directory Location

Before you install Oracle Database 10g Products into an existing Oracle home, you need to identify the location of this Oracle home. If you do not know the path of the Oracle home directory, you can check it using Oracle Universal Installer.

To check the path of the Oracle home directory:

1. From the **Start** menu, choose **Programs**, then **Oracle - HOME_NAME**, then **Oracle Installation Products**, then **Universal Installer**.
2. When the Welcome window appears, click **Installed Products**.

The Inventory window appears, listing all of the Oracle homes on the system and the products installed in each Oracle home.

3. In the Inventory window, expand each Oracle home and locate **Oracle Database 10g 10.2.0.4.0**.
4. Click **Close** and then **Cancel** to exit Oracle Universal Installer.
5. Have the Oracle home name available when you begin installing Oracle Database 10g Products, described next.

Procedure for Installing Oracle Database 10g Products

To install Oracle Database 10g Products:

1. Log on as a member of the Administrators group to the computer on which to install Oracle components.

If you are installing on a Primary Domain Controller (PDC) or a Backup Domain Controller (BDC), log on as a member of the Domain Administrators group.

2. Make sure that the Oracle database that you plan to use for Oracle SQLJ, for example, is accessible and running.

You can use the Windows **Services** utility, located either in the Windows Control Panel or from the **Administrative Tools** menu (under **Start** and then **Programs**), to check that Oracle Database is running. Names of Oracle databases are preceded with OracleService. Right-click the name of the service and from the menu, choose **Start**.

3. Delete the ORACLE_HOME environment variable (from the **System** Control Panel) if it exists.

Refer to your Microsoft online help for more information about deleting environment variables.

Note: The ORACLE_HOME environment variable is automatically set in the registry. Manually setting this variable prevents installation.

4. Insert the Oracle Database installation media and navigate to the companion directory. Alternatively, navigate to the directory where you downloaded or copied the installation files.

Use the same installation media to install Oracle Database on all supported Windows platforms.

5. Double-click `setup.exe` to start Oracle Universal Installer.
6. In the Welcome window click **Next**.
7. In the Specify Home Details window, do the following:
 - a. **Name:** Verify that the Oracle home specified is the Oracle Database Oracle home. (The default Oracle home is offered.)
 - b. **Path:** Enter the directory location of the Oracle Database Oracle home where you want to install the Oracle home files. (The directory of the default Oracle home is offered.) Do not enter a directory path that has spaces. After you enter a correct directory path, Oracle Universal Installer creates a new directory for you.

See also: "[Identifying the Oracle Home Directory Location](#)" on page 3-4 for information on finding the correct Oracle home

8. Click **Next**.
9. In the Product-specific Prerequisite Checks window, check for and correct any errors that may have occurred when Oracle Universal Installer checked your system.
10. Click **Next**.
11. In the Summary window, check the list of products that will be installed, and click **Install**.
12. When the installation completes, click **Exit** and then click **Yes** to exit from Oracle Universal Installer.
13. Optionally, delete the `OraInstalldate_time` directory if you want to remove the temporary files that were created during the installation process. The `OraInstalldate_time` directory holds about 45 MB of files. This directory is created in the location set by the `TEMP` environment variable setting.
Restarting your computer also removes the `OraInstalldate_time` directory.

Installing the Latest Patch Set Release

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

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

To find and download patches:

1. Go to the *OracleMetaLink* Web site
<https://metalink.oracle.com/>
2. Log in to *OracleMetaLink*.

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

3. On the main *OracleMetaLink* page, click **Patches & Updates**.
4. Select **Simple Search**.
5. Specify the following information, then click **Go**:
 - In the **Search By** field, choose Product or Family, then specify the Companion CD product, such as Oracle SQLJ.
 - In the **Release** field, specify the current release number.
 - In the **Patch Type** field, specify Patchset/Minipack
 - In the **Platform or Language** field, select your platform.
6. Under **Results for Platform**, find the latest patch set for Oracle Database using *OracleMetaLink*.
7. From the list of available patches, click the number of the patch you want to download.

