

**User's
Guide**



Integrated Library System

Installation

VIRTUA ILS – INTEGRATED LIBRARY SYSTEM

Installation User's Guide

Version 16.1

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1701 Kraft Drive
Blacksburg, Virginia 24060

U. S. A.

Phone 800.858.8857

E-mail: info@iii.com

Table of Contents

<u>TABLE OF CONTENTS</u>	<u>I</u>
<u>TABLE OF FIGURES</u>	<u>III</u>
<u>TABLE OF FIGURES</u>	<u>III</u>
<u>1. INTRODUCTION TO THE VIRTUA INSTALLATION GUIDE</u>	<u>1</u>
1.1 UNDERSTANDING THE WORKFLOW OF THE INSTALLATION PROCESS	1
1.2 ABOUT SERVER UPGRADES AND DATABASE UPDATES	2
1.3 A WORD ABOUT LICENSE KEYS	2
1.4 USING THIS GUIDE	3
<u>2. UNDERSTANDING THE COMPONENTS OF THE VIRTUA SYSTEM</u>	<u>4</u>
2.1 DIAGRAM OF COMPONENT INTERACTIONS IN VIRTUA	5
<u>3. PROCEDURES FOR THE INITIAL SETUP OF THE VIRTUA SERVER AND DATABASE</u>	<u>11</u>
3.1 PREPARING THE SERVER FOR INSTALLATION OF THE VIRTUA SOFTWARE	11
3.1.1 SYSTEM REQUIREMENTS FOR THE VIRTUA SERVER AND DATABASE	12
3.1.2 CREATING VIRTUA DIRECTORIES	13
3.1.3 CREATING THE DBA GROUP AND DBADMIN USER	13
3.1.4 SETTING KERNEL PARAMETERS	14
3.1.5 OPENING PORTS FOR THE INSTALLATION	16
3.2 ABOUT THE INSTALLATION OF THE VIRTUA SOFTWARE	16
3.2.1 ADDITIONAL STEP FOR LIBRARIES USING THE AIX PLATFORM	17
3.2.2 AFTER INNOVATIVE COMPLETES THE INSTALLATION . . .	17
3.3 CHANGING LOG-IN PASSWORDS AND ADDING USER ACCOUNTS	18
3.3.1 CHANGING PASSWORDS FOR VIRTUA USER PROFILES	18
3.3.2 CHANGING PASSWORDS FOR ORACLE USERS	19
<u>4. PROCEDURES FOR INSTALLING AND UPGRADING CLIENT (PC) SOFTWARE</u>	<u>20</u>
4.1 INSTALLING AND UPGRADING THE VIRTUA CLIENT	20
4.1.1 SYSTEM REQUIREMENTS	21
4.1.2 INSTALLING THE VIRTUA CLIENT	21
4.1.3 STRUCTURE OF THE VIRTUA CLIENT DIRECTORY	28

4.1.4 STARTING THE VIRTUA CLIENT	31
4.1.5 UPGRADING THE VIRTUA CLIENT	33
4.2 INSTALLING AND UPGRADING THE VIRTUA PROFILER	35
4.2.1 SYSTEM REQUIREMENTS: VIRTUA PROFILER	35
4.2.2 INSTALLING THE VIRTUA PROFILER	35
4.2.3 STRUCTURE OF THE VIRTUA PROFILER DIRECTORY	37
4.2.4 BEFORE STARTING THE VIRTUA PROFILER	38
4.2.5 STARTING THE VIRTUA PROFILER	39
4.2.6 UPGRADING AND UNINSTALLING THE VIRTUA PROFILER	43
4.3 INSTALLING AND UPGRADING THE VIRTUA LANGUAGE EDITOR	47
4.3.1 INSTALLING THE LANGUAGE EDITOR	47
4.3.2 UPGRADING THE VIRTUA LANGUAGE EDITOR	51
4.4 INSTALLING AND UPGRADING THE VIRTUA DOCUMENTATION IN PDF	53
4.4.1 INSTALLING THE VIRTUA DOCUMENTATION	53
4.4.2 UPGRADING THE VIRTUA DOCUMENTATION	60
4.4.3 VIEWING AND SEARCHING THE VIRTUA DOCUMENTATION	62
<u>5. APPENDIX A - INSTALLING AND WORKING WITH THE ORACLE CLIENT</u>	<u>66</u>
5.1 ORACLE 11G CLIENT INSTALLATION WORKFLOW	68
5.2 CONFIGURING LOCAL NET SERVICE NAMES FOR THE ORACLE 11G CLIENT	76
5.2.1 RUNNING THE ORACLE NET MANAGER	76
<u>6. APPENDIX B - TROUBLESHOOTING INSTALLATION PROCEDURES</u>	<u>88</u>
<u>7. APPENDIX C - VIRTUA CLIENT UPGRADES</u>	<u>89</u>
7.1 CHANGES TO FILES IN THE VTLS\VIRTUA DIRECTORY	89
7.1.1 FILES THAT INSTALLSHIELD OVERWRITES	89
7.1.2 FILES THAT INSTALLSHIELD DOES NOT OVERWRITE	90
7.2 INSTALLSHIELD, CLIENT SETTINGS, AND WINDOWS REGISTRY	90
<u>8. APPENDIX D - CONFIGURING AN EMPTY DATABASE</u>	<u>92</u>
<u>9. APPENDIX E - CHANGES IN THIS GUIDE</u>	<u>93</u>
9.1 CHANGES FOR VERSION 16.1	93
9.2 CHANGES FOR VERSION 15.2	93
<u>INDEX</u>	<u>94</u>
<u>INDEX</u>	<u>94</u>

Table of Figures

Figure 4-1. InstallShield Wizard	21
Figure 4-2. InstallShield Wizard - Initial Window (Virtua Client)	22
Figure 4-3. InstallShield Wizard - Warning	23
Figure 4-4. InstallShield Wizard - Destination Location Window	24
Figure 4-5. InstallShield Wizard - Component Selection Window	25
Figure 4-6. VERICAT Setup Window	26
Figure 4-7. InstallShield Wizard - Setup Status Window	27
Figure 4-8. InstallShield Wizard - Installation Complete	28
Figure 4-9. Virtua Client - Connect to Server Window	32
Figure 4-10. Version Mismatch Warning Message	33
Figure 4-11. InstallShield Wizard - Welcome	34
Figure 4-12. InstallShield Wizard	36
Figure 4-13. InstallShield Wizard - Initial Window (Virtua Profiler)	36
Figure 4-14. InstallShield Wizard - Destination Location Window	37
Figure 4-15. Virtua Profiler Main Window	40
Figure 4-16. Oracle Log-in Dialog Box	41
Figure 4-17. Virtua Profiler Main Window	42
Figure 4-18. Virtua Profiler Upgrade Message	44
Figure 4-19. Profiler Upgrade Intermediate Window	45
Figure 4-20. Profiler Installer Upgrade Complete Window	46
Figure 4-21. Confirm Application Uninstall	47
Figure 4-22. InstallShield Wizard	47
Figure 4-23. InstallShield Wizard - Initial Window	48
Figure 4-24. InstallShield Wizard - Destination Location Window	49
Figure 4-25. InstallShield Wizard - Installation Complete	50
Figure 4-26. Virtua Language Editor	51
Figure 4-27. Confirm File Deletion	52
Figure 4-28. InstallShield for Virtua Documentation (1)	54
Figure 4-29. InstallShield for Virtua Documentation (2)	54
Figure 4-30. InstallShield for Virtua Documentation (3)	55
Figure 4-31. InstallShield for Virtua Documentation (4)	56
Figure 4-32. InstallShield for Virtua Documentation (5)	57
Figure 4-33. InstallShield for Virtua Documentation (6)	58
Figure 4-34. InstallShield for Virtua Documentation (7)	59
Figure 4-35. InstallShield for Virtua Documentation (8)	60
Figure 4-36. InstallShield Wizard for Virtua Documentation Setup Maintenance	61
Figure 4-37. Windows Start Menu - Accessing View Documentation	62
Figure 4-38. Adobe Reader - Displaying a User's Guide	63
Figure 4-39. Windows Start Menu - Accessing Search Documentation	64
Figure 4-40. Virtua Tools Menu	65
Figure 4-41. Search the Virtua Documentation Page	65
Figure 5-1. Oracle Universal Installer Welcome Screen	67
Figure 5-2. Oracle Client Installer - Select Installation Type Screen	68
Figure 5-3. Oracle Client Installer - Select Product Languages Screen	69
Figure 5-4. Oracle Client Installer - Specify Installation Location Screen	70
Figure 5-5. Oracle Client Installer - Available Product Components Screen	71
Figure 5-6. Oracle Client Installer - Perform Prerequisite Checks Screen	72
Figure 5-7. Oracle Client Installer - Summary Screen	73

<i>Figure 5-8. Oracle Client Installer - Install Product Screen</i>	74
<i>Figure 5-9. Oracle Client Installer - Error Message</i>	74
<i>Figure 5-10. Oracle Client Installer - Finish Screen</i>	75
<i>Figure 5-11. Oracle Net Manager - Welcome Screen</i>	77
<i>Figure 5-12. Oracle Net Manager - Tree Structure</i>	78
<i>Figure 5-13. Oracle Net Manager - Net Service Name Wizard Welcome Screen</i>	79
<i>Figure 5-14. Oracle Net Manager - Net Service Name Wizard Protocol Screen</i>	80
<i>Figure 5-15. Oracle Net Manager - Net Service Name Wizard Protocol Settings Screen</i>	81
<i>Figure 5-16. Oracle Net Manager - Net Service Name Wizard Service Screen</i>	82
<i>Figure 5-17. Oracle Net Manager - Net Service Name Wizard Test Screen</i>	83
<i>Figure 5-18. Connection Test Screen - Failure Message</i>	84
<i>Figure 5-19. Log-in Dialog Box</i>	84
<i>Figure 5-20. Connection Test Screen - Confirmation Message</i>	85
<i>Figure 5-21. Oracle Net Manager - Displaying New Local Net Service Name</i>	86
<i>Figure 5-22. Oracle Net Manager - File Menu</i>	87

1. Introduction to the Virtua Installation Guide

This user's guide describes the components of the Virtua™ ILS – Integrated Library System and provides instructions for installing and configuring them. It also describes the procedures for the initial setup of your Virtua database server software. Using this guide, you can install and upgrade the following products:

- Virtua Client
- Virtua Profiler (and the required Oracle Client)
- Virtua Language Editor
- Virtua Documentation

Note:

- Up-to-date installation and upgrade instructions for InfoStation® are available from Innovative at the following password-protected URL: <https://global-support.vtls.com/cs/>.
- From this point on, we will refer to the Virtua ILS – Integrated Library System as simply Virtua or the Virtua system in this guide.

1.1 Understanding the Workflow of the Installation Process

The installation of the Virtua software is a joint procedure between you and Innovative. You are responsible for obtaining and preparing a server to house the Virtua software and database. Innovative provides a default installation of the following:

- Virtua server
- Virtua database
- Chamo
- InfoStation

Generally, it is the responsibility of the library to install and configure *client* applications.

Below are the typical steps involved in an initial installation of the Virtua system and reference the chapter(s) in which each step is discussed.

1. The library prepares a server for the Virtua installation (“[Procedures for the Initial Setup of the Virtua Server and Database](#)”).
2. Innovative installs the server and database files on the library’s server (“[Procedures for the Initial Setup of the Virtua Server and Database](#)”).
3. If the database is an empty database, the library configures the database and loads its records (“[Procedures for the Initial Setup of the Virtua Server and Database](#)”).
4. The library installs the client (PC) applications, such as the Virtua Client (“[Procedures for Installing and Upgrading Client \(PC\) Software](#)”).

This user’s guide offers instructions for each procedure that your library must complete. Before beginning the installation process, read ALL the procedures that apply to your library.

Note: The above list represents a common installation scenario. The steps required by your library may be different. For more information about your installation, contact your project manager.

1.2 About Server Upgrades and Database Updates

Procedures for server upgrades and database updates vary by release. Innovative Customer Services provides instructions for upgrading your Virtua server and updating your database for each general release of Virtua. You can find these password-protected instructions at . . .

<https://global-support.vtls.com/cs/>

If you have questions about upgrading to the most recent version of Virtua, contact your Innovative representative.

1.3 A Word about License Keys

Your Virtua server installation contains an active license key that is set to expire at a certain time. When your license key expires, it becomes invalid, and the **psdriver.exe** program will not accept connections from any source. You can obtain a new key from

Innovative customer services. For information about installing and updating the license key, see the *Virtua System Management Reference Guide*.

1.4 Using this Guide

You can use the list below and the table of contents to locate specific information in this guide. For your easy reference, this guide also contains a table of figures, an index, and a series of appendices. In addition, to facilitate navigation, each chapter begins with a list of headings, each of which is hyperlinked to the appropriate section in the chapter.

<u>For:</u>	<u>See:</u>
A series of diagrams outlining the relationships of the components of the Virtua system	Chapter 2
Information about the initial installation of the Virtua server and database	Chapter 3
Procedures for installing and upgrading client software	Chapter 4

The following appendices provide reference information and/or supplemental procedures:

- [Appendix A “Installing and Working with the Oracle Client”](#)
- [Appendix B “Troubleshooting Installation Procedures”](#)
- [Appendix C “Files Overwritten During a Virtua Client Upgrade”](#)
- [Appendix D “Configuring an Empty Database”](#)
- [Appendix E “Changes in this Guide”](#)

2. Understanding the Components of the Virtua System

Virtua is a three-tier (client/server/database) library system that runs on . . .

- Windows¹ XP, Windows Vista², Windows 7³, and Windows 8 operating systems
- A UNIX-based server
- An Oracle 11 database

The system consists of the following components:

- Virtua server
- Oracle 11g database
- Virtua Client
- Virtua Profiler
- InfoStation, Virtua's Web-reporting subsystem
- Virtua Language Editor
- Chamo, Virtua's Web OPAC

The functions of these components are intertwined. Each of the above depends on the other components to function. This chapter contains diagrams detailing the interactions of the Virtua system. It is important that you understand the basic workings of the system and know where each program is located. Each diagram indicates the general location of the software (client/server/database), how it communicates with other components, and the name and relationship of any related files of each component.

¹ Windows is a registered trademark of Microsoft Corporation in the United States and other countries.

² Windows Vista users may need to download WinHlp32.exe to view Virtua help files:
<http://www.microsoft.com/downloads/details.aspx?FamilyID=6ebcfad9-d3f5-4365-8070-334cd175d4bb&displaylang=en>

³ Windows 7 and 8 users may need to download WinHlp32.exe to view Virtua help files:
<http://www.microsoft.com/downloads/details.aspx?FamilyID=258aa5ec-e3d9-4228-8844-008e02b32a2c&displaylang=en>

2.1 Diagram of Component Interactions in Virtua

Virtua ILS is a complex system consisting of multiple client and server applications. Below are models showing the general relationships among the components of the Virtua ILS and the interactions of each individual application.

Diagram of the Components of the Virtua ILS

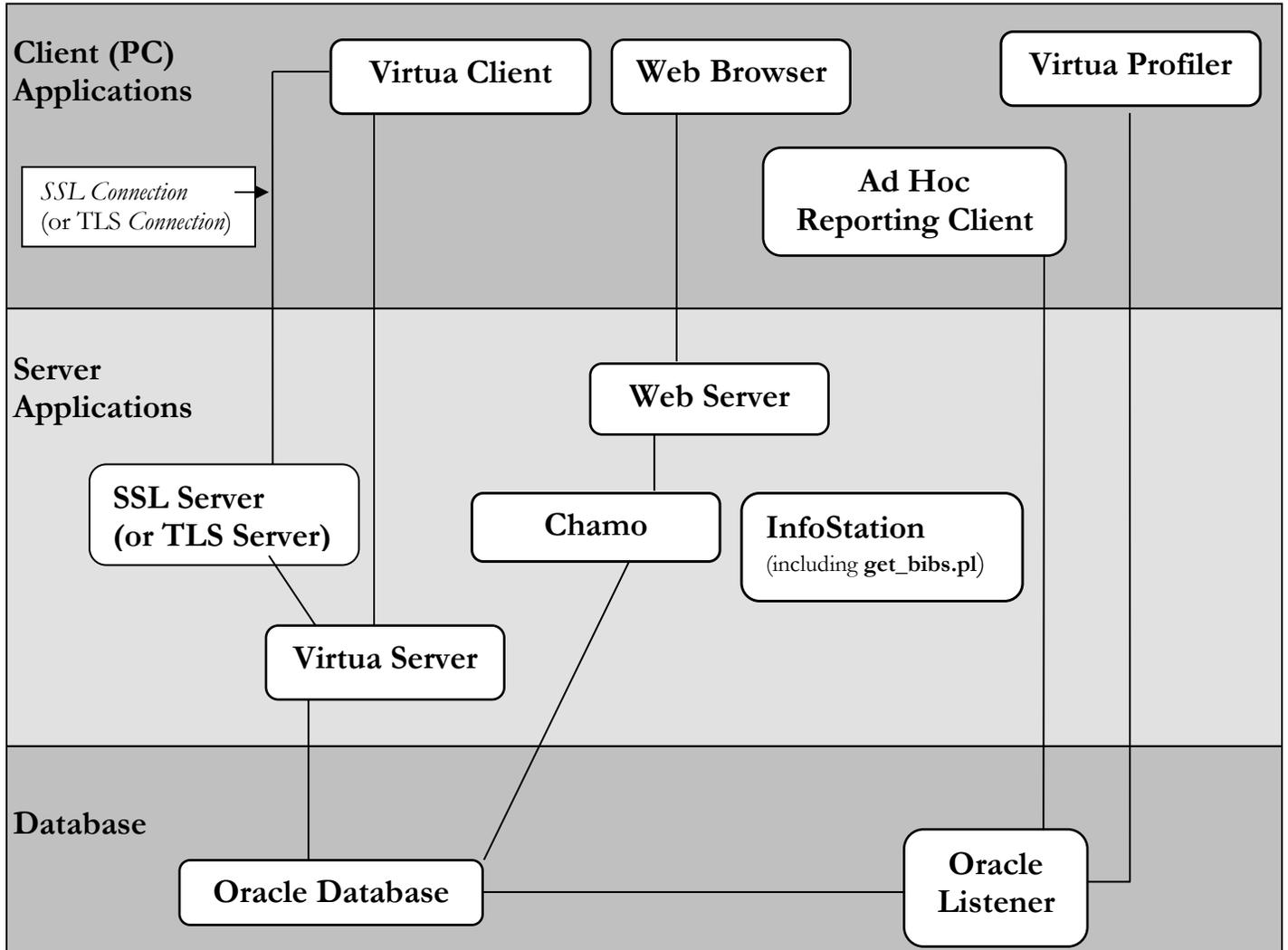


Diagram of the Interactions of the Virtua Client

The Virtua Client is part of a three-tier, client/server/database system.

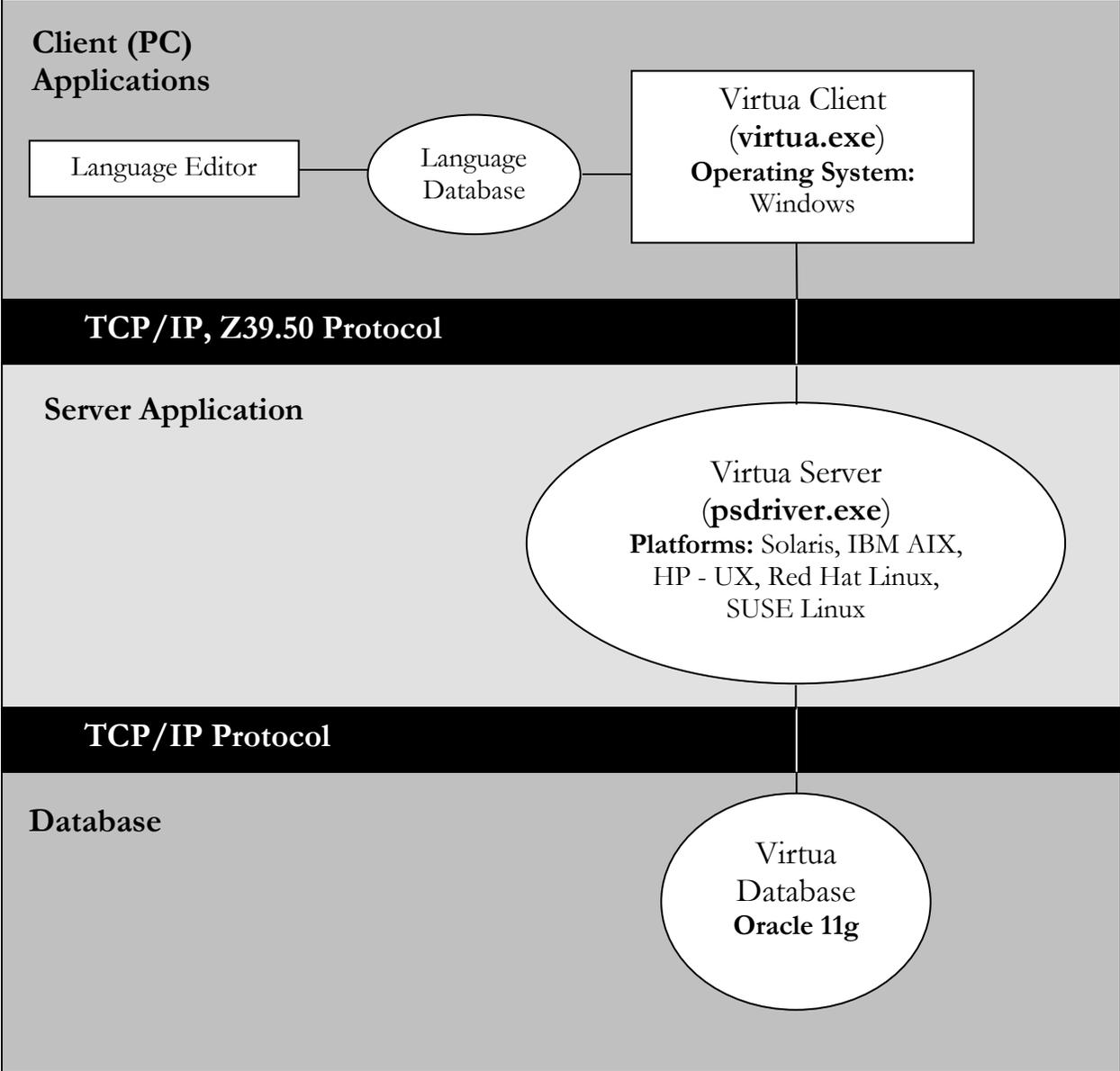


Diagram of the Interactions of the Virtua Profiler

The Virtua Profiler is part of a two-tier, client/database system.

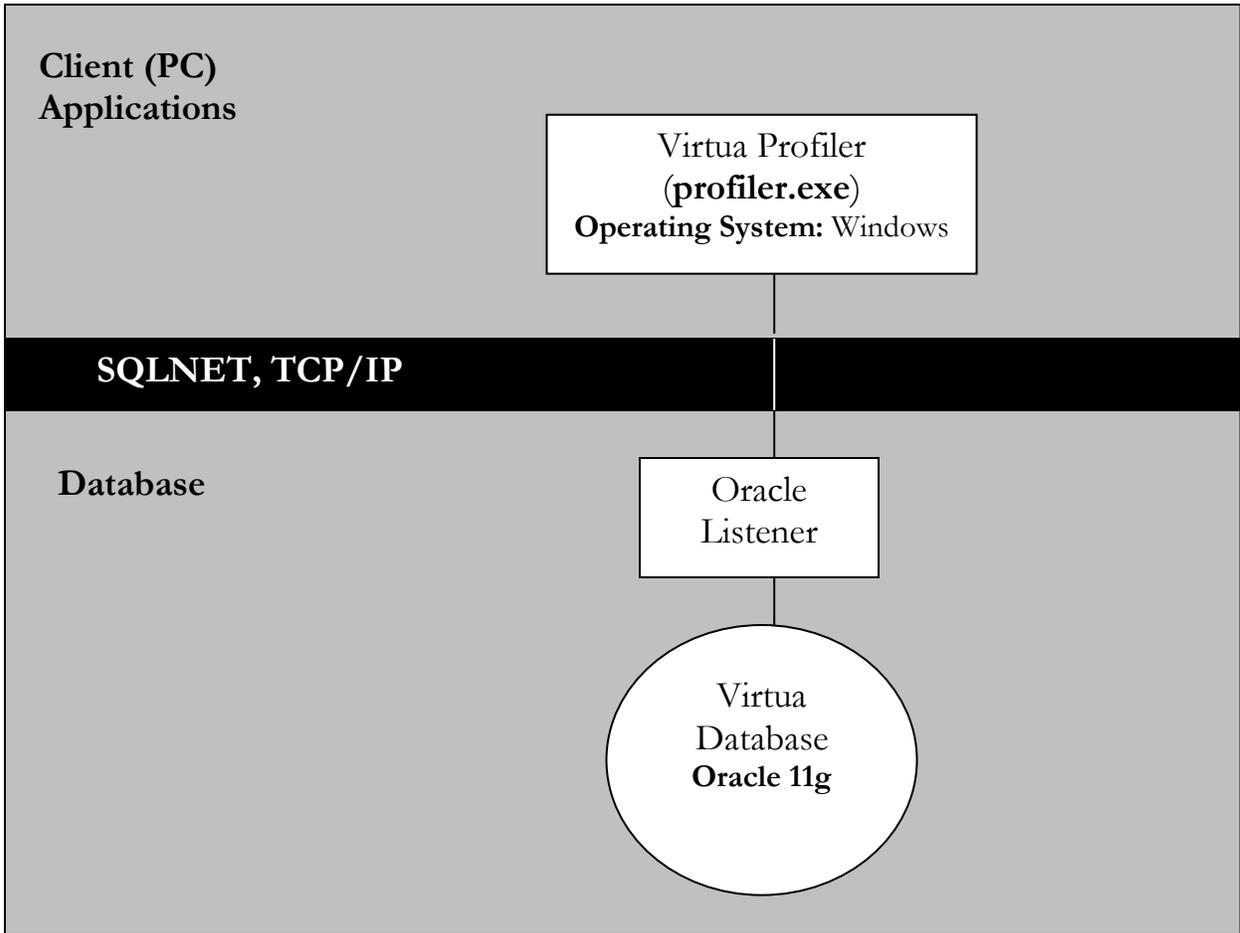


Diagram of the Interactions of Chamo

Chamo is part of the middle (server) tier of a three-tier system.

