Oracle® Database

Client Quick Installation Guide

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

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

1. Review Information About this Guide

2. Hardware Requirements

3. Software Requirements

4. Web Browser Support

5. Default Share Configuration Requirement

6. Install the Oracle Database Client Software

7. Performing an In-place Oracle Database Client Upgrade

8. What's Next?

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1 Review Information About this Guide

> **Note:**   This guide describes how to install Oracle Database Client on a system that does not have any Oracle software installed on it. If there is an existing Oracle software installation on this system, see *Oracle Database Client Installation Guide for Microsoft Windows* for more detailed installation instructions.

This guide describes how to complete a default installation of Oracle Database Client in a new Oracle home directory. It describes how to perform one of the following installation types:

- **Instant Client:** Enables you to install only the shared libraries required by Oracle Call Interface applications that use the Instant Client feature. This installation type requires much less disk space than the other Oracle Database Client installation types.

   Instant Client includes Instant Client Light. You may want to use this version of Instant Client if your applications generate error messages in American English only. The advantage of using Instant Client Light is that it has a smaller footprint than regular Instant Client. Hence, your applications use less memory.

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- **Administrator:** Enables applications to connect to an Oracle database on the local system or on a remote system. It also provides tools that let you administer an Oracle database.

- **Runtime:** Enables applications to connect to an Oracle database on the local system or on a remote system.

This guide does not describe how to install the Custom installation type.

> **See Also:** *Oracle Call Interface Programmer's Guide* for more information about the Instant Client feature

Where to Get Additional Installation Information

For more detailed information about installing Oracle Database Client, see *Oracle Database Client Installation Guide for Microsoft Windows*.

This guide is available on the product media. To access it, use a Web browser to open the `welcome.html` file from the top-level directory of the installation media. Platform-specific documentation is available in PDF and HTML formats in the Documentation section.

2 Hardware Requirements

Table 1 lists the required hardware components for Oracle Database Client.

Table 1   Hardware Requirements

Requirement	Minimum Value
Physical memory (RAM)	512 MB minimum, 1 GB recommended On Windows 7, 2 GB minimum
Virtual memory	Double the amount of RAM
Hard disk space	Total ranges between 330–1260 MB. See Table 2 for details.
Processor Type	AMD64, or Intel Extended memory (EM64T)
Video adapter	256 colors
Screen Resolution	1024 X 768 minimum

2.1 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 Client components include space required 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, then installation fails and an error message appears.

Table 2 lists the space requirements on NTFS.

Table 2   Disk Space Requirements on NTFS

Installation Type	TEMP Space	SYSTEM_ DRIVE:\Program Files\Oracle\Inventory	Oracle Home	Total
Instant Client	130 MB	5 MB	200 MB	335 MB
Administrator	130 MB	5 MB	1126.4 MB	1261.4 MB
Runtime	130 MB	5 MB	750 MB	885 MB

* Disk space requirements vary, depending on the components selected.

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

2.2 Verifying Hardware Requirements

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

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

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**.

3 Software Requirements

Table 3 lists the software requirements for Oracle Database Client.

Table 3 Software Requirements

Requirement	Value
Operating System	Oracle Database Client for Windows is supported on the following operating systems:
	■ Windows Server 2003 - all x64 editions
	■ Windows Server 2003 R2 - all x64 editions
	■ Windows XP Professional x64
	■ 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.
	Note: For more information about Hyper-V support, visit My Oracle Support (formerly Oracle*MetaLink*) at
	https://support.oracle.com
	■ Windows 7 x64 - Professional, Enterprise, and Ultimate editions
	Windows Multilingual User Interface Pack is supported.
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 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 the relevant Microsoft Visual C++ .NET 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

3.1 Instant Client Light Language and Character Set Requirements

In addition to the requirements described in the previous section, if you plan to use Instant Client Light, the applications must use the following languages and character sets:

- **Language:** Any language that is supported by Oracle, but only US English error messages are returned for errors generated on the client side.

- **Territory:** Any territory that is supported by Oracle.

- **Character sets:**

  - Single byte

    * US7ASCII

    * WE8DEC

    * WE8ISO8859P1

    * WE8MSWIN1252

  - Unicode

    * UTF8

    * AL16UTF16

    * AL32UTF8

Instant Client Light can connect to databases having one of the following database character sets. An error is returned if a character set other than those in the list is used as the client or database character set.

- US7ASCII

- WE8DEC

- WE8MSWIN1252

- WE8ISO8859P1

- WE8EBCDIC37C

- WE8EBCDIC1047

- UTF8

- AL32UTF8

Instant Client Light can also operate with the OCI Environment handles created in the OCI_UTF16 mode.

The language, territory, and character sets are determined by the `NLS_LANG` parameter, which is stored in the registry under the `HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE\KEY_HomeName\NLS_LANG` subkey, where `HomeName` is the unique name identifying the Oracle home.

> **Caution:** AL32UTF8 is the Oracle Database character set that is appropriate for XMLType data. It is equivalent to the IANA registered standard UTF-8 encoding, which supports all valid XML characters.
>
> Do not confuse Oracle Database database character set UTF8 (no hyphen) with database character set AL32UTF8 or with character encoding UTF-8. Database character set UTF8 has been superseded by AL32UTF8. Do not use UTF8 for XML data. UTF8 supports only Unicode version 3.1 and earlier; it does not support all valid XML characters. AL32UTF8 has no such limitation.
>
> Using database character set UTF8 for XML data could potentially cause an irrecoverable error or affect security negatively. If a character that is not supported by the database character set appears in an input-document element name, a replacement character (usually "?") is substituted for it. This terminates parsing and raises an exception.