8. Click **View Readme** to review the README before proceeding with the download.

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

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

Removing the Oracle Database Companion CD Software

The following steps describe how to use Oracle Universal Installer to remove Oracle software:

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

1. From the **Start** menu, select **Programs**, then **Oracle - HOME_NAME**, then **Oracle Installation Products**, then **Universal Installer**.
2. When the Welcome window appears, click **Deinstall Products**.
The Inventory window appears, listing all of the Oracle homes on the system and the products installed in each Oracle home.
3. In the Inventory window, select the Oracle home and the Oracle products that you want to remove.
4. To delete specific products, select them in the tree window.
5. Click **Remove**.
A confirmation window appears asking you to confirm that you want to deinstall the products and their dependent components.
6. Click **Yes**.
A progress indicator appears as the software is removed.

Getting Started with the Oracle Database Companion CD Products

This chapter describes where to go now that you have installed the Oracle Database Companion CD products:

- [Checking the Installation Contents](#)
- [Getting Started with Oracle Ultra Search](#)

Note: On Windows Vista and Windows Server 2008, utilities such as Oracle Universal Installer and Oracle Process Management Notification (OPMN) utility require Administrator privileges.

Checking the Installation Contents

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

1. From the **Start** menu, choose **Programs**, then **Oracle - HOME_NAME**, **Oracle Installation Products**, then **Universal Installer**.

You can access Oracle Universal Installer from any Oracle home.

2. When the Welcome window appears, click **Installed Products**.

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

Getting Started with Oracle Ultra Search

After you install Oracle Ultra Search, Oracle Universal Installer creates the following Oracle Ultra Search-specific administrative accounts:

- **WK_TEST**: The default Ultra Search instance schema.
- **WKPROXY**: The Ultra Search proxy user.
- **WKSYS**: Used for storing Ultra Search system dictionaries and PL/SQL packages.

See Also: *Oracle Ultra Search Administrator's Guide*

Installing Oracle Database Companion CD Using Response Files

This appendix covers the following topics:

- [How Response Files Work](#)
- [Preparing a Response File](#)
- [Running Oracle Universal Installer Using the Response File](#)

How Response Files Work

You can automate the installation and configuration of Oracle software, either fully or partially, by specifying a response file when you start Oracle Universal Installer. Oracle Universal Installer uses the values that you entered in the response file to provide answers to some or all of Oracle Universal Installer prompts.

Typically, Oracle Universal Installer runs in interactive mode, which means that it prompts you to provide information in graphical user interface (GUI) screens. When you use response files to provide this information, you run Oracle Universal Installer at a command prompt using either of the following modes:

- **Silent mode:** Oracle Universal Installer does not display any screens. Instead it displays progress information in the command window where you started it. To use silent mode, you run `setup.exe` with the `-silent` parameter and include a response file, which contains responses to the Oracle Universal Installer prompts.
- **Noninteractive (or suppressed) mode:** Oracle Universal Installer only displays screens for which you did not supply information in the response file. You can use variables in the response file or command-line prompts to suppress other Oracle Universal Installer screens, such as Welcome and Summary, that do not prompt for information. To use noninteractive mode, run `setup.exe` without the `-silent` parameter, but include the response file or any other parameters that apply.

You define the settings for a silent or noninteractive installation by entering values for the variables listed in the response file. For instance, to specify the Oracle home name, you would supply the appropriate value for the `ORACLE_HOME_NAME` variable, as in the following example:

```
ORACLE_HOME_NAME="OraDBHome1"
```

Another way of specifying the response file's variable settings is to pass them as command line arguments when you run Oracle Universal Installer. For example:

```
SYSTEM_DRIVE:\setup.exe_location> setup -silent "ORACLE_HOME_NAME=OraDBHome1" ...
```

This method is particularly useful if you do not want to embed sensitive information, such as passwords, in the response file. For example:

```
SYSTEM_DRIVE:\setup.exe_location> setup -silent "s_sysPwdFresh=binks342" ...
```

Ensure that you enclose the variable and its setting in quotes.