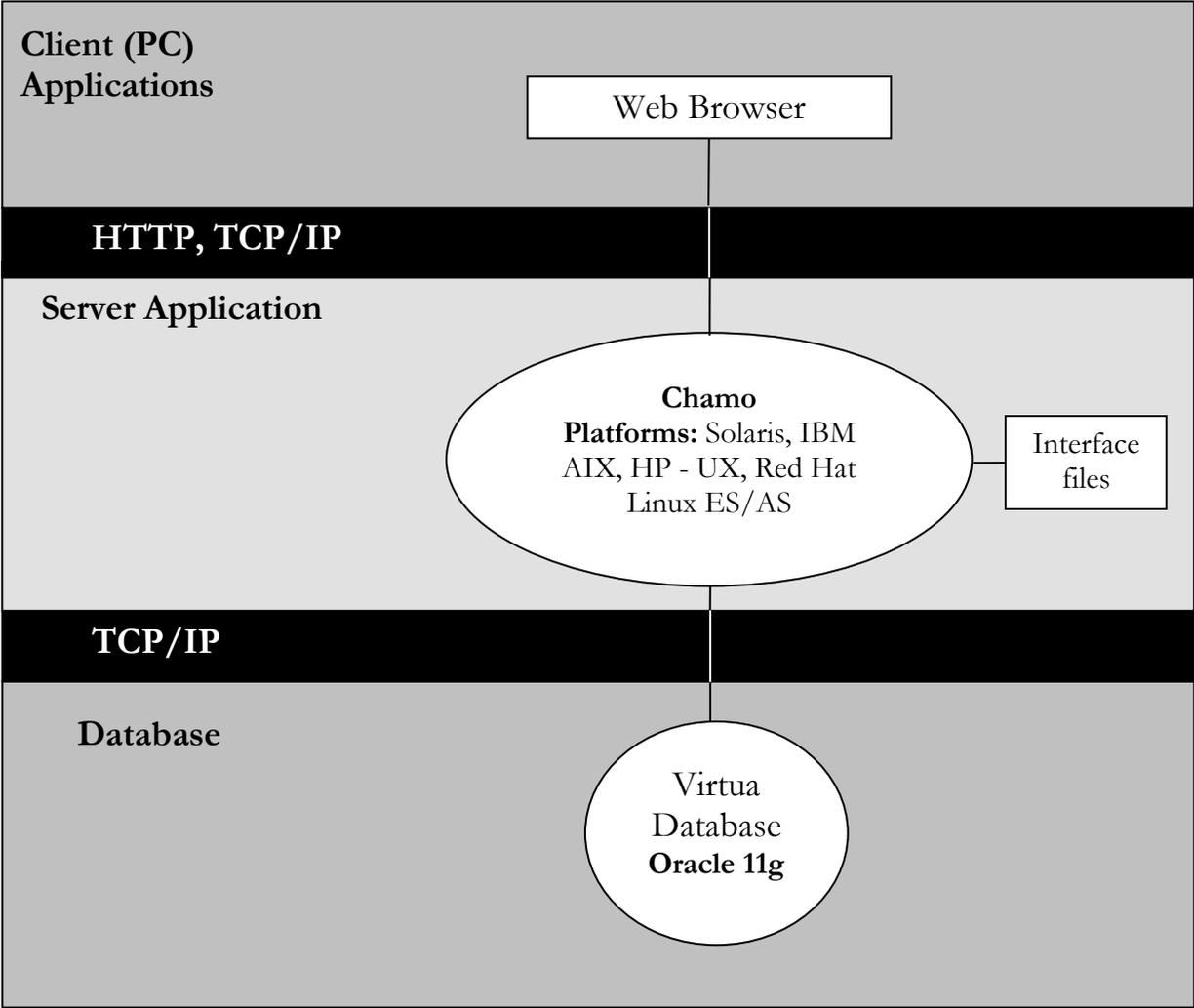
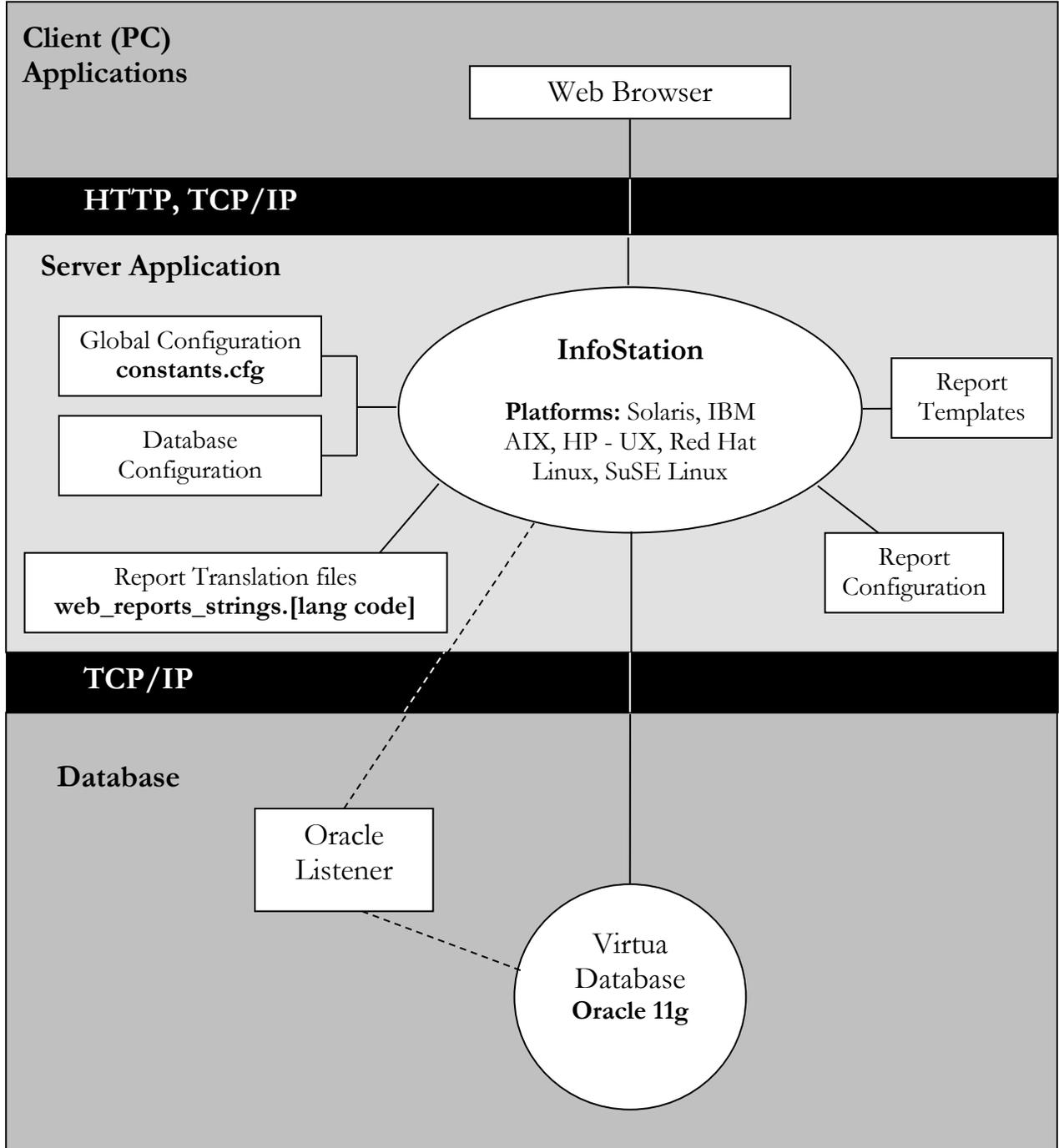


Diagram of the Interactions of InfoStation

InfoStation is part of the middle (server) tier of a three-tier system.



3. Procedures for the Initial Setup of the Virtua Server and Database

There are three major steps to installing and configuring the Virtua server and database:

1. Preparing the server for installation.
2. Installing the software.
3. Configuring the software.

After you complete step 1, Innovative installs the server and database software. Following the installation of the Virtua software, you need to configure the software for use in your library. This chapter provides instructions for completing steps 1 and 3.

This chapter covers the following topics:

- ⇒ [Preparing the Server for Installation of the Virtua Software](#)
- ⇒ [About the Installation of the Virtua Software](#)
- ⇒ [Changing Log-in Passwords and Adding User Accounts](#)

3.1 Preparing the Server for Installation of the Virtua Software

Before Innovative installs the Virtua software, you need to . . .

- Obtain a server that meets at least the minimum system requirements for the Virtua software.
- Create the directories into which Innovative will install the Virtua software.
- Create the **dbadmin** user on your server.
- Set kernel parameters for your server.
- Make default ports accessible to Innovative staff.

3.1.1 System Requirements for the Virtua Server and Database

Virtua software can run on the platforms listed below. Check with your Innovative representative for supported version numbers and the most up-to-date information before making a purchase.

Platform/Operating System	Hardware/CPU	Oracle
Redhat Linux 64-bit, 5.x and 6.x	Intel XEON 64-bit <i>or</i> AMD Opteron 64-bit	11.2.0.3
Solaris X64, 10 Kernel 127112-11 (or higher)	Intel XEON 64-bit <i>or</i> AMD Opteron 64-bit	11.2.0.3
Sun Solaris 10 <i>and</i> Solaris 11	Sun Sparc 64-bit	11.2.0.3
HP-UX 11i version 3 B.11.31	HP UX Itanium	11.2.0.3

Important : If you are using the Virtua web client for circulation, the following platform is supported .

Platform/Operating System	Hardware/CPU	Oracle
Redhat Linux 64-bit, 5.x and 6.x	Intel XEON 64-bit <i>or</i> AMD Opteron 64-bit	11.2.0.3

Important: Contact Innovative before installing any additional OS patches to ensure that they are certified to work properly with the current Virtua software.

You need to make available *at least* 30 GB of disk space for the Virtua server software installation. This is in addition to the space required for your databases. Most libraries configure their server with at least 200 GB or more of disk space. If you do not make enough disk space available, Innovative will not be able to complete the installation. Additionally, if you have an IBM AIX platform, you need to enable large file support prior to the installation of the Virtua software.

Note: If you want to install a clas99 test database, you will need to make available *at least* the same amount of disk space that your clas01 production database is occupying, if not twice as much to store the additional files needed to initially create the database (data exports, back-ups, etc.).

For more information, including minimum recommended server CPU and RAM quantities, contact Innovative.

3.1.2 Creating Virtua Directories

To create and prepare the directories for the Virtua installation,

1. Log in to the server as **root**.
2. Navigate to the **/usr** directory.
3. Type: **mkdir vtls** to create the **/vtls** directory.
4. Type: **chmod 775 vtls**

3.1.3 Creating the dba Group and dbadmin User

Virtua requires one UNIX group and one UNIX user. Before Innovative installs the Virtua software, you need to . . .

1. Create the **dba** group.
2. Create the **dbadmin** user.
3. Change the owner of **/usr/vtls** to the **dbadmin** user.

To make these changes, you need to log in to your server as **root**.

3.1.3.1 Creating the dba Group

To create the dba group,

- At the prompt, type: **groupadd dba**

Note: If you are adding the **dba** group on a Tru64 platform, type **groupadd -g 36 dba**

3.1.3.2 Creating the dbadmin User

Note: Before you create the dbadmin user, you must verify that the ksh shell is installed in your operating system. You can do this by typing "which ksh" at the prompt. If the ksh shell is installed, the server returns the path. If the ksh shell is not present, you must install it before continuing.

To create the dbadmin user,

- At the prompt, type:

```
useradd -g dba -s /usr/bin/ksh -d /usr/vt1s dbadmin
```

3.1.3.3 Changing Ownership of /usr/vt1s

1. Type: `cd /usr` to navigate to the `/usr` directory.
2. Type: `chown dbadmin:dba vt1s`

Ownership of `/usr/vt1s` is transferred from `root` to the `dbadmin` user. At this point, you have finished configuring the dbadmin user. If desired, you can log off the root user.

3.1.4 Setting Kernel Parameters

For the Virtua software to work properly, you need to modify some of the kernel parameters for your server and Oracle 11g database. Below, for each platform, the parameters are listed that need to be set to a value other than the default value. If your platform is not listed, you can leave the values that are already set.

Note:

- These parameters are required defaults for our system.
- After you modify the kernel parameters, you need to recycle the server.
- Kernel parameters may need to be adjusted to support additional databases.

3.1.4.1 Settings for RedHat 5

SEMMSL 250

SEMMNS	32000
SEMOPM	100
SEMMNI	128
SHMALL	2097152
SHMMAX	4 GB - 1 byte, or half the size of physical memory (in bytes), whichever is lower
SHMMNI	4096

3.1.4.2 Settings for Solaris 10

MAX-SEM-IDS	256
MAX-SHM-MEMORY	4294967295

3.1.4.3 Settings for HP - UX Platforms

KSI_ALLOC_MAX	32768
EXECUTABLE_STACK	0
MAXFILES	1024
MAXFILES_LIM	63488
MAX_THREAD_PROC	1024
MAXDSIZ	1073741824 bytes (1 GB)
MAXDSIZ_64BIT	2147483648 bytes (2 GB)
MAXSSIZ	134217728 bytes (128 MB)
MAXSSIZ_64BIT	1073741824 (1 GB)
MAXUPRC	3686
MSGMAP	4096
MSGMNI	4096
MSGSEG	32767
MSGTQL	4096
NCSIZE	35840
NFILE	63488
NFLOCKS	4096
NINODE	34816
NKTHREAD	7184
NPROC	4096
SEMMNS	8192
SEMMNU	4092
SEVMX	32767
SHMMAX	AvailMem or 1073741824 (0X40000000), whichever is greater
SHMMNI	512
SHMSEG	512
VPS_CEILING	64

3.1.5 Opening Ports for the Installation

To allow Innovative to install the Virtua server and database software, you need to make the following ports available to Innovative staff:

- **8000** - Apache Web server
- **1111** - clas01 production database (optional)
- **9999** - clas99 test database

3.2 About the Installation of the Virtua Software

Innovative performs the initial installation of your Virtua server and database software. The installation consists of the following:

- Oracle 11g database
- Virtua server
- Virtua database files with your migrated records loaded and indexed
- OR-
- An empty Virtua database
- Chamo (if purchased)
- InfoStation
- A clas99 test database.

After installing your software, Innovative configures the software to make sure that the server and database are operating correctly.

Note: This list may vary, depending on the options you choose.

3.2.1 Additional Step for Libraries Using the AIX Platform

For installations on the AIX platform where Oracle was not installed on the server prior to installing the Virtua software:

After Innovative installs the software, you need to create Oracle kernel extensions so your system can be configured and tested.

Note: If granted root access to your server, Innovative can do this step for you.

To create Oracle kernel extensions,

1. Request an **rp.tar** package from Innovative.
2. Log in to your server as **root**.
3. Copy the **rp.tar** package to the **/usr/vtls/virtua/ora11** directory.
4. To extract the files, type: **tar -xvf rp.tar**
5. In the **/ora11** directory you extracted the files to, type: **./rootpre.sh**

The script creates Oracle kernel extensions on your server. After you complete this procedure, contact Innovative so that your installation can be completed.

3.2.2 After Innovative Completes the Installation . . .

After Innovative completes the installation of the Virtua software, your Virtua system is ready to use. In addition to standard configuration procedures for the Virtua software, you need to follow the steps in the following section to set the passwords for your system.

Once your system is properly configured, you can begin using the Virtua software by starting the server program **psdriver.exe**. For instructions for running this program, see the *System Management Reference Guide*.

Note: If your installation included an empty database, you must follow the instructions in the appendix “[Configuring an Empty Database](#)” in this user’s guide.

3.3 Changing Log-in Passwords and Adding User Accounts

After the installation of the Virtua software is complete, it is important that you change the default passwords that are installed.

There are two types of passwords that you need to change:

- Virtua user profile passwords
- Oracle passwords

3.3.1 Changing Passwords for Virtua User Profiles

By default, your Virtua database includes the following user profiles:

- root
- staff
- vscadmin
- acqsadmin
- catadmin
- circadmin
- opacadmin
- guest

Important: Initially, the password for each of these users is the same as the username. For example, the password for the **opacadmin** user is **opacadmin**. To prevent unauthorized access to your system, you need to change the password for each of these profiles.

For all Virtua user profiles other than **root**, you can change the password via the Virtua Profiler. For information on changing the password for a Virtua user profile in the Virtua Profiler, see the *Getting Started with the Virtua Profiler Primer*.

You CANNOT change the password for the **root** user in the Virtua Profiler. You must change the **root** password directly in the database via SQLPLUS. For information about changing the password for the **root** user profile, see the *System Management Reference Guide*.

3.3.2 Changing Passwords for Oracle Users

Your Oracle database includes users that have permission to view and alter your Virtua tables. For security reasons, it is important that you change the password for each of these users upon installation.

The Oracle users with access to the Virtua tables are:

- **sys** - An administrative user for Oracle. The default password for **sys** is **change_on_install**
- **system** - An administrative user for Oracle. The default password for **system** is **manager**
- **syscli** - A user created for use with the Virtua Profiler. The default password for **syscli** is **syscli**
- **ctxsys** - A user created for the interMedia application. The default password for **ctxsys** is **ctxsys**

Note: While we recommend that you keep these passwords secure, keep in mind that to maintain and troubleshoot your system, Innovative will periodically need to access your database using these Oracle users.

For instructions for changing passwords for Oracle users, see the *System Management Reference Guide*.

4. Procedures for Installing and Upgrading Client (PC) Software

This chapter provides step-by-step instructions for installing and upgrading Virtua software on your PC. Additionally, instructions are provided for starting each program the first time.

This chapter covers the following topics:

- ⇒ [Installing and Upgrading the Virtua Client](#)
- ⇒ [Installing and Upgrading the Virtua Profiler](#)
- ⇒ [Installing and Upgrading the Language Editor](#)
- ⇒ [Installing and Upgrading the Virtua Documentation in PDF](#)

Note: When you are installing software on a PC with a Windows operating system, you may first have to log in to your PC as Administrator.

4.1 Installing and Upgrading the Virtua Client

The Virtua Client is a versatile interface that provides a custom level of access to the day-to-day functions of the Virtua ILS. Typically, library staff uses the client to perform library functions, such as cataloging, circulating, and ordering materials, while patrons will access the Virtua OPAC via the web-based Chamo.

Virtua supports multiple versions of the client being open simultaneously. This feature is especially useful for copy cataloging between databases on different versions of the software, but it is also useful when you are testing new software or preparing for migrations.

As of Virtua 2010.1, when multiple versions of the Virtua client are installed on your workstation, you will also have multiple versions of the language table on the workstation. This feature is of special benefit to translators. The client now accesses *only* its own language table; no other client installed on the workstation will be able to access that language table. To install a Virtua client alongside another client, during the

installation process, use the Browse button in the InstallShield Wizard to choose a new Destination Folder for the other client.

However, you need to be aware of the following behavior:

- All pre-2010.1 clients will use the language table of the *last* client installed.
- All pre-2010.1 clients will use the path to the Catalog directory of the *last* client installed.

Note: All clients, no matter the version, that are installed on a workstation will use the same shared Windows Registry values. This means that Virtua settings such as Load Options, Cataloging Options, and Circulation Options that are configured on one client will affect the other clients as well.

4.1.1 System Requirements

Before doing the installation, make sure the PC has the following:

- Windows XP, Windows 7 or Windows 8 operating system.
- 150 MB of free disk space before installation; 100 MB after installation (includes space for installing VERICAT, the Virtua record validation program).
- Minimum of 32 MB RAM.
- A TCP/IP connection to the Virtua server.

4.1.2 Installing the Virtua Client

To install the Virtua Client,

1. From whatever media package Innovative provides, run **Setup.exe** or **client_install.exe**.



Figure 4-1. InstallShield Wizard

The InstallShield Wizard window appears, displaying the name and version number of the software (*Figure 4-2*).

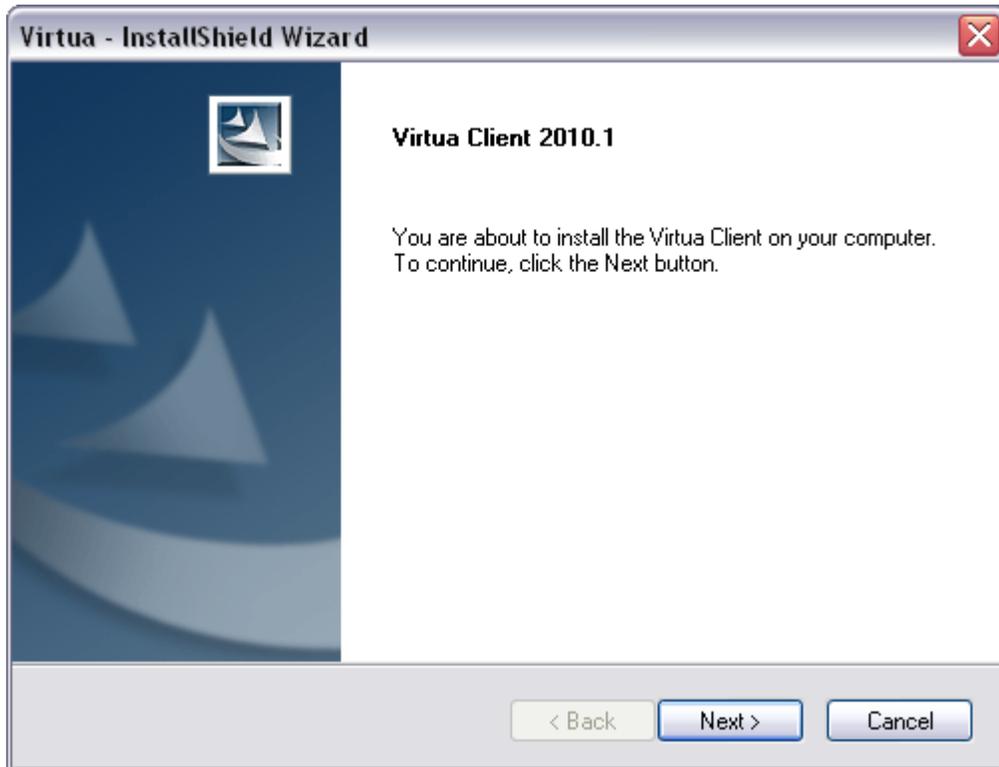


Figure 4-2. InstallShield Wizard - Initial Window (Virtua Client)

Note: If you already have a Virtua client installed on your machine, you will not see the initial window shown in Figure 4-2. Instead, you will see the Welcome window in Figure 4-11, where you can choose the operation (Modify, Repair, or Remove) that suits your needs. See the section “[Upgrading the Virtua Client](#)” for information on upgrading the client from one version to a newer version.

2. On the Virtua Client version number window (*Figure 4-2*), click the Next button to view the Warning window (*Figure 4-3*).



Figure 4-3. InstallShield Wizard - Warning

3. Read the text of the warning, and click Yes to continue to the Destination Location window (*Figure 4-4*).

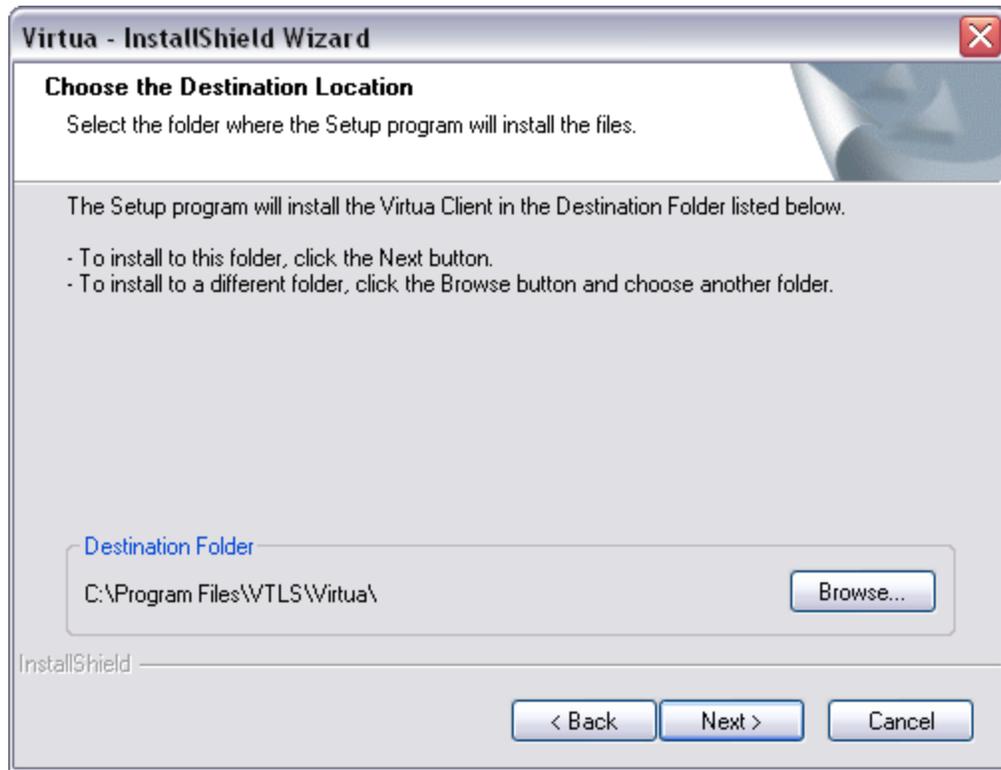


Figure 4-4. InstallShield Wizard -Destination Location Window

4. By default, Virtua is installed in C:\Program Files\VTLS\Virtua. If you want to install Virtua in a different directory, click the Browse button and select a new directory.

Note: The path to the directory in which the Virtua executable (**virtua.exe**) is stored can be no more than 46 characters, including drive name, slashes, underscores, and spaces.

5. Click the Next button to continue to the Component Selection screen ([Figure 4-5](#)).

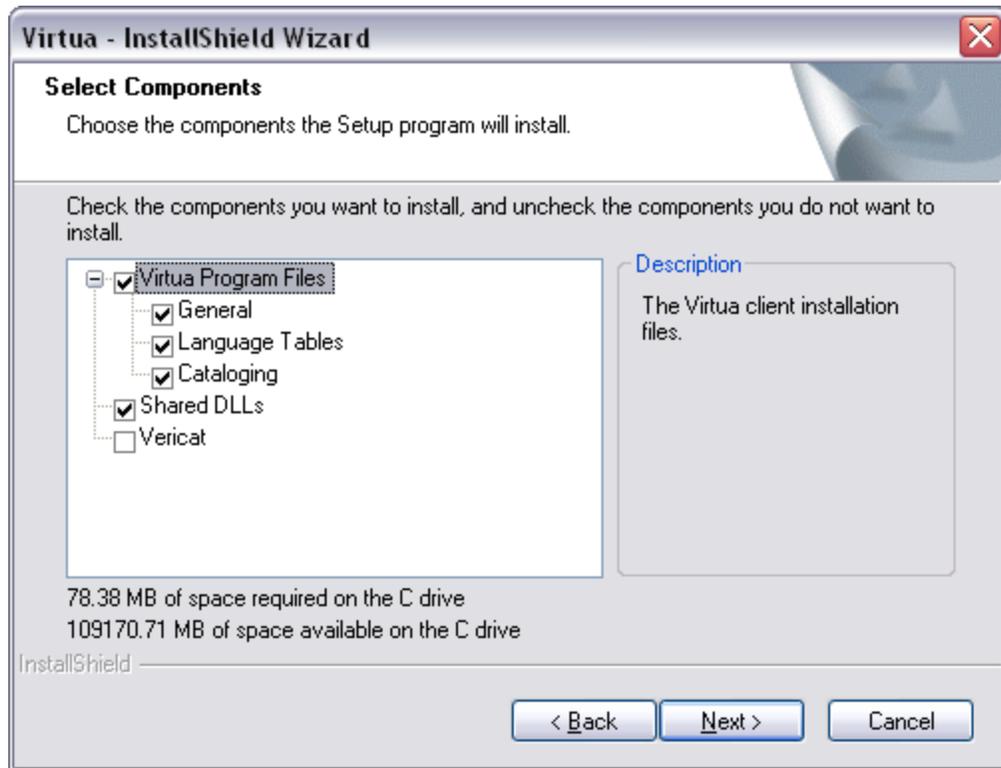


Figure 4-5. InstallShield Wizard - Component Selection Window

6. Select the components you want to install. Your choices consist of the following:
 - **Virtua Program Files** - The files required to run the Virtua Client.
 - **Shared DLLs** - System-required files. If you choose to install the Virtua Program Files, you must install these files.
 - **VERICAT** - A program for validating MARC records. After you install the VERICAT software once, you will not have to install it again. Upon selecting the VERICAT component, the following window appears ([Figure 4-6](#)). To install VERICAT, click the large icon at the left of the window.



Figure 4-6. VERICAT Setup Window

7. If you are not installing VERICAT, on the Component Selection window (Figure 4-5), click the Next button to begin the installation.

The InstallShield Wizard installs the components you chose (Figure 4-7).

