

# Oracle® Database

Client Quick Installation Guide

12c Release 1 (12.1) for Microsoft Windows x64 (64-Bit)

E17743-01

May 2013

---

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. [Creating Oracle Home User](#)
5. [Operating System Groups for Oracle Database Client Installations](#)
6. [Remote Desktop Services](#)
7. [Installation Requirements for Web Browsers](#)
8. [Default Share Configuration Requirement](#)
9. [Install the Oracle Database Client Software](#)
10. [What's Next?](#)
11. [Documentation Accessibility](#)

## 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:** Installs 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.

Included in the Instant Client installation is 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 much smaller footprint than regular Instant Client. Hence, your applications use less memory.

- **Administrator:** Enables applications to connect to an Oracle database on the local system or on a remote system. It 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.
- **Custom:** Enables you to select individual components from the list of Administrator and Runtime components.

**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*.

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>

## 2 Hardware Requirements

[Table 1](#) lists the required hardware components for Oracle Database Client on Windows x64.

**Table 1 Hardware Requirements**

Requirement	Minimum Value
Physical memory (RAM)	2 GB minimum
Virtual memory	Double the amount of RAM
Hard disk space	Total ranges between 430–1570 MB. See <a href="#">Table 2</a> for details.
Processor Type	AMD64, or Intel Extended Memory (EM64T) <b>Note:</b> Oracle provides 32-bit (Windows x86) and 64-bit (Windows x64) versions of Oracle Database Client. Oracle certifies 32-bit Oracle Database Client on Windows x64. <a href="#">Table 3</a> lists the operating systems supported on Windows x64.
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).

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 Windows x64 disk space requirements on NTFS.

**Table 2 Windows x64 Disk Space Requirements on NTFS**

Installation Type	TEMP Space	SYSTEM_ DRIVE:\Program Files\Oracle\Inventory	Oracle Home	Total
Instant Client	130 MB	5 MB	301 MB	436 MB
Administrator	130 MB	5 MB	1.4 GB	1568.6 MB
Runtime	130 MB	5 MB	980 MB	1115 MB
Custom (all components installed)	130 MB	5 MB *	1.4 GB *	1568.6 MB*

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

**See Also:** "Overview of 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 Server 2008 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 Server 2008 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 Server 2008 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.

On Windows x64, 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 2008 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 on Windows x64.

**Table 3 Windows x64 Software Requirements**

Requirement	Value
Operating System	<p>Oracle Database Client for Windows is supported on the following operating systems:</p> <ul style="list-style-type: none"><li>■ Windows Server 2008 x64 and Windows Server 2008 R2 x64 - Standard, Enterprise, Datacenter, Web, and Foundation editions.</li><li>■ Windows 7 x64 - Professional, Enterprise, and Ultimate editions</li><li>■ Windows 8 x64 - Pro and Enterprise editions</li><li>■ Windows Server 2012 x64 - Standard, Datacenter, Essentials, and Foundation editions</li></ul> <p><b>Note:</b></p> <ul style="list-style-type: none"><li>■ For more information about Hyper-V support, visit My Oracle Support (formerly OracleMetaLink) at <a href="https://support.oracle.com">https://support.oracle.com</a></li><li>■ Windows Multilingual User Interface Pack is supported. The Server Core option is not supported.</li></ul>

**Table 3 (Cont.) Windows x64 Software Requirements**

Requirement	Value
Compiler	<p>Pro*COBOL has been tested and certified with Net Express 5.1.</p> <p>The following components are supported with the Microsoft Visual C++ 2010 SP1 and Intel 12.1 C compilers:</p> <ul style="list-style-type: none"><li>■ Oracle Call Interface</li><li>■ External callouts</li><li>■ Pro*C/C++</li><li>■ XDK</li></ul> <p>Oracle C++ Call Interface is supported with</p> <ul style="list-style-type: none"><li>■ Microsoft Visual C++ 2010 SP1</li><li>■ Microsoft Visual C++ 2012 - OCCI libraries are installed under <code>ORACLE_HOME\oci\lib\msvc\vc11</code>. When developing OCCI applications with MSVC++ 2012, ensure that the OCCI libraries are correctly selected from this directory for linking and executing.</li><li>■ Intel 12.1 C compilers with Microsoft Visual Studio 2010 STLs</li></ul>
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>

### 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 Creating Oracle Home User

During Oracle Database Client installation, you can specify an optional Oracle Home user associated with the Oracle home. Oracle Home User can be Windows Built-in Account or a standard Windows User Account (not an Administrator account). Windows User Account can be a Windows Local User, Windows Domain User or Managed Services Account (MSA). If you want to create a new user during installation, then it can only be a Windows Local User. It cannot be a Windows Domain User or an MSA. The new user created is denied interactive logon privileges to the Windows computer. However, a Windows administrator can manage this account like any other Windows account.

**See Also:** "Managing Oracle Home User" in *Oracle Database Platform Guide for Microsoft Windows*

Silent install is enhanced to support password prompt for Oracle Home User. So, customers and independent software vendors (ISV) can use response files without hard coding the password into the source code.