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

Reasons for Using Silent Mode or Noninteractive Mode

The following table describes several reasons why you might want to run Oracle Universal Installer in silent mode or noninteractive mode:

Table A-1 *Reasons for Using Silent Mode or Noninteractive Mode*

Mode	Uses
Silent	<p>Use silent mode if you want to:</p> <ul style="list-style-type: none"> ■ Complete an unattended installation ■ Complete several similar installations on multiple systems without user interaction <p>Oracle Universal Installer displays progress information in the terminal that you used to start it, but it does not display the Oracle Universal Installer screens.</p>
Noninteractive	<p>Use noninteractive mode if you want to complete similar Oracle software installations on more than one system, providing default answers to some, but not all of Oracle Universal Installer prompts.</p> <p>If you do not specify information required for a particular Installer screen in the response file, Oracle Universal Installer displays that screen. It suppresses screens for which you have provided all of the required information.</p>

General Procedure for Using Response Files

You will follow these general steps to install the Oracle Database Companion CD products using response files:

1. Customize or create a response file for the installation settings that you need.

You can create the response file by using either of the following methods:

- Modifying one of the sample response files that are provided with the installation.
- Running Oracle Universal Installer at a command prompt using record mode.

"[Preparing a Response File](#)" on page A-2 explains how to customize or create the response file.

2. Run Oracle Universal Installer from a command prompt, specifying the response file, using either silent or noninteractive mode.

"[Running Oracle Universal Installer Using the Response File](#)" on page A-4 explains how to run Oracle Universal Installer with a response file.

Preparing a Response File

This section describes the methods that you can use to prepare a response file for use during silent-mode or noninteractive-mode installations:

- [Editing a Response File Template](#)
- [Recording a Response File](#)

Editing a Response File Template

Oracle provides a response file template for the Oracle Database 10g Products installation type called `companionCD.db.rsp`, which you can find in the `companion\response` directory on the Oracle Database installation media.

Creating a response file using a response file template is most useful for the Enterprise Edition or Standard Edition installation types.

To copy and modify a response file:

1. Copy the appropriate response files from the `companion\Response` directory on the Oracle Database media to your hard drive.
2. Modify the response files with a text file editor.

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

```
FROM_LOCATION="\\myserver\companion\stage\products.xml"
```

Remember that you can specify sensitive information, such as passwords, at the command line rather than within the response file. "[How Response Files Work](#)" on page A-1 explains this method.

See Also: *Oracle Universal Installer and OPatch User's Guide* for detailed information on creating response files. In an installed Oracle Database, select **Start**, then **Programs**, then **Oracle - HOME_NAME**, then **Oracle Installation Products**, then **Universal Installer Concepts Guide**. It appears in HTML format.

3. Run the response file by following the instructions in the "[Running Oracle Universal Installer Using the Response File](#)" section on page A-4.

Recording a Response File

You can create a response file by running Oracle Universal Installer in interactive mode using record mode. This method is most useful for custom or software-only installations.

Recording the response file generates the response file immediately after you complete the Summary window, so you do not need to actually install the Oracle Database Companion CD products to create the response file. After you create the response file in this manner, you can customize it to your needs.

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

Note: You cannot use record mode to create a response file based on the Basic installation type.

To record a response file:

1. Ensure that the computer on which you are creating the response file has met the requirements in [Chapter 1](#).
2. At the command prompt, use the `cd` command to change to the directory that contains the Oracle Universal Installer `setup.exe` executable.

On the installation DVD, `setup.exe` is located in the `db` directory. Alternatively, navigate to the directory where you downloaded or copied the installation files.