4 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

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 Install the Oracle Database Client Software

The following sections describe how to install the Oracle software:

- Installation Consideration on Windows Vista and Later
- Guidelines for Installing Oracle Database Client
- Procedure for Installing Oracle Database Client

6.1 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.

6.2 Guidelines for Installing Oracle Database Client

In most cases, you use the graphical user interface (GUI) provided by Oracle Universal Installer to install Oracle Database Client. However, you can also use Oracle Universal Installer to complete silent or noninteractive installations using a response file, without using the GUI. This method is particularly useful if you need to perform multiple installations of Oracle Database Client.

As you install Oracle Database Client, follow these guidelines:

> **See Also:**   Appendix B, "Installing Oracle Database Client Using Response Files" in *Oracle Database Client Installation Guide for Microsoft Windows* for information on silent or noninteractive installations

- Do not use Oracle Universal Installer from an earlier Oracle product release to install components from this release.
- Use the same installation media to install Oracle Database Client on all supported Windows platforms.
- If you reinstall Oracle software into an Oracle home directory where Oracle Database Client is already installed, you must reinstall any components that were installed before you began the reinstallation.
- 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 during installation, click **Help** or see Appendix D, "Troubleshooting the Oracle Database Client Installation" in *Oracle Database Client Installation Guide for Microsoft Windows* for advice.

6.3 Procedure for Installing Oracle Database Client

To install Oracle Database Client:

1. 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.

2. Insert the Oracle Database Client installation media and navigate to the `client` 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.

   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, enter the following command:

   ```
   ./setup.exe -downloadUpdates
   ```

   Provide the My Oracle Support (formerly Oracle*MetaLink*) user name and password, and provide proxy settings if needed. After you download updates, transfer the update file to a directory on the server where you plan to run the installation.

4. If you have an existing Oracle Database Client 11*g* Release 2 (11.2) installed on your system, the Select Installation Mode screen is displayed. Select **New Install** to install Oracle Database Client software in to a new location.

   Starting with Oracle Database 11g Release 2 (11.2.0.2), if you want to upgrade an earlier release of Oracle Database Client, then select **Upgrade** and follow the instructions in "Performing an In-place Oracle Database Client Upgrade".

5. In the Select Installation Type screen, select the type of installation that you want: Instant Client, Administrator, or Runtime and click **Next.**

   > **See Also:** "Oracle Database Client Installation Types" section in *Oracle Database Client Installation Guide for Microsoft Windows* for more information on these installation types

6. In the Download Software Updates screen, select one of the following options, and click **Next**:

   - Use My Oracle Support credentials for download 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.

   - Use pre-downloaded software updates to apply previously downloaded software updates.

   - Skip Software Updates if you do not want to apply any updates.

7. The Apply Software Updates screen is displayed if you select to download the software updates or provide the pre-downloaded software downloads location. If you selected Use My Oracle Support credentials for download in the previous

screen, then select **Download and apply all updates**, and click **Next**. If you selected Use pre-downloaded software updates, then select **Apply all updates**, and click **Next**.

8. The Select Product Languages screen enables you to select the language in which you want to run the product.

   Select the product language from the Available Languages list, transfer it to the Selected Languages list. Click **Next**.

   This screen is not displayed if you select Instant Client as the type of installation in step 5.

9. In the Specify Installation Location screen, enter the following details:

   Oracle Base: This path appears by default. You can change the path based on your requirement.

   The Oracle Base section is not displayed if you select Instant Client as the type of installation in step 5.

   In the **Software Location** section, accept the default values or enter the Oracle home name and directory path in which you want to install Oracle components. The directory path should not contain spaces. Click **Next**.

10. The Perform Prerequisite Checks screen verifies if your computer meets the minimum system requirements to install the desired product. Click **Next.**

    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 is able to install Oracle Database successfully.

11. Review the information displayed in the Summary screen, and click **Finish**.

    > **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.

12. The Install Product screen shows the progress of a client installation. After Oracle Database Client is installed, click **OK**.

13. In the Finish screen, click **Close** to exit from Oracle Universal Installer.

7 Performing an In-place Oracle Database Client Upgrade

Starting with Oracle Database 11*g* Release 2 (11.2.0.2) you can perform an in-place upgrade of Oracle Database Client 11*g* Release 2 (11.2) using the following instructions:

> **Note:** If you do not have an existing Oracle Database Client 11*g* Release 2 (11.2) upgradable home on your system, you cannot perform an in-place upgrade.

1. Perform Steps 1 through 3 listed in "Procedure for Installing Oracle Database Client" section.

2. Only if you have an existing Oracle Database Client 11*g* Release 2 (11.2.0.1) installed on your system, the Select Installation Mode screen is displayed. Select **Upgrade** to upgrade the existing Oracle Database Client software with the latest version.

3. Perform Steps 8 through 13 listed in "Procedure for Installing Oracle Database Client" to complete the upgrade process.

> **See Also:** "Updating the Existing Software with the Current Version" and "Performing an In-place Oracle Database Client Upgrade Using the Response File" sections in *Oracle Database Client Installation Guide for Microsoft Windows*

8 What's Next?

After you have successfully installed Oracle Database Client, refer to Chapter 4, "Oracle Database Client Postinstallation Tasks" in *Oracle Database Client Installation Guide for Microsoft Windows* for information about required and optional postinstallation steps.

9 Documentation Accessibility

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