## 5 Operating System Groups for Oracle Database Client Installations

Oracle Universal Installer creates groups, such as, `ORA_INSTALL`, `ORA_CLIENT_LISTENERS`, `ORA_HOMENAME_SVCSIDS` during installation and you should not change these groups, memberships, and ACLs associated with various Oracle created groups.

## 6 Remote Desktop Services

On Windows, Oracle supports installing, configuring, and running Oracle Database through Remote Desktop Services, formerly known as Terminal Services. To install Oracle Database, Oracle recommends that you start all configuration tools from the Terminal Server console session of the server (using `mstsc/console`).

Platform-specific support information is as follows:

- Windows client operating systems: The Remote Desktop is only available in Single User Mode.
- Windows server operating systems: You can have multiple Remote Desktop sessions.

### See Also:

- The Microsoft website for more information about Remote Desktop Services  
<http://www.microsoft.com/>
- The My Oracle Support website for the latest Terminal Services and Remote Desktop Services certification information  
<https://support.oracle.com/>

## 7 Installation Requirements for Web Browsers

Web browsers are required to use Oracle Enterprise Manager Database Express and Oracle Enterprise Manager Cloud Control. Web browsers must support Java Script, and the HTML 4.0 and CSS 1.0 standards. For a list of browsers that meet these requirements, see the Oracle Enterprise Manager certification matrix on My Oracle Support:

<https://support.oracle.com>

**See Also:** *Oracle Enterprise Manager Cloud Control Basic Installation Guide* for information on accessing the Oracle Enterprise Manager certification matrix

## 8 Default Share Configuration Requirement

The prerequisite checks during Oracle Database Client 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.

## 9 Install the Oracle Database Client Software

The following sections describe how to install the Oracle software:

- [Guidelines for Installing Oracle Database Client](#)
- [Procedure for Installing Oracle Database Client](#)

### 9.1 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.
- Products not installed by default, in case of Custom installation:
  - Oracle Connection Manager
  - Oracle Net Listener
  - Oracle Scheduler Agent

## 9.2 Procedure for Installing Oracle Database Client

Use Oracle Universal Installer to install the Oracle Database Client software.

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.

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, 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.

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

4. In the Select Installation Type screen, select the type of installation that you want: Instant Client, Administrator, Runtime, or Custom 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

5. 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. 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. Starting with Oracle Database 11g Release 2 (11.2.0.3), you can enter the Proxy Realm information. The proxy realm information is case-sensitive. If you do not have a proxy realm, then you do not need to provide an entry for the Proxy Username, Proxy Password, and Proxy Realm fields.

- Use pre-downloaded software updates: Select this option if you have already downloaded software updates using the Oracle Universal installer command `setup.exe -downloadUpdates`.

**Note:** The pre-downloaded option only works if you have used Oracle Universal Installer to download the updates, either during the installation, or before the installation with the `-downloadUpdates` option. You cannot manually download updates, and then provide the manual download path to the installer.

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

6. 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**.

7. 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 4.

8. Starting with Oracle Database 12c, during installation, you can specify an Oracle Home User associated with the Oracle Database home on the Specify Oracle Home User screen. The Oracle Home User owns all the services run by the Oracle Database software. You can either specify an existing user, or have the installer create the user for you. The Oracle Home User and several database services with the proper Access Control Lists (ACLs) are configured during installation.

Select **Use Windows Built-in Account** if you do not specify an Oracle Home User during installation. Then the services for the Oracle home run as the LocalService or LocalSystem user.

**See Also:** "Supporting Oracle Home User on Windows" in *Oracle Database Platform Guide for Microsoft Windows*

The Oracle Home User is not available if you select Instant Client as the type of installation in step 4.

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 4.

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. Click **Next**.

10. If you selected Custom as the type of installation in step 4, then the Available Product Components screen is displayed. Select the products that you want to install and click **Next**.

---

---

**Note:** Starting with Oracle Database 11g Release 2 (11.2), you can install Oracle Connection Manager, Oracle Net Listener, and Oracle Scheduler Agent using the Custom install option.

---

---

11. In step 10, if you select Oracle Scheduler Agent as one of the components that you want to install, then the Oracle Database Scheduler Agent screen is displayed. Enter the Scheduler Agent Host Name, and the Scheduler Agent Port Number. Click **Next**.
12. 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.

---

---

13. Review the information displayed in the Summary screen, and click **Install**.

---

---

**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.

---

---

14. The Install Product screen shows the progress of a client installation. After Oracle Database Client is installed, click **OK**.
15. If you are performing a Custom installation, and selected Oracle Net Listener from the list of components to install in step 10, then see section "Using Oracle Net Configuration Assistant" in *Oracle Database Client Installation Guide for Microsoft Windows* for instructions.
16. In the Finish screen, click **Close** to exit from Oracle Universal Installer.

## 10 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.

# 11 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.

---

Oracle Database Client Quick Installation Guide, 12c Release 1 (12.1) for Microsoft Windows x64 (64-Bit)  
E17743-01

Copyright © 1996, 2013, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.