3. Enter the following command:

```
SYSTEM_DRIVE:\setup.exe_location> setup -record -destinationFile response_file_name
```

Replace `response_file_name` with the complete path for the new response file. For example:

```
SYSTEM_DRIVE:\setup.exe_location> setup -record -destinationFile c:\response_files\install_oracle10_2.rsp
```

4. After Oracle Universal Installer launches, enter the installation settings, which will be recorded into the response file.
5. When the Summary window appears, do one of the following:
 - Click **Install** to create the response file and continue with the installation.
 - Click **Cancel** if you only want to create the response file but not continue with the installation. The installation will stop, but the settings you have entered will be recorded in the response file.

Afterwards, Oracle Universal Installer saves your new response file using the path and file name you specified on the command line.

6. Edit the new response file to have any environment-specific changes for the computer on which you will run it.

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

```
FROM_LOCATION="\\myserver\companion\response\stage\products.xml"
```

Remember that you can specify sensitive information, such as passwords, at the command line rather than within the response file. ["How Response Files Work"](#) on page A-1 explains this method.

7. Run the response file by following the instructions in the ["Running Oracle Universal Installer Using the Response File"](#) section, next.

Running Oracle Universal Installer Using the Response File

At this stage, you are ready to run Oracle Universal Installer at the command line, specifying the response file you created, to perform the installation. The Oracle Universal Installer executable, `setup.exe`, provides several options. For help information on the full set of these options, run `setup.exe` with the `-help` option, for example:

```
SYSTEM_DRIVE:\setup.exe_location> setup -help
```

A new command window appears, with the "Preparing to launch..." message. In a moment, the help information appears in that window.

To run Oracle Universal Installer and specify a response file:

1. Place the response file on the computer where you want to install the Oracle Database Companion CD products.
2. At a command prompt, run Oracle Universal Installer with the appropriate response file. For example:

```
SYSTEM_DRIVE:\setup.exe_location> setup [-silent] "variable=setting"  
[-nowelcome] [-noconfig] [-nowait] -responseFile filename
```

where:

- *filename*: Identifies the full path of the response file.
- `-silent`: Runs Oracle Universal Installer in silent mode and suppresses the Welcome window. When you use `-silent`, then the `-nowelcome` option is not necessary.
- `"variable=setting"` refers to a variable within the response file that you may prefer to run at the command line rather than set in the response file. Enclose the variable and its setting in quotes.
- `-nowelcome`: Suppresses the Welcome window that appears during installation.
- `-noconfig`: Suppresses running the configuration assistants during installation, performing a software-only installation instead.
- `-nowait`: Closes the console window when the silent installation completes.

See Also:

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

Configuring Oracle Database Companion CD Globalization Support

This appendix describes the following Globalization Support topics:

- [Installing and Using Oracle Components in Different Languages](#)
- [Configuring Locale and Character Sets with the NLS_LANG Parameter](#)

Installing and Using Oracle Components in Different Languages

This section describes the following features:

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

Running Oracle Universal Installer in Different Languages

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

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

To run Oracle Universal Installer in a different language:

1. Change the language in which your operating system is running. For example, on Windows 2003:
 - a. From the **Start** menu, select **Control Panel**, then **Regional and Language Options**.
 - b. From the drop-down list, select a language from the preceding table list and choose **OK**.

2. Run Oracle Universal Installer by following the instructions in the *Oracle Database Installation Guide for Microsoft Windows (x64)*.

Note: The selected language is assigned to the NLS_LANG registry parameter.

Using Oracle Components in Different Languages

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

To use components in different languages:

1. Start Oracle Universal Installer:
 - **From the installation media:** From the installation media, navigate to the companion directory and double-click `setup.exe`.
 - **From an installed Oracle Database Companion CD:** From the **Start** menu, select **Programs**, then **Oracle - HOME_NAME**, then **Oracle Installation Products**, then **Universal Installer**.
2. From the Select Installation Type window, select the **Product Languages** button. The Language Selection window appears.
3. Select a language in which to use Oracle components from the Available Languages field.
4. Use the > arrow to move the language to the Selected Languages field and click **OK**.
5. Select appropriate products for installation and click **Next**.

