

Oracle® Database

Quick Installation Guide

11g Release 2 (11.2) for Microsoft Windows x64 (64-Bit)

E24283-01

October 2011

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

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1 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 Oracle Database software on a local file system by using the Typical installation method.
- Configure a general-purpose Oracle database that uses the local file system for database file storage.

Results of a Successful Installation

After you successfully install Oracle Database:

- The database that you created and the default Oracle Net listener process run on the system.

- Oracle Enterprise Manager Database Control is running and can be accessed using a Web browser.

Tasks Not Described in this Guide

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

- Using the Advanced Installation option to install the software, such as silent or response file installation.
- Installing the software on a system that has an existing Oracle software installation.
- Installing Oracle Clusterware and Oracle Real Application Clusters.
- Cloning an Oracle home.
- Enabling Enterprise Manager e-mail notifications or automated backups.
- Using alternative storage options such as Oracle Automatic Storage Management.
- Installing and configuring Oracle Grid Infrastructure, for example, Oracle ASM.

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, then see *Oracle Database Installation Guide for Microsoft Windows*.
- If you want to install Oracle Grid Infrastructure for a standalone server, then see the "Oracle Grid Infrastructure" chapter in *Oracle Database Installation Guide for Microsoft Windows*.
- If you are installing Oracle Real Application Clusters, then see *Oracle Grid Infrastructure Installation Guide* and *Oracle Real Application Clusters Installation Guide*. These guides describe how to install Oracle Grid Infrastructure and Oracle Real Application Clusters. Oracle Grid infrastructure is a prerequisite for Oracle Real Application Clusters installations.

All these guides are available on the product media. To access these guides, use a Web browser to open the `welcome.html` file located in the top-level directory of the installation media.

For information about installing Oracle Database examples, see *Oracle Database Examples Installation Guide*.

2 Log On to the System with Administrator Privileges

Log on as a member of the Administrators group to the computer on which you want 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.

3 Check the Hardware Requirements

Table 1 Hardware Requirements

Requirement	Minimum Value
Physical memory (RAM)	1 GB minimum On Windows 7, 2 GB minimum
Virtual memory	Double the amount of RAM
Disk space	Total: 5.39 GB See Table 2 for details.
Processor Type	AMD64, or Intel Extended memory (EM64T)
Video adapter	256 colors
Screen Resolution	1024 X 768 minimum

3.1 Hard Disk Space Requirements

This section lists system requirements for Windows platforms that use the NT File System (NTFS). Oracle strongly recommends that you install the Oracle database home (Oracle database binaries, trace files, and so on) on Oracle ACFS or NTFS; the database files themselves must be placed on Oracle ASM if using Oracle ACFS; otherwise they can be placed on NTFS. Usage of Oracle ACFS and Oracle ASM or NTFS instead of FAT32 is recommended to ensure security of these files.

The NTFS system requirements listed in this section are more accurate than the hard disk values reported by the Oracle Universal Installer Summary window. The Summary window does not include accurate values for disk space, the space required to create a database, or the size of compressed files that are expanded on the hard drive.

The hard disk requirements for Oracle Database components include 32 MB to install Java Runtime Environment (JRE) and Oracle Universal Installer on the partition where the operating system is installed. If sufficient space is not detected, installation fails and an error message appears.

[Table 2](#) lists the space requirements on NTFS. The starter database requires 720 MB of disk space. The figures in this table include the starter database. FAT32 space requirements are slightly higher.

Table 2 Disk Space Requirements on NTFS

Installation Type	TEMP Space	C:\Program Files\Oracle	Oracle Home	Datafiles *	Total
Typical Install	500 MB	4.0 MB	3.53 GB	1.9 GB	5.92 GB

* Refers to the contents of the `admin`, `cfgtoollogs`, `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 data file disk space.

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

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

1. Determine the physical RAM size. For example, on a Windows Server 2003 computer, double-click **System** in the Windows Control Panel and click the **General** tab.