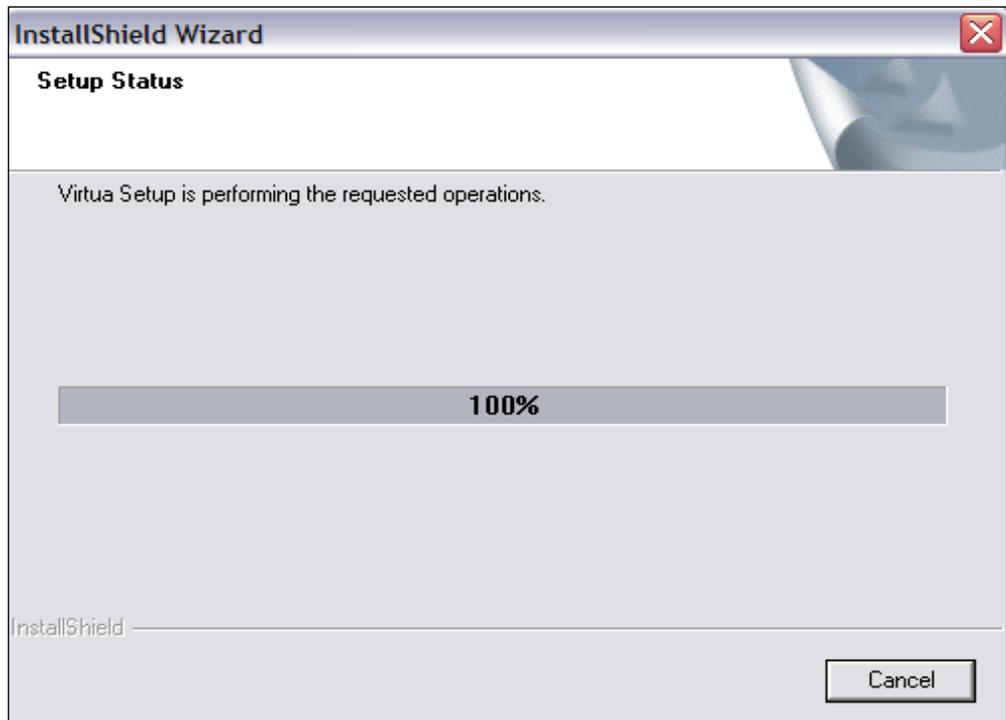


Figure 4-7. InstallShield Wizard - Setup Status Window

You may cancel the installation at any time by clicking the Cancel button. After the InstallShield Wizard completes the installation, a confirmation window appears ([Figure 4-8](#)).

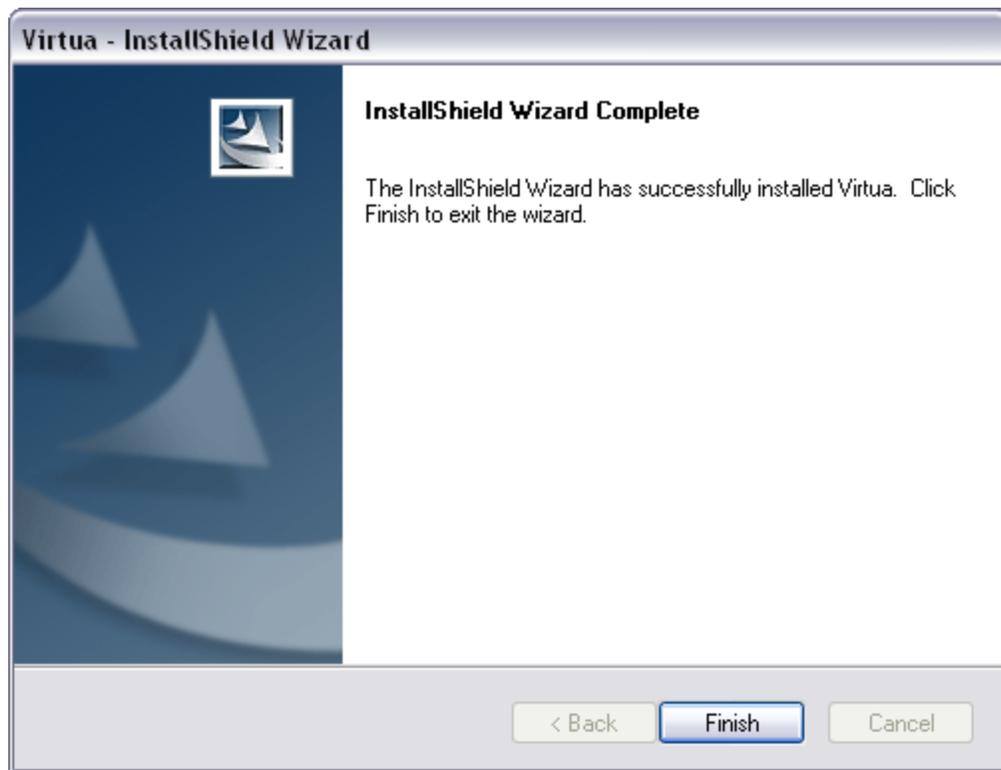


Figure 4-8. InstallShield Wizard - Installation Complete

8. Click the Finish button to end the installation.

After the installation is complete, a shortcut to your Virtua Client appears in the Windows Start menu.

4.1.3 Structure of the Virtua Client Directory

The Virtua Client installation program automatically sets up a directory for the client files. If you wish, you can move the files from this directory to the directory of your choice. In the InstallShield Wizard, if you choose to install VERICAT, InstallShield will set up **\Vericat** under Program Files on your PC.

Important: The Virtua Client installer is configured to set up in the C:\Program Files\VTLS\Virtua directory on your PC. This default configuration started to present problems on the Microsoft Windows 7 and Microsoft Windows 8 operating systems. The problem is that once the Virtua Client is installed and you start to use it, the OS puts edited and newly generated client-based files in the VirtualStore directory (C:\Users\smitha\AppData\Local\VirtualStore\Program Files\VTLS\Virtua) instead of in the C:\Program Files\VTLS\Virtua directory as it used to do. This

behavior is due to Microsoft Windows' new UAC (User Account Control) policy. Some of the files that are affected by this behavior are as follows:

- Trans1.DAT
- circback.ini
- virtua.ini
- Spinelab.txt
- vlang.* and plang.*

This file placement does not occur if you install Virtua in a directory other than C:\Program Files\VTLS\Virtua. Thus if you find this issue bothersome, we recommend that you uninstall the Virtua Client and re-install it outside of the C:\Program Files directory, for example, in C:\VTLS\Virtua. We suggest that you apply this same workaround to the installation of the Virtua Language Editor and the Virtua Profiler.

4.1.3.1 Virtua Client Files and Placement

- 1) If you accept the default installation path, the Virtua Client software is set up in the following default directory: **C:\Program Files\VTLS\Virtua**.

This directory contains the following:

- Virtua executable (**virtua.exe**)
- Virtua initialization file (**virtua.ini**)
- Circulation Backup (**circback.exe**)
- Circulation Backup initialization file (**circback.ini**)
- A variety of text (**.txt** and **.utf**) files and 2709 format (**.rec**) files that serve as default files or forms
- Files associated with spine label generation (**labinput.txt**, **holdlabinput.txt**, **SpineLab.txt**, **HoldSpineLab.txt**, **accesslabelsexample.mdb**, and **virtua.lbl**)
- A text file containing examples of serial prediction patterns (**patterns.txt**)
- A file for use by the ISSN Centre only - **centre_codes-country_codes_uc.rtf**

The directory also contains the following folders:

- **Catalog:** Contains the following files and subfolders:
 - ◆ Cataloging workforms (**.wfm**) and fixed field templates (**.tem**), which are configured the Fixed Field Editor in the MARC Editor. Fixed field template files are available for the 006, 007, 008, and the UNIMARC 1XX fixed fields.

- ◆ Sample local records (**.rec**)
 - ◆ Labels files (e.g., **labels.rec** and **simplelabels.rec**) containing a 2709 MARC format record, which describes the mapping between labels and MARC fields and which is used with the MARC Label Editor.
 - ◆ **Mappings** folder, which holds specifications for mapping specific characters in specific formats to the UTF-8 character set.
 - ◆ **New Fixed Field Files** folder, which holds the four standard template files that define the fixed field editor for the 006, 007, 006, and 1XX (UNIMARC only) tags and template files specific to Library of Congress.
 - ◆ **New Workforms** folder, which holds a set of the most up-to-date predefined workforms.
 - ◆ **NSSAW** folder, which contains files specific to the National Library of Wales.
 - ◆ **Validate** folder, which holds the rules files (**.val**) for MARC record validation.
- **DBTables:** Contains the Language folder, which stores the language database files and indexes used by the Virtua Language Editor for the Virtua Client (**vlang.***) and for the Virtua Profiler (**plang.***). For information about using these files to translate interface strings in both programs, see the *Virtua Translation and String Customization Guide*.
 - **Help:** Contains a general help file (**virtua.hlp**), which provides right-click, context-sensitive help for client features; user permissions help files (**permissions.hlp** and **permissions.cnt**), which describe how to set visible user permissions for client features; and concise MARC Format online help (**.hlp**) files and their contents (**.cnt**) files for the various 2709 formats.
 - **New Files:** Text files associated with Acquisitions functions. Files in this directory are overwritten with each installation to ensure that you will have the most recent versions. For more information on these files, see the *Virtua Acquisitions User's Guide*.
- 2) Files that support the VERICAT Utilities are set up in the following directory:
C:\Program Files\Vericat

4.1.3.2 The `virtua.ini` File

The `virtua.ini` file contains the following information:

- The entry `srvsetup=1` to allow the display of the Setup button on the Connect to Server window.

Note: You can block access to the Connect to Server window on a PC by changing the `1` to a `0`.

- List of available “tools” or programs such as Notepad and the Documentation Search Engine.
- List of available servers including the IP address or host name and port number.

You can modify the server list and create a list of available “tools” directly in the `virtua.ini` file. To do this, just open the file in a text editor. For details, see the *Virtua Getting Started Primer*.

You can also modify the list of servers using the client interface. To do this, just click the Setup button on the Connect to Server window after launching the client. For details, see the *Virtua Getting Started Primer*.

4.1.4 Starting the Virtua Client

To start the Virtua Client,

- Click the Virtua Client icon in the Windows Start menu.

The Connect to Server window appears (*Figure 4-9*)



Figure 4-9. Virtua Client - Connect to Server Window

Before you can proceed, you need to configure Virtua to access one or more servers. If you are configuring access to the Virtua server application (**psdriver.exe**), you need to be sure that your configuration specifies the port on which the Virtua server is running.

Note:

- For information on configuring the Virtua Client to connect to a server, see the *Virtua Getting Started Primer*.
- For instructions for running the Virtua server software on a given port, see the *System Management Reference Guide*.

4.1.4.1 About Client/Server Compatibility

It is important that you connect to the Virtua server with the same version of the Virtua Client. If you attempt to connect to the Virtua server with a different version of the Virtua Client, you might experience problems performing tasks and, in some cases, corrupt data.

When you connect to a server with a client that has a different version number, a warning message appears that indicates the version of your client and server ([Figure 4-10](#)).



Figure 4-10. Version Mismatch Warning Message

Virtua will not allow you to access one version of a database (e.g., 2010.1) with a significantly different version of the Virtua client (e.g., 2010.2). However, you can work around this by telling the Virtua client to connect to the database as a generic Z39.50 server, which will give you fewer privileges in respect to viewing and modifying the database. For information on how to do this, see the *Virtua Client Getting Started Primer*.

4.1.5 Upgrading the Virtua Client

If you want to keep the previous Virtua client on your machine along with the upgraded version, first copy the VTLS\Virtua directory and give it a new name such as **VTLS\Virtua_Old**. Then install the upgraded version of the client in the default Virtua directory.

To upgrade your Virtua client,

1. Double-click the **client_install.exe** executable.

The InstallShield Wizard welcome window appears. If you are upgrading to a minor build; e.g., if you are upgrading from 2010.2 to 2010.2.1, the maintenance program window appears ([Figure 4-11](#)).



Figure 4-11. InstallShield Wizard -Welcome

2. Select the radio button that suits your needs.

Important: If you want to remove the client, you **MUST** use the same version of the installer as the version of the client you are uninstalling. If you no longer have the installation package you used to install the current version of the Virtua client, contact Innovative for a replacement.

3. Click the Next button.

InstallShield modifies, repairs, or removes the previous Virtua Client installation.

Hint: If you are doing a *removal*, and the InstallShield Wizard asks you if it should delete shared or read-only files, answer Yes.

4. On the Completion window, click the Finish button.

4.2 Installing and Upgrading the Virtua Profiler

Important: The Virtua Profiler is intended for use by system administrators and is not recommended for installation on public workstations.

The Virtua Profiler is a graphical user interface that lets you configure the Virtua system by modifying parameters and user permissions. The Virtua Profiler connects to the parameters in your Oracle database via a Net connection. Before you can use the Virtua Profiler, you need to install the Oracle Client and use the Oracle Net Configuration Assistant to set up a Local Net Service Name for your database. For instructions on using the Oracle Net Configuration Assistant to configure a Local Net Service Name, see the appendix “[Installing and Working with the Oracle Client](#)” in this user’s guide.

The Virtua Profiler supports multiple versions of the language table installed on the same workstation at the same time. This feature is of special benefit to translators. The Virtua Profiler accesses *only* its respective (e.g., 2013.1) language table, and this is the case for every Profiler version subsequent to 2010.1.

4.2.1 System Requirements: Virtua Profiler

Before installation, make sure the PC has the following:

- Windows XP, Windows 7, or Windows 8 operating system.
- Oracle Net Configuration Assistant (part of the Oracle Client software)
- 65 MB of free disk space
- Minimum of 64 MB RAM

4.2.2 Installing the Virtua Profiler

To install the Virtua Profiler,

1. From whatever distribution package provided for the Virtua Profiler, run **Setup.exe**.



Figure 4-12. InstallShield Wizard

The InstallShield Wizard window appears, displaying the version number of the Virtua Profiler software ([Figure 4-13](#)).

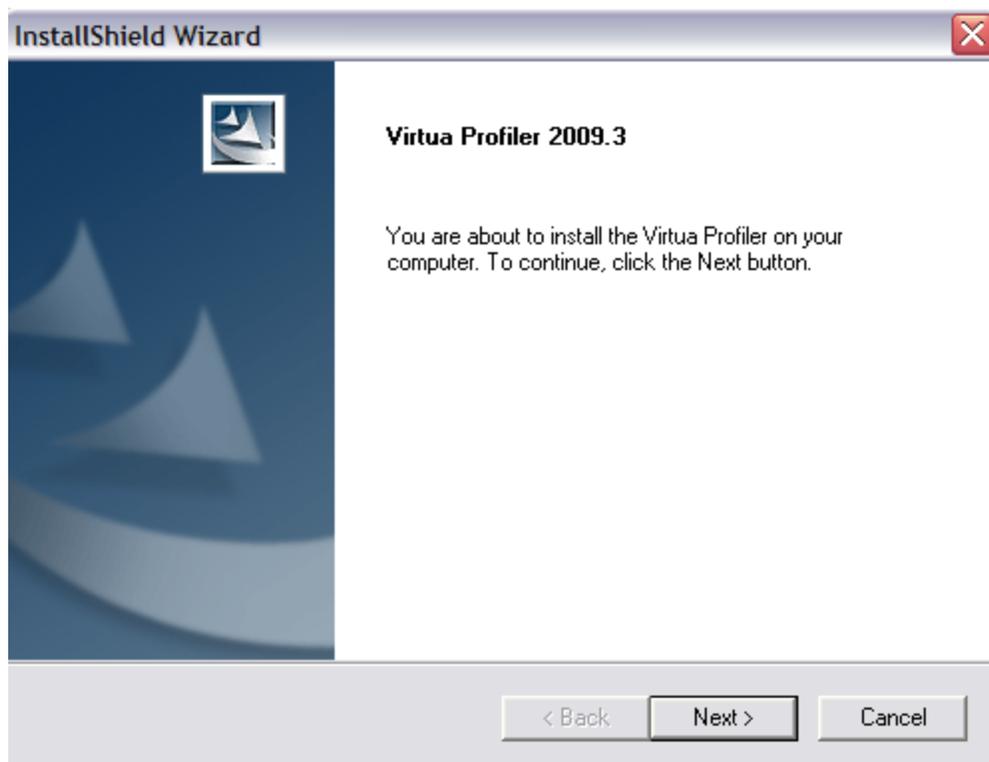


Figure 4-13. InstallShield Wizard - Initial Window (Virtua Profiler)

2. Click the Next button to go to the Destination Location window ([Figure 4-14](#)).

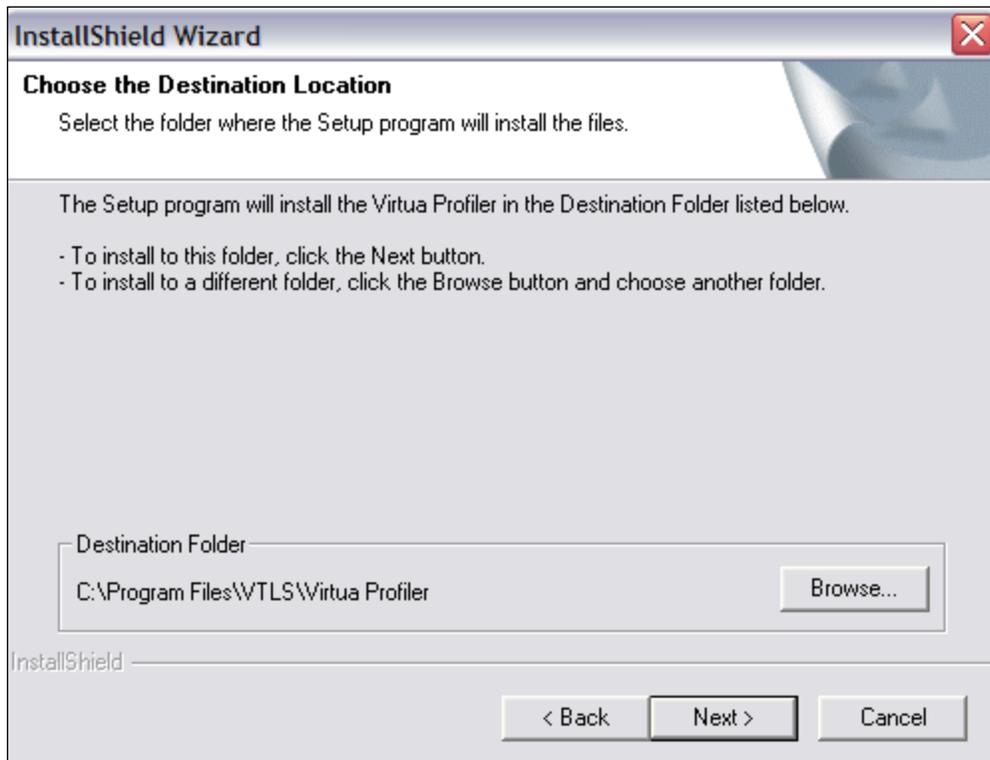


Figure 4-14. InstallShield Wizard - Destination Location Window

3. By default, the Virtua Profiler is installed in C:\Program Files\VTLS\Virtua Profiler. If you want to install the Virtua Profiler in a different directory, click the Browse button and select a new directory.
4. Click the Next button to begin the installation.

After the installation is complete, a shortcut to the Virtua Profiler appears in the Windows Start menu.

4.2.3 Structure of the Virtua Profiler Directory

If you accepted the default installation path, the Virtua Profiler software is set up in the following default directory:

C:\Program Files\VTLS\Virtua Profiler

If you prefer, you can choose a different directory during installation (see the Important note in the section “[Structure of the Virtua Client Directory](#)”).

The Virtua Profiler directory contains the following files and executables:

- Virtua Profiler executable (**profiler.exe**)
- Virtua Profiler help file (**profiler.hlp**)
- Profiler Permissions help files (**permissions.hlp** and **permissions.cnt**)
- RoboHelp DLL files required to display the Virtua Profiler pop-up help (**ROBOEX32.DLL** and **INETWH32.DLL**)
- The file that stores the permissions definitions (**Release XX permissions.prf**)

The directory also contains one folder:

- **Views:** Contains the default View records for each entity. You can access these records via the MARC View Editor, which is a standalone program that is integrated into the Virtua Profiler.

4.2.4 Before Starting the Virtua Profiler

Before you use the Virtua Profiler, you *must* do the following:

- Configure a Local Net Service Name on your PC for each database to which you want to connect with the Virtua Profiler. For information on creating a Local Net Service Name, see the appendix “[Installing and Working with the Oracle Client](#)” in this user’s guide.
- Have the Oracle Listener running on your database. The Oracle Listener, installed as part of the Oracle *server* software, “listens” for requests from applications such as the Virtua Profiler. For instructions on starting the Oracle Listener, see the *System Management Reference Guide*.
- Set the Regional Settings on your PC to display dates with a four-digit year. For details, see the section “[Choosing an Appropriate Date Format](#).”

4.2.4.1 Choosing an Appropriate Date Format

To use the Virtua Profiler, you need to set your short date format to display a four-digit year.

To set the proper Date format,

1. Click the Start button.
2. Choose Settings.

3. Choose Control Panel.
4. Double-click the icon for Regional Settings.
The Regional Settings Properties window appears.
5. Click the Date tab.
6. In the pull-down list box labeled Short Date Style, choose a date format with a four-digit year.
7. Click the OK button.

4.2.5 Starting the Virtua Profiler

Important: Before you use the Virtua Profiler, you need to install the Oracle Client. For each database you want to access using the Virtua Profiler, you need to use the Oracle Net Configuration Assistant to configure a Local Net Service Name on your PC. You will NOT be able to use the Virtua Profiler until you configure at least one Local Net Service Name. For instructions on installing the Oracle Client and configuring a Local Net Service Name, see the chapter “[Installing and Working with the Oracle Client](#)” in this user’s guide.

To start the Virtua Profiler,

- Click the Virtua Profiler icon in your Windows Start menu.

The Virtua Profiler main window appears (*Figure 4-15*).

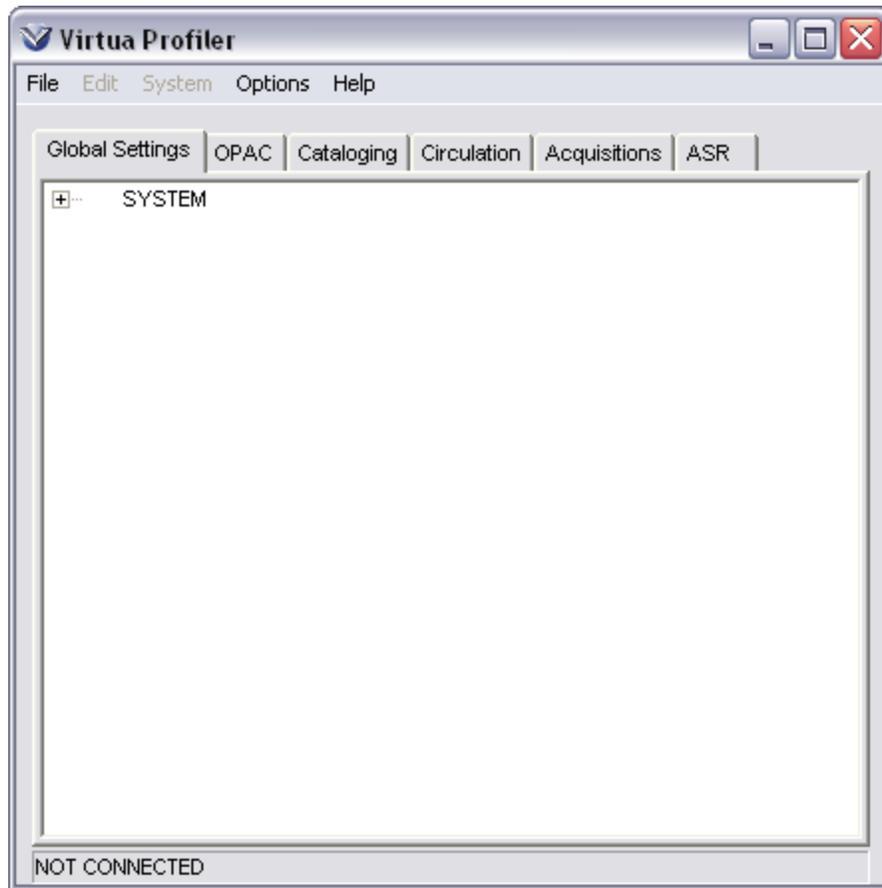


Figure 4-15. Virtua Profiler Main Window

At the bottom of the window, the status bar displays NOT CONNECTED, indicating that you are not yet connected to the database.

To log in to the Oracle database and to Virtua,

1. On the menu bar, click File.
2. Choose Connect.

The Log-in dialog box appears ([Figure 4-16](#)), showing two log-in areas, one for Oracle and one for Virtua.

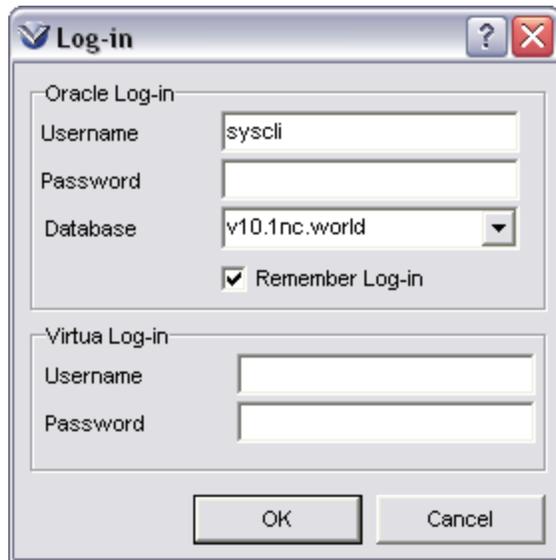


Figure 4-16. Oracle Log-in Dialog Box

3. In the first Username text box, type **syscli**.
4. In the first Password text box, type the password for the **syscli** user.
5. In the Database pull-down list box, select a database to which you want to connect. **Tip:** This list box contains the Local Net Service Names you configured with the Oracle Net Configuration Assistant.
6. If you want the system to remember the Username and Database settings at the next log-in, click the Remember Log-in check box.
7. In the second Username text box, type the username for your Virtua user profile, such as **staff**.
8. In the second Password text box, type the password for the username you typed in the previous step.
9. Click the OK button.
-OR-
Press the Enter key.

If Virtua is able to validate your user profile, it initializes and configures the main window of the Virtua Profiler according to the user permissions assigned to your Virtua user profile (*Figure 4-17*).