After installation is complete, the dialog box wording, messages, and online help for the installed components display in the language you selected.

Configuring Locale and Character Sets with the NLS_LANG Parameter

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

The NLS_LANG parameter is stored in the registry under the HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE\HOMEID\NLS_LANG subkey, where *ID* is the unique number identifying the Oracle home. This parameter uses the following format:

```
NLS_LANG = LANGUAGE_TERRITORY.CHARACTER_SET
```

where:

Parameter	Description
<i>LANGUAGE</i>	Specifies the language and conventions for displaying messages, day name, and month name.
<i>TERRITORY</i>	Specifies the territory and conventions for calculating week and day numbers.
<i>CHARACTER_SET</i>	Specifies the encoding of the database client, which is the character set for data entered or displayed by a client program.

The following table lists some of the values for the NLS_LANG parameter:

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

See Also:

- *Oracle Database Installation Guide for Microsoft Windows (x64)* for more information about how NLS_LANG works in a Windows installation of Oracle Database
- *Oracle Database Platform Guide for Microsoft Windows (x64)* for more information about the subkey locations for multiple Oracle homes
- *Oracle Database Globalization Support Guide* for information about the NLS_LANG parameter and Globalization Support initialization parameters
- The operating system documentation on how to determine the operating system locale environment setting

Managing Oracle Companion CD Port Numbers

This appendix lists the default port numbers and describes how to change the assigned port after installation:

- [About Managing Ports](#)
- [Viewing Port Numbers and Access URLs](#)
- [Port Numbers and Protocols of Oracle Components](#)
- [Changing the Oracle Ultra Search Ports](#)

About Managing Ports

During installation, Oracle Universal Installer assigns port numbers to components from a set of default port numbers. Many Oracle Database components and services use ports. As an administrator, it is important to know the port numbers used by these services, and to make sure that the same port number is not used by two services on your host.

Most port numbers are assigned during installation. Every component and service has an allotted port range, which is the set of port numbers Oracle Database attempts to use when assigning a port. Oracle Database starts with the lowest number in the range and performs the following checks:

- Is the port used by another Oracle Database installation on the host?
The installation may be up or down at the time; Oracle Database can still detect if the port is used.
- Is the port used by a process that is currently running?
This could be any process on the host, even a non-Oracle Database process.

If the answer to any of the preceding questions is yes, Oracle Database moves to the next highest port in the allotted port range and continues checking until it finds a free port.

Viewing Port Numbers and Access URLs

In most cases, the Oracle Database component's port number is listed in the tool used to configure the port. In addition, ports for some Oracle Database applications are listed in the `portlist.ini` file. This file is located in `ORACLE_BASE\ORACLE_HOME\install`.

If you change a port number, it is not updated in the `portlist.ini` file, so you can only rely on this file immediately after installation. To find or change a port number, use the methods described in this appendix.

Port Numbers and Protocols of Oracle Components

The following table lists the port numbers and protocols used by components that are configured during the installation. By default, the first port in the range is assigned to the component, if it is available.

Table C-1 Ports Used in Oracle Components

Component and Description	Default Port Number	Port Range	Protocol
Oracle Ultra Search HTTP port for Oracle Ultra Search. Its port number is assigned automatically when you install Oracle Ultra Search, by using the Custom installation type. "Changing the Oracle Ultra Search Ports" on page C-2 explains how to change its port number.	5620	5620-5639	TCP/HTTP
Oracle Ultra Search RMI port for Oracle Ultra Search. Its port number is assigned automatically when you install Oracle Ultra Search, by using the Custom installation type. "Changing the Oracle Ultra Search Ports" on page C-2 explains how to change its port number.	5640	5640-5659	TCP
Oracle Ultra Search JMS port for Oracle Ultra Search. Its port number is assigned automatically when you install Oracle Ultra Search, by using the Custom installation type. "Changing the Oracle Ultra Search Ports" on page C-2 explains how to change its port number.	5660	5660-5679	TCP

Changing the Oracle Ultra Search Ports

The following sections describe how to change the Oracle Ultra Search ports.

