Oracle® Database

Quick Installation Guide

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

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

1. Review Information About this Guide
2. Log On to the System with Administrator Privileges
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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

- 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.

The product documentation for Oracle Database products is available in both HTML and PDF formats online on the Oracle Technology Network (OTN) website:

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

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 and Windows 8, 2 GB minimum
Virtual memory	▪ If physical memory is between 2 GB and 16 GB, then set virtual memory to 1 times the size of the RAM ▪ If physical memory is more than 16 GB, then set virtual memory to 16 GB
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	3.80 GB	1.9 GB	6.22 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.

   If there is less than 500 MB of disk space available in the `temp` directory, then first delete all unnecessary files. If the temp disk space is still less than 500 MB, then set the `TEMP` or `TMP` environment variable to point to a different hard drive.

   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	Processor: AMD64, and Intel EM64T **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*MetaLink*) at `https://support.oracle.com/`
Operating System	Oracle Database for Windows x64 is supported on the following operating systems: ▪ 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. ▪ Windows 7 x64 - Professional, Enterprise, and Ultimate editions ▪ Windows 8 x64 - Pro and Enterprise editions ▪ Windows Server 2012 x64 - Standard, Datacenter, Essentials, and Foundation editions Windows Multilingual User Interface Pack is supported. The Server Core option is not supported for all Windows Server operating systems. **Note:** For information about Hyper-V support, visit My Oracle Support (formerly Oracle*MetaLink*) at `https://support.oracle.com/epmos/faces/DocumentDisplay?id=1563794.1`
Compiler	Pro*Cobol has been tested and certified with Net Express 5.0. 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: ▪ Oracle Call Interface ▪ External callouts ▪ Pro*C/C++ ▪ XDK Oracle C++ Call Interface is supported with ▪ Microsoft Visual C++ .NET 2005 8.0 ▪ Microsoft Visual C++ .NET 2008 9.0 - OCCI libraries are installed under *ORACLE_HOME*`\oci\lib\msvc\vc9`. 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.

Table 3 (Cont.) Software Requirements

Requirement	Value
Network Protocol	The Oracle Net foundation layer uses Oracle protocol support to communicate with the following industry-standard network protocols: ■ TCP/IP ■ TCP/IP with SSL ■ Named Pipes

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

You do not require a web browser to install Oracle Database. However, web browsers are required to access documentation, and to use Oracle Enterprise Manager Database Control and Oracle Application Express. Web browsers must support JavaScript, and the HTML 4.0 and CSS 1.0 standards.

Oracle Enterprise Manager supports the following browsers:

- Netscape Navigator 9.0
- Netscape Navigator 8.1
- Microsoft Internet Explorer 10.0 (supports Oracle Enterprise Manager Database Control 11.2.0.3 or higher)
- Microsoft Internet Explorer 9.0
- Microsoft Internet Explorer 8.0
- Microsoft Internet Explorer 7.0 SP1
- Microsoft Internet Explorer 6.0 SP2
- Firefox 21.0 (supports Oracle Enterprise Manager Database Control 11.2.0.4)
- Firefox 17.0.6 ESR (supports Oracle Enterprise Manager Database Control 11.2.0.4)
- Firefox 3.6
- Firefox 3.5
- Firefox 3.0.7
- Firefox 2.0
- Safari 4.0.x
- Safari 3.2

- Safari 3.1
- Google Chrome 27.0 (supports Oracle Enterprise Manager Database Control 11.2.0.4)
- Google Chrome 4.0
- Google Chrome 3.0

> **See Also:** *Oracle Application Express Installation Guide* for a list of browsers supported with Oracle Application Express

7 Installation Consideration on Windows Vista, Windows Server 2008, and Later

On Windows Vista, Windows Server 2008, and later versions 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 the 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 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 11*g* 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 11*g* 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 `dbsnmp`. (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 `dbsnmp`. (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, 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 `OraInstall`*`date_time`* directory to remove the temporary files that were created during the installation process. The `OraInstall`*`date_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 `OraInstall`*`date_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.