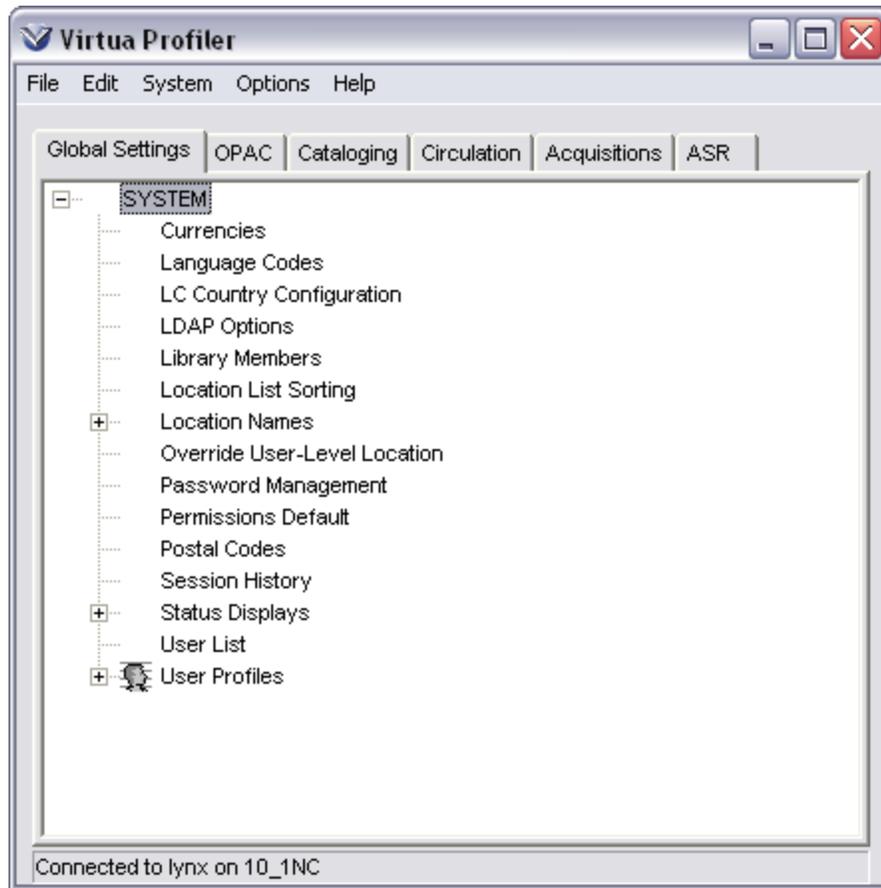


Figure 4-17. *Virtua Profiler Main Window*

At this point, to ensure that your database is up to date, use the Import New Permissions feature, which is on the File menu, to import the file of current permissions associated with a given version of the Virtua client (for details, see the *Virtua Profiler/Global Settings User's Guide*).

For details about using the Virtua Profiler, see the *Getting Started with the Virtua Profiler Primer*.

4.2.6 Upgrading and Uninstalling the Virtua Profiler

The Virtua Profiler installation program lets you upgrade the Profiler using the installation program for the version of the Profiler to which you are upgrading. Innovative recommends that you use this method to upgrade the Profiler.

You can also uninstall the Virtua Profiler and then reinstall the version of the Profiler to which you would like to upgrade. To do this, follow the instructions in the sections “[Uninstalling the Virtua Profiler](#)” and “[Installing the Virtua Profiler](#)” in this guide.

Important: After you install the new version of the Profiler, to ensure that your database is up to date while maintaining its customized aspects, you *must* use the Import New Permissions feature to import the file of current permissions associated with a given version of the Virtua client (for details, see the *Virtua Profiler/Global Settings User's Guide*).

4.2.6.1 Upgrading the Virtua Profiler

To upgrade the current version of the Virtua Profiler,

1. Double-click the **profiler_install.exe** installation icon for the new version of the Virtua Profiler, or use your preferred method to run the **profiler_install.exe** executable.

The following dialog box appears:

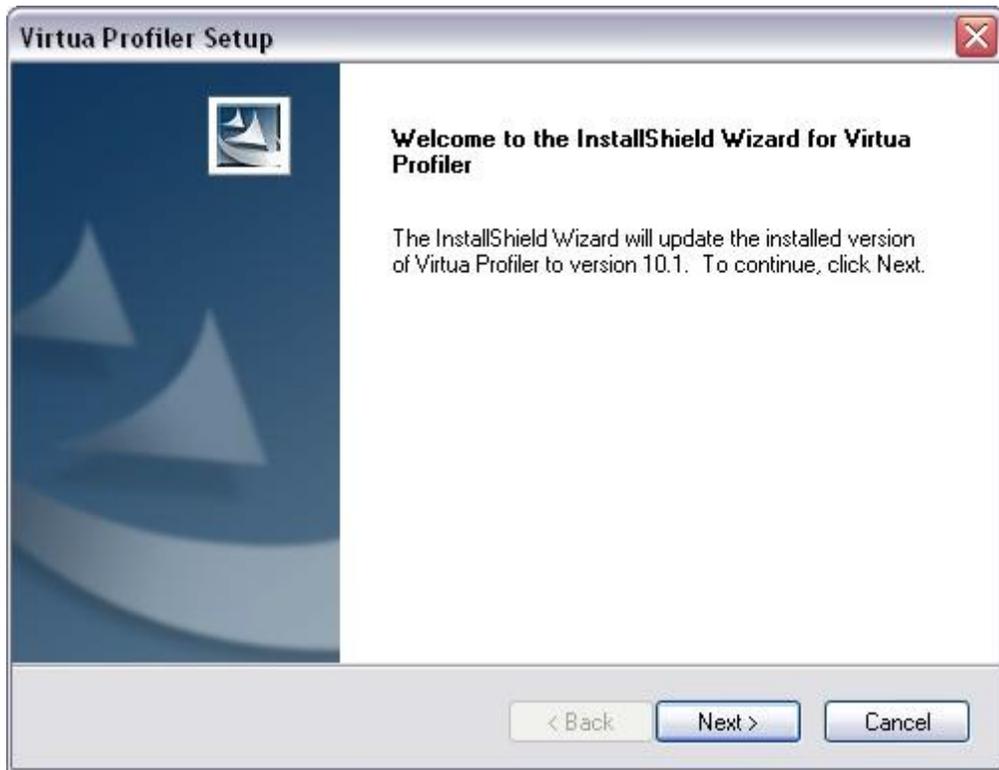


Figure 4-18. Virtua Profiler Upgrade Message

2. Click the Next button.

The installer starts to upgrade your Profiler installation (*Figure 4-19*).



Figure 4-19. Profiler Upgrade Intermediate Window

When the upgrade is complete, the installer displays an informational window (Figure 4-20).

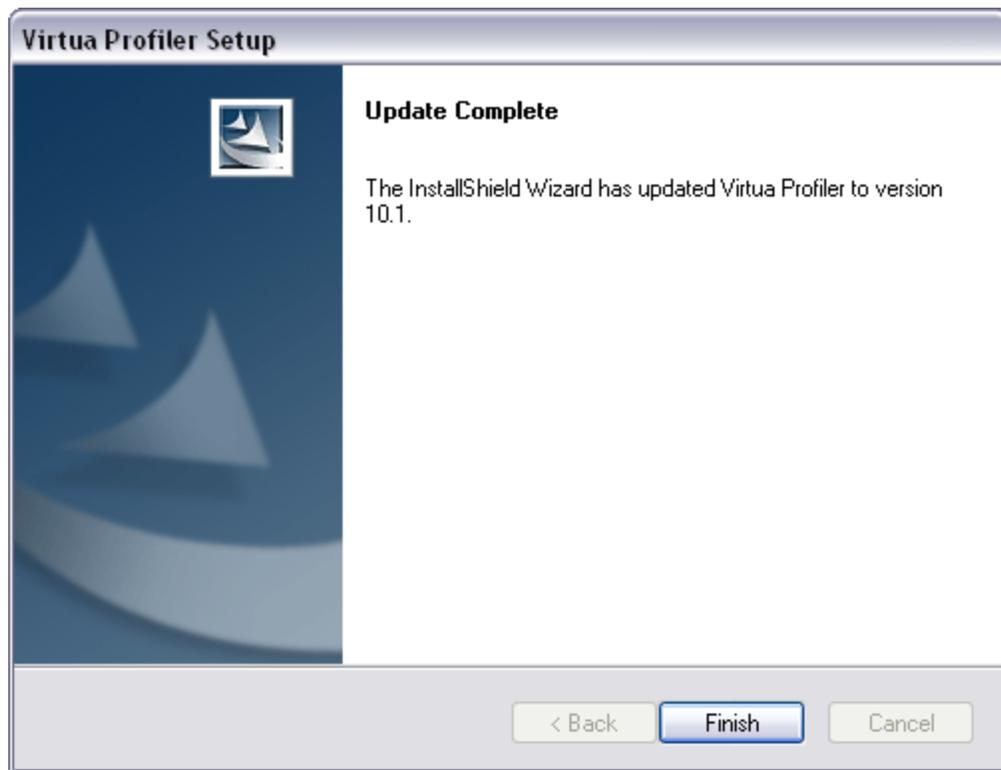


Figure 4-20. Profiler Installer Upgrade Complete Window

3. Click the Finish button.

The new Virtua Profiler version is available for use.

4.2.6.2 Uninstalling the Virtua Profiler

To uninstall the current version of the Virtua Profiler,

1. Double-click the **profiler_install.exe** installation icon on your desktop for the same version of the Virtua Profiler you are uninstalling, or use another method to run the **profiler_install.exe** executable.

Important: You MUST use the same version of the installer as the version of the Profiler you are uninstalling. If you no longer have the installation package you used to install the current version of the Virtua Profiler, contact Innovative for a replacement.

A dialog box appears asking if you want to remove the program.

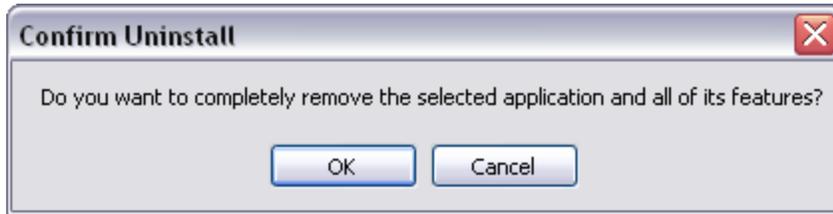


Figure 4-21. Confirm Application Uninstall

2. Click the OK button.

The installer removes the Virtua Profiler from your computer.

4.3 Installing and Upgrading the Virtua Language Editor

The Virtua Language Editor is a client program through which you can translate the language strings used in the Virtua Client. For information about the Language Editor, see the *Virtua Translation and String Customization Guide*.

4.3.1 Installing the Language Editor

To install the Virtua Language Editor,

1. From whatever distribution package provided for the Language Editor, run **Setup.exe**.

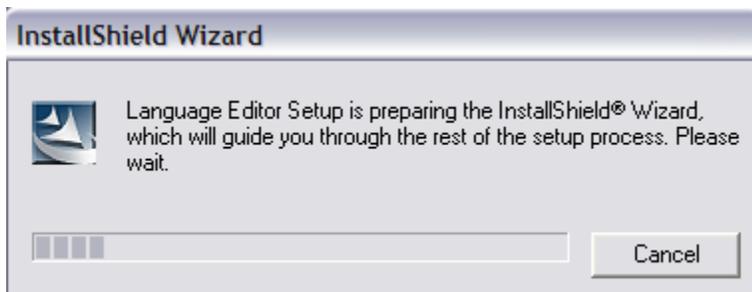


Figure 4-22. InstallShield Wizard

The InstallShield Wizard window appears, displaying the name and version number of the software ([Figure 4-23](#)).

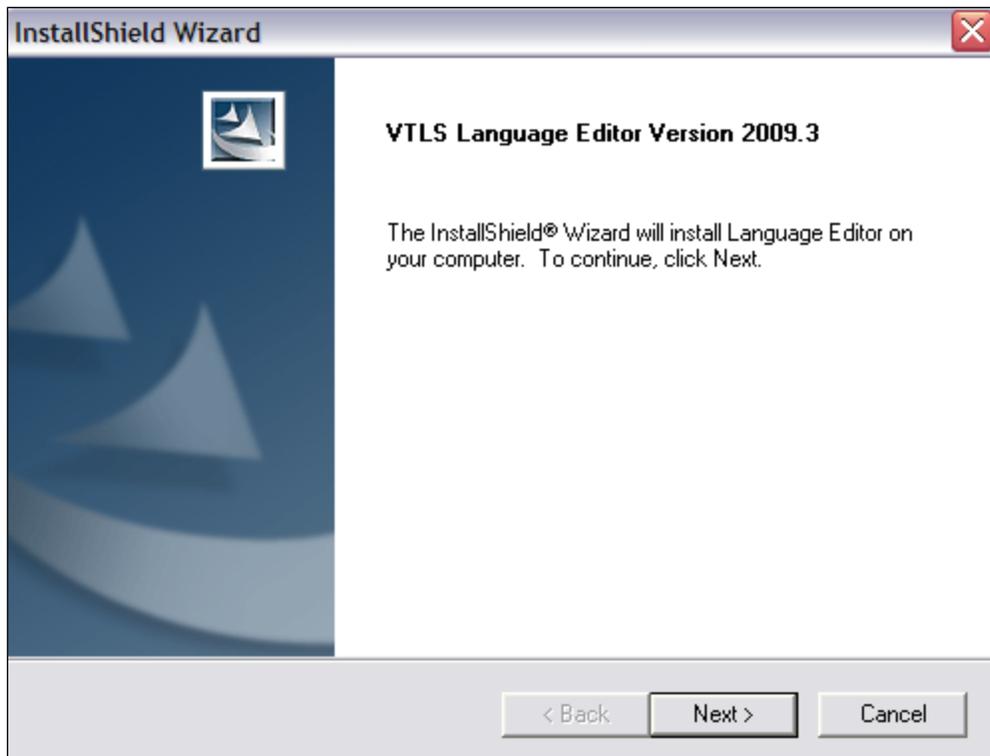


Figure 4-23. InstallShield Wizard - Initial Window

2. Click the Next button to view the Destination Location window (*Figure 4-24*).

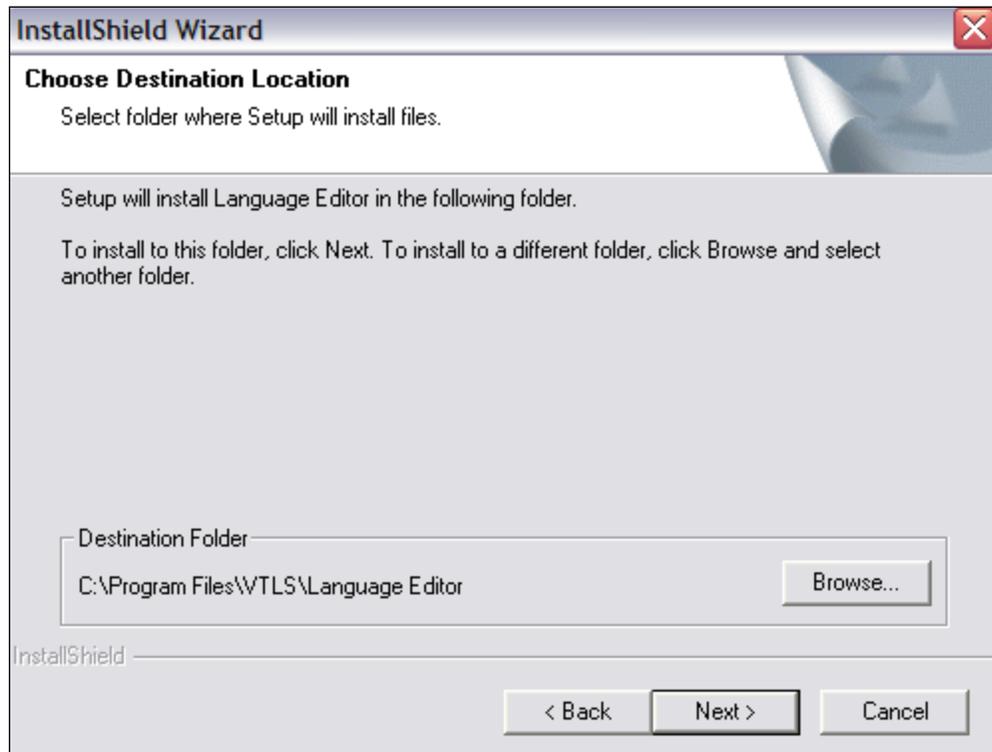


Figure 4-24. InstallShield Wizard - Destination Location Window

3. By default, the Language Editor is installed in C:\Program Files\VTLS\Language Editor. If you want to install the Language Editor in a different directory, click the Browse button and select a new directory (see the Important note in the section “[Structure of the Virtua Client Directory](#)”).
4. Click the Next button to begin the installation.

The InstallShield Wizard installs the Language Editor.

After the InstallShield Wizard completes the installation, a confirmation window appears ([Figure 4-25](#)).

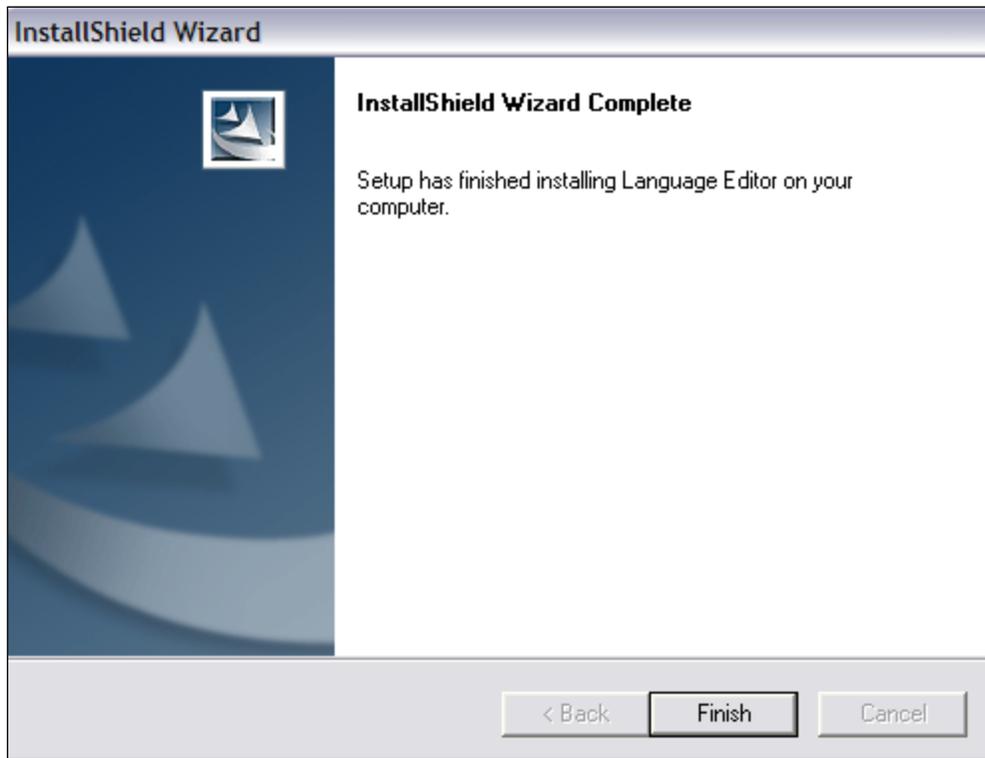


Figure 4-25. InstallShield Wizard - Installation Complete

5. Click the Finish button to end the installation.

After the installation is complete, a shortcut to your Virtua Language Editor appears in the Windows Start menu.

To start the Virtua Language Editor,

1. Click the Virtua Language Editor icon in your Windows Start menu.

The Virtua Language Editor window appears ([Figure 4-26](#)).

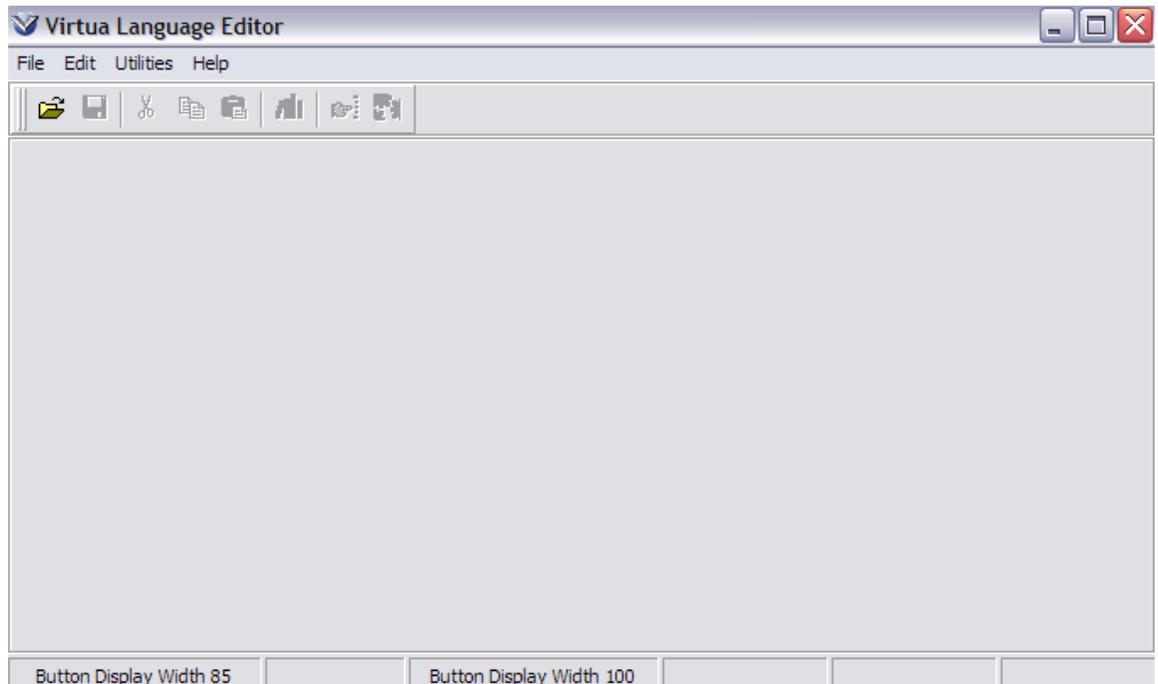


Figure 4-26. Virtua Language Editor

2. Using the File menu or the Open Project toolbar icon, open an existing language table to edit or translate.

4.3.2 Upgrading the Virtua Language Editor

When installing an upgraded version of the Virtua Language Editor, we recommend that you uninstall the older version of the Language Editor before installing the new version.

Once you have uninstalled the Virtua Language Editor, you can install the new version of the software by following the instructions in the section “[Installing the Language Editor](#)” in this user’s guide.

4.3.2.1 Uninstalling the Virtua Language Editor

To uninstall the current version of the Virtua Language Editor,

1. Click Start.
2. Choose Settings.
3. Choose Control Panel.
4. Double-click the Add/Remove Programs icon.
5. On the Add/Remove Programs window, highlight Language Editor in the list box.
6. Click the Change/Remove button.

A dialog box appears, asking you if you want to remove the Language Editor (*Figure 4-27*).

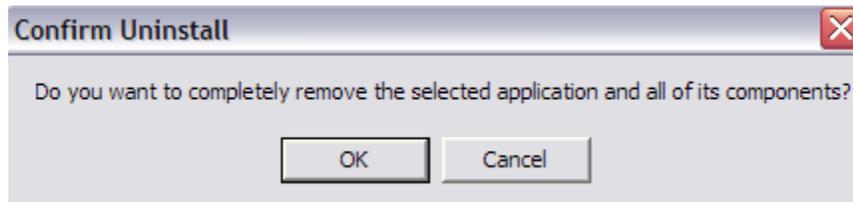


Figure 4-27. Confirm File Deletion

7. Click the OK button.

InstallShield removes the Language Editor from your computer.

4.4 Installing and Upgrading the Virtua Documentation in PDF

Virtua offers a separate executable that installs the Virtua documentation in PDF format on your PC and works in conjunction with the Adobe® Reader. The Documentation Installer gives you the ability to select the guides that you want to install. It also lets you search the user's guides using keywords.

You can access the Virtua documentation for viewing or searching via the Windows Start menu or from an icon on your desktop. You can also search the documentation by accessing the Documentation Search Engine from the Tools menu in the Virtua client.

Important: Always install the Adobe Reader *before* you install the Virtua documentation.

4.4.1 Installing the Virtua Documentation

To install the Virtua documentation in PDF,

1. From whatever media package Innovative provides, run **doc_inst.exe**.

Note: The Virtua Documentation Installer is also available for download from the Innovative support site <https://global-support.vtk.com/cs/>

The Virtua Documentation - InstallShield Wizard window appears (*Figure 4-28*).

