

# **Oracle® Database**

## **Quick Installation Guide**

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

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**ORACLE®**

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This guide describes how to quickly install the Oracle Database Client product on x64 Windows systems. It includes information about the following:

1. [Review Information About this Guide](#)
2. [Log In to the System with Administrator Privileges](#)
3. [Check the Hardware Requirements](#)
4. [Check the Software Requirements](#)
5. [Install the Oracle Database Software](#)
6. [Install Products from the Oracle Database Companion CD](#)
7. [What's Next?](#)
8. [Additional Information](#)
9. [Documentation Accessibility](#)

## **Review Information About this Guide**

This guide describes how to install Oracle Database using the default installation options into a new Oracle home.

## **Tasks Described in this Guide**

The procedures in this guide describe how to:

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

## **Results of a Successful Installation**

After you successfully install Oracle Database:

- The database that you created and the default Oracle Net listener process are running on the system.
- Oracle Enterprise Manager Database Control and *iSQL\*Plus* are running and can be accessed using a Web browser.
- A single-node version of the Oracle Cluster Synchronization Services (CSS) daemon is running and is configured to start automatically when your system boots.

## Tasks Not Described in this Guide

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

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

## Where to Get Additional Installation Information

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

- If you are installing the software on a single system or if you want to install Automatic Storage Management (ASM), see *Oracle Database Installation Guide for Microsoft Windows (x64)*.

- If you are installing Oracle Real Application Clusters (Oracle RAC), see *Oracle Database Oracle Clusterware and Oracle Real Application Clusters Installation Guide* for your platform.

This guide also describes how to install Oracle Clusterware, which is a prerequisite for Oracle RAC installations. You can use Oracle Clusterware with single-instance Oracle Database installations as well.

Both of these guides are available on the Oracle Database installation media. To access them, use a Web browser to open the `welcome.htm` file in the `database` directory of the DVD, then select the **Documentation** tab.

For more information about installing Oracle Database Companion CD components, see one of the following guides:

- *Oracle Database Companion CD Installation Guide for Microsoft Windows (x64)*
- *Oracle Database Companion CD Quick Installation Guide for Microsoft Windows (x64)*

These guides are available in the `companion` directory on the Oracle Database installation media.

## Log In to the System with Administrator Privileges

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.

## Check the Hardware Requirements

The following hardware components are required for Oracle Database:

**Table 1** *Hardware Requirements*

<b>Requirement</b>	<b>Minimum Value</b>
Physical memory (RAM)	512 MB minimum, 2 GB recommended On Windows Vista and Windows Server 2008, the minimum requirement is 1 GB.
Virtual memory	Double the amount of RAM
Disk space	Total: 4.77 GB See <a href="#">Table 2</a> for details.

**Table 1 (Cont.) Hardware Requirements**

<b>Requirement</b>	<b>Minimum Value</b>
Video adapter	256 colors
Processor	AMD64, or Intel Extended memory (EM64T)

## Hard Disk Space Requirements

This section lists system requirements for Windows platforms that use the NT File System (NTFS) file systems. Oracle recommends installing Oracle components on NTFS. NTFS allows for strong security of database files, trace files, incident data, and so on, stored in Oracle home.

[Table 2](#) lists the space requirements for NTFS. The starter database requires 720 MB of disk space. The figures in this table include the starter database.



**Table 2 Disk Space Requirements for NTFS**

<b>Installation Type</b>	<b>TEMP Space</b>	<b>C:\Program Files\Oracle</b>	<b>Oracle Home</b>	<b>Datafiles *</b>	<b>Total</b>
Basic Installation	125 MB	100 MB	3.5 GB	1.05 GB	4.77 GB
Advanced Installation: Enterprise Edition	125 MB	100 MB	3.5 GB *	1.05 GB *	4.77 GB **
Advanced Installation: Standard Edition	125 MB	100 MB	3.5 GB *	1.05 GB *	4.77 GB **
Advanced Installation: Personal Edition	125 MB	100 MB	3.5 GB *	1.05 GB *	4.77 GB **

\* Refers to the contents of the `admin`, `flash_recovery_area`, and `oradata` directories in the `ORACLE_BASE` directory.

