Alcatel-Lucent VitalQIP®

DNS/DHCP & IP MANAGEMENT SOFTWARE | RELEASE 7.2

INSTALLATION GUIDE

190-409-043R7.2

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JULY 2009
ISSUE 4

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About this document

Purpose

This document provides the following information:

- Pre-installation requirements for installing VitalQIP
- Procedures required to install and configure VitalQIP
- Procedures to upgrade previous versions of VitalQIP to the current version
- Post-installation setup
- VitalQIP uninstallation
- Troubleshooting assistance with problem installations.

Reason for reissue

Table 1 lists the changes to the VitalQIP installation that required the *Installation Guide* to be reissued. The manual has also been reorganized into three parts, Sybase, Oracle, and Console and template installations. The Issue column indicates in which revision of the document the changes occurred.

Table 1 Installation Guide changes

Issue	Feature name	Description	Feature impact
4	Extent specifications	Instructions for calculating and customizing initial extent specifications in Oracle databases have been clarified. Fixes VQIP00022048.	“Calculate and customize initial/extent specifications” (p. 12-6)

Issue	Feature name	Description	Feature impact
4	Executable name change	Executable files that start installations now have a repackaging number as part of the file name. This allows Alcatel-Lucent to repackage an existing build to address installation problems without requiring a rebuild and re-release of the product.	Throughout this manual, where executable names are provided.
4	Template installation	Clarification that template installations of enterprise server require a license key. Fixes VQIP00022097.	“Use the template to install VitalQIP” (p. 20-7)
4	Oracle requirement	Oracle installations must include JVM. Fixes VQIP00022021.	“Install Oracle” (p. 12-4)
4	Post-install configuration	Additional step added to address ulimit issue with Solaris. Fixes VQIP00020755.	“VitalQIP configuration on a UNIX platform” (p. 19-15)
4	Linux shared memory	The recommended amount of shared memory allocated for Linux has changed.	“Solaris and Linux: adjust shared memory” (p. 2-4)
4	Upgrade of VitalQIP	Upgrade instructions from previous versions of VitalQIP to the current version of VitalQIP have been added to this document.	Part IV: “Upgrade VitalQIP”
3	Configuration of Sybase backup server	Clarification added for instances where configuration fails on Linux servers. Fixes VQIP00020544.	“Sybase backup server configuration failure” (p. 2-22)

Issue	Feature name	Description	Feature impact
3	Install enterprise server (Oracle)	Clarification added that Oracle client needs to be installed on enterprise server box if the Oracle server and VitalQIP enterprise server are located on different boxes. Fixes VQIP00020542.	"Install the VitalQIP enterprise server" (p. 14-5)
2	Install Sybase database	Clarification added in cases where the configuration of the Sybase backup server fails. Fixes VQIP00019755.	Step 23 in "Install Sybase database"
1	VitalQIP configuration	Workaround for a blocked Tomcat self-signed certificate in IE 7. Fixes VQIP00018883.	• "Enable a blocked Tomcat self-signed certificate" (p. 9-11) • "Enable a blocked Tomcat self-signed certificate" (p. 19-5)
1	VitalQIP configuration	Increase the memory allocation for Tomcat server when working with very large data sets. Fixes VQIP00018846.	• "Increase Tomcat server memory allocation" (p. 17) • "Increase Tomcat server memory allocation" (p. 19-11)
1	Oracle tablespace	A new tablespace (QIP_LOB) is used by Managed Files. Fixes VQIP00018121.	"Create tablespace" (p. 12-5)
1	Sybase memory allocation in UNIX	The memory allocation requirements for Sybase 15.0.1 and 15.0.2 have been increased. Fixes VQIP00017716.	"Configure the Sybase configuration file" (p. 9-3)
1	TCP KeepAlive setting	Corrected TCP KeepAlive instructions for both UNIX and Windows. Fixes VQIP00017711.	UNIX: Step 6 in "VitalQIP configuration on a UNIX platform" . Windows: "Adjust TCP KeepAlive settings" (p. 9-9)

Issue	Feature name	Description	Feature impact
1	VitalQIP pre-installation requirements	The SYBASE_SYSAM variable is no longer set by Sybase.sh and was removed from the variables list. Fixes VQIP00017656.	"UNIX: Set database environment variables" (p. 3-4)
1	Sybase Adaptive Server configuration	• Values adjusted for `max memory` and `procedure cache size`. Fixes VQIP00017716. • `enable java` added to Table 9-1	"Configure the Sybase configuration file" (p. 9-3)
1	Sybase client configuration	Clarification added to Add new network transport step. Fixes VQIP00017815 (1).	Step 6 in "UNIX: Configure and check the connectivity to the database"
1	Sybase data directory location during Enterprise installation	Clarification added if Sybase server location is different from enterprise server. Fixes VQIP00017815 (2).	Step 12 in "Install the VitalQIP enterprise server"
1	Sybase default sort order	Added sort order steps to Windows Sybase configuration instructions. Fixes VQIP00019298.	Step 13 in "Windows: Configure the database"

Intended audience

This manual is intended for administrators who install VitalQIP.

Supported systems

For supported system platforms, refer to the *VitalQIP 7.2 Release Notes*.

How to use this document

This manual is organized as follows:

Part I: "Sybase"	Chapter 1, "Introduction"	Provides an overview of the types of installations and steps for installing VitalQIP.

	Chapter 2, “Install Sybase database”	Provides the pre-installation requirements, installation instructions, post installation directions, and the uninstall directions for Sybase.
	Chapter 3, “VitalQIP requirements”	Outlines the pre-installation requirements for VitalQIP.
	Chapter 4, “Install VitalQIP enterprise server”	Discusses how to install the VitalQIP enterprise server.
	Chapter 5, “Install VitalQIP remote server”	Discusses how to install the VitalQIP remote server.
	Chapter 6, “Install VitalQIP web client interface”	Discusses how to install the VitalQIP web client interface.
	Chapter 7, “Install VitalQIP GUI client”	Discusses how to install the VitalQIP graphical user interface.
	Chapter 8, “Install VitalQIP Distributed Services”	Discusses how to install the VitalQIP distributed services.
	Chapter 9, “VitalQIP configuration”	Describes how to start and configure VitalQIP after the installation.
Part II: “Oracle”	Chapter 11, “Introduction”	Provides an overview of the types of installations and steps for installing VitalQIP.
	Chapter 12, “Oracle requirements”	Outlines the pre-installation requirements for Oracle.
	Chapter 13, “VitalQIP requirements”	Outlines the pre-installation requirements for VitalQIP.
	Chapter 14, “Install VitalQIP enterprise server”	Discusses how to install the VitalQIP enterprise server.
	Chapter 15, “Install VitalQIP remote server”	Discusses how to install the VitalQIP remote server.
	Chapter 16, “Install VitalQIP web client interface”	Discusses how to install the VitalQIP web client interface.
	Chapter 17, “Install VitalQIP GUI client”	Discusses how to install the VitalQIP graphical user interface.
	Chapter 18, “Install VitalQIP Distributed Services”	Discusses how to install the VitalQIP distributed services.
	Chapter 19, “VitalQIP configuration”	Describes how to start and configure VitalQIP after the installation.

Part III: “Console and template installations”	Chapter 20, “Console and template installations”	Discusses the console and template installations.
	Appendix A, “Uninstall VitalQIP”	Describes how to uninstall VitalQIP.
	Appendix B, “Troubleshooting”	Provides possible resolutions to problems you may encounter during the VitalQIP installation.
	Appendix C, “Third party software license statements”	This appendix contains third-party license agreements statements.

Conventions used

Table 2 lists the typographical conventions used throughout this manual.

Table 2 Typographical conventionss

Convention	Meaning	Example
Trebuchet bold	Names of items on screens.	Select the **Client** check box.
	Names of buttons you should click on the screen, or names of keys on the keyboard to be pressed.	Click **OK**.
Courier	Output from commands, code listings, and log files	`# Name: Share shared-network _200_200_200_0`
Courier bold	Input that you should enter from your keyboard.	Run the following command: **`c:\setup.exe`**
	Names of commands and routines	The **`qip_getapp1lst`** routine returns the entire list of existing applications.
Courier bold italic	Input variable for which you must substitute another value. The angle brackets also indicate the value is a variable.	**`isql -U sa -P <sa_password>`**
Times bold	Uniform Resource Locators (URLs)	The VitalQIP product site can be found at **http://www.alcatel-lucent.com/wps/portal/products/**.
Times italics	Manual and book titles.	Refer to the *VitalQIP User’s Guide*.
	Directories, paths, file names, and e-mail addresses.	A symbolic link must be created from */etc/ named.conf* that points to *named.conf*.

Convention	Meaning	Example
Times bold italic	Emphasis	***Read-only***. The name of the service element.

Table 3 Related information

You will find the following documentation useful:

- *VitalQIP 7.2 Release Notes* (part number: 190-409-100R7.2)

  This document contains product features, known defects, resolved defects, and documentation updates.
- *VitalQIP Administrator Reference Guide* (part number: 190-409-042)

  This guide discusses planning and configuration of VitalQIP.
- *VitalQIP User's Guide* (part number: 190-409-068)

  This guide describes how to set up and use the VitalQIP user interface on Windows and UNIX platforms.
- *VitalQIP Command Line Interface User's Guide* (part number: 190-409-044)

  This guide discusses and describes how to use the VitalQIP Command Line Interface.
- *VitalQIP Web Client User's Guide* (190-409-079)

  This guide describes how to use the VitalQIP web client interface.
- **www.sybase.com**

  The Sybase website.
- **www.redhat.com**

  The Red Hat Linux website.
- **www.sun.com**

  The website for Sun products.

Training support

Alcatel-Lucent University offers cost-effective educational programs that support the VitalQIP product. Our offerings also include courses on the underlying technology for the VitalQIP products (for example, DNS and DHCP). Our classes blend presentation, discussion, and hands-on exercises to reinforce learning. Students acquire in-depth knowledge and gain expertise by practicing with our products in a controlled, instructor-facilitated setting. If you have any questions, please contact us at 1 888 LUCENT8, option 2, option 2.

Technical support

If you need assistance with VitalQIP, you can contact the Technical Assistance Center for your region. Contact information is provided in the following table.