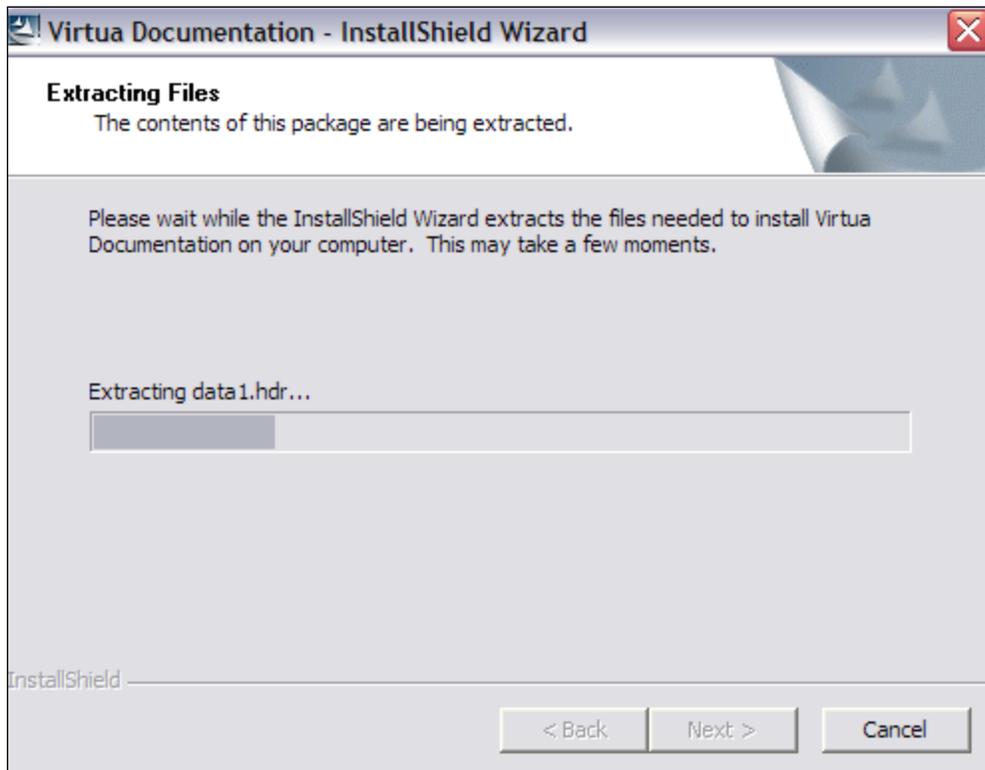


Figure 4-28. InstallShield for Virtua Documentation (1)

2. Click the Next button to begin the installation process (Figure 4-29 and Figure 4-30).

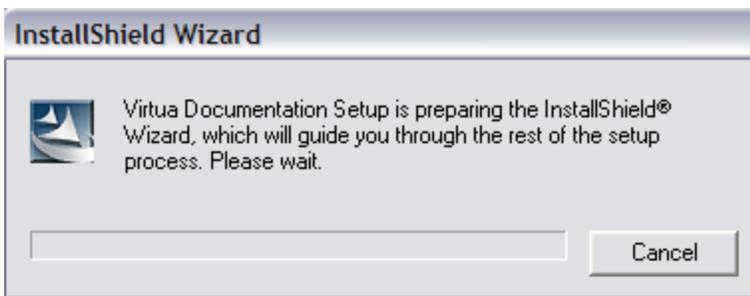


Figure 4-29. InstallShield for Virtua Documentation (2)

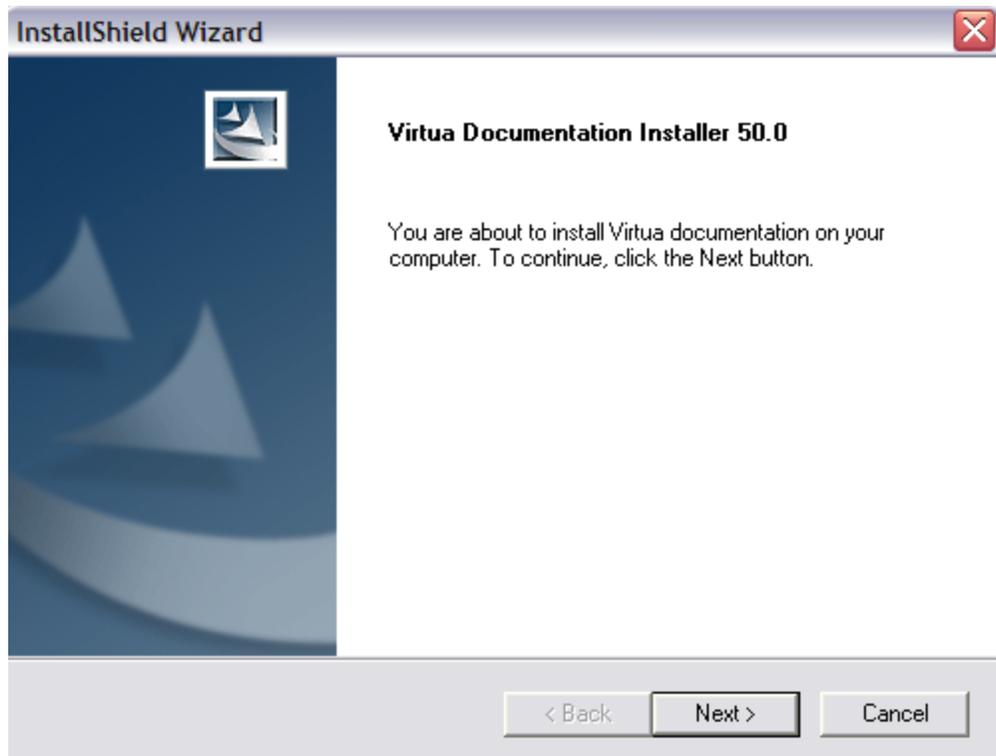


Figure 4-30. InstallShield for Virtua Documentation (3)

3. Click the Next button to continue to the Notice screen ([Figure 4-31](#)).

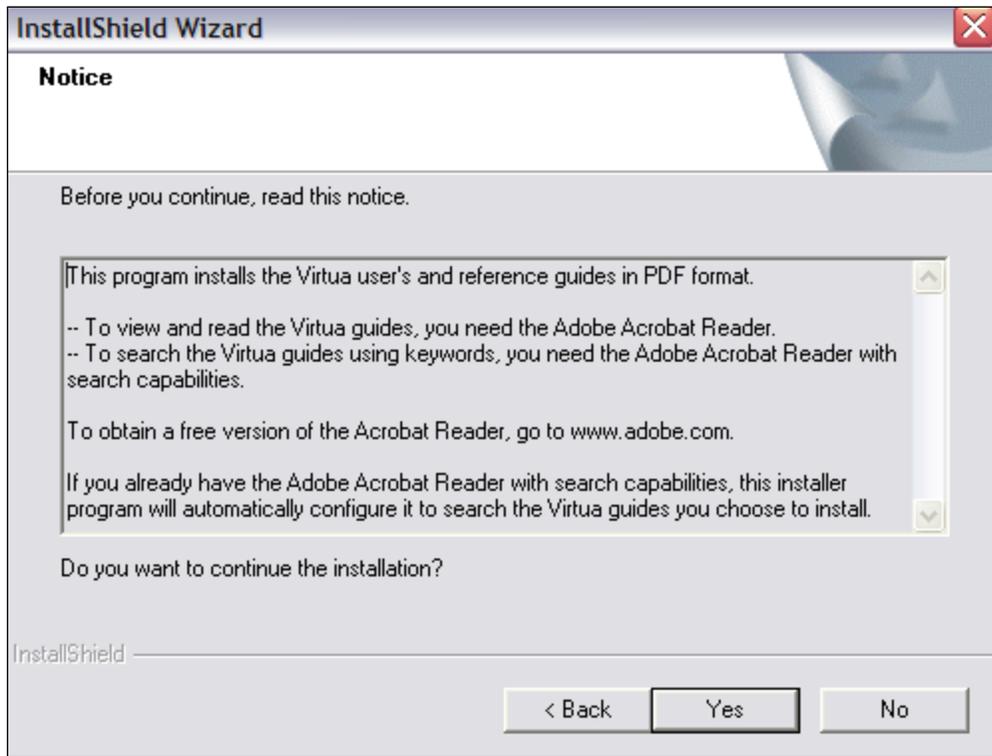


Figure 4-31. InstallShield for Virtua Documentation (4)

4. Read the text of the notice in the list box.
5. Press the Yes button to continue to the Choose Destination screen ([Figure 4-32](#)).

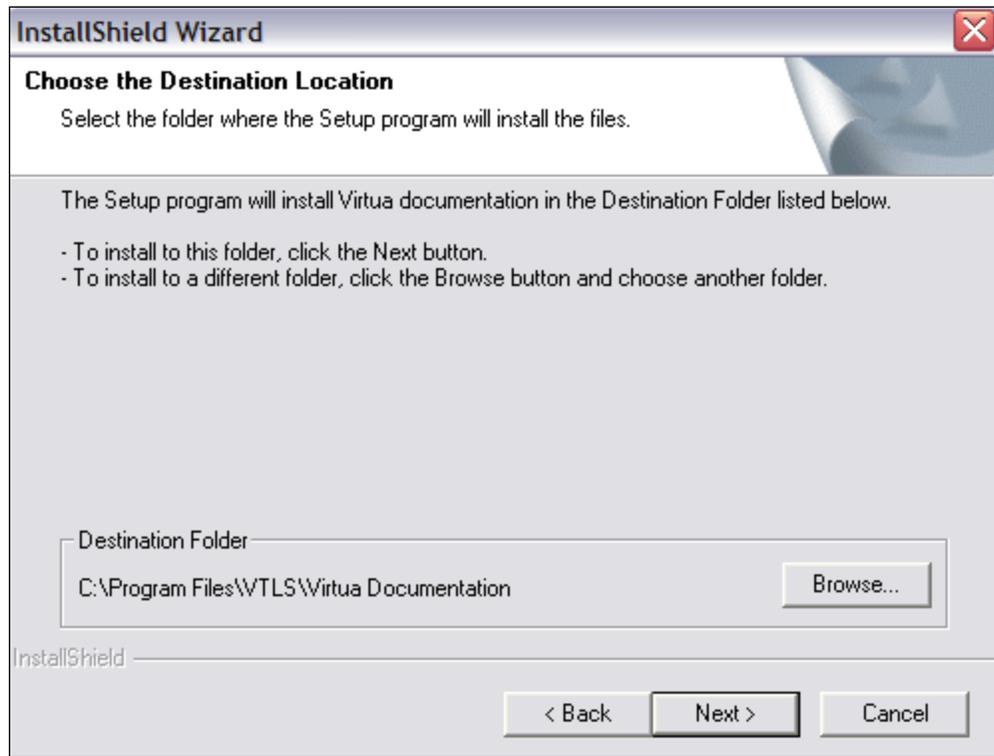


Figure 4-32. InstallShield for Virtua Documentation (5)

6. By default, Virtua documentation is installed in C:\Program Files\VTLS\Virtua Documentation. If you want to install Virtua in a different directory, click the Browse button and select a new directory.
7. Click the Next button to continue to the Select Guides screen ([Figure 4-33](#)).

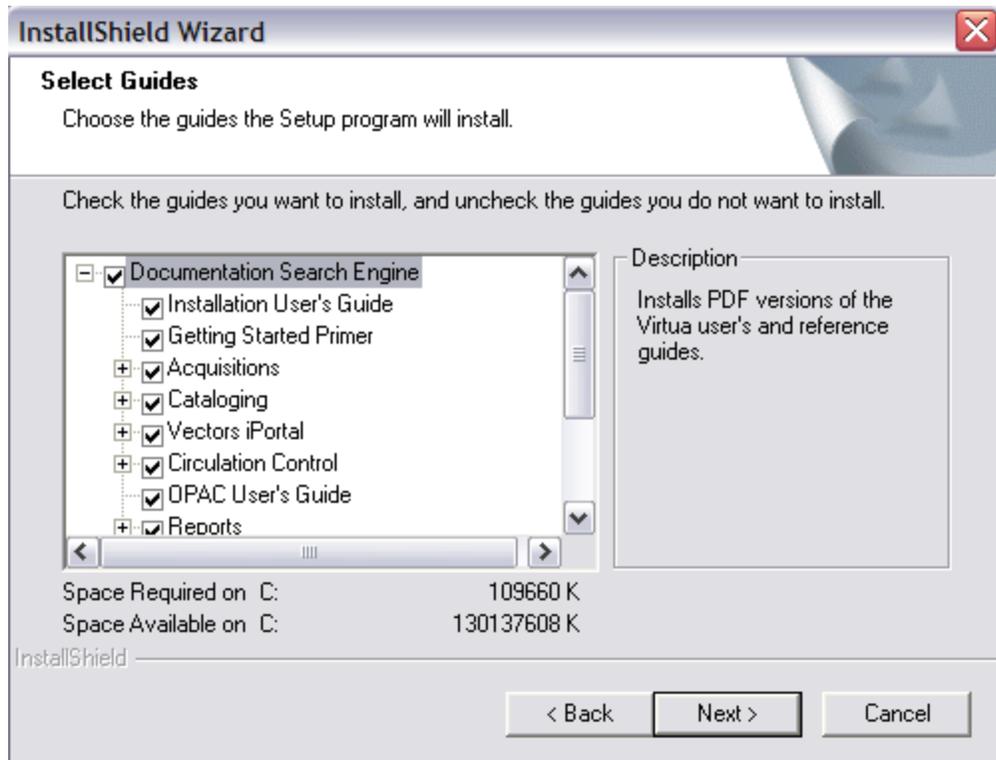


Figure 4-33. InstallShield for Virtua Documentation (6)

8. Check the documents that you want to install on this PC, and uncheck the documents that you do not want to install on this PC. **Tip:** By default, all documents are checked when you first view this screen.
9. Click the Next button to begin the installation ([Figure 4-34](#)).

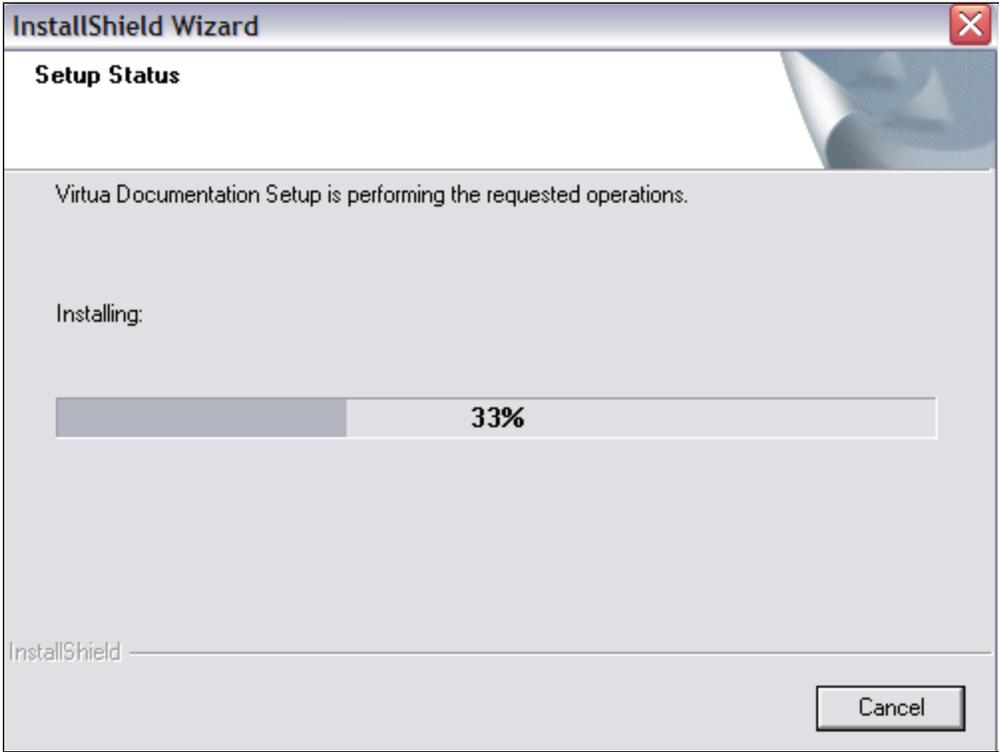


Figure 4-34. InstallShield for Virtua Documentation (7)

Once the installation is complete, a confirmation screen appears (Figure 4-35).

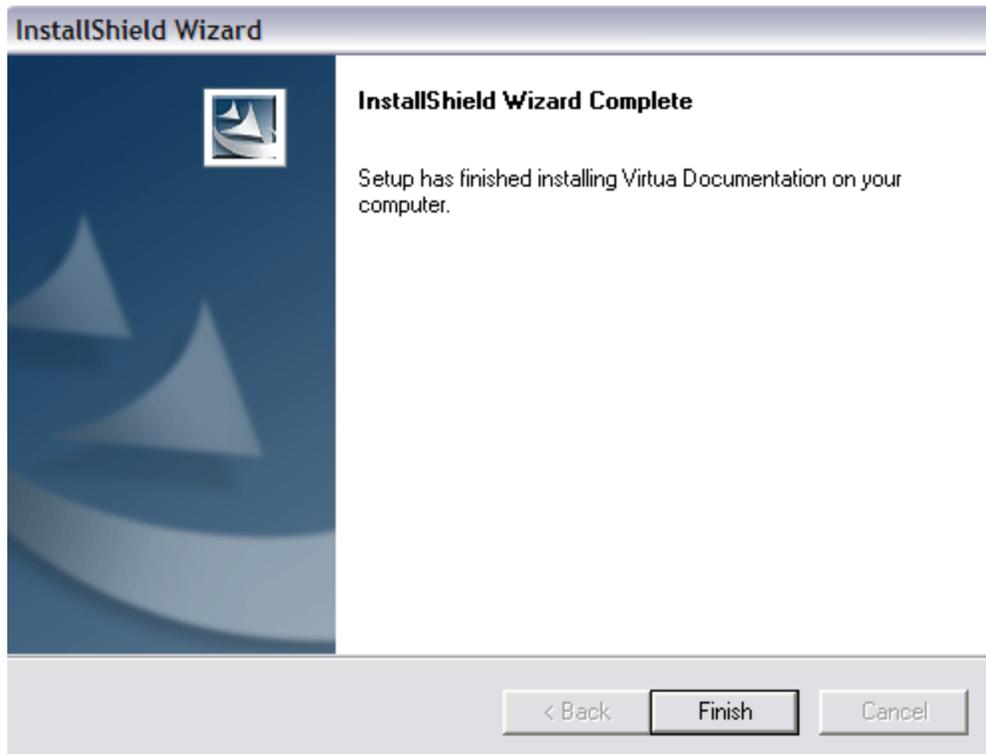


Figure 4-35. InstallShield for Virtua Documentation (8)

10. Click the Finish button to end the installation program.

4.4.2 Upgrading the Virtua Documentation

If you already have a version of the Virtua documentation installed on your PC, remove it before installing an upgrade.

To upgrade the Virtua documentation on your PC, first remove the old installation and then install the new version:

1. In the Windows task bar, click Start/Control Panel/Add or Remove Programs/Virtua Documentation, and then click the Change/Remove button.

-OR-

Double-click the executable of the latest version of the Virtua documentation.

The installation program displays the Welcome window ([Figure 4-36](#)).

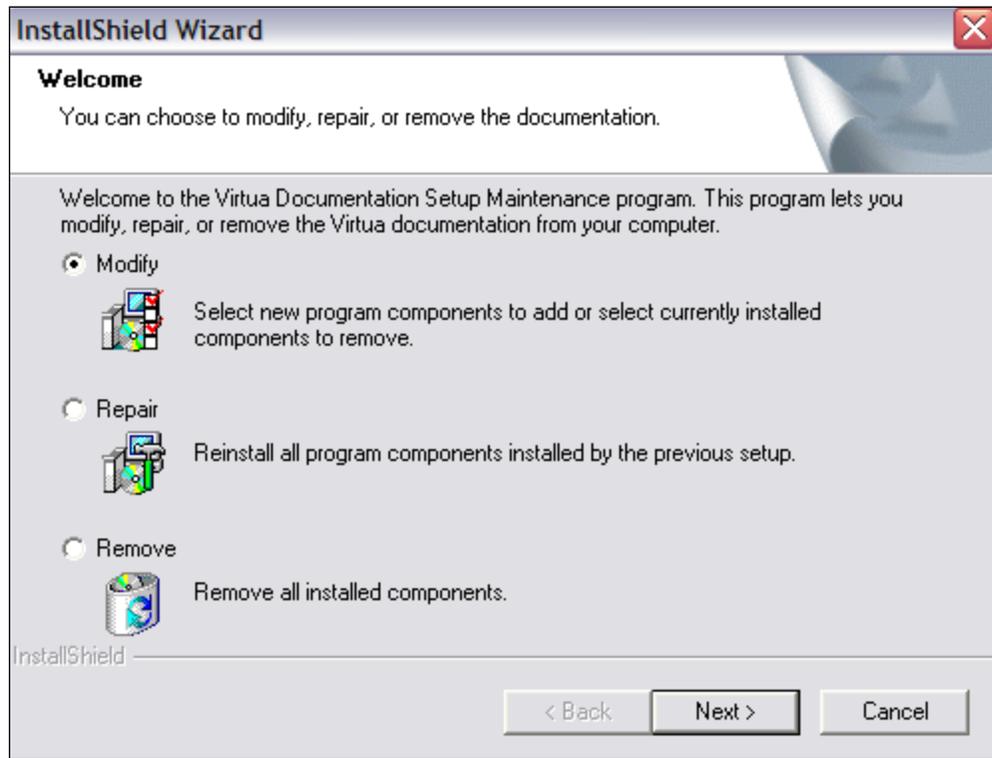


Figure 4-36. InstallShield Wizard for Virtua Documentation Setup Maintenance

2. Select the Remove radio button.

The InstallShield Wizard removes the old installation.

3. Double-click the executable of the latest version of the Virtua documentation.

The installation program installs the new version on your PC.

4.4.3 Viewing and Searching the Virtua Documentation

After installing the Virtua documentation, you can view and search for information in the Virtua user's guides.

4.4.3.1 Viewing a Specific Virtua Guide

To view a specific Virtua guide,

1. On your Windows taskbar, click Start/Programs/VTLS/View Documentation.

The menu expands to display a list of categories of user's/reference guides ([Figure 4-37](#)).

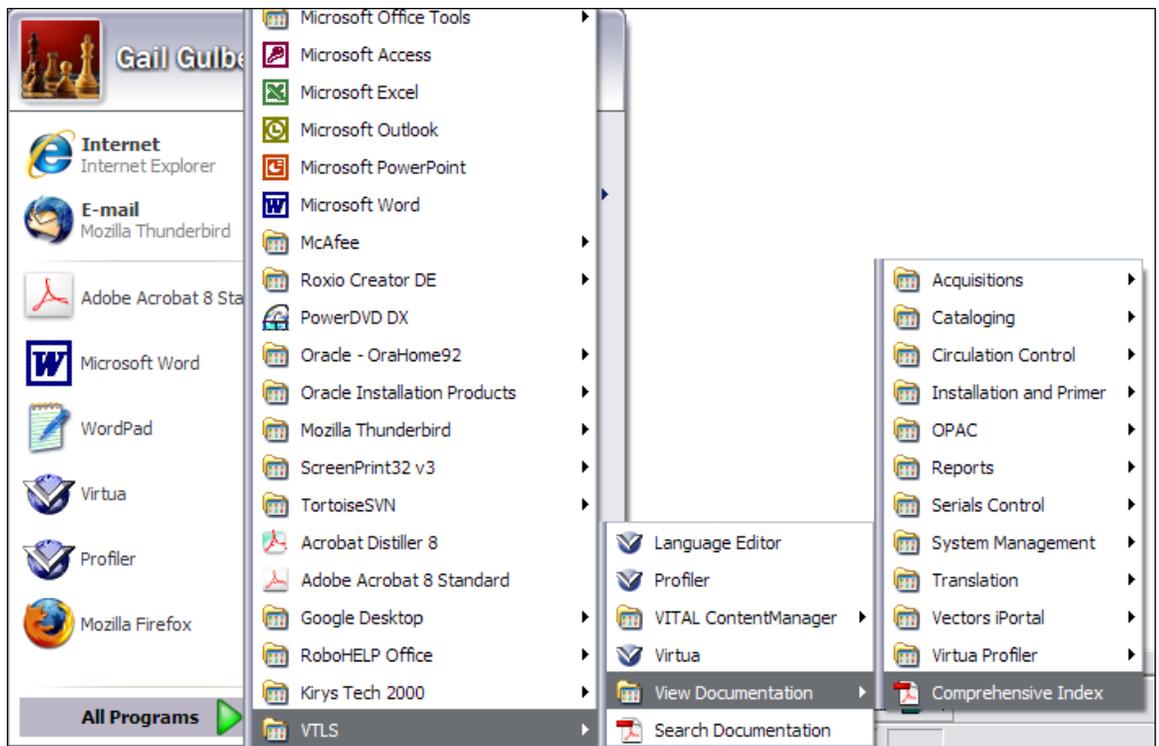


Figure 4-37. Windows Start Menu - Accessing View Documentation

2. Highlight the desired category.

The menu expands to display a list of guides belonging to that category.

3. Select the guide you want to view.

The Adobe Reader appears, displaying the selected guide (*Figure 4-38*) for viewing.

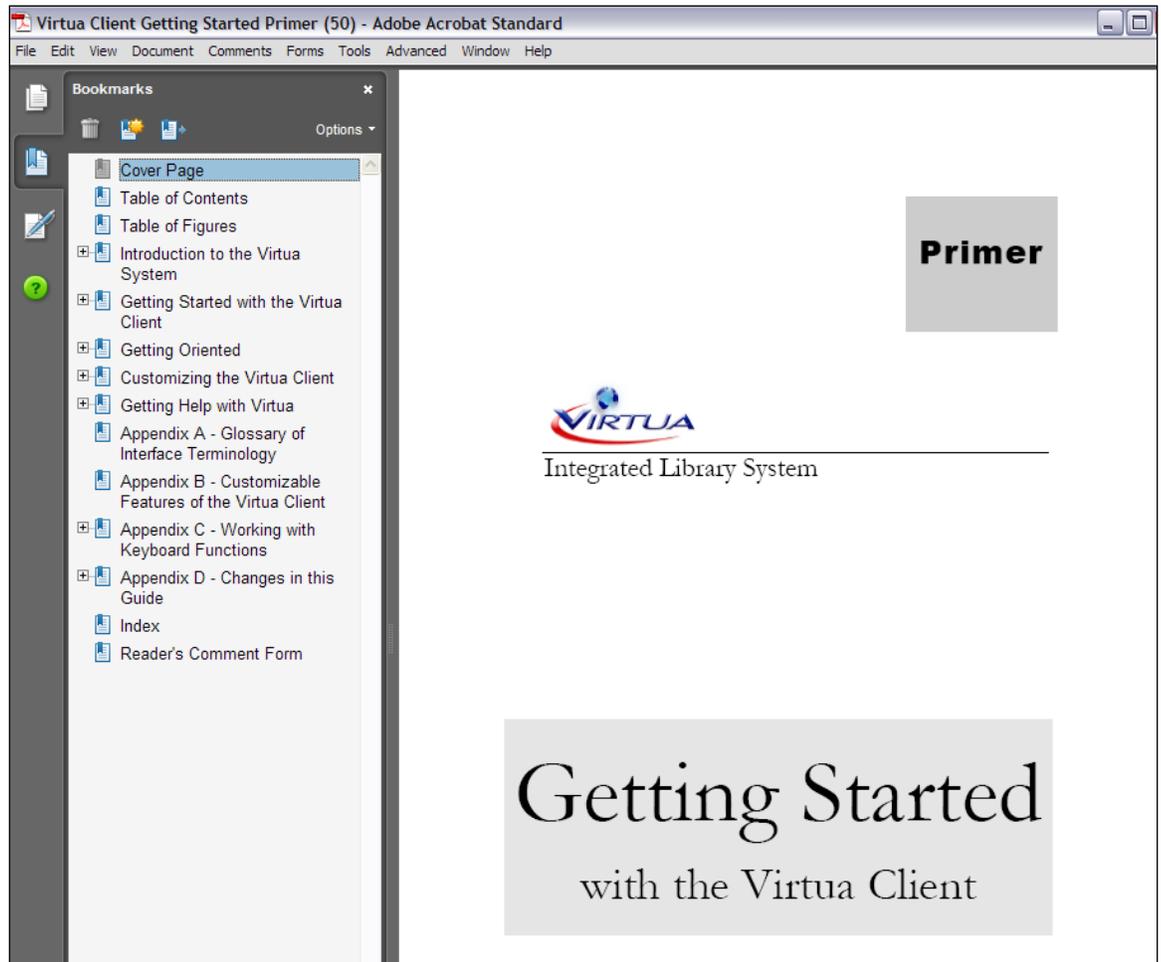


Figure 4-38. Adobe Reader - Displaying a User's Guide

4.4.3.2 Searching Virtua Guides

The Documentation Search Engine lets you search the Virtua guides using keywords. You can access the search facility via the Windows Start menu and the Virtua Tools menu.

To search the Virtua guides via the Windows Start menu,

1. On your Windows taskbar, click Start/Programs/VTLS/Search Documentation (*Figure 4-39*).

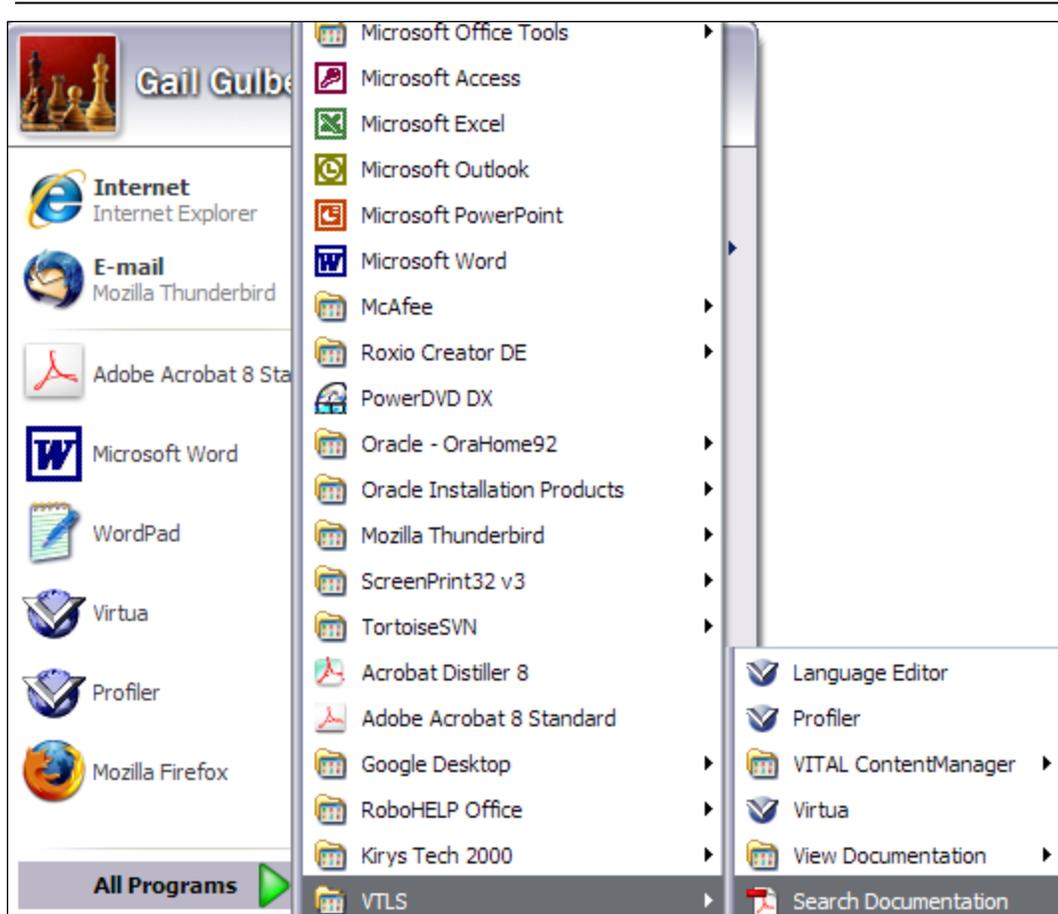


Figure 4-39. Windows Start Menu - Accessing Search Documentation

-OR-

To search the Virtua guides via the Virtua Tools menu,

1. On the Virtua menu bar, click Tools, and then choose Documentation Search Engine (*Figure 4-40*).

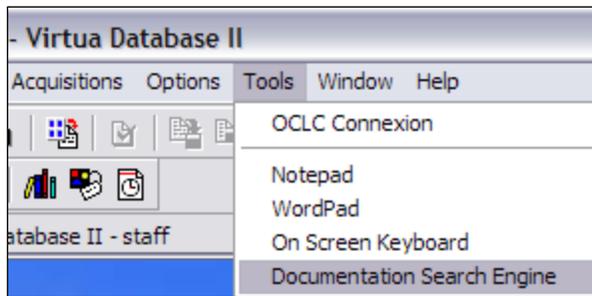


Figure 4-40. Virtua Tools Menu

The Adobe Reader launches, and the Search the Virtua Documentation page appears (Figure 4-41).