\*\* This size can be higher depending on the installation options selected, such as languages or additional components. If you choose to install Oracle Database with automated backups enabled, include at least 2 GB extra for datafile disk space.

**See Also:** "About NTFS File System and Windows Registry Permissions" in *Oracle Database Platform Guide for Microsoft Windows (x64)*

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

1. Determine the physical RAM size. For a computer using Windows 2003, for example, open **System** in the Windows Control Panel and select the **General** tab. 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. Determine the size of the configured virtual memory (also known as paging file size). For a computer using Windows 2003, for example, open **System** in the Control Panel, select the **Advanced** tab, and click **Settings** in the **Performance** section. Then select the **Advanced** tab. The virtual memory is listed in the **Virtual Memory** section.

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

3. Determine the amount of free disk space on the system. For a computer using Windows 2003, for example, open **My**

**Computer**, right-click the drive where the Oracle software is to be installed, and choose **Properties**.

4. Determine the amount of disk space available in the `temp` directory. This is equivalent to the total amount of free disk space, minus what will be needed for the Oracle software to be installed.

If there is less than 125 MB of disk space available in the `temp` directory, then first delete all unnecessary files. If the `temp` disk space is still less than 125 MB, then set the `TEMP` or `TMP` environment variable to point to a different hard drive. For a computer using Windows 2003, for example, open **System** in the Control Panel, select the **Advanced** tab, and click **Environment Variables**.

## Check the Software Requirements

[Table 3](#) lists the software requirements for Oracle Database.

**Table 3 Software Requirements**

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Requirement	Value
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System Architecture	Processor: AMD64, or Intel Extended memory (EM64T) <b>Note:</b> Oracle provides 32-bit (x86), 64-bit (Itanium), and 64-bit (x64) versions of Oracle Database for Microsoft Windows. Oracle certifies the 32-bit Oracle Database client on 64-bit Windows (x64). For additional information, visit Oracle <i>MetaLink</i> at: <a href="https://metalink.oracle.com">https://metalink.oracle.com</a>
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**Table 3 (Cont.) Software Requirements**

<b>Requirement</b>	<b>Value</b>
Operating System	<p>Oracle Database for Windows x64 is supported on the following operating systems:</p> <ul style="list-style-type: none"><li>■ Windows Server 2003, Standard x64 Edition</li><li>■ Windows Server 2003, Enterprise x64 Edition</li><li>■ Windows Server 2003, Datacenter x64 Edition</li><li>■ Windows XP Professional x64 Edition</li><li>■ Windows Vista x64, Service Pack 1 - Business, Enterprise, and Ultimate editions</li><li>■ Windows Server 2008 x64 - Standard, Enterprise, Datacenter, Web, Standard without Hyper-V, Enterprise without Hyper-V, and Datacenter without Hyper-V editions</li></ul> <p>The specific operating system components that are not supported are Windows Server 2008 x64 Hyper-V and Server Core.</p> <p>Windows Multilingual User Interface Pack is supported on Windows Server 2003, Windows XP Professional, Windows Vista and Windows Server 2008.</p>

**Table 3 (Cont.) Software Requirements**

<b>Requirement</b>	<b>Value</b>
Compiler	<p>The following components are supported with the Windows 2003 Microsoft Platform SDK or later compiler and Intel compiler 8.1:</p> <ul style="list-style-type: none"><li>■ Oracle C++ Call Interface</li><li>■ Oracle Call Interface</li><li>■ External callouts</li><li>■ PL/SQL native compilation</li><li>■ Pro*C</li><li>■ XDK</li></ul> <p>Pro*COBOL is supported with Net Express 5.0 from 10.2.0.4 release on Windows x64.</p> <p>GNU Compiler Collection (GCC) and Object Oriented COBOL (OOCOBOL) specifications are not supported.</p>
Network Protocol	<p>The Oracle Net foundation layer uses Oracle protocol support to communicate with the following industry-standard network protocols:</p> <ul style="list-style-type: none"><li>■ TCP/IP</li><li>■ TCP/IP with SSL</li><li>■ Named Pipes</li></ul>