On a Windows Server 2008 R2 computer, click **System and Security** in the Windows Control Panel, then click **System**.

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 example, on a Windows 2003 computer, double-click **System**, click the **Advanced** tab, and click **Settings** in the Performance section. Then click the **Advanced** tab.

On a Windows Server 2008 R2 computer, click **System and Security**, then click **System**, click **Advanced System Settings**, click the **Advanced** tab on System Properties page, and then click **Settings** in the Performance section. Then select the **Advanced** tab on Performance Options page.

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 example, on a Windows 2003 computer, double-click **My Computer**, right-click the drive where the Oracle software is to be installed, and select **Properties**.

On a Windows Server 2008 R2 computer, right-click **My Computer** and click **Open**.

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 is needed for the Oracle software to be installed.

For example, to change the environment variables on a Windows Server 2003 computer, double-click **System**, click the **Advanced** tab, and click **Environment Variables**.

On a Windows Server 2008 R2 computer, click **System and Security**, then click **System**, click **Advanced System Settings**, click the **Advanced** tab on System Properties page, and then click **Environment Variables**.

4 Check the Software Requirements

Table 3 lists the software requirements for Oracle Database.

Table 3 Software Requirements

Requirement	Value
System Architecture	<p>Processor: AMD64, and Intel EM64T</p> <p>Note: Oracle provides limited certification for 32-bit Oracle Database Client on 64-bit Windows x64. For additional information, visit My Oracle Support (formerly Oracle<i>MetaLink</i>) at https://support.oracle.com/</p>
Operating System	<p>Oracle Database for Windows x64 is supported on the following operating systems:</p> <ul style="list-style-type: none"> ■ Windows Server 2003 - all x64 editions ■ Windows Server 2003 R2 - all x64 editions ■ Windows XP Professional x64 Edition ■ Windows Vista x64 - Business, Enterprise, and Ultimate editions ■ Windows Server 2008 x64 and Windows Server 2008 R2 x64 - Standard, Enterprise, Datacenter, Web, and Foundation editions. The Server Core option is not supported. <p>Note: Check My Oracle Support (formerly Oracle<i>MetaLink</i>) for more information about Hyper-V support.</p> <ul style="list-style-type: none"> ■ Windows 7 x64 - Professional, Enterprise, and Ultimate editions <p>Windows Multilingual User Interface Pack is supported.</p>
Compiler	<p>Pro*Cobol has been tested and certified with Net Express 5.0.</p> <p>The following components are supported with the Microsoft Visual C++ .NET 2005 8.0, Microsoft Visual C++ .NET 2008 9.0, and Intel 10.1 C compilers:</p> <ul style="list-style-type: none"> ■ Oracle Call Interface ■ External callouts ■ Pro*C/C++ ■ XDK <p>Oracle C++ Call Interface is supported with</p> <ul style="list-style-type: none"> ■ Microsoft Visual C++ .NET 2005 8.0 ■ Microsoft Visual C++ .NET 2008 9.0 - OCCI libraries are installed under <code>ORACLE_HOME\oci\lib\msvc\vc9</code>. When developing OCCI applications with MSVC++ 9.0, ensure that the OCCI libraries are correctly selected from this directory for linking and executing. ■ Intel 10.1 C++ compiler with Microsoft Visual C++ .NET 2005 STLs.
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"> ■ TCP/IP ■ TCP/IP with SSL ■ Named Pipes