Table 4 Technical support information

Region	Address	Contact information
North, Central, and South America	Alcatel-Lucent 400 Lapp Road, Suite 101 Malvern, PA 19355 USA	Phone: 1-866-LUCENT8 (582-3688) Option 1, Option 2 Web: **https://support.lucent.com**
Europe, Middle East, Africa, and China	Alcatel-Lucent Voyager Place Shoppenhangers Road Maidenhead Berkshire SL6 2PJ UK	Phone: 00 800 00 LUCENT or +353 1 692 4579 E-mail: *emeacallcenter@alcatel-lucent.com* Web: **https://support.lucent.com**
Central and South America	Alcatel-Lucent Calle 10, No. 145 San Pedro de los Pinos, 01180 Ciudad de Mexico Mexico	Mexico 01 800 123 8705 or (52) 55 5278 7235 Brazil 0800 89 19325 or (55) 193707 7900 Argentina 0800 666 1687 Venezuela 0 800 1004136 Costa Rica 0800-012-2222 or 1800 58 58877 For other local CALA numbers, consult the web site **https://support.lucent.com** or contact your local sales representative.
Asia Pacific	Alcatel-Lucent Australia 280 Botany Road Alexandria NSW 2015 Australia	Phone: 1800-458-236 (toll free from within Australia) (IDD) 800-5823-6888 (toll free from Asia Pacific - Hong Kong, Indonesia, South Korea, Malaysia, New Zealand, Philippines, Singapore, Taiwan, and Thailand) (613) 9614-8530 (toll call from any country) E-mail: *apactss@alcatel-lucent.com*

How to order

Customers can order additional VitalQIP manuals online from the Alcatel-Lucent Online Customer Support (OLCS) web site at **https://support.lucent.com/portal/olcsHome.do**.

How to comment

To comment on this document, go to the Online Comment Form or e-mail your comments to the Comments Hotline (***comments@alcatel-lucent.com***).

Part I: Sybase

Overview

Purpose

Part I provides instructions for Sybase users on installing and configuring VitalQIP.

Contents

This part includes these chapters.

Chapter 1, “Introduction”	1-1
Chapter 2, “Install Sybase database”	2-1
Chapter 3, “VitalQIP requirements”	3-1
Chapter 4, “Install VitalQIP enterprise server”	4-1
Chapter 5, “Install VitalQIP remote server”	5-1
Chapter 6, “Install VitalQIP web client interface”	6-1
Chapter 7, “Install VitalQIP GUI client”	7-1
Chapter 8, “Install VitalQIP Distributed Services”	8-1
Chapter 9, “VitalQIP configuration”	9-1

1 Introduction

Overview

Purpose

This chapter provides information about the types of VitalQIP installations and the suggested order for installing VitalQIP components.

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This chapter covers these topics.

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Recommended order to install VitalQIP components	1-3

Installation overview

Available types of installations

Installation types

VitalQIP offers three ways to install VitalQIP components. You can pick the type which best suits your needs.

Standard installation

The standard installation offers a graphical user interface that takes you step by step through the VitalQIP installation. This installation offers those users who are not familiar with console and template installation a visual way to install VitalQIP.

Console installation

The console installation is a text based installation. Since the console installation is not GUI based, it is much faster. All the information that is collected in the regular VitalQIP installation appears as prompts in the console installation. The console installation is not platform-dependent.

Template installation

The template installation runs the standard installation and creates a template. The template can be transported to another machine and used to install VitalQIP on separate machine. This can come in handy in situations where VitalQIP is being installed on more than one machine, for example, when installing multiple remote servers with the same configuration options.

Recommended order to install VitalQIP components

Purpose

This section suggests the recommended order for installing VitalQIP.

Before you begin

As required by the VitalQIP and database prerequisites, ensure your system is running the correct operating system and is patched to the required operating system level. Refer to the *VitalQIP 7.2 Release Notes*.

Procedure

Follow these steps:

1. Install the database and the necessary patches.

2. Install the VitalQIP enterprise server. As a Sybase user, additional configuration of the database is necessary. Refer to "Sybase configuration" (p. 9-2) for more information.

3. Install the VitalQIP clients.

4. Install the VitalQIP remote servers.

5. Install the VitalQIP web package. If you are planning on using a language other than English for VitalQIP, additional configuration is required. Refer to Chapter 17, "Web client configuration" in the *VitalQIP Administrator Reference Manual* for more information.

   Note: You can complete this step at any time after you have installed the VitalQIP enterprise server.

END OF STEPS

2 Install Sybase database

Overview

Purpose

Because Alcatel-Lucent supports and supplies Sybase, this chapter is provided as a supplement to the Sybase instructions for installing the Adaptive Server database and Sybase client. This chapter contains the pre-installation requirements, installation instructions, and uninstall instructions for the Sybase database and Sybase client. Sybase must be installed before you install VitalQIP.

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This chapter covers these topics.

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Sybase database

Overview

Install Sybase before VitalQIP

For the VitalQIP enterprise server to be installed on a Windows or UNIX server, the full Sybase database must be installed. Alcatel-Lucent recommends that a "Custom" installation be done. A Custom installation adds the necessary components to create a database for VitalQIP. For this reason, only Custom installation procedures that focus on VitalQIP needs are documented.

Full and customized installations

If you choose to perform a typical or full installation of Sybase rather than a custom installation, ensure the following is installed when you select "Typical Install" or "Full Install" during the Sybase installation:

- Adaptive Server
- Connectivity (Open client)
- Language Modules

For information about a "Typical Install" or "Full Install", refer to the *Installation Guide* for Sybase 15.0.1. Sybase documentation can be obtained from Sybase's website at **www.sybase.com/support/manuals**.

Sybase pre-installation tasks

Introduction

To assist in a trouble free installation, ensure that operating system requirements are met before installing Sybase. Unless specified, the requirements apply to both UNIX and Windows.

Sybase may have additional issues not documented here that may require extra attention. Refer to the "Known Vendor Issues" in the *VitalQIP 7.2 Release Notes* for more information.

> **Note:** Sybase is not included in the VitalQIP installation files. The Sybase installation files are provided separately.

Guidelines for choosing operating system files

If you decide to use operating system files for the database devices, be aware of the following:

- You can eliminate the risk of losing data by keeping database dumps of the master and sybsystemprocs devices, as well as by keeping user databases up-to-date at all times.
- Although the number of writes for the master and sybsystemprocs devices is generally small (so that the risk of database corruption is small), the recovery from a lost master or sybsystemprocs device is complicated.

Use of network-mounted files as database devices

Sybase strongly recommends against running the SQL server on network-mounted files (for example, NFS- or RFS-mounted files), for the following reasons:

- Network problems can cause serious data integrity problems because the network lies between the SQL server and the devices on which it writes.
- Certain combinations of NFS or RFS file servers and clients may cause unpredictable operating system behavior and adversely affect other processes in the system.
- To run the SQL server by using network-mounted files as database devices, you must use operating system files for your database devices. Devices installed on operating system files cannot guarantee recovery in case of media failure, power failure, or system failure.
- If the remote machine is down when you reboot the SQL server, and the database devices cannot be activated, automatic recovery will fail.
- The SQL server is suspended when the remote machine or network is down.

Obtain gtar utility to unpack Sybase files

The Sybase installation file for UNIX is compressed using GNU Tar, and must be decompressed using GNU Tar. If you use the UNIX native Tar executable, checksum errors may occur.

Visit **http://www.sunfreeware.com/** for download servers for this utility.

When running GNU Tar, use the full path name for GNU Tar as all UNIX implementations have their own native Tar utility:

```
/<path_name for gtar utility>/gtar -zxvf EBF11441.tgz
```

Solaris and Linux: adjust shared memory

For the relational database to start correctly on Solaris and Linux, the operating system kernel must be modified to adjust the system shared memory parameter. This only needs to be done on systems where the database has never been installed. To do so:

If you installing on...	Then...
Linux	1. Log on to the system as the root user. 2. Copy your existing system file to a backup file. 3. Open the */etc/sysctl.conf* file with a text editor. 4. Add this line to the file: **`kernel.shmmax=536870912`** 5. Save the file. 6. Reboot the machine.

Solaris	1. Log on to the system as the root user.
	2. Copy your existing system file to a backup file. For example:
	`cd /`
	`mkdir oldkernel`
	`cp -R /kernel/* /oldkernel/.`
	3. Add the following line into the */etc/system* file if it is not already present:
	`set shmsys:shminfo_shmmax=134217728`
	Note: 134217728 (128 MB) is a minimal value. You can enter a larger value if needed, but it cannot be more than the computer's physical memory.
	4. Reboot the machine.

Linux: Install Developer Kit and patches

On Linux, ensure that these items are installed:

- Linux Developers Kit

  Sybase installation on Linux requires the Developers Kit to run the installation or the installation fails.

- Red Hat Linux patch, *compat-libstdch++-7.3.296.128.i386.rpm*.

  Visit **www.redhat.com** to download the patch.

Determine the size of the database

Note: Alcatel-Lucent does not recommend using raw partitions. It is the responsibility of the customer to install and configure the Sybase database on raw partitions.

You must determine your SQL server device sizes and locations. The following table outlines the Sybase device and database configuration that is utilized with VitalQIP.

These calculations are used in the table:

x = (# of IP Addresses * 2500) + (# of subnets * 500) + (# of domains * 1300)

y = x/(1024*1024) (to convert to MB)

VitalQIP database (qip_dat) MB = y * 5

VitalQIP Transaction Log = VitalQIP database size /2

VitalQIP Temporary Space (tempdb, in MB) = VitalQIP database size /2

Note: The space needed for the backup server is not included in these calculations.

Table 2-1 Device sizes

Device	Device Size (MB)	Database	Default Database Size (MB)	Notes
master	150	master	125	Holds system catalog information.
		tempdb	5	Holds temporary calculations and data sorting before returning results to client. Default minimum is 5 MB.
systemprocs	120	sybsystemprocs	120	Holds Sybase system stored procedures that start with sp_.
qip_dat	50	VitalQIP	50	Holds VitalQIP database. Calculated based on #objects, #domains, and #subnets. Minimum is 45 MB.
qip_log	25	VitalQIP Transaction Log	25	Holds the VitalQIP Transaction Log. Calculated based on #objects, #domains, and #subnets. Minimum is 15 MB.