Changing the HTTP Port

To change the HTTP port, modify the `port` attribute of the `web-site` element in the `ORACLE_BASE\ORACLE_HOME\oc4j\j2ee\OC4J_SEARCH\config\http-web-site.xml` file:

```
<web-site port="5620"...>
```

Changing the RMI Port

To change the RMI port, modify the `port` attribute of the `rmi-server` element in the `ORACLE_BASE\ORACLE_HOME\oc4j\j2ee\OC4J_SEARCH\config\rmi.xml` file:

```
<rmi-server port="5640"...>
```

Changing the JMS Port

To change the JMS port, modify the `port` attribute of the `jms-server` element in the `ORACLE_BASE\ORACLE_HOME\oc4j\j2ee\OC4J_SEARCH\config\jms.xml` file:

```
<jms-server port="5660"...>
```

Troubleshooting the Oracle Database Companion CD Installation

This appendix contains the following information on troubleshooting:

- [Verifying Requirements](#)
- [Reviewing a Log of an Installation Session](#)
- [Cleaning Up After a Failed Installation](#)
- [Silent or Noninteractive Installation Response File Error Handling](#)

Verifying Requirements

Before you try any of the troubleshooting steps in this appendix, do the following:

- Check [Chapter 2, "Oracle Database Companion CD Requirements"](#) to make sure that the system meets the requirements and that you have completed all of the preinstallation tasks.
- Read the release notes for the product on your platform before installing it. The release notes are available on the Oracle Database installation media. You can find the latest version of the release notes on the Oracle Technology Network Web site:

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

Reviewing a Log of an Installation Session

Oracle Universal Installer creates the *DRIVE_LETTER:\ORACLE_BASE\ORACLE_HOME\Inventory\logs* directory the first time it runs to record an inventory of products that it installs on your system as well as other installation information.

The log file is named *installActionsdate_time.log*, where *date_time* is the date and time of the installation. For example, *installActions2004-055-14_09-00-56-am.log*.

You can also view a list of installed components by clicking **Installed Products** on any window of Oracle Universal Installer.

Note: Do not delete or manually alter the `Inventory` directory or its contents. Doing so can prevent Oracle Universal Installer from locating products that you install on your system.

The `installActionsdate_time.log` file contains a log of actions executed during the installation process. This file also records any link errors during installation. Do not delete or alter the `installActionsdate_time.log` file.

Cleaning Up After a Failed Installation

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

1. Insert Oracle Database installation media and navigate to the `companion` directory. Alternatively, navigate to the directory where you downloaded or copied the installation files. Then double-click `setup.exe` to start Oracle Universal Installer.
2. Click **Deinstall Products** on the Welcome window or **Installed Products** available on any Oracle Universal Installer window. The Inventory window appears, listing installed products.
3. Select the products that you want to remove and click **Remove**.

Note: If you have more than one installation on the system, products installed in other Oracle homes appear in the Inventory window. If you select products from other Oracle homes, they are deinstalled.

Silent or Noninteractive Installation Response File Error Handling

To determine whether a silent or noninteractive installation succeeds or fails, check the `silentInstallActionsdate_time.log` file, located in the `DRIVE_LETTER:\Program Files\Oracle\Inventory\logs` directory.

A silent installation fails if:

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

For example, a common problem is that while all the product-specific data is filled out correctly, the staging area location may be incorrect. If this is the case, check the `FROM_LOCATION` variable and make sure that it points to the `products.xml` file in the installation media. In the installation media, this `products.xml` is in `companion\stage`.

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

Oracle Universal Installer or a configuration assistant validates the response file at runtime. If the validation fails, the installation or configuration process ends. Oracle Universal Installer treats values for parameters that are of the wrong context, format, or type as if no value was specified in the file.

See Also: ["Reviewing a Log of an Installation Session"](#) on page D-1 for information on interactive installation log files

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