The following table lists the various screens displayed during an Enterprise Edition installation for Oracle Database 11*g* Release 2 (11.2):

Screen	Recommended Action
Configure Security Updates	Enter your e-mail address, preferably your My Oracle Support (formerly Oracle*MetaLink*) e-mail address or user name in the **Email** field. You can select the **I wish to receive security updates via My Oracle Support** check box to receive security updates. Enter your My Oracle Support (formerly Oracle*MetaLink*) password in the **My Oracle Support Password** field. Click **Next**.
Download Software Updates	Starting with Oracle Database 11*g* 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**: ■ 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 11*g* 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 ppre-downloaded software updates: Select this option if you have already downloaded software updates using the Oracle Universal installer command `setup.exe -downloadUpdates`. ■ Skip software updates: Select this option if you do not want to apply any updates.

Screen	Recommended Action
Apply Software Updates	This screen is displayed if you select to download the software updates or provide the pre-downloaded software updates location. If you selected Use My Oracle Support credentials for download in the previous screen, select **Download and apply all updates**, and then click **Next** to apply the updates. By default, the download location for software updates is placed in the home directory of the Oracle installation owner you are using to run this installation. If you choose to download the software updates in another location, then click **Browse** and select a different location on your server. If you selected Use pre-downloaded software updates in the previous screen, select **Apply all updates**, and then click **Next** to apply the updates downloaded before starting the installation.
Select Installation Option	Select **Create and configure a database** from the following list of available options, then click **Next**: ■ 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.
System Class	Select the type of system for installing the database, click **Next**. ■ Desktop Class: Choose this option if you are installing on a laptop or desktop class system. This option includes a starter database and allows minimal configuration. This option is designed for those who want to get up and running with the database quickly. ■ 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. Advanced configuration options available using this option include Oracle RAC, Oracle Automatic Storage Management, backup and recovery configuration, integration with Enterprise Manager Grid Control, and more fine-grained memory tuning, among many others.
Grid Installation Options	Select the type of database installation you want to perform, click **Next**. ■ 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. **Note**: Oracle RAC One Node is only supported with Oracle Clusterware.
Select Install Type	Select Typical Install as the installation type from the following options, and then click **Next**: ■ 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, 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.

Screen	Recommended Action
Typical Install Configuration	Enter the following information according to your requirements: Oracle base: The Oracle base path appears by default. You can change the path based on your requirement. 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. Storage Type: Select **File System**, or **Oracle Automatic Storage Management** as the database storage option. Database file location: If you select File System as your storage type, then click **Browse** and specify a database file location. ASMSNMP Password: If you select Oracle Automatic Storage Management as your Storage Type, then specify the password for the ASMSNMP user. Database Edition: Select the database edition to install. Global database name: Specify the Global Database Name using the following syntax: *database_unique_name*.*db_domain* For example, `sales.us.example.com` where: ■ *database_unique_name* is *sales* ■ *db_domain* is *us.example.com* Administrative password: Enter the password for the privileged database account. Confirm Password: Reenter, and confirm the password for the privileged database account. Click **Next** to continue.
Perform Prerequisite Checks	This option checks if the minimum system requirements to perform the database installation are met. Click **Fix & Check Again**, if you want the installer to fix the problem and check the system requirements once more. 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. To get a list of failed requirements, select **Show Failed** from the list. To get a list of all the prerequirement checks run by the OUI, select **Show All**. To get a list of the prerequirement checks that are successful, select **Show Succeeded**. **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.
Summary	Review the information displayed on this screen, and then click **Install**. **Note:** Starting with Oracle Database 11*g* 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.
Install Product	This screen displays the progress of a database installation. It also shows the status information while the product is being installed. Click **Next**. 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.
Finish	This screen is shown automatically when all the configuration tools are successful. Click **Close**.

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
- Oracle Text Knowledge Base

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

Product documentation includes information about configuring, using, or administering Oracle products on any platform. The product documentation for Oracle Database 11*g* Release 1 (11.2) is available in both HTML and PDF formats on Oracle Technology Network (OTN) at:

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

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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