Device	Device Size (MB)	Database	Default Database Size (MB)	Notes
qip_tempdb	25	VitalQIP Temporary Space	25	Holds temporary calculations and data sorting prior to returning results to client. Calculated based on #objects, #domains, and #subnets. Calculation is 1/2 of VitalQIP database. Minimum is 15 MB. Performance problems usually can be attributed to having qip_tempdb defined too small.
sybsysdb.dat	12	Associated with the master	12	

Install Sybase database

Purpose

This section describes how to install Sybase on a system that has never had Sybase installed on it. The instructions apply to both UNIX and Windows. If values differ for options between UNIX and Windows, the different values are noted.

Before you begin

- After the Sybase installation, you ***must*** configure the database for language support. Refer to "UNIX: Configure the database" (p. 2-25) or "Windows: Configure the database" (p. 2-29) to specify the language configuration settings.
- VitalQIP supports multiple languages for simplified Chinese, French, English, German, Spanish, and Korean. Before installing Sybase, it is recommended that you determine if VitalQIP will be supporting one or more of these languages. Multiple language support must be installed at the database level for this feature to work.
- Alcatel-Lucent recommends that you write down the name of your Sybase server, the port number of the server, the port number of the backup server, and the IP address. This information is needed for the VitalQIP installation.

Procedure

Follow these steps:

1 Log into your system as:

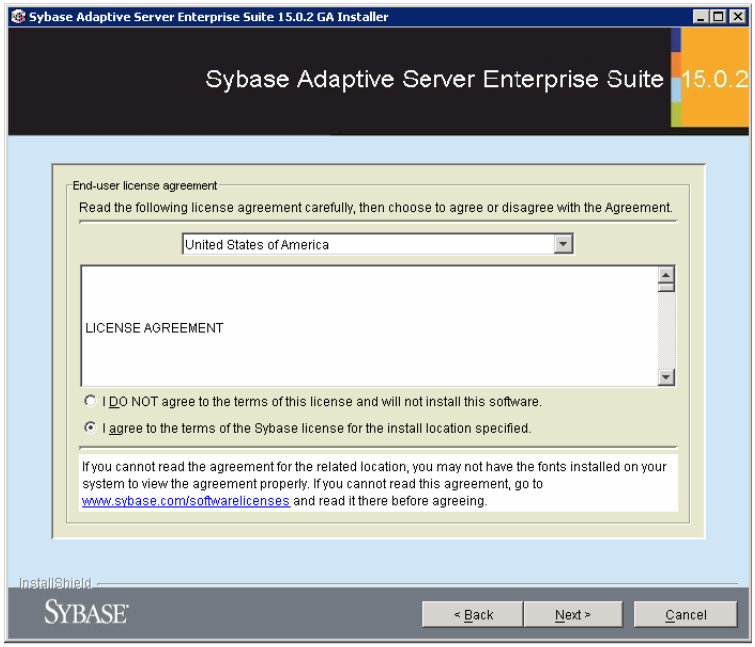
- For UNIX, the root user
- For Windows, the user with administrative privileges

2 Exit all programs you are currently running.

3 To start the installation:

If you are...	Then...
Installing on UNIX	1. Execute: **export PATH=*<Sybase install storage areas>*/JVM:$PATH** **Note:** If the installation is not being performed from the console, export the DISPLAY and ensure **xhost** is executed to allow displays from other servers. 2. Go to the directory where the Sybase installation files are located. 3. Execute: **./setup** The Welcome screen opens.
Installing on Windows	1. From your Desktop, select **Run** from the **Start** menu. 2. Open a command prompt and type: **cmd** 3. Go to the directory where the Sybase installation files are located: **cd *<drive>*:*<directory>*** 4. Type: **setup.exe** The Welcome screen opens.

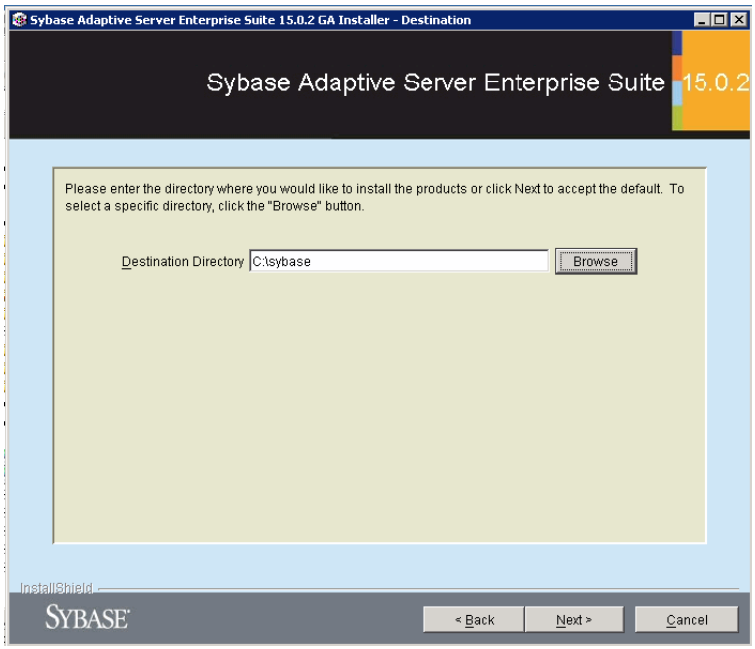
4 Click **Next**. The End-User License Agreement screen opens.



In the **Select** field, select your country to display the license agreement in your language. Read the license agreement and select one of the following:

- If you agree to the terms, click **I agree to the terms of the Sybase license for the install location specified.**
- If you do not agree to the terms, click **I DO NOT agree to the terms and will not install this software.** to exit the installation.

5 Click **Next**. The Destination screen opens.



By default, the database is installed in the */opt/sybase* directory UNIX and *c:\sybase* directory for Windows. If you want the database installed in a different directory, type the full path to the directory. Alternatively, you can use **Browse** to select an existing directory.

6 If an older version is detected, a message opens:

```
You have chosen to install into an existing directory. Any older
version of the product you choose to install that are detected in
this directory will be replaced. Do you want to continue?
```

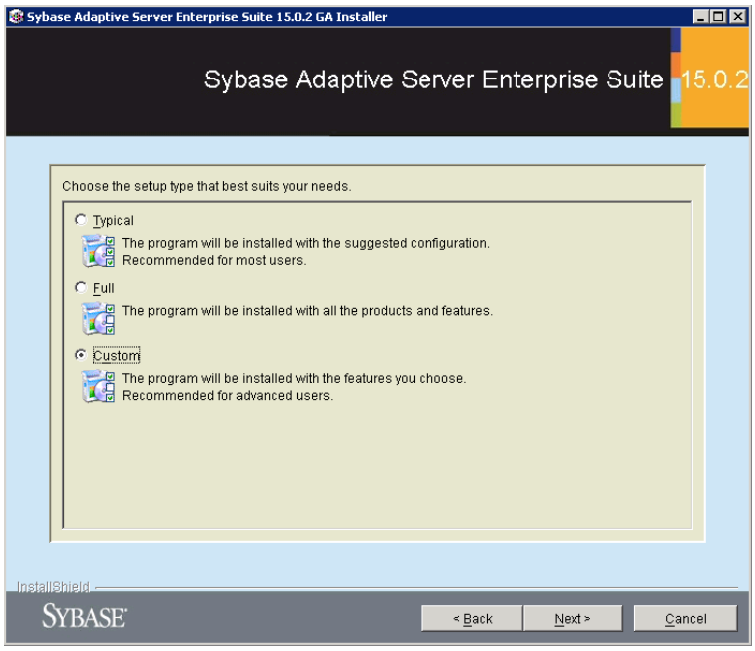
7 Click **Next**. If the directory does not exist, a message opens:

```
The Directory does not exist. Do you want to create the directory?
```

Click one of the following:

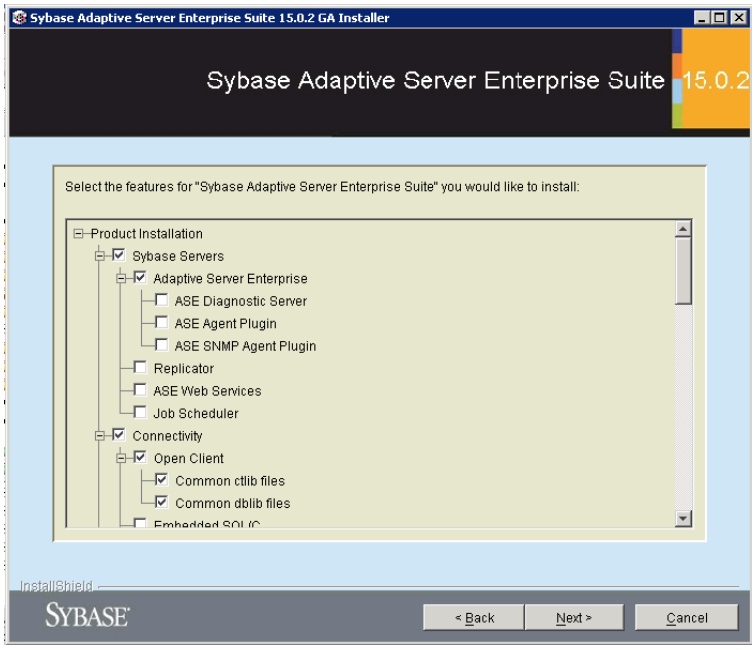
- **Yes** to create the directory. The Install Type screen opens.
- **No** to not create the directory. The installation uses the location of the default directory to store the database.

8 The Feature screen opens.



Alcatel-Lucent recommends you install the “Custom” installation. VitalQIP requires some components but does not need others. If you wish to use the Typical or Full installation, refer to the Sybase documentation for installation instructions, as described in “Full and customized installations” (p. 2-2).

9 Select **Custom** and click **Next**. The Select Features screen opens.



For VitalQIP to function with Sybase, you must install the components that are listed in the following table. If the options are not selected, select the options. Refer to the Sybase documentation if you want in-depth details on these options.