Table 3 (Cont.) Software Requirements

Requirement	Value
Oracle Database Client	<p>If you plan to connect to Oracle Database 11g Release 2 (11.2) from a release of Oracle Database Client that is earlier than 11g Release 2 (11.2), the following conditions apply:</p> <ul style="list-style-type: none"> ■ Oracle Database Client is version 9.2.0.4 or higher. See Note 207303.1 on My Oracle Support (formerly OracleMetaLink) for more details and up to date information. ■ If the earlier Oracle Database Client is running on the same computer as Oracle Database 11g Release 2 (11.2), a bequeath connection cannot be used. <p>Oracle recommends upgrading Oracle Database Client to the latest patchset (9.2.0.8, 10.2.0.4, or later). You can download the patchset from the Patches and Updates section of My Oracle Support (formerly OracleMetaLink) at https://support.oracle.com</p>

5 Default Share Configuration Requirement

The prerequisite checks during Oracle Database installation require that the system drive on your computer has default share configured on it. Use the `net use` command to verify, for example:

```
C:\>net use \\hostname\c$
The command completed successfully.
```

Ensure that the current user, the user in the Administrator group, has all the privileges on the default share.

6 Web Browser Support

The following Web browsers are supported for Oracle Enterprise Manager Database Control:

- Netscape Navigator 8.1
- Netscape Navigator 9.0
- Microsoft Internet Explorer 6.0 SP2
- Microsoft Internet Explorer 7.0 SP1
- Microsoft Internet Explorer 8.0
- Firefox 2.0
- Firefox 3.0.7
- Firefox 3.5
- Firefox 3.6
- Safari 3.1
- Safari 3.2
- Safari 4.0.x
- Google Chrome 3.0
- Google Chrome 4.0

7 Installation Consideration on Windows Vista and Later

On Windows Vista, Windows Server 2008, Windows Server 2008 R2, and Windows 7, command prompts should be opened with Administrator privileges.

8 Install the Oracle Database Software

To install the Oracle Database software:

Note: If you run Oracle Universal Installer when Windows Scheduler jobs are running, then you may encounter unexplained installation problems if your Windows Scheduler job is performing cleanup, and temporary files are deleted before the installation is finished. Oracle recommends that you complete installation before the Windows Scheduler jobs are run, or disable Windows Scheduler jobs that perform cleanup of temporary files until after the installation is completed.

1. Log on as a member of the Administrators group (typically, `oracle`) for the computer on which you want 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. 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.
3. 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.

4. Double-click `setup.exe` to start Oracle Universal Installer.

Downloading Updates Before Installation

Starting with Oracle Database 11g Release 2 (11.2.0.2), if you plan to run the installation in a secured data center, then you can download updates before starting the installation by starting Oracle Universal Installer on a system that has Internet access in update download mode. To start Oracle Universal Installer to download updates before installation, enter the following command:

```
setup.exe -downloadUpdates
```

Provide the My Oracle Support user name and password, and provide proxy settings if needed on the Provide My Oracle Support credentials screen. Then, enter the **Download location** and click **Download** on the Download software updates screen. If updates are available, then they are downloaded in the location provided. The Finish Updates screen shows the successful download of the updates. Click **Close**.

After you download updates, transfer the update file to a directory on the server where you plan to run the installation.

5. Follow these guidelines to complete the installation:

- Do not install Oracle Database 11g Release 2 (11.2) software into an existing Oracle home.
- Follow the instructions displayed in the Oracle Universal Installer screens. If you need additional information, click **Help**.
- When prompted for a password, follow these guidelines:

The installation does not continue if the following requirements are not met.

 - Password cannot exceed 30 characters.
 - Password cannot contain invalid characters: ! @ % ^ & * () + = \ | ` ~ [{] } ; : ' " , < > ?
 - A user name cannot be a password.
 - An empty password cannot be accepted.
 - The SYS account password cannot be change_on_install. (case-insensitive)
 - The SYSTEM account password cannot be manager. (case-insensitive)
 - The SYSMAN account password cannot be sysman. (case-insensitive)
 - The DBSNMP account password cannot be db snmp. (case-insensitive)
 - If you choose to use the same password for all the accounts, then that password cannot be change_on_install, manager, sysman, or db snmp. (case-insensitive)

Note: You must remember the passwords that you specify.