**Table 3 (Cont.) Software Requirements**

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<b>Requirement</b>	<b>Value</b>
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Oracle  
Database  
Client

If you plan to connect to Oracle Database 10g release 2 (10.2) from a release of Oracle Database Client that is earlier than 10g release 2 (10.2), you will not be able to do so if the following conditions exist:

- Oracle Database Client is running on the same computer as Oracle Database 10g release 2 (10.2).
- Microsoft Windows Terminal Services is not running on the same computer as Oracle Database Client. Typically, Terminal Services is installed and configured with Microsoft Windows 2003, but on Windows XP it may not be installed or enabled.
- Oracle Database Client is version 8.0, 9.0–9.2.0.6, or 10.1–10.1.0.3.
- Oracle Database Client is not running as Administrator.

To remedy this problem, upgrade Oracle Database Client by using the latest Oracle Database Family patchset (9.2.0.7, or 10.1.0.4 or later). You can download the patchset from the Patches and Updates section of Oracle*MetaLink* at:

<https://metalink.oracle.com>

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## Install the Oracle Database Software

To install the Oracle Database software:

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**Note:** Windows Vista and Windows Server 2008 require Administrator privileges at the command prompt.

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1. If you are installing Oracle Database on a multihomed computer or a computer that uses multiple aliases, use the **System** in the Control Panel to create the `ORACLE_HOSTNAME` system environment variable. Set this variable to point to the host name of the computer on which you are installing Oracle Database.
2. Insert Oracle Database installation media and navigate to the database 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.
3. Double-click `setup.exe` to start Oracle Universal Installer.



4. In the Welcome window, select either **Basic Installation** or **Advanced Installation**, and then answer the prompts as needed.

**See Also:** Chapter 1 in *Oracle Database Installation Guide for Microsoft Windows (x64)* for more information on the **Basic** and **Advanced** installation methods

The subsequent windows that appear, which are listed in [Table 4](#) on page 22, depend on the installation method you have chosen. The order in which the windows appear depends on the options you select.

5. Follow these guidelines to complete the installation:

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**Note:** If you perform a Custom installation, then ensure that you install only the components covered by your license. You can not install Standard Edition using Custom installation.

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- Do not install Oracle Database 10g release 2 (10.2) software into an existing Oracle home that contains Oracle9i or earlier software.
- If you install Oracle Database 10g release 2 (10.2) in an Oracle home directory that already contains Oracle Database 10g release 2 (10.2) client software, the listener is not created. To create the listener, install and run Oracle Net Configuration Assistant after the installation. If the Administrator client is installed before Oracle Database, Oracle Net Configuration Assistant is already installed.
- Follow the instructions displayed in the Oracle Universal Installer windows. If you need additional information, click **Help**.
- When prompted for a password, follow these guidelines:
  - Make the password be between 4 and 30 characters long.
  - Use the database character set for the password's characters, which can include the underscore (\_), dollar (\$), and pound sign (#) characters.
  - Do not start passwords with a numeral.
  - Do not use a user name for a password.

Do not use Oracle reserved words for the password.

Do not use `change_on_install` for the `SYS` account password.

Do not use `manager` for the `SYSTEM` account password.

Do not use `sysman` for the `SYSMAN` account password.

Do not use `db snmp` for the `DBSNMP` account password.

If you choose to use the same password for all the accounts, do not use `change_on_install`, `manager`, `sysman`, or `db snmp` as a password.

Have the password include at least 1 alphabetic, 1 numeric, and 1 punctuation mark character

Do not use simple or obvious words, such as `welcome`, `account`, `database`, and `user` for the password.