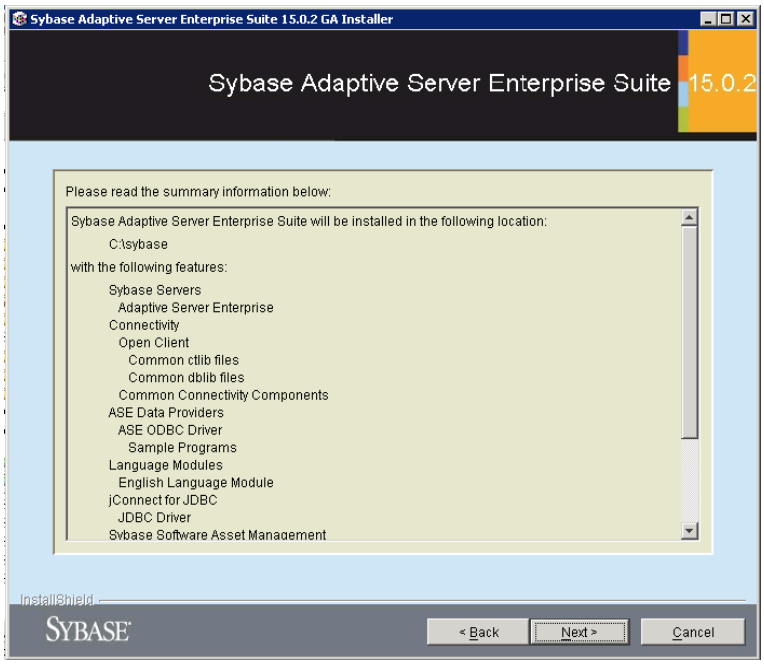
Note: The approximate total size for the options selected in the following table is 250.8 MB.

Table 2-2 Required Sybase options for VitalQIP

Option	Notes
Sybase Servers	
Adaptive Server Enterprise	VitalQIP requires this option. You can deselect the ASE Diagnostic Server and ASE Agent Plugin sub-options, as well as the Replicator option because they are ***not*** required by VitalQIP.
Connectivity	
Open Client	
Common ctlib files	VitalQIP requires this option.
Common dblib files	

Option	Notes
Common Connectivity Components	Defaults to being greyed out because Sybase requires that this option be installed.
Language Modules	This option defaults to being selected because English Language Support is required by Sybase. VitalQIP supports additional languages, as listed below. If you wish Sybase to support one of these languages, select that language support module.
Chinese Language Support Module	Required if VitalQIP is supporting simplified Chinese.
German Language Support Module	Required if VitalQIP is supporting German.
French Language Support Module	Required if VitalQIP is supporting French.
Spanish Language Support Module	Required if VitalQIP is supporting Spanish.
Korean Language Support Module	Required if VitalQIP is supporting Korean.
English Language Support Module	Defaults to being greyed out because Sybase requires that this option be installed.
jConnect for JDBC	
JDBC Driver	Defaults to being greyed out because Sybase requires that this option be installed.
Sybase Software Asset Management	Deselect because VitalQIP does not require these features.
Sybase Unified Agent	Deselect because VitalQIP does not require these features.
ASE Administration Tools	Deselect because VitalQIP does not require these features.

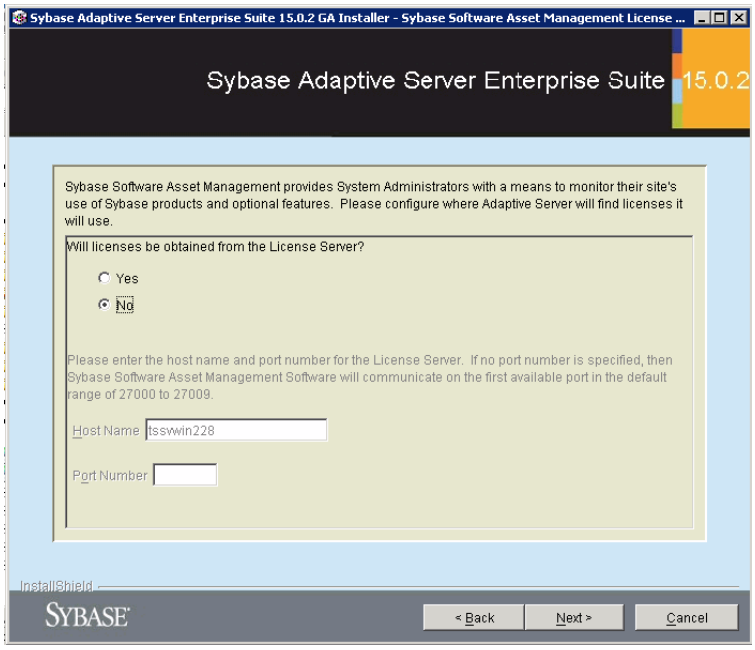
10 Click **Next**. The Summary Information screen opens.



11 Review the summary of information to ensure it is correct. Click **Back** if you need to change selections.

12 Click **Next**. After the installation completes, a message opens indicating whether the installation was successful.

13 Click **Next**. The Sybase Software Asset Management screen opens.



The Sybase Software Asset Management is not needed to run Sybase for VitalQIP.

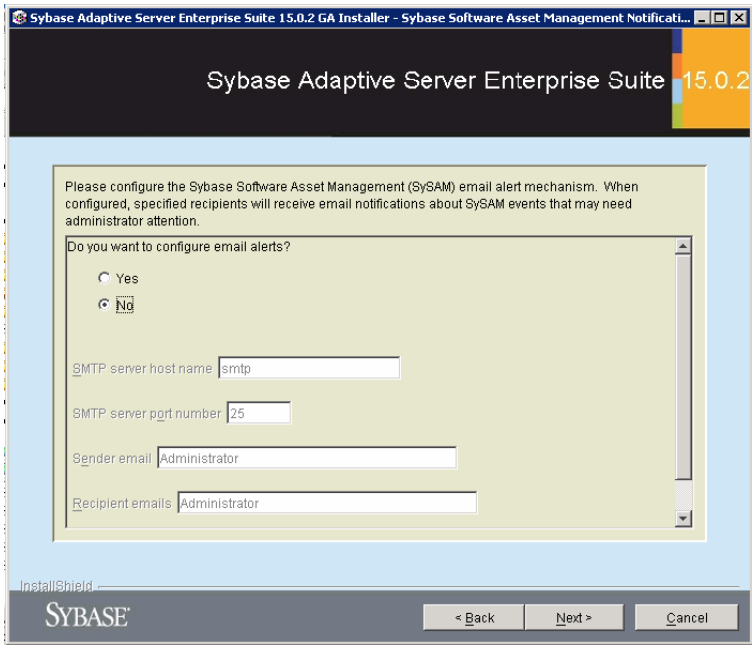
14 Select **No**. All options in this screen are disabled. By default, **Yes** is selected and all options are enabled.

15 Click **Next**. A message opens:

```
Please remember to download and install the license file after
this installation
```

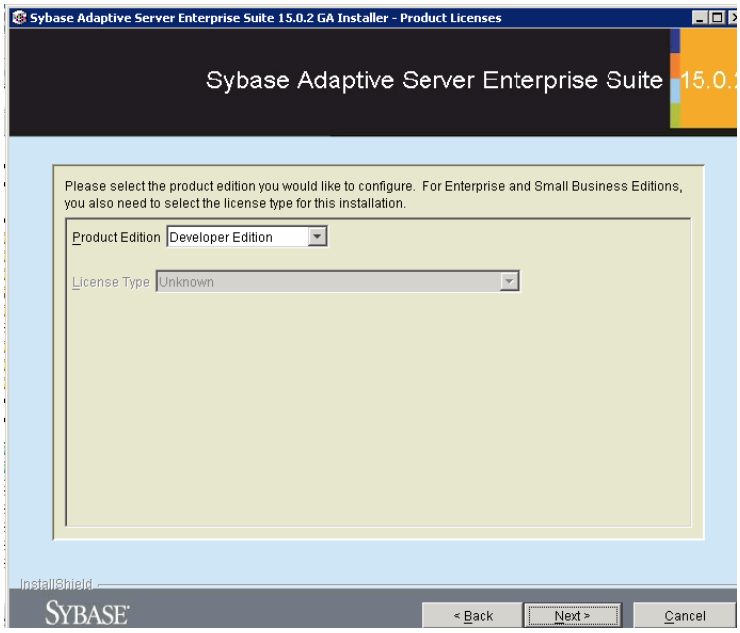
The VitalQIP installation installs a license for Sybase. No action is required on your part.

16 Click **OK**. Configure Email Alerts screen opens.



If you wish to use Sybase's email alerts, you are responsible for the setup of this feature. Alcatel-Lucent does not support this feature. Select **No**. All options are disabled. By default, **Yes** is selected and all options are enabled.

17 Click **Next**. The Product Edition screen opens.



Select the following:

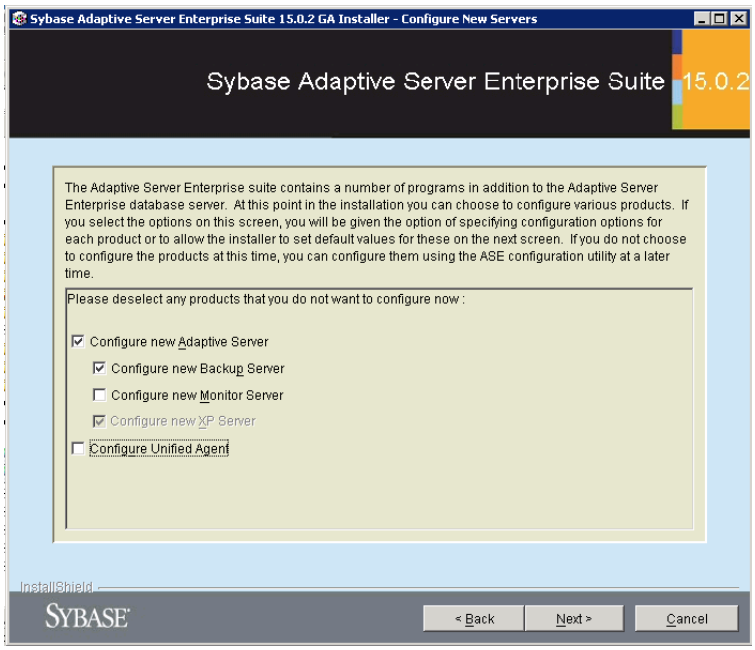
- For the **Product Edition** field, select **Enterprise Edition**. The default is **Developer Edition**.
- For the **License Type** field, select **AR : OEM Application Deployement Server License**.