Search the Virtua Documentation

To search the Virtua User's Guides,

1. Click the Search button below.

The Search panel appears, displaying basic search options.

2. Type your search term in the "What word or phrase would you like to search for?" field.
3. Under the "Where would you like to search?" question, select the "All PDF Documents in" radio button, and then navigate to Program Files\VTLS\Virtua Documentation, or whichever directory you've chosen for installing the Virtua documentation.
4. Check any other desired search options.
5. On the Search panel, click the Search button.

Note: For advanced search options, click the Use Advanced Search Options link at the bottom of the Search panel.

Figure 4-41. Search the Virtua Documentation Page

2. Follow the instructions on the page to begin a keyword search of all of the Virtua user's guides installed on your PC.

5. Appendix A - Installing and Working with the Oracle Client

This appendix provides instructions for installing the 32-bit Oracle 11g Client. Note that Innovative supports the 32-bit Oracle client ONLY; even those users with 64-bit Windows must use the 32-bit Oracle client.

Note: Windows XP and Windows Vista users may use an earlier version of the Oracle client, but only the Oracle 11 client is currently supported for Windows 7.

As part of the Oracle Client installation process, you will also install an Oracle configuration tool called the Oracle Net Manager. This tool lets you configure Local Net Service Names for your PC so that you can connect to remote databases with client applications such as the Virtua Profiler or Microsoft® Access®.

Before you install the Oracle 11g Client, you may want to uninstall any older versions of Oracle that may be on your PC. Alternatively, you can choose to install the Oracle 11 client alongside any Oracle clients you already have installed. **Tip:** Older versions of Oracle include the Net8 Easy Configuration Client and the SQL*Net Easy Configuration Client.

To uninstall an old Oracle Client,

- Use the Oracle Universal Installer program ([Figure 5-1](#)) to uninstall any old Oracle Client software.

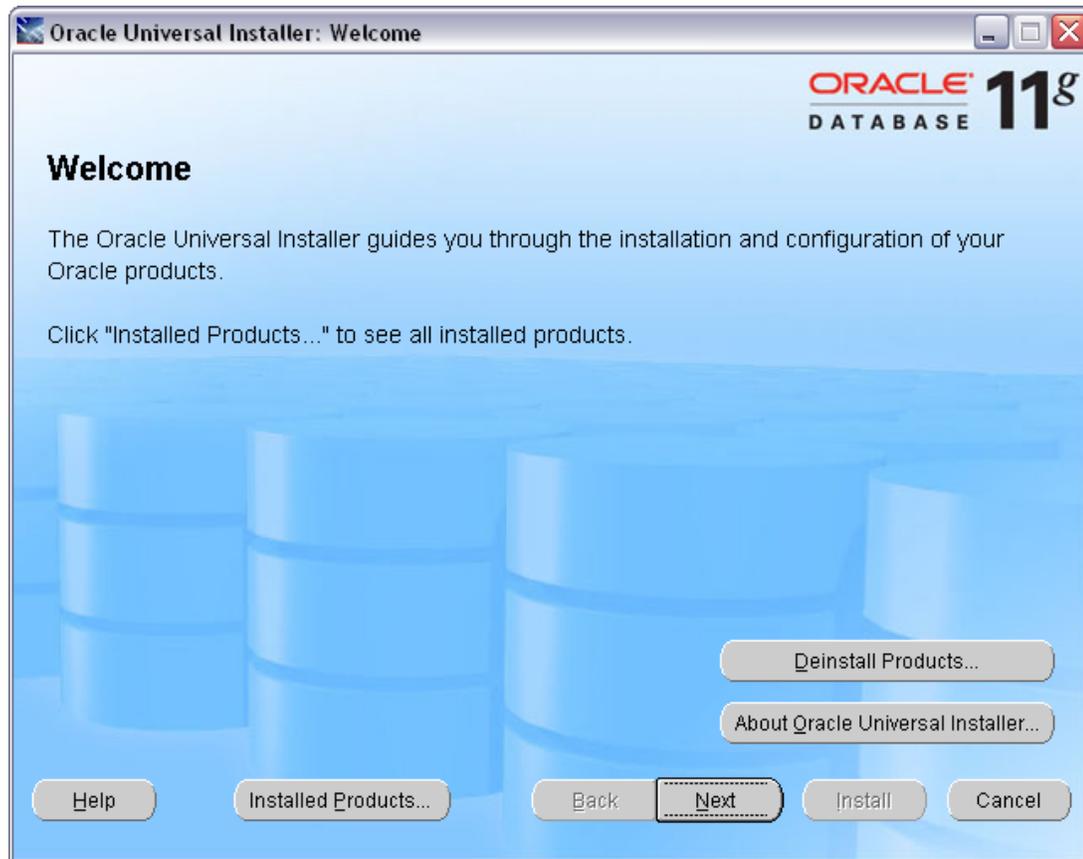


Figure 5-1. Oracle Universal Installer Welcome Screen

Tip: If you have Local Net Service Names already configured, you can retain these names for use with the new Oracle Net Configuration Assistant. To do this, prior to uninstalling your old Oracle Client, copy the **tnsnames.ora** file in the Oracle directory on your PC. After you install the new Oracle Client, insert this file in the \network\admin directory of your new Oracle installation.

5.1 Oracle 11g Client Installation Workflow

Oracle provides a Client Installer to install the Oracle 11g Client, Oracle Net Manager, and patch sets.

To install the Oracle 11g Client software,

1. From the Oracle Net 11g Client distribution media, run **Setup.exe** (**Tip:** If you are installing from a CD-ROM, your CD-ROM drive might run **Setup.exe** for you automatically.)

The Oracle Client Installer Select Installation Type screen appears (*Figure 5-2*).

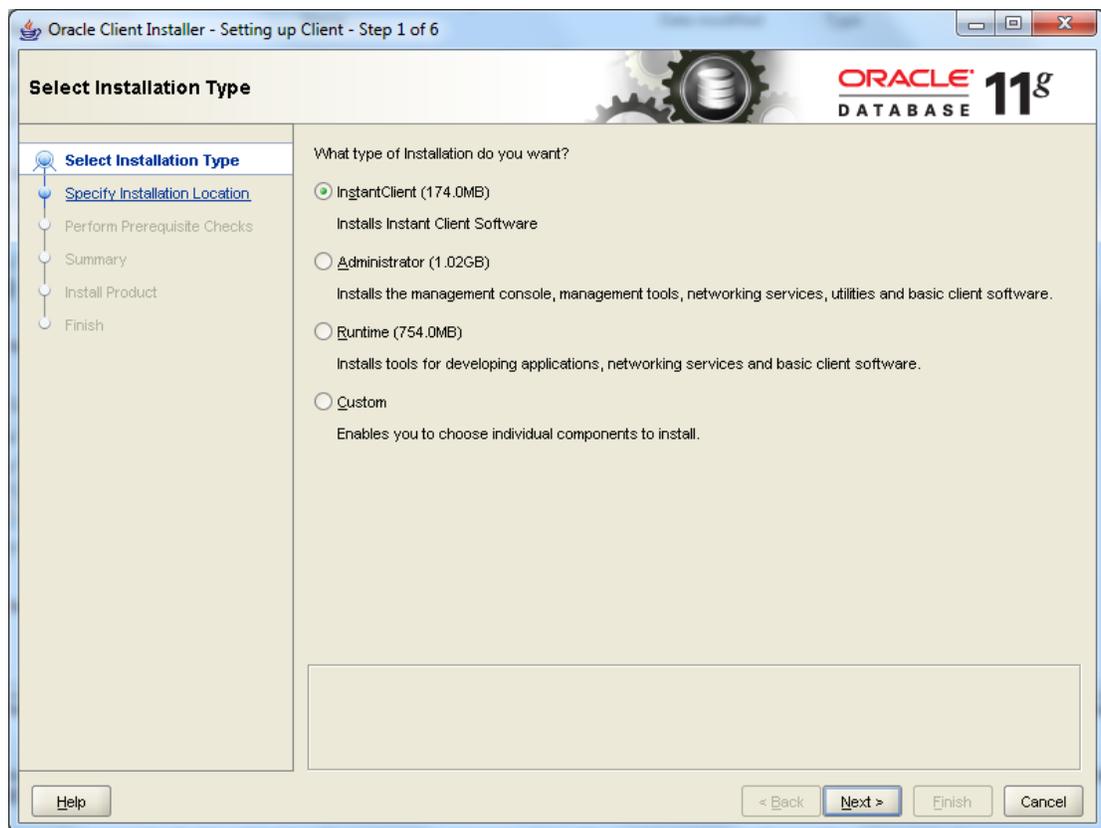


Figure 5-2. Oracle Client Installer - Select Installation Type Screen

2. Click the Custom radio button to select a custom installation of the Oracle client software.

3. Click the Next button to display the Select Product Languages screen (*Figure 5-3*).

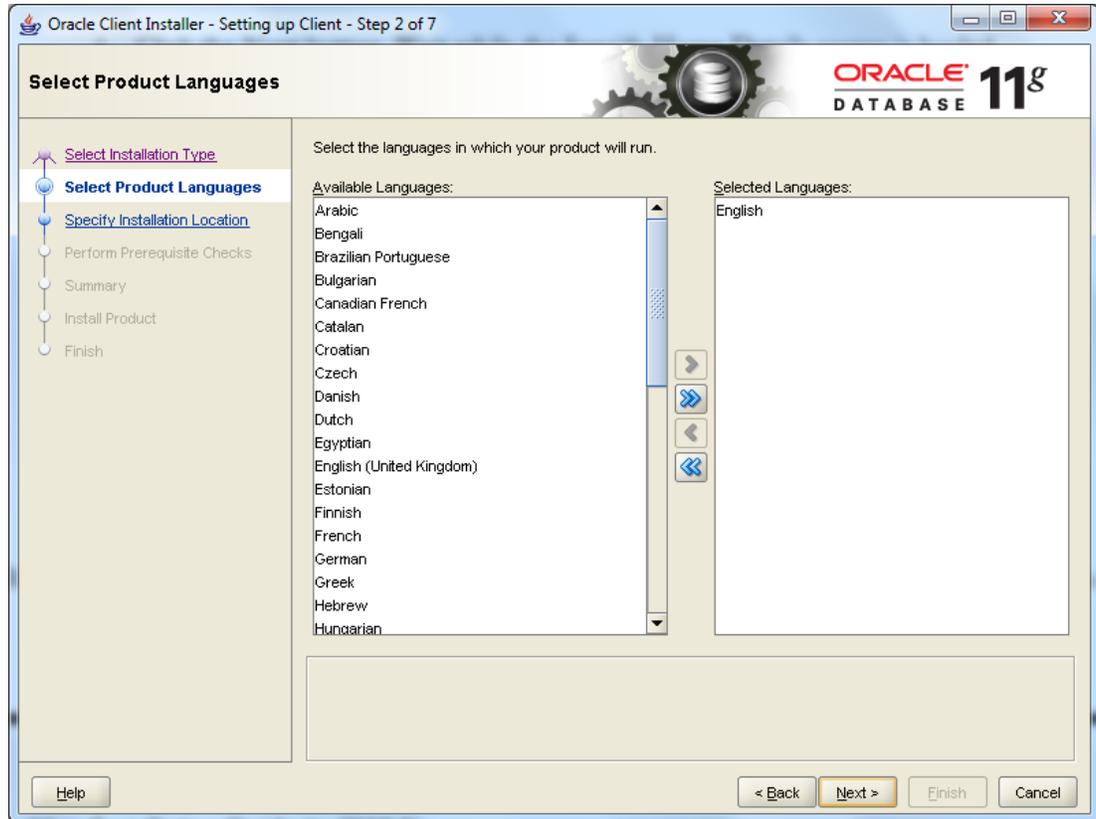


Figure 5-3. Oracle Client Installer - Select Product Languages Screen

4. Select the language(s) in which your Oracle client installation will be able to run.
5. Click the Next button. Wait while the Specify Installation Location screen is loaded (*Figure 5-4*).

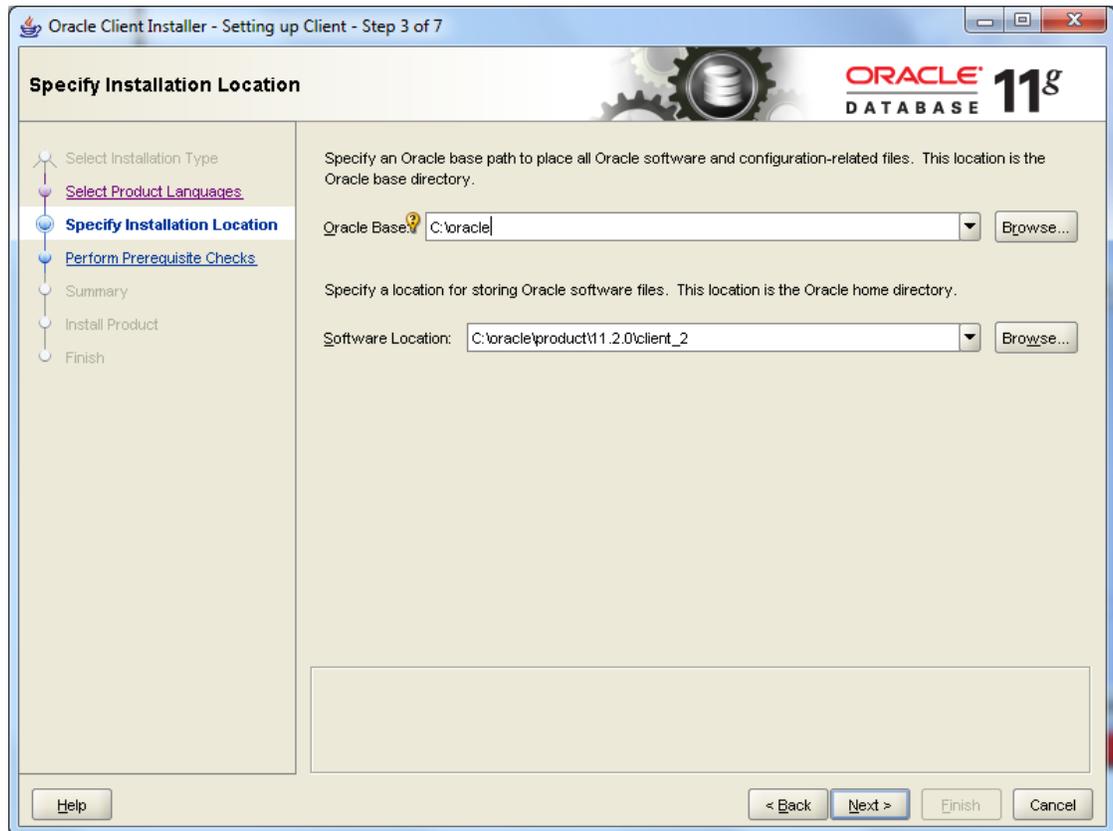


Figure 5-4. Oracle Client Installer - Specify Installation Location Screen

6. Make any changes you wish to make to the Oracle Base path or the Software Location path, and click the Next button. The Available Product Components screen (Figure 5-5) appears.

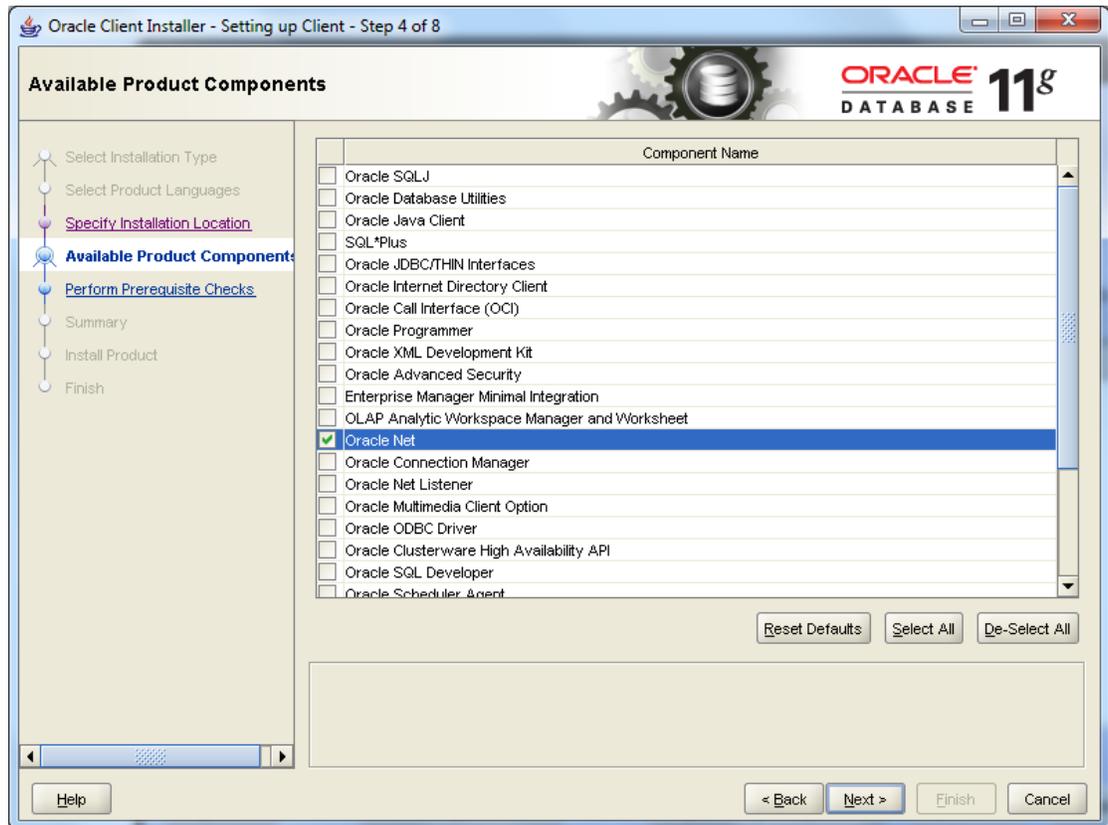


Figure 5-5. Oracle Client Installer - Available Product Components Screen

- On the Available Product Components screen, select Oracle Net. You may need to scroll down to see this component.

Important: With this installer, you have the option to install other Oracle programs and utilities. However, you may not be licensed to use these other products in a production environment. If you choose to install and use any of the other options, we recommend that you review your site's Oracle licensing agreement before using the Oracle product in a production environment.

- Click the Next button to execute the prerequisite checks for the products you have selected to install. The Perform Prerequisite Checks screen (Figure 5-6) shows the status of each check.

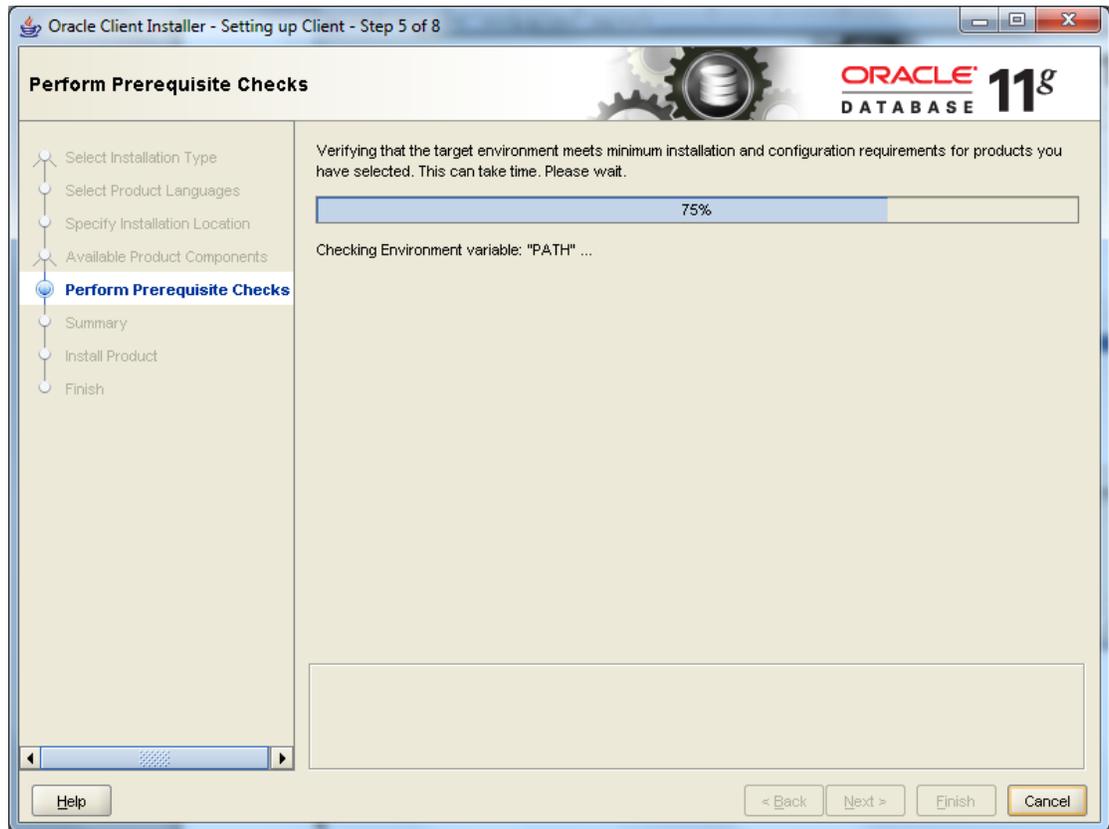


Figure 5-6. Oracle Client Installer - Perform Prerequisite Checks Screen

After the prerequisite checks execute, the Summary screen appears (Figure 5-7).

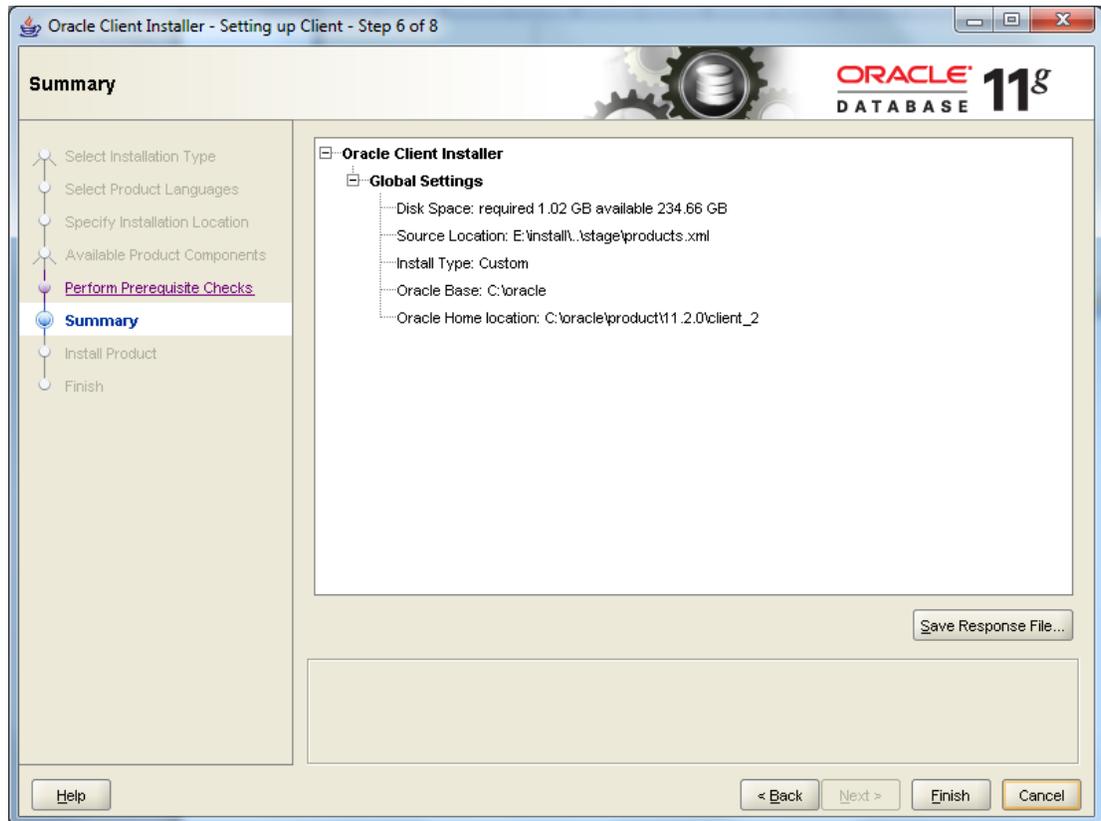


Figure 5-7. Oracle Client Installer - Summary Screen

9. Review the installation summary listed on the Summary screen. To return to a previous screen to make any changes, click the Back button.
10. Click the Finish button to begin installing the software (*Figure 5-8*).