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**Note:** You must remember the passwords that you specify.

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- Do not modify the Java Runtime Environment (JRE) except by using a patch provided by Oracle Support Services. Oracle Universal Installer automatically installs

the Oracle-supplied version of the JRE. This version is required to run Oracle Universal Installer and several Oracle assistants.

- If you encounter errors while installing or linking the software, see Appendix G in *Oracle Database Installation Guide for Microsoft Windows (x64)* for information about troubleshooting.
- If you chose an installation type that runs Database Configuration Assistant and Oracle Net Configuration Assistant in interactive mode, you must provide detailed information about configuring your database and network.

If you need assistance when using the Database Configuration Assistant or Oracle Net Configuration Assistant in interactive mode, click **Help** on any window.

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**Note:** If you chose a default installation, Database Configuration Assistant and Oracle Net Configuration Assistant run non-interactively.

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6. When the configuration tools finish, click **Exit**, then click **Yes** to exit from Oracle Universal Installer.
7. When Oracle Enterprise Manager Database Control opens a Web browser, enter the username and password you created during the installation.

You can log in as `SYS`, `SYSTEM`, or `SYSMAN`. If you log in as `SYS`, then you must connect `AS SYSDBA`. Enter the password you specified for the account during installation.

8. 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.

9. See Chapter 4 in *Oracle Database Installation Guide for Microsoft Windows (x64)* for information about postinstallation tasks that you must complete after you have installed Oracle Database.

**Table 4 Oracle Universal Installer Screens**

<b>Screen</b>	<b>Recommended Action</b>
Select Installation Method	Select one of the following, then click <b>Next</b> : <ul style="list-style-type: none"><li>■ <b>Basic Installation:</b> Lets you quickly install Oracle Database using minimal input. It installs the software and optionally creates a general-purpose database using the information that you specify on this window.</li><li>■ <b>Advanced Installation:</b> Lets you perform more complex installations, such as creating individual passwords for different accounts, creating specific types of starter databases (for example, for transaction processing or data warehouse systems), using different language groups, specifying e-mail notifications, and so on.</li></ul>
Select Installation Type	Select <b>Enterprise Edition</b> , <b>Standard Edition</b> , <b>Personal Edition</b> , or <b>Custom</b> . Click <b>Next</b> .
Specify Home Details	In the <b>Destination</b> section, accept the default values or enter the Oracle home name and directory path in which to install Oracle components. The directory path should not contain spaces.  Click <b>Next</b> .

**Table 4 (Cont.) Oracle Universal Installer Screens**

<b>Screen</b>	<b>Recommended Action</b>
Available Product Components	If you selected <b>Custom</b> for the Installation Type, this window appears. Select from the list and click <b>Next</b> . To learn more about each component, position the mouse over the component's name.
Product-specific Prerequisite Checks	This window checks that your system meets the minimum requirements for the installation. Click <b>Next</b> .
Upgrade an Existing Database	<p>If you have a previous updatable version of Oracle Database or Automatic Storage Management installed, this window appears. For in-place database installations where Automatic Storage Management is running, ASM is upgraded automatically.</p> <p>Click <b>Yes</b> if you want to upgrade or <b>No</b> if not. If you click <b>Yes</b>, the Summary window appears next.</p> <p>For more information on upgrades, refer to <i>Oracle Database Upgrade Guide</i>.</p>

**Table 4 (Cont.) Oracle Universal Installer Screens**

<b>Screen</b>	<b>Recommended Action</b>
Select Configuration Option	<p>Select one of the following:</p> <ul style="list-style-type: none"><li>■ <b>Create a database:</b> Select this option if you are creating a database using the following database types: <b>General purpose, Transaction processing, Data warehousing.</b> The <b>Advanced</b> option starts Database Configuration Assistant for advanced database creation configuration options.</li><li>■ <b>Configure Automatic Storage Management (ASM):</b> Select this option to create an Automatic Storage Management instance only. To create an ASM instance, you must provide an ASM SYS Password. After you provide this password, Oracle Universal Installer lets you create an ASM disk group. After you complete this Oracle Universal Installer session, you can run it again to install and configure one or more Oracle databases that will use ASM.</li><li>■ <b>Install database Software only:</b> Select this option to install the database software only but not create a database or configure Automatic Storage Management.</li></ul>