18 Click **Next**. In some instances, the following message opens:

```
Installer can't check out a license. Do you want to continue
without a license?
```

The VitalQIP installation installs a license for Sybase. No action is required on your part.

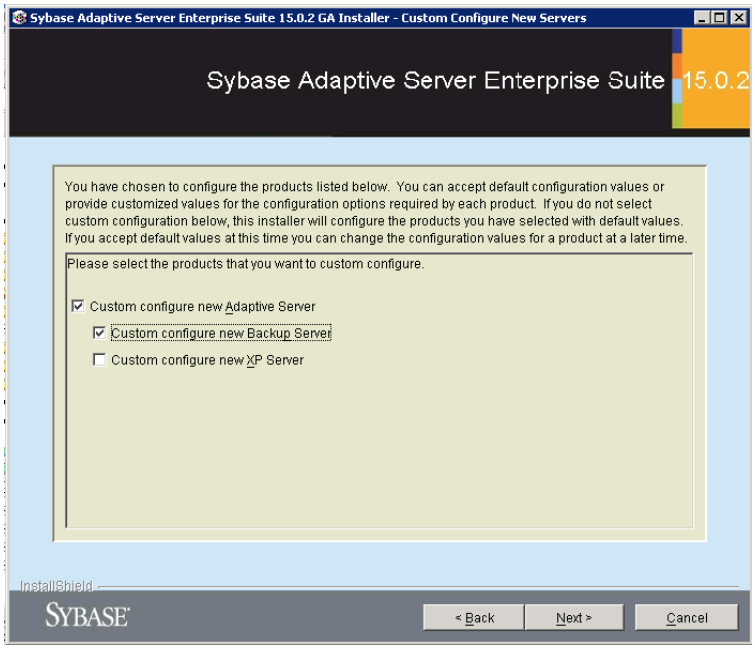
19 Click **Yes**. The Configure New Servers screen opens.



Sybase requires an Adaptive Server be configured to run a backup server. By default, all options are selected. Deselect all options except **Configure new Adaptive Server** and **Configure new Backup Server**.

> **Note:** For Windows, Sybase requires that the XP Server be installed. Thus, the **Configure new XP Server** option is selected. It cannot be unchecked. No additional configuration is needed for the XP Server.

20 Click **Next**. The Configure new Adaptive Server screen opens.

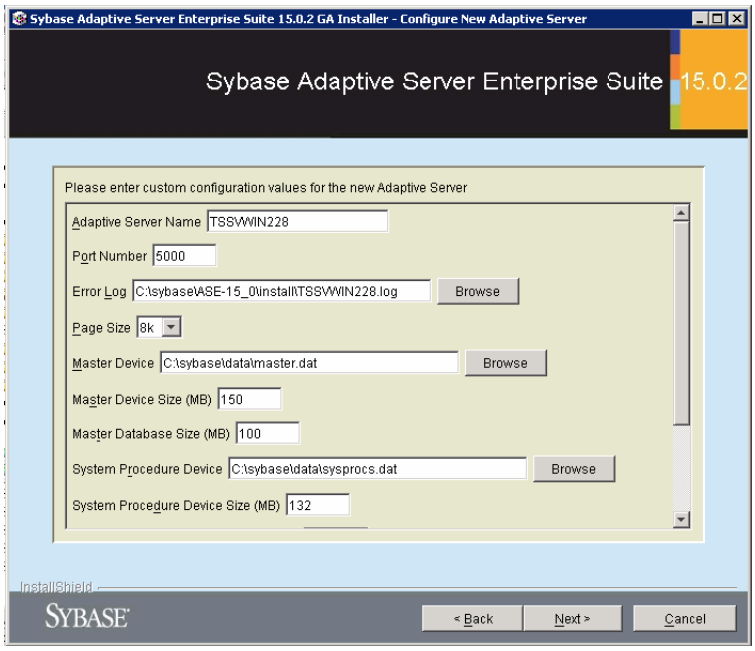


According to the screen instructions, you have a choice to accept the configuration defaults or to provide customized configuration values. Do ***not*** accept the Sybase installation defaults because VitalQIP requires greater default Adaptive Server values than those offered by the installation.

21 Click **Custom Configure new Adaptive Server** and **Custom Configure new Backup Server**.

Note: When you are installing on Windows, an additional option, **Custom configure new XP server** is shown. Do not select this option. No additional configuration is needed for the XP server to run Sybase with VitalQIP.

22 Click **Next**. The Configure New Adaptive Server screen opens.



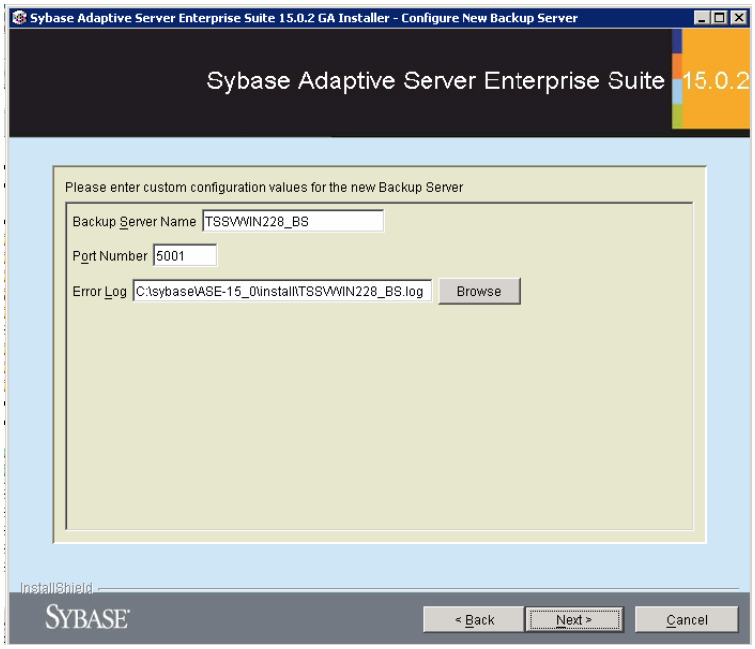
Refer to the following table to establish the appropriate values for each field. Unless specified in the table, Alcatel-Lucent recommends you accept the default for an option if you are not familiar with it.

Table 2-3 Required Configure New Adaptive Server values

Option	Change it to...
Adaptive Server Name	If needed, you can change the name for the Adaptive Server.
Port Number	The installation determines the available port and displays it as the default. Change it as needed. By default, the port is 5000.
Error log	This value does not need to be changed.
Page Size	Change the value to a minimum of **8k**.
Master Device	This value does not need to be changed.
Master Device Size	Change the value to a minimum of **150**. The master device must be at least 37 MB more than the Master database.
Master Database Size	Change the value to a minimum of **100**.
System Procedure Device	This value does not need to be changed.
System Procedure Device Size	This value does not need to be changed.

Option	Change it to...
System Procedure Database Size	This value does not need to be changed.
System Device	This value does not need to be changed.
System Device Size	This value does not need to be changed.
System Database Size	This value does not need to be changed.

23 Click **Next**. The Configure Backup Server screen opens.



Refer to the following table to establish the appropriate values for each field. Unless specified, Alcatel-Lucent recommends that you accept the default for an option if you are not familiar with it.

Note: If the configuration of the Sybase backup server fails on Linux, additional steps are needed to configure the backup server. Refer to "Sybase backup server configuration failure" (p. 2-22) for more information.

Table 2-4 Required Configure New Backup Server values

Option	Change it to...
Backup Server Name	If needed, you can change the name for the backup server.

Option	Change it to...
Port Number	The installation determines the available port and displays it as the default. Change it as needed. The default port is 5001.
Error log	The error log value does not need to be changed.

24 Click **Next**. The Configure New Servers Summary screen opens. Review the information to ensure it is correct.

25 Click **Next**. After a few moments, a message opens stating that the installation is complete.

26 Do the following:

If you are...	Then...
Installing on UNIX	The installation is complete. Click **Finish**.
Installing on Windows	Click **Next**. The machine must be rebooted before installing VitalQIP. Select one of the following and click **Finish**: • **Yes, restart my computer.** • **No, I will restart my computer at a later time.**

27 After the installation, configure your Sybase environment. Add ***<Sybase installation directory>/*SYBASE.sh** to your profile or run **SYBASE.sh** before starting or configuring the database. After this is complete, the database must be configured. Refer to one of the following sections to configure the database:

- For UNIX, refer to "UNIX: Configure the database" (p. 2-25)
- For Windows, refer to "Windows: Configure the database" (p. 2-29)

END OF STEPS

Sybase backup server configuration failure

If an error occurs when you are configuring a Sybase backup server on a Linux platform, follow these steps to complete the backup server configuration.

1 Go to the Sybase home directory.

2 Source the Sybase environment variables:

```
. ./SYBASE.sh
```

3 Export the LD_POINTER_GUARD:

```
export LD_POINTER_GUARD=0
```

4 Copy the *srvbuild.backup_server.rs* file to a temporary directory:

```
cp $SYBASE/ASE-15_0/init/sample_resource_files/srvbuild.backup_server.rs
   /tmp/BS_IN
```

5 Change the directory to the temporary directory:

```
cd /tmp
```

6 Open the *BS_IN* file in a text editor.

7 Set values for the following parameters:

```
sybinit.release_directory: <path to Sybase home directory>
bsrv.server_name: <Name of Sybase backup server>
bsrv.network_hostname_list: <Hostname>
bsrv.network_port_list: <port number used by Sybase; default port is 5001>
sqlsrv.related_sqlsrvr: <Adaptive server name>
```

The following is a sample file with changed values. In this example, ***SYBASE*** is the name of the database server and ***SYBASE_BS*** is the name of the backup server:

```
sybinit.release_directory: /opt/sybase
sybinit.product: bsrv
bsrv.server_name: SYBASE_BS
bsrv.new_config: yes
bsrv.do_add_backup_server: yes
bsrv.do_upgrade: no
bsrv.network_protocol_list: tcp
bsrv.network_hostname_list: SYBASE
bsrv.network_port_list: 5001
bsrv.language: USE_DEFAULT
bsrv.character_set: USE_DEFAULT
bsrv.tape_config_file: USE_DEFAULT
bsrv.errorlog: USE_DEFAULT
```

```
sqlsrv.related_sqlsrvr: SYBASE
sqlsrv.sa_login: sa
sqlsrv.sa_password: USE_DEFAULT
bsrv.addl_cmdline_parameters:
```

8 Save the file.

9 Restart the backup server, as follows:

```
cd $SYBASE/ASE-15_0/bin
./srvbuild -r /tmp/BS_IN
```

END OF STEPS

UNIX: Configure the database

Purpose

The VitalQIP database can convert data found in the database from one supported language to another language for the VitalQIP web client interface.