- 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 F in *Oracle Database Installation Guide for Microsoft Windows* for information about troubleshooting.
- If you chose an installation type that runs Database Configuration Assistant in interactive mode, then you must provide detailed information about configuring your database and network.

If you need help when using the Database Configuration Assistant in interactive mode, click **Help** on any screen.

Note: If you chose a default installation, Database Configuration Assistant does not run interactively.

6. When the Configuration Assistant tasks are complete, click **Finish**, click **Exit**, then click **Yes** to exit from Oracle Universal Installer.

7. Optionally, delete the `OraInstalldate_time` directory 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.

8. See Chapter 5 in *Oracle Database Installation Guide for Microsoft Windows* for information about postinstallation tasks that you must complete after you have installed Oracle Database.

Screen	Recommended Action
Configure Security Updates	<p>Enter your e-mail address, preferably your My Oracle Support (formerly OracleMetaLink) e-mail address or user name in the Email field.</p> <p>You can select the I wish to receive security updates via My Oracle Support check box to receive security updates.</p> <p>Enter your My Oracle Support (formerly OracleMetaLink) password in the My Oracle Support Password field.</p> <p>Click Next.</p>
Download Software Updates	<p>Starting with Oracle Database 11g Release 2 (11.2.0.2), you can use the Software Updates feature to dynamically download and apply latest updates. Select one of the following options, and click Next:</p> <ul style="list-style-type: none"> ■ Use My Oracle Support credentials for download: Select this option to download and apply the latest software updates. Click Proxy Settings to configure a proxy for Oracle Universal Installer to use to connect to the Internet. Provide the proxy server information for your site, along with a user account that has access to the local area network through which the server is connecting. Starting with Oracle Database 11g Release 2 (11.2.0.3), you can enter the Proxy Realm information if required. The proxy realm information is case-sensitive. Click Test Connection to ensure that your proxy settings are correctly entered, and the installer can download the updates. ■ Use pre-downloaded software updates: Select this option to apply the software updates previously downloaded using the <code>-downloadUpdates</code> flag. ■ Skip software updates: Select this option if you do not want to apply any updates.
Apply Software Updates	<p>This screen is displayed if you select to download the software updates or provide the pre-downloaded software updates location.</p> <p>If you selected Use My Oracle Support credentials for download in the previous screen, select Download and apply all updates, and then click Next.</p> <p>If you selected Use pre-downloaded software updates in the previous screen, select Apply all updates, and then click Next.</p>
Select Installation Option	<p>Select Create and configure a database from the following list of available options, then click Next:</p> <ul style="list-style-type: none"> ■ Create and configure a database: This option creates a new database along with sample schemas. ■ Install database software only: This option installs only the database binaries. To configure database, you must run Oracle Database Configuration Assistant after the software installation. ■ Upgrade an existing database: This option installs the software binaries in a new Oracle home. At the end of the installation, you can upgrade the existing database.