**Table 4 (Cont.) Oracle Universal Installer Screens**

Screen	Recommended Action
Select ASM Management Option	If you selected <b>Configure Automatic Storage Management (ASM)</b> from the Select Configuration Option window, and if you have Oracle Enterprise Manager 10g Grid Control installed, this window appears. Select <b>Yes</b> or <b>No</b> , depending on if you want to use Grid Control to manage Automatic Storage Management. If you select <b>Yes</b> , then select from the list of Enterprise Management agents to use.

**Table 4 (Cont.) Oracle Universal Installer Screens**

<b>Screen</b>	<b>Recommended Action</b>
Configure Automatic Storage Management	<p>Appears if you selected <b>Configure Automatic Storage Management (ASM)</b> from the Select Configuration Option window. Enter the disk group name. The disk group list shows both candidate and member disks; you can click <b>Show Candidates</b> or <b>Show All</b> to filter their display. Then select the disk group's redundancy level and its member disks.</p> <p>For <b>Redundancy Level</b>, choose one of the following. The default is normal redundancy.</p> <ul style="list-style-type: none"><li>■ <b>High:</b> The contents of the disk group are three-way mirrored by default. To create a disk group with high redundancy, specify at least three failure groups (a minimum of three devices).</li><li>■ <b>Normal:</b> By default the datafiles of the disk group are two-way mirrored and the control files are three-way mirrored. You can create certain files that are three-way mirrored or not mirrored. To create a disk group with normal redundancy, specify at least two failure groups (a minimum of two devices) for two-way mirroring.</li><li>■ <b>External:</b> ASM does not mirror the contents of the disk group. Choose this option when 1) the disk group contains devices, such as RAID devices, that provide their own data protection; or 2) the database does not require uninterrupted access to data, for example, if you have a suitable backup strategy already in place.</li></ul>

**Table 4 (Cont.) Oracle Universal Installer Screens**

<b>Screen</b>	<b>Recommended Action</b>
Select Database Configuration	<p>Select the database configuration that best meets your needs: General Purpose, Transaction Processing, Data Warehouse; Advanced.</p> <p>See the online help provided by either Oracle Universal Installer or Database Configuration Assistant for a description of these preconfigured database types.</p> <p>Click <b>Next</b>.</p>

## **Install Products from the Oracle Database Companion CD**

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

### **See Also:**

- *Oracle Database Companion CD Installation Guide for Microsoft Windows (x64)*
- *Oracle Database Companion CD Quick Installation Guide for Microsoft Windows (x64)*

## What's Next?

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

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

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

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

Log in with the user name `SYSMAN`. Use the password that you specified for this user during the Oracle Database installation.

- See Chapter 4 of *Oracle Database Installation Guide for Microsoft Windows (x64)* for information about required and optional postinstallation tasks, depending on the components that you want to use.
- Review Chapter 5 of *Oracle Database Installation Guide for Microsoft Windows (x64)* for information about how to get started using Oracle Database.

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

This guide, designed for new Oracle DBAs, describes how to use Oracle Enterprise Manager 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.

## 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.

**See Also:** *Oracle Database Licensing Information*

### **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 disks in the media pack:
  - Platform-specific documentation is available on the installation media. To access the documentation, see the `welcome.htm` file located in the top-level directory of the DVD.
  - Generic product documentation is available on the Oracle Documentation Library on the DVD.
- From the Oracle Technology Network Web site:  
<http://www.oracle.com/technology/documentation/>

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

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

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