Before you begin

- You ***must*** select UNICODE and UTF-8 support, as well as the desired languages during the database installation. ***This procedure is mandatory.***
- Ensure your Sybase environment variables are set.

Procedure

To configure the database on UNIX:

1 Start the Sybase database:

```
<Sybase_installation_directory>/ASE-15_0/install/
RUN_<Sybase_server_name>
```

2 Start the sqlloc program:

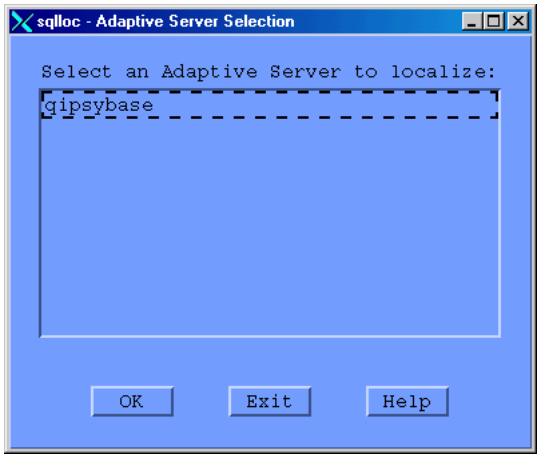
a. Change your directory:

```
cd $SYBASE/ASE-15_0/bin
```

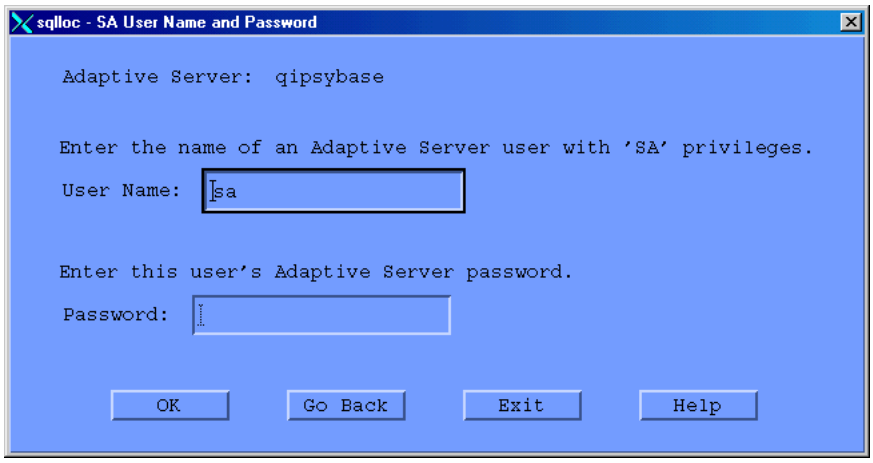
b. Start the program:

```
./sqlloc
```

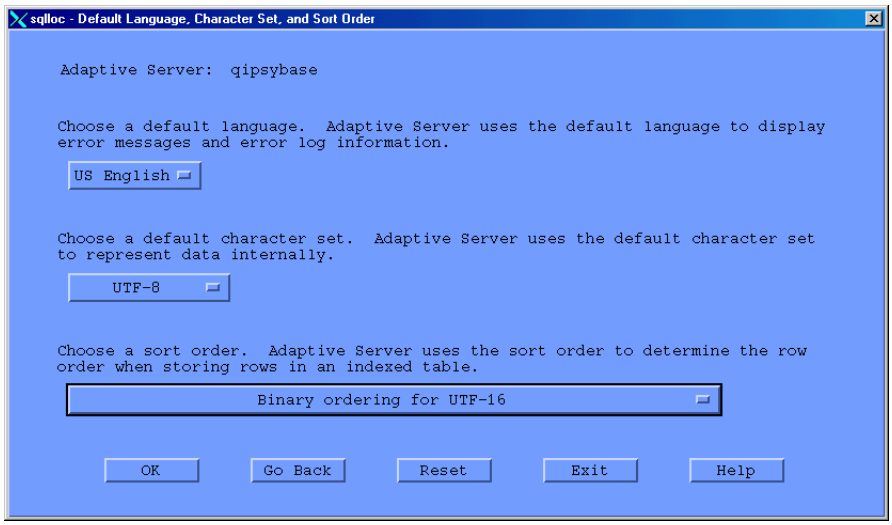
The Adaptive Server Selection screen opens.



3 Select your **Adaptive Server** and click **OK**. The SA User Name and Password screen opens.



4 There is no need to enter a password for the sa login. Click **OK**. The Default Language, Character Set, and Sort Order screen opens.



5 Review the following table and make the required selections.

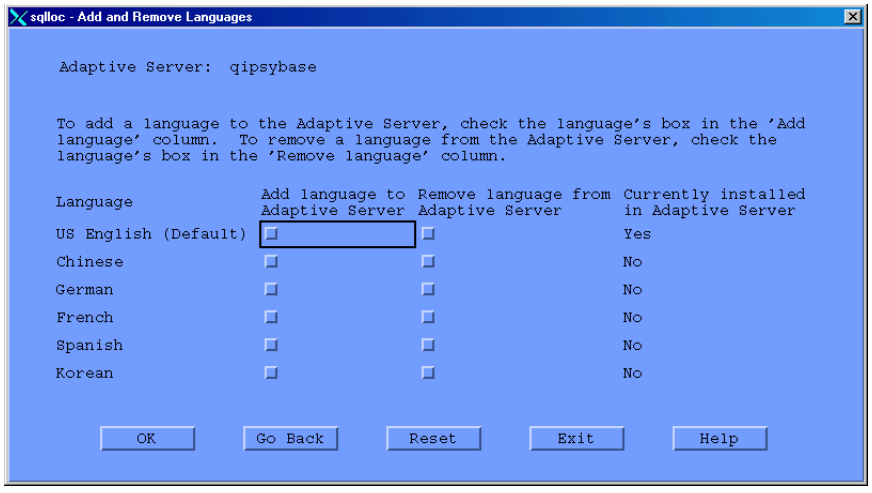
Table 2-5 Default Language, Character Set, and Sort Order fields

Field	Required value
Choose a default language.	There is no specific required value for this field. You set the default language in which information is stored in the database. The languages that appear in the fields list are determined by the language installed during the Sybase installation. The default is US English.
Choose a default character set.	A universal character set needs to be set in order to convert one language into another language. Set the default character set to the **UTF-8**.
Choose a sort order.	The default is **Binary sort order for the ISO 10646-1, UTF-8 multibyte encoding**. This value is required for internal use by Sybase.

6 Click **OK**. A message opens:

```
The default character set will be changed. You may need to
translate data stored in the Adaptive Server databases into a new
character set.
```

7 Click **OK**. The Add and Remove Languages screen opens.



8 You need to install the languages VitalQIP will be using in the Adaptive Server. Under **Add Language to the Adaptive Server**, select the languages to install.

9 After making your selections, click **OK**. The Localization Summary screen opens. Review the screen. If necessary, click **Go Back** to make changes.

10 If everything is correct, click **OK**. After a few moments, the Status Output screen opens if the installation is successful. Note that this process can take approximately 10 minutes per language before the Status Output screen opens.

11 Click **OK**. You are returned to the Adaptive Server Selection screen. Click **Exit** to close the program.

12 Click **Yes** to confirm the exit.

13 After configuring the database, test that the database is working correctly. Refer to "Test connectivity to Sybase" (p. 2-34) for instructions.

END OF STEPS

Windows: Configure the database

Purpose

The VitalQIP database can convert data found in the database from one supported language to another supported in the VitalQIP web client interface.

Before you begin

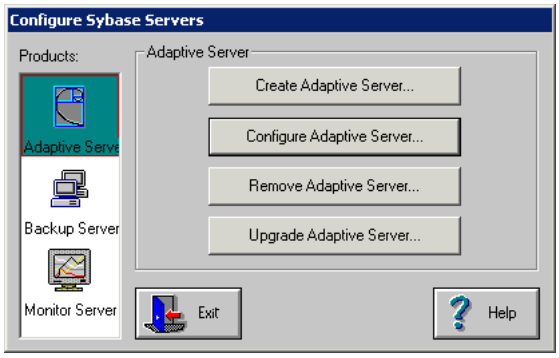
You ***must*** select UNICODE and UTF-8 support, as well as the desired languages during the database installation. ***This procedure is mandatory.***

Procedure

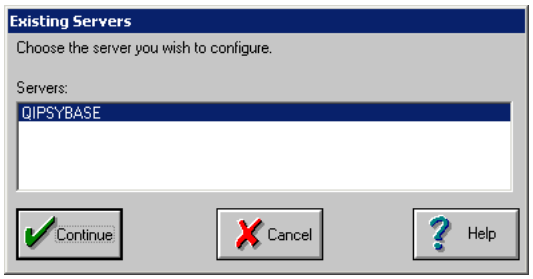
To configure the database on Windows:

1 Start the Sybase database.

2 From the **Start** menu, select **Program|Sybase|Adaptive Server Enterprise|Server Config**. The Configure Sybase Servers screen opens.

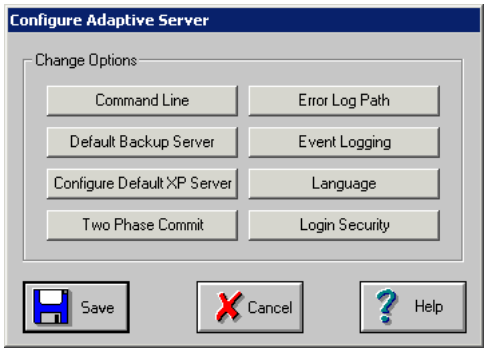


3 Ensure **Adaptive Server** is selected from the **Product** list, and click **Configure Adaptive Server**. The Existing Server screen opens.