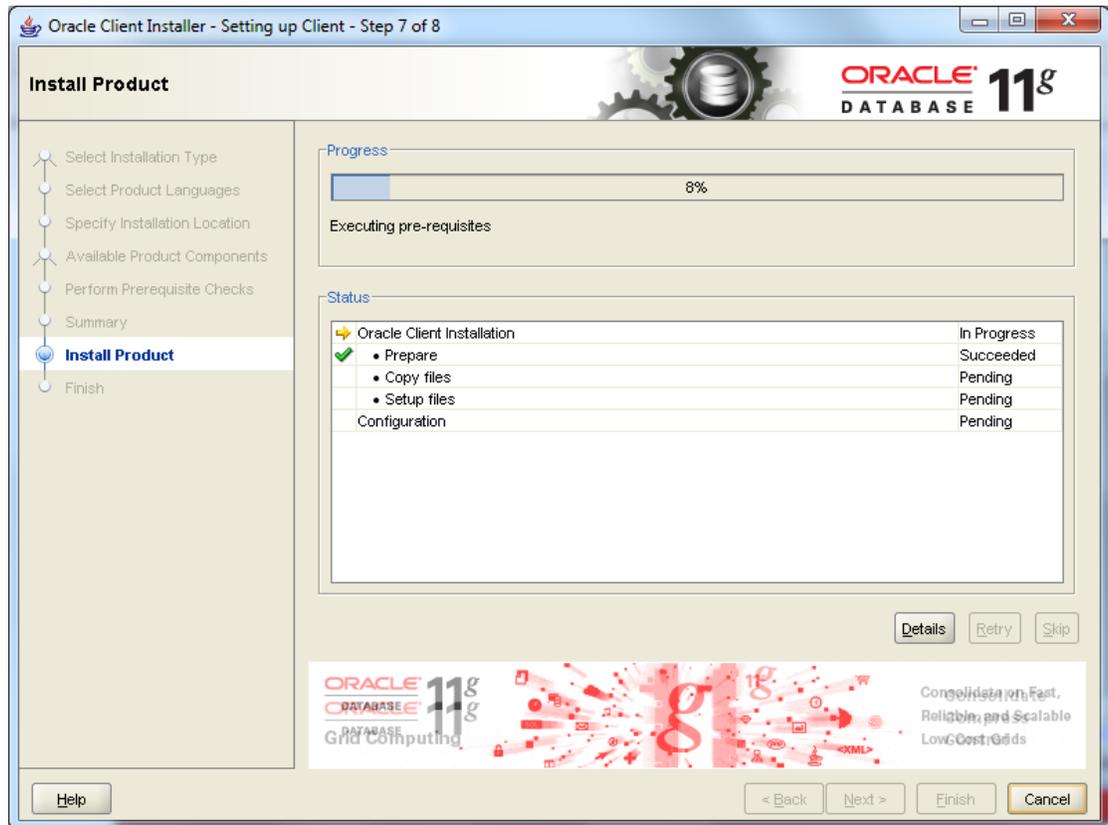


Figure 5-8. Oracle Client Installer - Install Product Screen

Note: On the Install Product screen, if you see the following Error pop up,

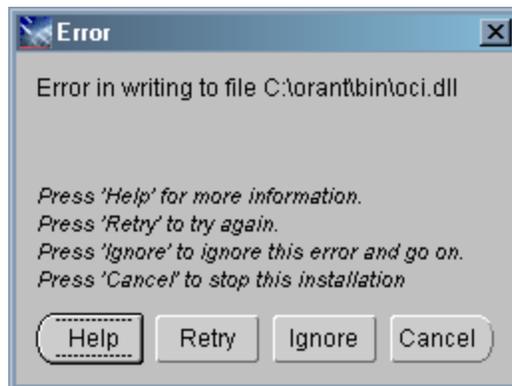


Figure 5-9. Oracle Client Installer - Error Message

do the following:

- Go into your Windows Explorer and find the file in error.
- Rename the file in error; for example, give it the extension **.old**.
- Return to the Install screen.
- Click the Retry button.

After the installation is complete, the Finish screen appears (*Figure 5-10*), showing confirmation that the install process was successful.

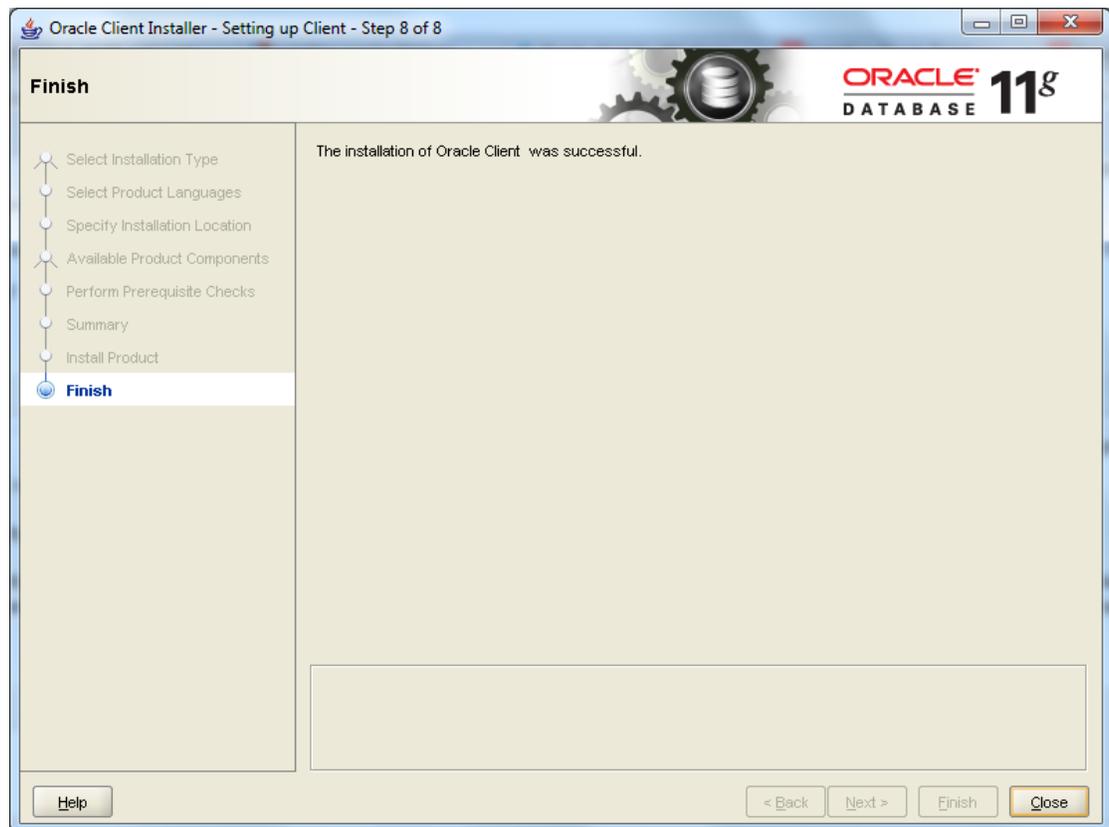


Figure 5-10. Oracle Client Installer - Finish Screen

11. Click the Close button to close the Oracle Client Installer.

Now you are ready to configure a Local Net Service Name. See the section “[Configuring Local Net Service Names for the Oracle 11g Client](#)” below.

5.2 Configuring Local Net Service Names for the Oracle 11g Client

To connect to an Oracle database, you need to configure a Local Net Service Name for that database. Each Local Net Service Name contains connection information that is used by your PC to access a database. To configure a Local Net Service Name for use with the Oracle 11g Client, you need to run the Oracle Net Manager.

Note: If you backed up your `tnsnames.ora` file from a previous installation, you need to insert this file in the `\network\ADMIN` directory of your new Oracle installation *before* you configure additional Local Net Service Names.

5.2.1 Running the Oracle Net Manager

To run the Oracle Net Manager,

1. Click Start/All Programs/Oracle - OraClient11g_home1.

Note: The name of your shortcut path may vary slightly.

2. Select Configuration and Migration Tools.
3. Select Net Manager.

The Oracle Net Manager Welcome screen appears (*Figure 5-11*).

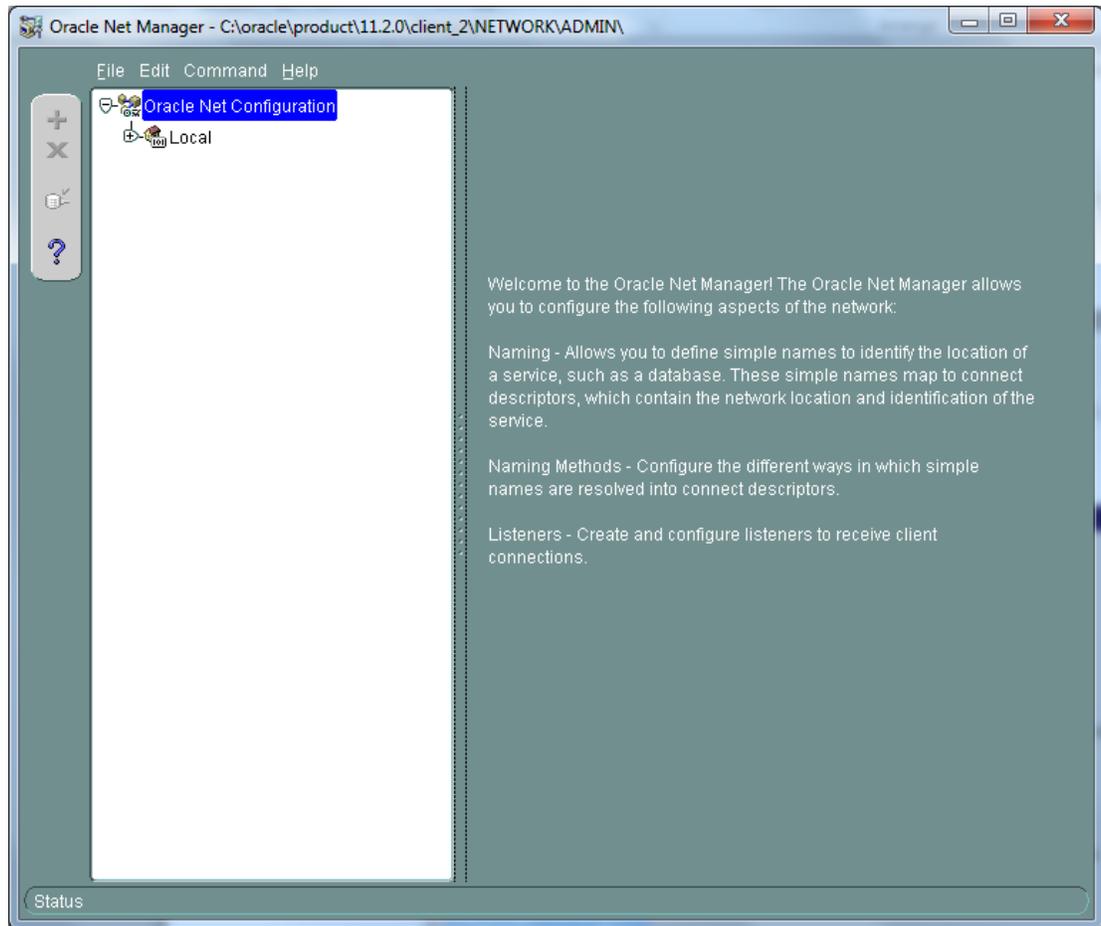


Figure 5-11. Oracle Net Manager - Welcome Screen

4. Expand the tree structure and select Service Naming ([Figure 5-12](#)).

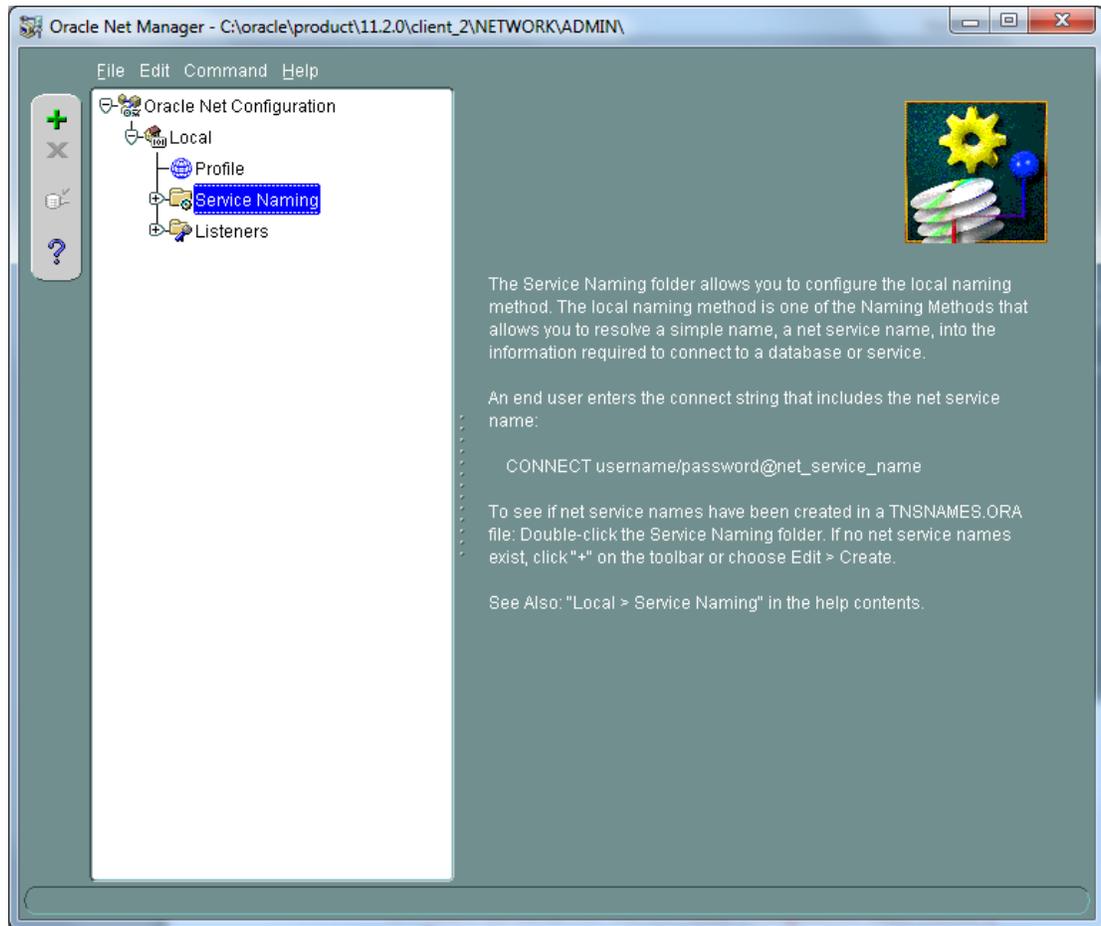


Figure 5-12. Oracle Net Manager - Tree Structure

5. Click the green plus sign icon  to display the Net Service Name Wizard Welcome screen (Figure 5-13).

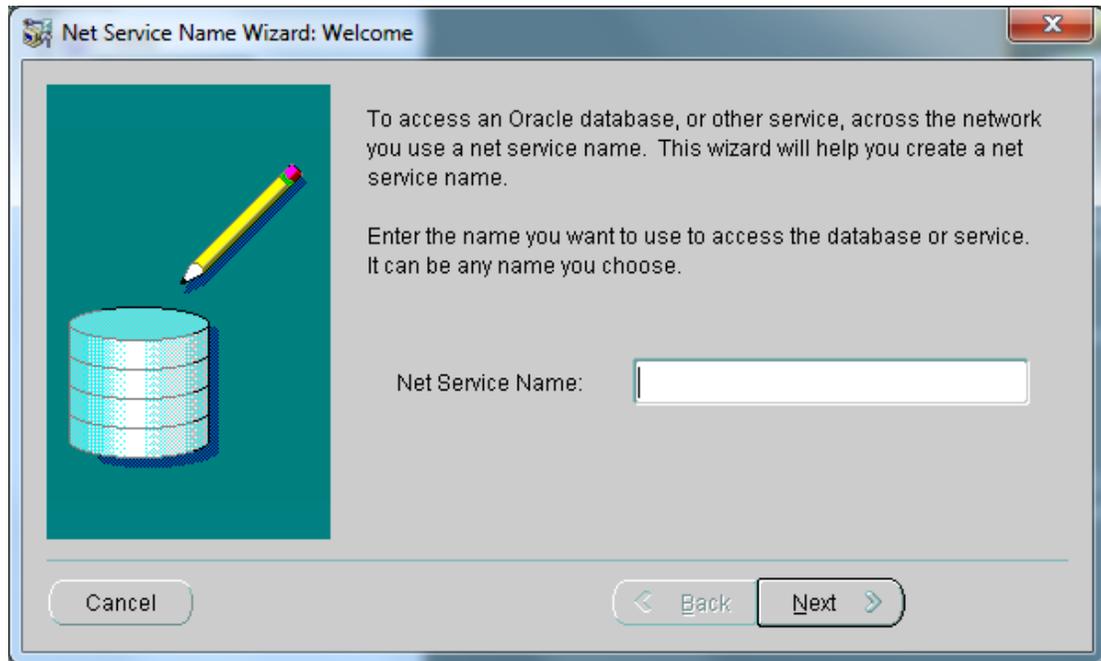


Figure 5-13. Oracle Net Manager - Net Service Name Wizard Welcome Screen

6. In the Net Service Name field, type a unique name for your database.

Note: We recommend that you use the server name where the database resides followed by the Innovative database number, for example, *apollo01* or *venus81*. Do NOT include parentheses in this name.

7. Click the Next button to view the Net Service Name Wizard, Protocol screen (Figure 5-14).

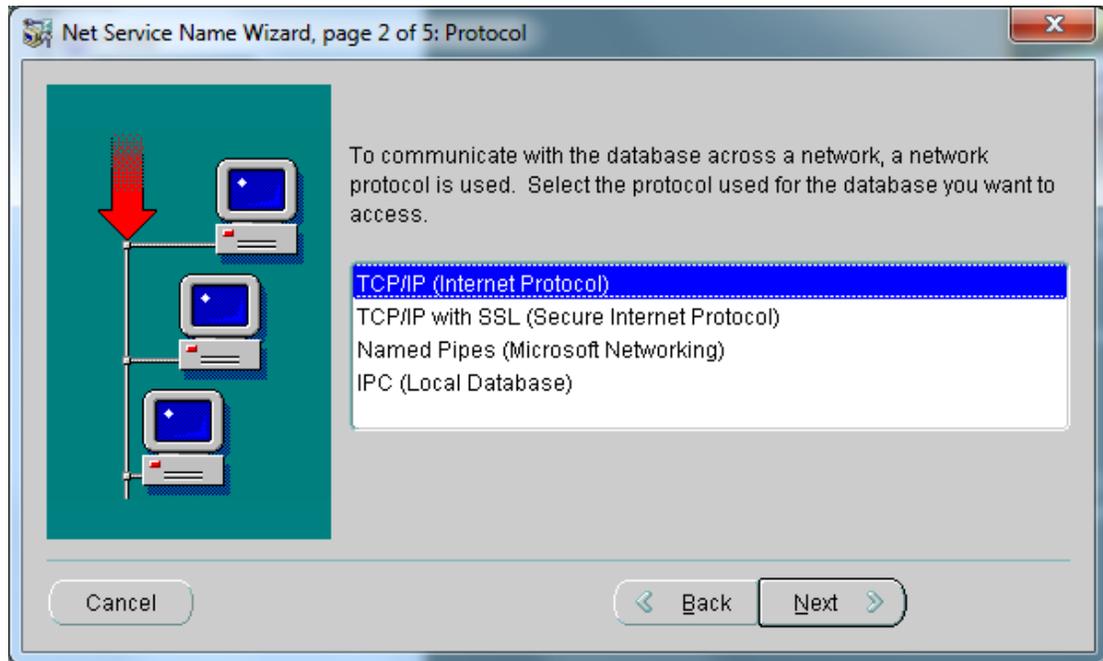


Figure 5-14. Oracle Net Manager - Net Service Name Wizard Protocol Screen

8. Select TCP/IP (Internet Protocol).
9. Click the Next button to view the Protocol Settings screen ([Figure 5-15](#)).

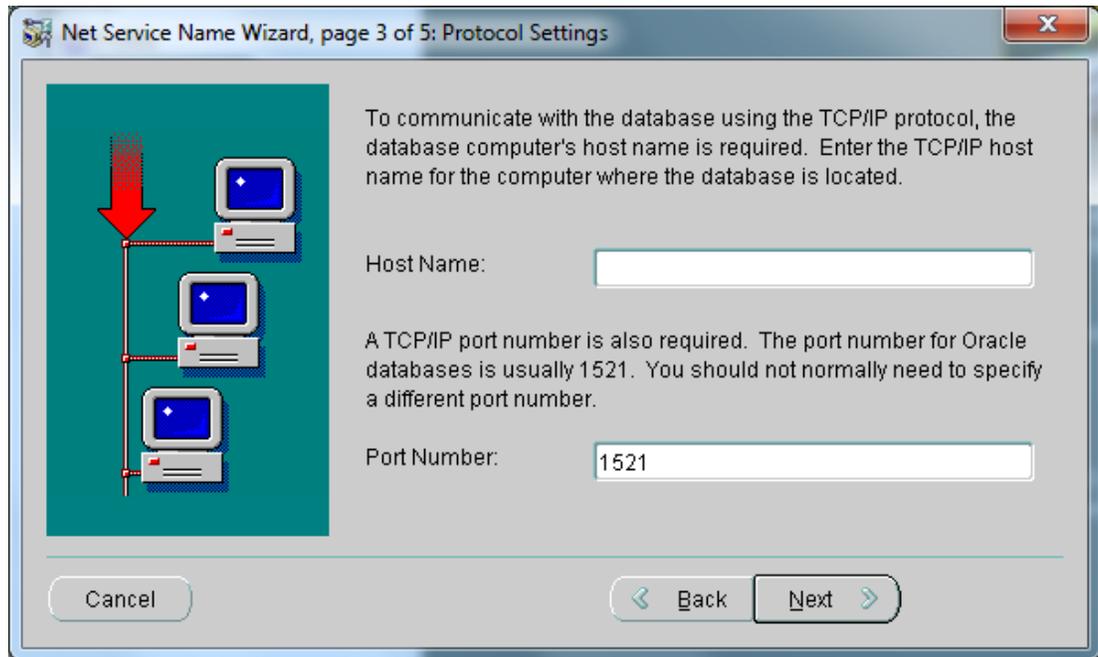


Figure 5-15. Oracle Net Manager - Net Service Name Wizard Protocol Settings Screen

9. In the Host Name field, type the IP address or the host name of the server, for example, *100.15.15.101* or *zeus.library.edu*.
10. If the Oracle Listener on the database you specified listens for a connection on a port other than 1521, type the port number in the Port Number field. Otherwise, accept the standard port number of 1521.
11. Click the Next button to proceed to the Service screen ([Figure 5-16](#)).

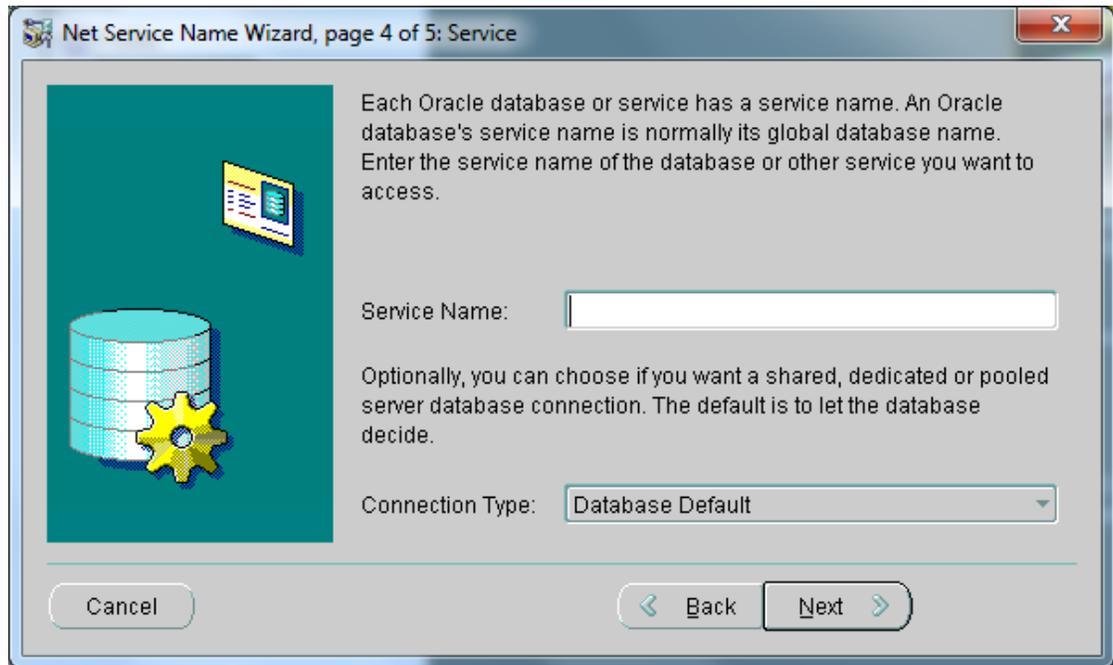


Figure 5-16. Oracle Net Manager - Net Service Name Wizard Service Screen

12. In the Service Name field, type your database's System Identifier. Use the name of the database as it is declared on the server. Virtua databases are `vtls##`, where `##` is the database number, for example, `vtls01`.
13. Click the Next button to proceed to the Net Service Name Configuration, Test screen (Figure 5-17).

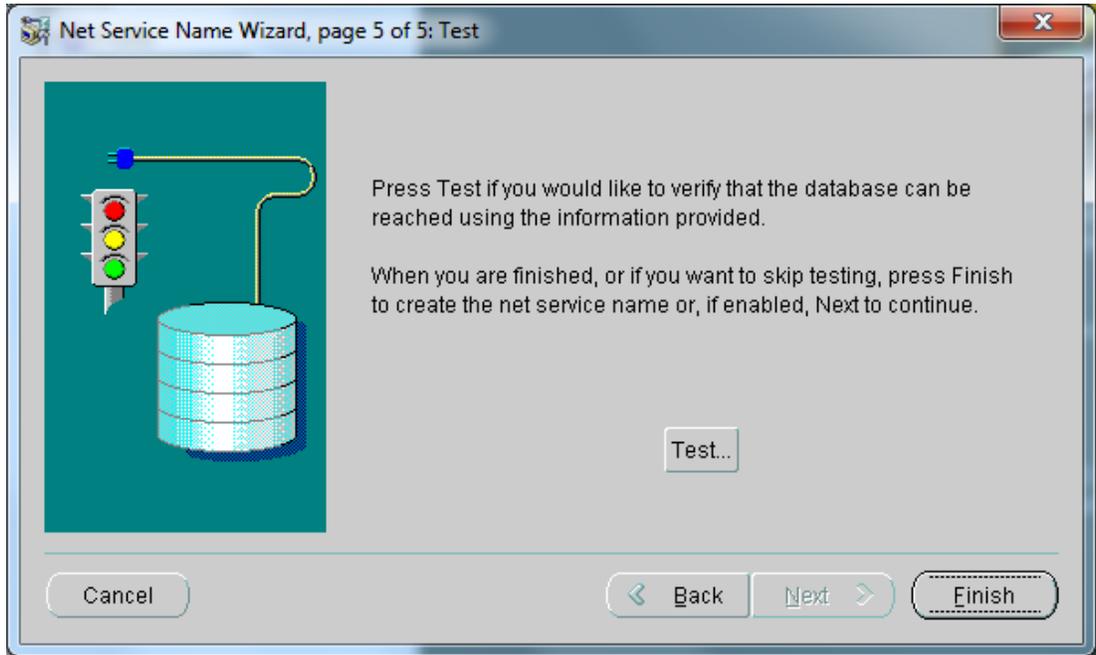


Figure 5-17. Oracle Net Manager - Net Service Name Wizard Test Screen

14. Click the Test button to test the new configuration.

The Oracle client attempts to connect to the database using a default password for Oracle databases. This connection attempt will fail. Information about the failed test will be displayed on the Connection Test screen ([Figure 5-18](#)).