Screen	Recommended Action
System Class	<p>Select Server Class from the following options to install the database, and click Next.</p> <ul style="list-style-type: none"> ■ Desktop Class: Choose this option if you are installing on a laptop or desktop class system. ■ Server Class: Choose this option if you are installing on a server class system, such as what you would use when deploying Oracle in a production data center. This option allows for more advanced configuration options.
Grid Installation Options	<p>Select the type of database installation you want to perform, click Next.</p> <ul style="list-style-type: none"> ■ Single instance database installation: This option installs the database and the listener. ■ Oracle Real Application Clusters database installation: This option installs Oracle Real Application Clusters. ■ Oracle RAC One Node database installation: This option installs Oracle RAC One Node database. <p>Note: Oracle RAC One Node is only supported with Oracle Clusterware.</p>
Select Install Type	<p>Select Typical Install as the installation type from the following options, and then click Next:</p> <ul style="list-style-type: none"> ■ Typical Install: This installation method is selected by default. It 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 screen. ■ Advanced Install: This installation method enables to perform more complex installations.
Typical Install Configuration	<p>Enter the following information according to your requirements:</p> <p>Oracle base: The Oracle base path appears by default. You can change the path based on your requirement.</p> <p>Software location: In the Software location section, accept the default value or enter the Oracle home directory path in which you want to install Oracle components. The directory path should not contain spaces.</p> <p>Storage Type: Select File System, or Oracle Automatic Storage Management as the database storage option.</p> <p>Database file location: If you select File System as your storage type, then click Browse and specify a database file location.</p> <p>ASMSNMP Password: If you select Automatic Storage Management as your Storage Type, then specify the password for the ASM-SNMP user.</p> <p>Database Edition: Select the database edition to install.</p> <p>Global database name: Specify the Global Database Name using the following syntax:</p> <p><i>database_unique_name.db_domain</i></p> <p>For example, <i>sales.us.example.com</i></p> <ul style="list-style-type: none"> ■ <i>database_unique_name</i> is <i>sales</i> ■ <i>db_domain</i> is <i>us.example.com</i> <p>Administrative password: Enter the password for the privileged database account.</p> <p>Confirm Password: Reenter, and confirm the password for the privileged database account.</p> <p>Click Next to continue.</p>

Screen	Recommended Action
Perform Prerequisite Checks	<p>This option checks if the minimum system requirements to perform the database installation are met.</p> <p>Click Fix & Check Again, if you want the installer to fix the problem and check the system requirements once more.</p> <p>If you click Check Again, then you can run the prerequisite check again to see if the minimum requirements are met to carry on with the database installation.</p> <p>To get a list of failed requirements, select Show Failed from the list. To get a list of all the prerequisite checks run by the OUI, select Show All. To get a list of the prerequisite checks that are successful, select Show Succeeded.</p> <p>Note: Oracle recommends that you use caution in checking the Ignore All option. If you check this option, then Oracle Universal Installer may not confirm that your system can install Oracle Database successfully.</p>
Summary	<p>Review the information displayed on this screen, and then click Install.</p> <p>Note: Starting with Oracle Database 11g Release 2 (11.2), you can save all the installation steps into a response file by clicking Save Response File. Later, this file can be used for a silent installation.</p>
Install Product	<p>This screen displays the progress of a database installation. It also shows the status information while the product is being installed. Click Next.</p> <p>This screen then displays the status information for the configuration assistants that configure the software and create a database. When the message is displayed after Database Configuration Assistant process, click OK to continue.</p>
Finish	<p>This screen is shown automatically when all the configuration tools are successful.</p> <p>Click Close.</p>

9 Installing Oracle Database Examples

If you plan to use the following products or features, then download and install the products from the Oracle Database Examples media:

- Oracle JDBC Development Drivers
- Oracle Database Examples
- Various Oracle product demonstrations

For information about installing software and various Oracle product demonstrations from the Oracle Database Examples media, see *Oracle Database Examples Installation Guide*.

10 What to Do Next?

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

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

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

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

Log in with the user name *SYS* and connect as *SYSDBA*. Use the password that you specified for this user during the Oracle Database installation.

- See Chapter 5 of *Oracle Database Installation Guide for Microsoft Windows* for information about required and optional postinstallation tasks, depending on the components to use.
- Review Chapter 6 of *Oracle Database Installation Guide for Microsoft Windows* for information about how to get started using Oracle Database.
- Read *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.

11 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 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 and updated versions of Oracle products from the Oracle Store Web site:

<https://shop.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 the Oracle Database Documentation Library media:

Use a Web browser to view or open the `index.htm` file in the top-level directory on the media.

- From the Oracle Technology Network (OTN) Web site:

<http://www.oracle.com/technetwork/indexes/documentation/index.html>

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

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

12 Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at

<http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

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E24283-01

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