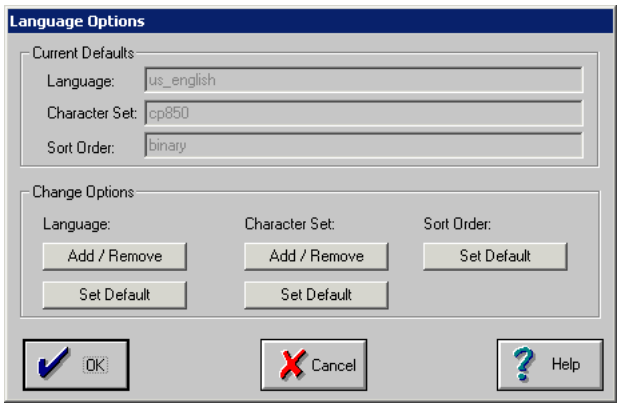


4 From the **Server** list, select your **Adaptive Server** and click **Continue**. The Enter the System Administrator Password screen opens.

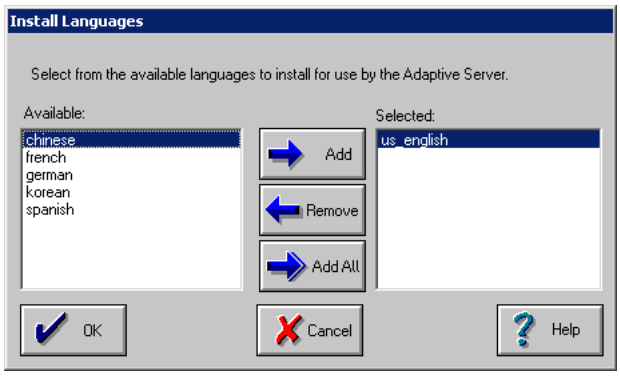
5 There is no need to enter a password for the **sa** login. Click **Continue**. The Configure the Adaptive Server screen opens.



6 Click **Language**. The Language Option screen opens.

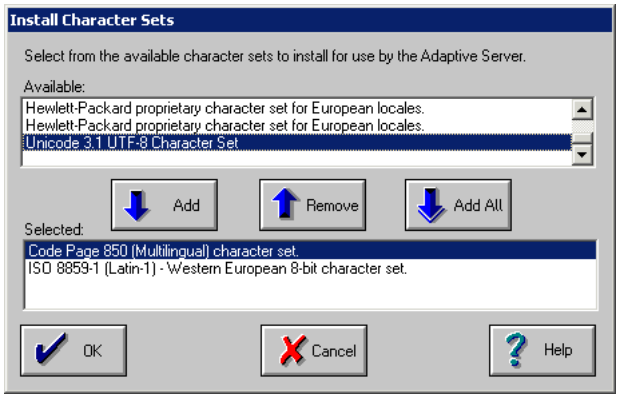


7 You need to install the language VitalQIP will be using in the Adaptive Server. Under **Language**, click **Add/Remove**. The Install Languages screen opens.



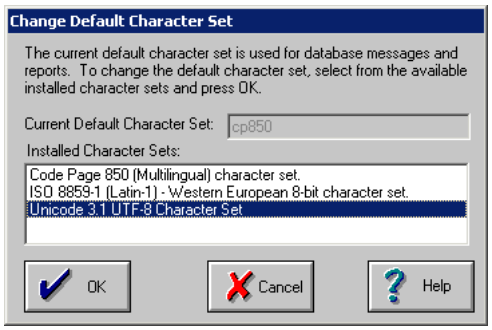
8 By default, the languages selected during the Sybase installation are displayed in the **Available** list. From the **Available** list, select the languages to install into the Adaptive Server and click **Add**. The selected language appears in the **Selected** list. Once you have made your selections, click **OK**. You are returned to the Language Option screen.

9 A universal character set needs to be selected in order to convert one language into another language. In the Language Option screen, click **Add/Remove** under **Character Set**. The Install Character Sets screen opens.



10 From the **Available** list, select **Unicode 3.1 UTF-8 Character Set** and click **Add**. The selection is added to the **Selected** list. Once you have made your selections, click **OK**. You are returned to the Language Option screen.

11 The default character set needs to default to the Unicode 3.1 UTF-8 character set. In the Language Option screen, click **Set Default** under **Character Set**. The Change Default Character screen opens.

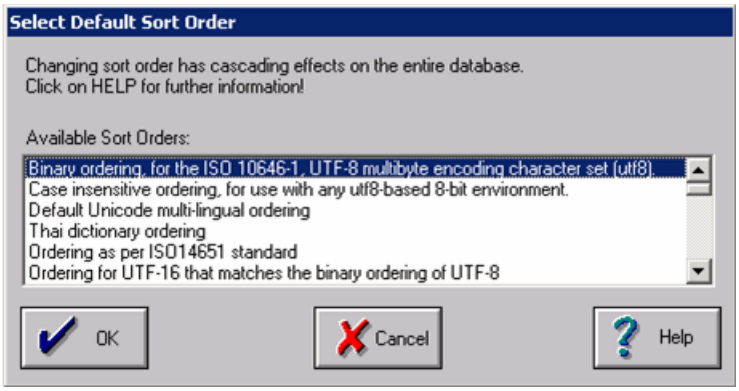


12 Select **Unicode 3.1 UTF-8 Character Set** and click **OK**.

Result: You are returned to the Language Option screen.

13 Click **Set Default** under **Sort Order**.

Result: The Select Default Sort Order screen opens.



14 Select **Binary sort order for the ISO 10646-1, UTF-8 multibyte encoding character set (utf8)** and click **OK**.

15 Click **OK** again and click **Save** in the Configure Adaptive Server screen to save the changes.

16 Click **Exit** to close the Configure Sybase Servers screen.

17 Click **OK** and click **Save** to save the changes to the Adaptive Server.

18 After configuring the database, test that the database is working correctly. Refer to "Test connectivity to Sybase" (p. 2-34) for instructions.

END OF STEPS

Test connectivity to Sybase

Introduction

After Sybase is installed, additional preparation is needed before installing VitalQIP. Read this section and ensure that your database is working properly before installing VitalQIP.

Verify Sybase is running

To determine if the database is running:

If you installed Sybase on...	Then...
UNIX	Execute: **`$SYBASE/$SYBASE_ASE/install/showserver`** **Note:** showserver shows all Adaptive Server-related processes that are on the system.
Windows	1. Reboot your Windows database server. 2. From the Windows task manager, select **Start | Settings | Control Panel |Administrative Tools| Services**. 3. Scroll through the list of services until you locate Sybase **SQLServer_***<database name>*. 4. Check the **Status** column to see if it indicates Sybase has been started started. If it is not, select the server, and click **Start**.

Verifying that you can connect to Sybase

Use **`isql`** to verify the connectivity to Sybase:

If you installed Sybase on...	Then...
UNIX	1. Source the Sybase environment variables. To do so, execute the following from the Sybase directory: – For Cshell: **`source SYBASE.csh`** – For Bourne shell: **`. ./SYBASE.sh`** 2. Use **`isql`** to connect to servers. At the command prompt, enter: **`isql -U sa -P -S<server name>`** where ***`server name`*** is the Adaptive Server name. The command prompt is displayed if the login is successful.

If you installed Sybase on...	Then...
Windows	Open a command line prompt and use **isql** to connect to servers. At the command prompt, enter: **isql -U sa -P -S *<server name>*** where ***server name*** is the Adaptive Server name. The command prompt is displayed if the login is successful.

Sybase client

Overview

Pre-Installation requirements

Before the installation of the Sybase client begins, ensure the pre-installation requirements are met. For more information on the pre-installation requirements, see "Sybase pre-installation tasks" (p. 2-2).

Full and customized installations

For the Sybase client installation, you need to do a customized installation of Sybase rather than a standard installation. Ensure that at a minimum **Connectivity (Open client)** component is selected. Do not select Sybase Servers; this option installs the Adaptive Server.

For information about a "Full Install" or "Customized Install", refer to the Adaptive Server Enterprise *Installation Guide* for Sybase 15.0. Sybase documentation can be obtained at Sybase's website **www.sybase.com/support/manuals**.

Install the Sybase client

Purpose

This section describes the steps to install the Sybase client on UNIX and Windows. The Sybase client is needed if you are installing VitalQIP client on a machine other than where the Sybase database is installed.

Before you begin

- These procedures are based on the Sybase's executable for installing the Sybase client and not the Sybase server. If you chose to install the Sybase client using the Sybase database executable, run the installation and ensure only the options described in Table 2-6 are selected. Unselect all other options.
- The Sybase database must be installed prior to installing the Sybase client in order to check connectivity to the database.
- VitalQIP supports multiple language support for simplified Chinese, French, English, German, Spanish, and Korean. Before installing Sybase, determine if one or more of these languages are supported by VitalQIP. Multiple language support must be installed at the database level for this feature to work. If you add multiple language support after installing the Sybase client, uninstall the Sybase client and re-install the Sybase client. When you re-install the Sybase Client, ensure **Language Modules** is selected along with languages VitalQIP will support.

Procedure

Follow these steps:

1 Log into your system as:

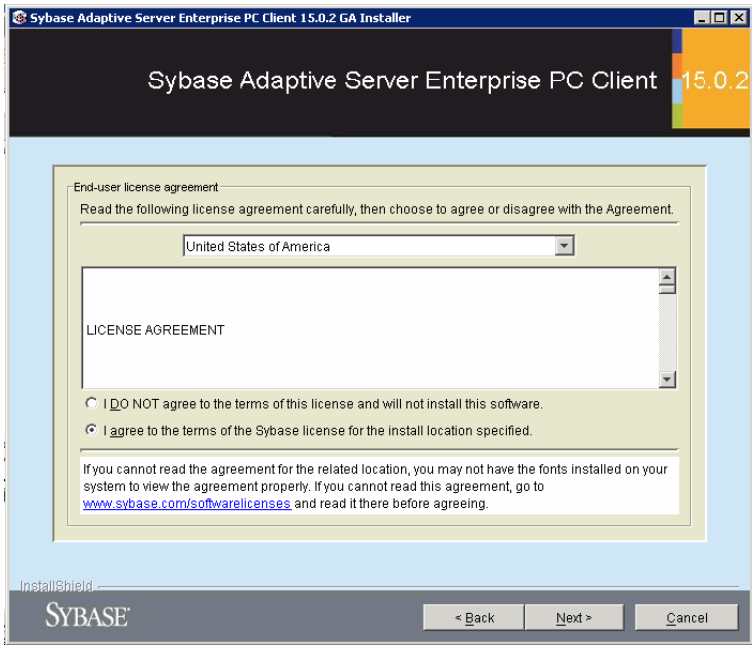
- For UNIX, the root user
- For Windows, the user with administrative privileges

2 Exit all programs you are currently running.

3 To start the installation:

If you are...	Then...
Installing on UNIX	1. Execute: **`export PATH=<Sybase install storage areas>/JVM:$PATH`** 2. Go to the directory where the Sybase installation files are located. 3. Execute: **`./setup`** **Result:** The Welcome screen opens. **Note:** If the installation is not being performed from the console, export the DISPLAY and ensure xhost is executed to allow displays from other servers.
Installing on Windows	1. From your Desktop, select **Run** from the **Start** menu. 2. Open a command prompt, type: **`cmd`** 3. Go to the directory where the Sybase installation files are located: **`cd <drive>:\<directory>`** 4. Type **`setup.exe`** **Result:** The Welcome screen opens.