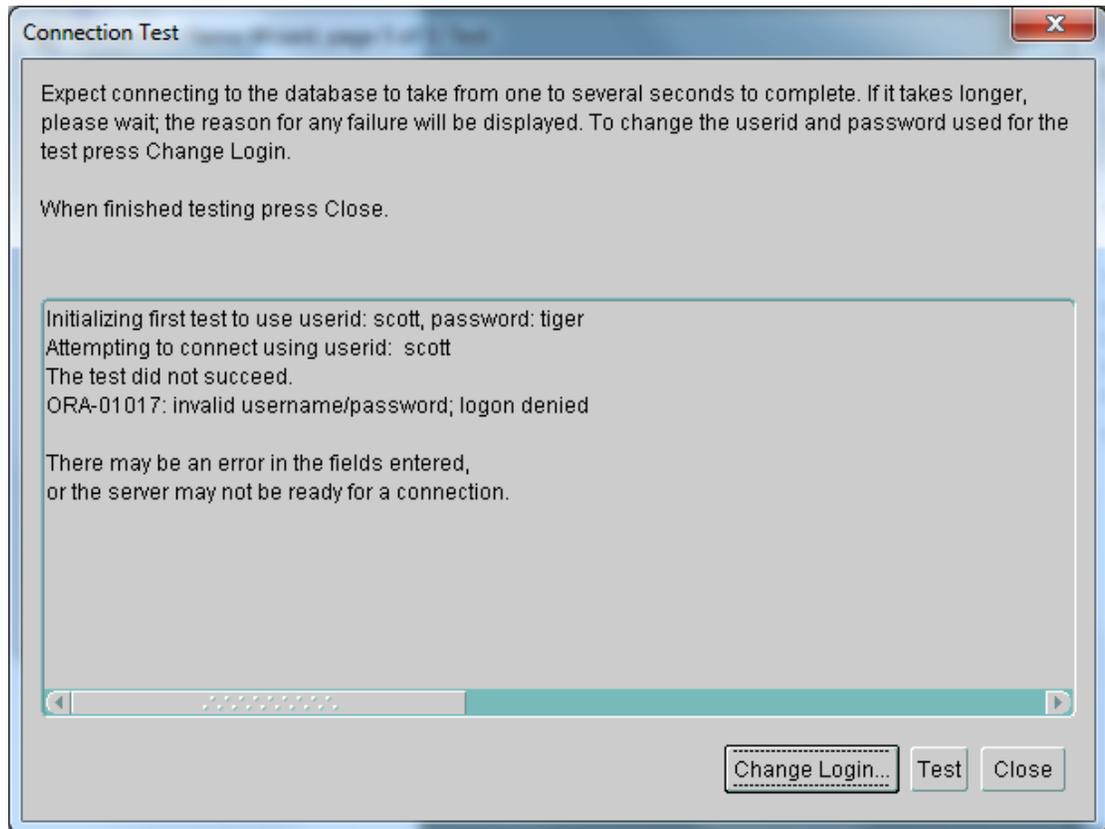


Figure 5-18. Connection Test Screen - Failure Message

15. Click the Change Log-in button to view the Log-in dialog with the default connection information (Figure 5-19).

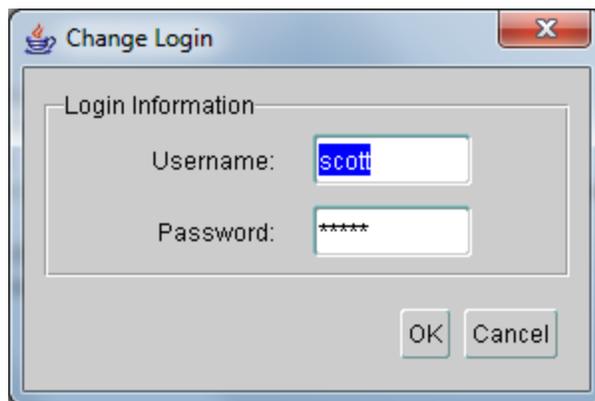


Figure 5-19. Log-in Dialog Box

16. Type the Oracle username and password for the database to which you are setting up a connection.
17. Click the OK button to return to the Connection Test screen (*Figure 5-18*).
18. Click the Test button to test the new username and password you entered.

If the username/password you entered is correct, the Connection Test screen will display a confirmation message (*Figure 5-20*).

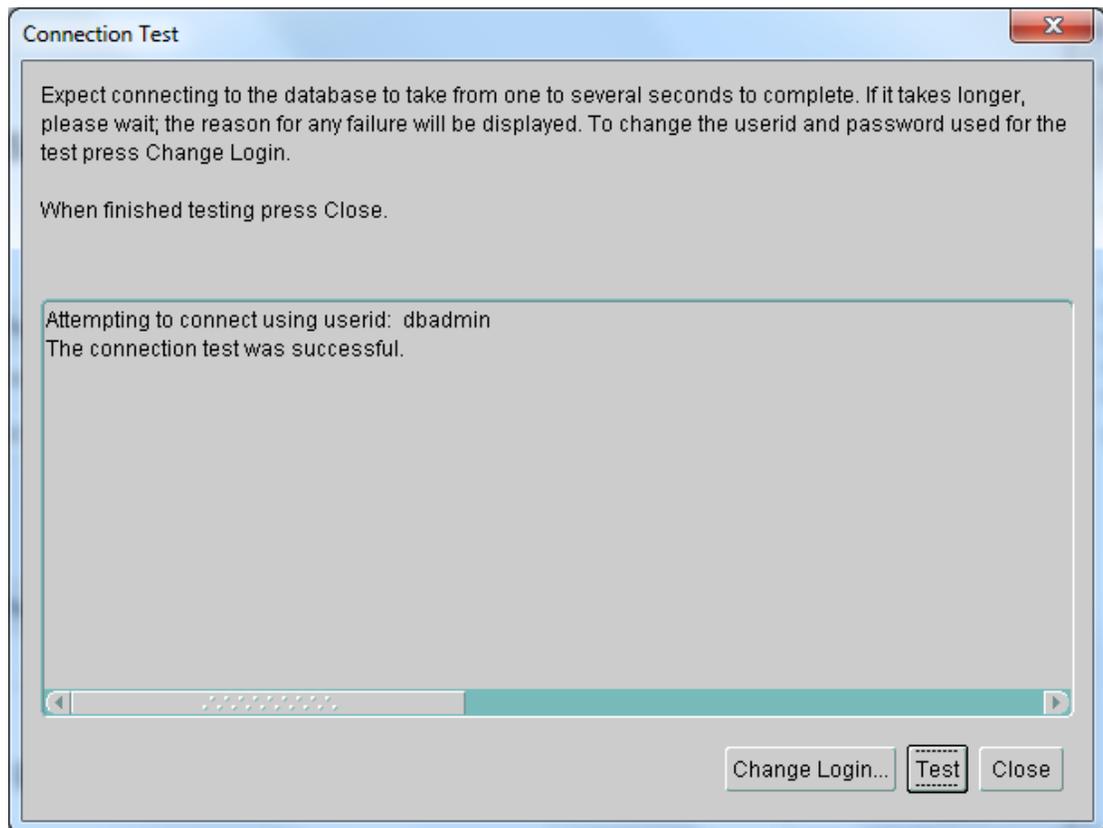


Figure 5-20. Connection Test Screen - Confirmation Message

19. Click the Close button close the Connection Test screen and return to the Test screen (*Figure 5-17*).
20. On the Test screen, click the Finish button. The Oracle Net Manager main window appears, with your new Local Net Service Name highlighted in the tree structure (*Figure 5-21*).

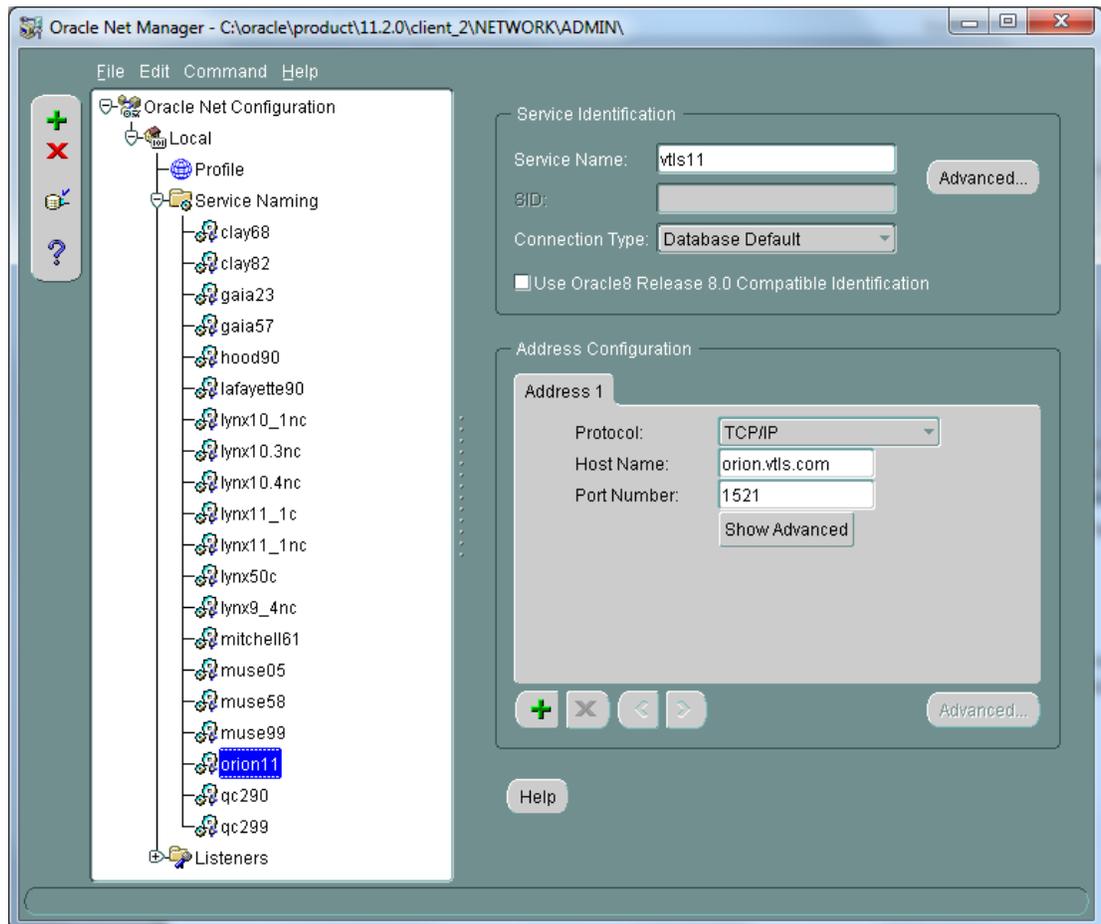


Figure 5-21. Oracle Net Manager - Displaying New Local Net Service Name

21. If you would like to configure another Local Net Service Name, return to step 4 of this workflow.

-OR-

If you have finished adding Local Net Service Names, select Save Network Configuration from the File menu (*Figure 5-22*).

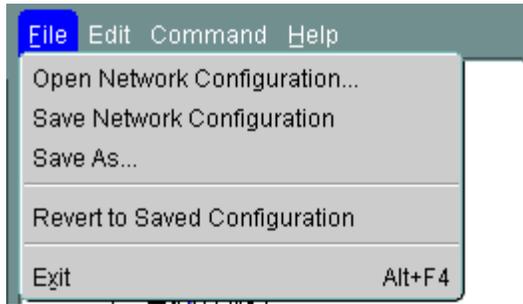


Figure 5-22. Oracle Net Manager - File Menu

22. Once you have saved your network configuration settings, click Exit to close the Oracle Net Manager.

6. Appendix B - Troubleshooting Installation Procedures

This appendix provides troubleshooting tips for common issues you might encounter while following the procedures in this user's guide. If you have problems with your installation, we recommend that you read this section before calling Innovative Customer Services.

1. **Problem:** When installing client (PC) software, you get an error message saying that you do not have sufficient privileges or permissions to install the software.

Reason: You are logged in to your PC as a user that is not in the Administrators group.

Solution: Log in to Windows as the administrator user for your PC.

2. **Problem:** You cannot run the Documentation Search Engine from the Tools menu.

Reason: You do not have Acrobat Reader installed.

Solution: Go to <http://get.adobe.com/reader/> and click the Download Now button.

7. Appendix C - Virtua Client Upgrades

7.1 Changes to Files in the VTLS\Virtua Directory

When you upgrade your Virtua Client by uninstalling the old version and installing a new version, many of the files in the VTLS\Virtua directory are overwritten. This section provides lists of the files that the InstallShield overwrites and those it does not overwrite when you select the InstallShield option to “Remove” the old version and then install the new version.

Important: If you want to retain customized files that may be overwritten, you will need to temporarily move or copy them to another location during an uninstall/reinstall process. The InstallShield does not overwrite your library’s customized .utf, .txt, .wfm, and .val files. When Virtua provides new versions of any of these types of files, the InstallShield will place them in the following directory: **\New Files**.

7.1.1 Files that InstallShield Overwrites

- \accesslabelsexample.mdb
- \CIRCBACK.EXE
- \CIRCBACK.INI
- \erb.rec
- \labinput.txt
- \oclc.rec
- \pcw.rec
- \pcwren.rec
- \sampleenglishthankyou.tyl
- \virtua.exe
- \virtua.ini (*If you use the InstallShield to do a Modify or Repair instead of a Remove, this file will not be overwritten..*)
- \virtua.lbl
- \virtua.hlp

- \Catalog\labels.rec
- \Catalog\ff006.tem (*If you use the InstallShield to do a Modify or Repair instead of a Remove, the four fixed field templates will not be overwritten.*)
- \Catalog\ff007.tem
- \Catalog\ff008.tem
- \Catalog\ff1xx.tem
- \Catalog\Mappings*.*
- \Catalog\New Fixed Field Files*.*
- \Catalog\New Workforms*.*
- \Catalog\NSSAW (Custom program text files)
- \DBTables\Language*.*
- \Help*.*
- \New Files*.*
- \User Documentation*.* (when using Documentation installer)
- \User Documentation\PDFDocs*.* (when using Documentation installer)

7.1.2 Files that InstallShield does NOT overwrite

- *.utf
- *.txt
- \Catalog*.wfm
- \Catalog\Validate*.val

7.2 InstallShield, Client Settings, and Windows Registry

During an upgrade of the Virtua Client, the InstallShield does not change any settings that are stored as Registry keys on the workstation.

The main settings stored as Registry keys are configured under the Options pull-down menu in the Virtua Client. Thus the settings you establish for OPAC Display (Show Blind References), Language, Directionality, Cataloging Options, Circulation Options, Load Options, and Toolbars will not be affected during uninstalling and reinstalling operations; they will persist. In addition, the following client settings are stored as Registry keys: cataloging editor short cuts, circulation patron access, Printer Setup, Receipt Printer Setup, Import Records to Purchase Requests, serials check-in, and vendor records (Create Multiple Vendors check box).

Caution: The Registry controls how the Microsoft Windows operating system works. Do not edit the Registry unless you know what you are doing. A mistake could damage your Windows installation.

8. Appendix D - Configuring an Empty Database

Important: The instructions in this section are for customers who receive an *empty* database and have not yet loaded records.

This appendix provides instructions for configuring an empty database so that you can load data. These instructions are provided for those customers who are doing their own data load. If you have an empty database, you must follow these instructions *before* loading data.

If Innovative has loaded your data, skip this section. Be aware that there are procedures documented in this section that can cause serious problems if done on a database containing records. If you have questions about whether or not you should perform the procedures detailed in this section, contact your Innovative representative before continuing.

Before you load records to your empty database, you need to . . .

- Load input, output and sort character maps to the database. For information about working with character maps, see the *System Management Reference Guide*.
- Review the list of stop words, and if necessary, make changes to this list. For instructions for working with stop words, see the *System Management: Cataloging User's Guide*.
- Use the Virtua Profiler to set parameters for the database. For information about using the Virtua Profiler to set parameters, see the *Getting Started with the Virtua Profiler Primer*.

9. Appendix E - Changes in this Guide

9.1 Changes for Version 16.1

No changes were made.

9.2 Changes for Version 15.2

“[Creating the dbadmin User](#)” - Added a note directing users to make sure that the ksh shell is installed before attempting to create the dbadmin user.

Index

.ini file · *See* virtua.ini file

/

/usr/vtls

changing ownership to dbadmin · 13
 changing permissions · 13
 creating · 13

A

accesslabelsexample.mdb · 28
 Acrobat Reader · 86
 AIX platform · *See* IBM AIX
 Apache Web server, opening port for installation · 15
 Available Product Components Screen (fig) · 70

B

backing up, Local Net Service Name · 65

C

Catalog folder · 28
 cataloging workforms · 28
 centre_codes-country_codes_uc.rtf · 28
 Chamo · 4
 interactions of · 9
 changes in the guide · 91
 character maps, loading on an empty database · 90
 Choose Destination Location window · 35, 47
 circback.exe · 28
 circback.ini · 28
 clas99 database, system requirements · 12
 client software, installing · 19
 Client/Server version differences · 31
 compatibility of the Virtua client and server · 31
 Component Selection window · 24
 components of Virtua system · 4
 map of · 5
 configurations/settings
 persistent nature of select · 88
 preserving during a Virtua client upgrade · 87

configuring, Local Net Service Name · 75
 Connect to Server window · 31
 connecting to the Oracle database · 39
 Connection Test Screen - Confirmation Message (fig) · 83
 Connection Test Screen - Failure Message (fig) · 82
 ctxsys user · 18
 default password · 18

D

databases, updating · 2
 date format · 37
 setting in Windows · 37
 dba group · 13
 creating · 13
 on Tru64 platform · 13
 dbadmin user · 13
 creating · 13
 granting ownership of /usr/vtls · 13
 DBTables folder · 29
 directories, creating for the Virtua installation · 12
 directory structure
 Virtua Client · 27
 Virtua Profiler · 36
 documentation · *See* Virtua documentation
 Documentation Installer · *See* Virtua Documentation
 Installer
 Documentation Search Engine · 62
 accessing · 52, 62
 troubleshooting · 86

E

empty database
 configuring · 90
 loading character maps · 90
 reviewing stopwords · 90
 setting parameters · 90
 expiring license keys · 2

F

File menu, Virtua Profiler · 39
 files overwritten during a Virtua Client upgrade · 87
 Finish Screen (fig) · 74

G

Getting Started with the Virtua Profiler Primer · 18, 41, 90

H

Help folder · 29
 holdlabinput.txt · 28
 HoldSpineLab.txt · 28
 host name · 30, 80
 HP - UX
 setting kernel parameters for · 14
 HP-UX · 12

I

IBM AIX · 12
 creating Oracle kernel extensions · 16
 enabling large file support · 12
 Import New Permissions function · 41, 42
 INETWH32.DLL · 37
 InfoStation · 4
 interactions of · 10
 ini file · *See* virtua.ini file
 Install Product Screen (fig) · 73
 installing
 client software · 19
 more than one Virtua Client · 19
 Oracle 11g Client · 65, 67
 Virtua Client · 19
 canceling the installation · 26
 choosing an alternate directory · 23
 Component Selection window · 24
 directory structure · 27
 limit to path size · 23
 procedures · 20
 shared dlls · 24
 system requirements · 20
 upgrading versions · 32
 VERICAT · 24
 Virtua program files · 24
 Virtua database · 11
 Virtua documentation · 52
 Virtua Language Editor
 choosing an alternate directory · 48
 default directory · 48
 procedures · 46
 upgrading · 50
 Virtua Profiler
 choosing an alternate directory · 36
 default directory · 36
 directory structure · 36
 overview · 34
 procedures · 34

system requirements · 34
 upgrading · 42

Virtua server software · 11
 InstallShield, files in Virtua directory and · 87
 IP address · 30

K

kernel extensions, creating · 16
 kernel parameters · 14
 setting
 for HP - UX platforms · 14

L

labels.rec · 29
 labinput.txt · 28
 Language Editor · *See* Virtua Language Editor
 language strings · 46
 large file support, enabling on IBM AIX platforms · 12
 license keys · 2
 Local Net Service Name · 65
 about · 75
 backing up · 65
 configuring · 75
 host name · 80
 naming · 78
 protocol · 79
 required to use the Virtua Profiler · 34
 specifying in the Virtua Profiler · 40
 System Identifier (SID) · 80
 testing · 81
 tnsnames.ora · 65
 logging in
 Oracle database · 40
 Virtua Profiler · 39
 Log-in dialog box (fig) · 39
 log-in passwords, changing for Virtua · 17

M

map of the Virtua system · 5
 Mappings folder · 29
 MARC Format help files · 29
 MARC Label Editor · 29
 MARC record validation files · 29
 Microsoft Access · 65
 migrations · 2
 multiple open clients
 caveats for · 19
 support for · 19

N

Net Configuration Assistant · *See* Oracle Net Configuration Assistant
 Net Service Name · *See* Local Net Service Name
 Net Service Name Wizard Protocol Screen (fig) · 79
 Net Service Name Wizard Protocol Settings Screen (fig) · 80
 Net Service Name Wizard Service Screen (fig) · 80
 Net Service Name Wizard Test Screen (fig) · 81
 Net Service Name Wizard Welcome Screen (fig) · 78
 Net8 Easy Configuration Client · 65
 New Files folder · 29
 New Workforms folder · 29
 NSSAW folder · 29

O

Oracle
 password · 40
 username · 40
 Oracle 11g Client, installing · 65, 67
 Oracle 11g database · 4
 Oracle Client Installer · 67
 Available Product Components Screen (fig) · 70
 Finish Screen (fig) · 74
 Install Product Screen (fig) · 73
 Perform Prerequisite Checks Screen (fig) · 71
 Select Installation Type Screen (fig) · 67
 Select Product Languages Screen (fig) · 68
 Summary Screen (fig) · 72
 Oracle databases
 changing log-in password · 18
 logging in to · 39
 test database · *See* clas99
 Oracle Listener · 37
 Oracle Net Configuration Assistant · 34, 65
 older versions of · 65
 removing · 65
 Oracle Net Manager
 configuring Local Net Service Name · 75
 configuring Local Net Service Names · 75
 Displaying New Local Net Service Name · 84
 File Menu · 85
 running · 75
 Tree Structure · 77
 Welcome Screen · 76
 Oracle users
 ctxsys · 18
 default password · 18
 sys · 18
 default password · 18
 syscli · 18
 default password · 18
 system · 18
 default password · 18

P

parameters
 setting for an empty database · 90
 passwords
 changing · 17
 for Oracle database · 18
 for Virtua root user · 18
 for Virtua user profiles · 17
 for Oracle users · 17
 for Virtua user profiles · 17
 making available to VTLS · 18
 patterns.txt · 28
 Perform Prerequisite Checks Screen (fig) · 71
 permissions
 determines configuration of Virtua Profiler · 40
 Import New Permissions and · 41, 42
 storage of definitions · 37
 persistent settings · *See* Registry
 plang.* files · 29
 port numbers · 30
 ports
 opening for server and database software
 installation · 15
 1111 · 15
 8000 · 15
 9999 · 15
 Profiler · *See* Virtua Profiler
 profiler.exe · 37
 profiler.hlp · 37

R

Redhat Linux · 12
 Registry
 note of caution regarding · 88
 Virtua client settings and · 88
 ROBOEX32.DLL · 37
 root user (UNIX) · 13
 root user (Virtua), changing password for · 18
 rootpre.sh · 16

S

searching the Virtua documentation · 62
 Secure Socket Layer (SSL) · 6
 Select Product Languages Screen (fig) · 68
 server
 license keys · 2
 requirements · 12
 upgrading · 2
 server process · *See* psdriver.exe
 settings · *See* configurations
 Setup button · 30
 shortcut

- Virtua Client · 27
- Virtua Language Editor · 49
- Virtua Profiler · 36
- simplelabels.rec · 29
- spine label generation · 28
- SpineLab.txt · 28
- SQL*Net Easy Configuration · 65
- SSL · *See* Secure Socket Layer
- starting
 - Virtua Client · 30, 31
 - Virtua Language Editor · 49
 - Virtua Profiler · 38
 - requirements before starting · 37
- stop words
 - reviewing in an empty database · 90
- stoplist · *See* stop words
- Summary Screen (fig) · 72
- Sun Solaris · 12
- sys user · 18
 - default password · 18
- syscli user · 18, 40
 - default password · 18
- System Identifier (SID) · 80
- System Management Reference Guide* · 17, 31, 37, 90
- System Management: Cataloging User's Guide* · 90
- system requirements
 - clas99 database · 12
 - Virtua Client · 20
 - Virtua Profiler · 34
 - Virtua server · 12
- system user · 18
 - default password · 18

T

- TCP/IP connection · 20
- TCP/IP host name · 80
- test database · *See* clas99
- tnsnames.ora
 - inserting · 75
 - retaining · 65
- Tools menu · 52, 62
 - setting up in the Virtua client · 30
- Tools menu (fig) · 64
- troubleshooting installation procedures · 86
- Tru64 · *See* Digital UNIX/Tru64
- two clients on same workstation · 19
- two language tables on same workstation · 34

U

- uninstalling
 - Oracle Net Configuration Assistant · 65
 - Virtua Client · 32
 - read-only files · 33
 - shared files · 33

- Virtua Language Editor · 51
- Virtua Profiler · 45
- uninstalling old Oracle software · 65
- updates to the database · 2
- upgrading
 - server software · 2
 - Virtua Client · 32
 - effect on configuration files · 87
 - Virtua documentation · 59
 - Virtua Language Editor · 50
 - Virtua Profiler · 42
- username for log-in · 39
- user's guides · *See* Virtua documentation

V

- Validate folder · 29
- Vericat directory · 27, 29
- VERICAT setup · 24
- VERICAT Setup Window (fig) · 25
- VERICAT Utilities · 29
- version differences · 31
- View records · 37
- viewing the Virtua documentation · 61
- Views folder · 37
- Virtua Acquisitions User's Guide* · 29
- Virtua Client · 4, 19
 - Component Selection window · 24
 - Connect to Server window · 31
 - connecting to a different version of the server · 31
 - directory structure · 27
 - files overwritten · 87
 - installation on Windows 7 and Windows 8 · 27
 - installing · 20
 - installing in an alternate directory · 23
 - interactions of · 7
 - issues with file placement · 27
 - limit to path size · 23
 - shortcut · 27
 - starting · 30, 31
 - system requirements · 20
 - uninstalling · 32
 - upgrading · 32
- Virtua database installation
 - opening ports for · 15
 - preparing for
 - setting kernel parameters · 14
 - procedures · 11
- Virtua documentation
 - accessing · 52, 61
 - installing · 52
 - searching · 62
 - upgrading · 59
 - viewing · 61
- Virtua Documentation Installer · 52
 - location of · 52
- Virtua Getting Started Primer* · 30, 31

- Virtua Language Editor · 4
 - default installation directory · 48
 - installation on Windows 7 and Windows 8 · 28
 - installing · 46
 - issues with file placement · 28
 - shortcut · 49
 - starting · 49
 - uninstalling · 51
 - upgrading · 50
- Virtua Profiler · 4, 65
 - default installation directory · 36
 - directory structure · 36
 - executable · 37
 - help file · 37
 - installation on Windows 7 and Windows 8 · 28
 - installing · 34
 - interactions of · 8
 - issues with file placement · 28
 - Log-in dialog box
 - displaying · 39
 - Log-in dialog box (fig) · 40
 - main window (fig) · 40
 - required date format · 37
 - requirements before starting · 37
 - shortcut · 36
 - starting · 38
 - syscli user · 40
 - system requirements · 34
 - uninstalling · 45
 - upgrading · 42
 - use of by system administrators · 34
- Virtua Profiler main window (fig) · 38
- Virtua Profiler permissions
 - Import New Permissions and · 42
- Virtua server · 4, *See also* psdriver.exe
 - connecting to with a different version of the client · 31
 - opening ports for · 15
 - procedures for installing · 11
 - supported platforms · 12
 - system requirements · 12
- Virtua software
 - components of · 4
 - diagram of the interactions of · 5
- Virtua Statistics and Reporting · *See* InfoStation
- Virtua system components · 5
- Virtua System Management Reference Guide* · 3
- Virtua Translation and String Customization Guide* · 29, 46
- Virtua user profiles
 - changing passwords for · 17
 - initial · 17
 - acqadmin · 17
 - catadmin · 17
 - circadmin · 17
 - guest · 17
 - opacadmin · 17
 - root · 17
 - staff · 17
 - vscadmin · 17
 - initial password · 18
 - root user
 - changing password for · 18
 - using to log in to the Virtua Profiler · 40
- virtua.exe file · 28
- virtua.ini file · 28, 30
- virtua.lbl · 28
- vlang.* files · 29

W

- Web Reports · *See* InfoStation
- Windows 7 · 4, 20, 34
- Windows 8 · 20, 34
- Windows Vista · 4
- Windows XP · 4, 20, 34
- workflow · 1