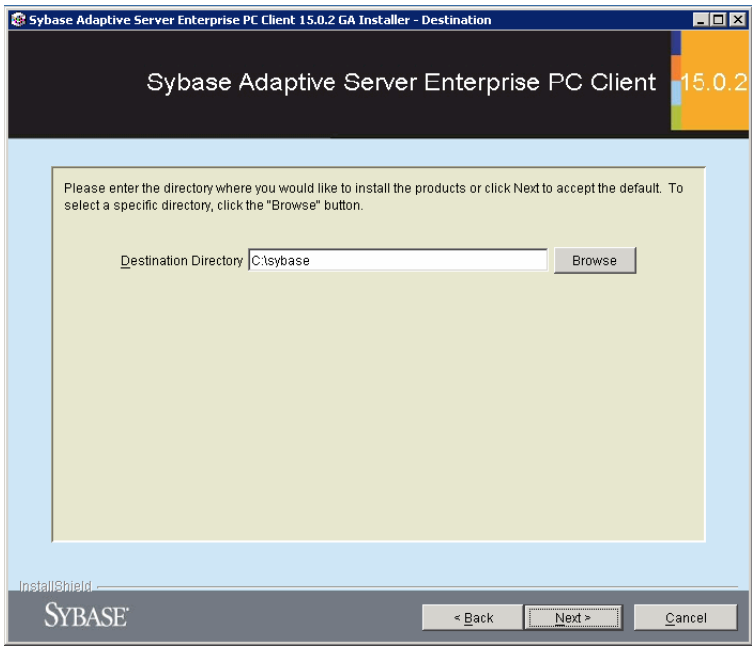
4 Click **Next**. The End-User License Agreement screen opens.



In the **Select** field, select your country to display the license agreement in your language. Read the license agreement and:

- If you agree to the terms, click **I agree to the terms of the Sybase license for the install location specified.**
- If you do not agree to the terms, click **I DO NOT agree to the terms and will not install this software.** to exit the installation.

5 Click **Next**. The Destination screen opens.



By default, the database is installed in the */opt/sybase* directory UNIX and *c:\sybase* directory for Windows. If you want the client installed in a different directory, type the full path to the directory. Alternatively, you can use **Browse** to select an existing directory.

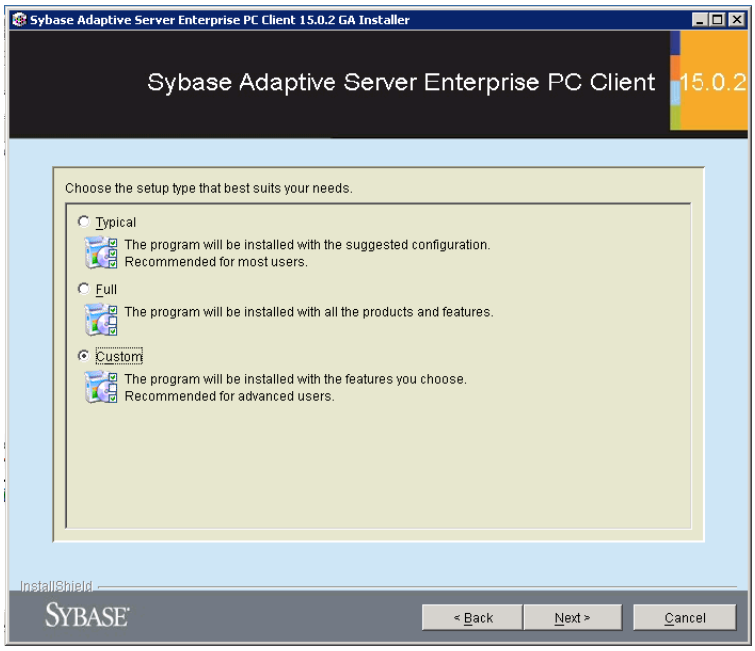
6 Click **Next**. If the directory does not exist, a message opens:

```
The Directory does not exist. Do you want to create the
directory?
```

Click one of the following:

- **Yes** to create the directory. The Install Type screen opens.
- **No** to not create the directory. The installation uses the location of the default directory to store the database.

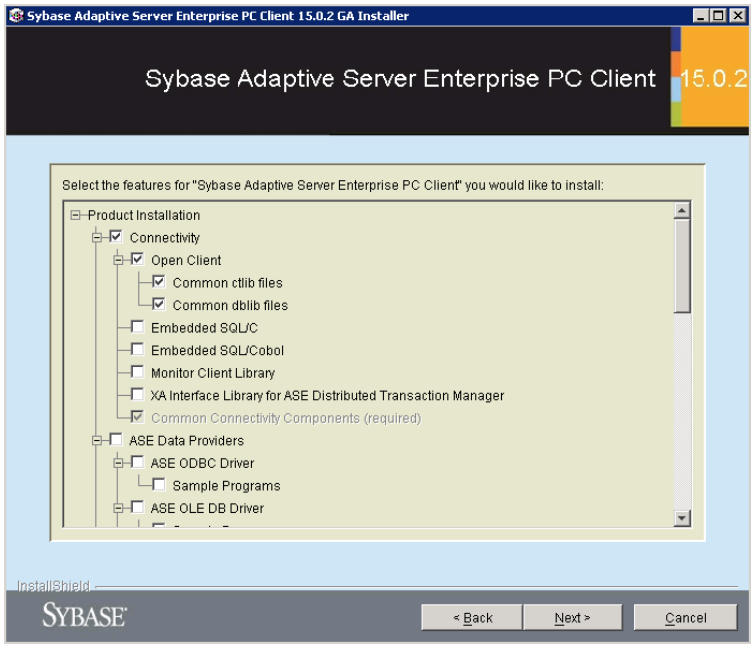
7 The Feature screen opens.



Alcatel-Lucent recommends installing the “Custom” installation. VitalQIP requires some components and does not need other components. Select **Custom**. The Select Features screen opens.

Note: If you wish to use the Typical or Full installation, refer to the Sybase documentation for installation instructions.

8 Click **Next**. The Select Features screen opens.



For VitalQIP with Sybase, you needs to have the minimum components installed that are described in the following table. If the options are not selected, select the options. The options are required software for Sybase to run and for connectivity with VitalQIP. Refer to the Sybase documentation if you want in-depth details for these options.

Table 2-6 Required Sybase client options for VitalQIP

Option	Notes
Connectivity	
Open Client	
Common ctlib files	VitalQIP requires this option.
Common dblib files	
Common Connectivity Components	Defaults to being greyed out because Sybase requires that this option be installed.
Language Modules	This option defaults to being selected because English Language Support is required by Sybase. VitalQIP supports additional languages, as listed below. If you wish Sybase to support one of these languages, select that language support module.

Option	Notes
Chinese Language Support Module	Required if VitalQIP is supporting simplified Chinese.
German Language Support Module	Required if VitalQIP is supporting German.
French Language Support Module	Required if VitalQIP is supporting French.
Spanish Language Support Module	Required if VitalQIP is supporting Spanish.
Korean Language Support Module	Required if VitalQIP is supporting Korean.
English Language Support Module	Defaults to being greyed out because Sybase requires that this option be installed.
jConnect for JDBC	
JDBC Driver	Located under **jConnect for JDBC**. This option is required if a VitalQIP web server will be installed locally.
Sybase Software Asset Management	Deselect because VitalQIP does not require these features.
Sybase Unified Agent	Deselect because VitalQIP does not require these features.
ASE Administration Tools	Deselect because VitalQIP does not require these features.

9 Click **Next**. The Summary screen opens. Review the summary of information to ensure it is correct.

10 Click **Next**. After the installation completes, a message opens stating the installation is complete.

Note: If you are using the database server executable to install the Sybase client, an additional screen opens. Unselect the option and continue to the next step.

11 Click **Next**. The Installation Complete screen opens.

12 Click **Finish**.

13 Check the connectivity of the database. Refer to:

- "UNIX: Configure and check the connectivity to the database" (p. 2-45)
- "Windows: Configure and check connectivity to the database" (p. 2-47)

END OF STEPS

UNIX: Configure and check the connectivity to the database

Purpose

Connectivity to the database must be configured to point to the database after installing the Sybase client. The procedures in this section apply to a Sybase client installed on UNIX.

Procedure

Follow these steps:

1 Source your Sybase environment variables:

a. If needed, change the directory to the Sybase home directory:

cd /opt/<*Sybase directory*>

b. Source the Sybase environment variables:

- For Cshell:

source SYBASE.csh

- For Bourne shell:

. ./SYBASE.sh

2 Run **dsedit** by typing **dsedit**.

3 In **Select a directory service to open**, highlight the Sybase interfaces file and click **OK**.

4 In the Directory Service Session screen, click **Add new server entry**.

5 In the Server Entry Editor screen, enter the QIP dataserver name (this is case sensitive). When you are installing VitalQIP, make sure you enter the name exactly as it appears during the installation process. The name must match the name in the `[VitalQIP Login Service]` section of the *qip.pcy* file. The file is located on the server running **QIP loginservice** in the server name field.

6 Click **Add new network transport**, and enter the hostname or IP address of the database server, and the server's port number.

7 Exit all DSEDIT windows:

a. Click **OK**.

b. Click **OK**.

c. Click **Close Session**.

d. Click **Exit** and **Yes** to confirm the exit.

8 Test with the following command to verify connectivity to the Sybase server:

- If VitalQIP is installed:

```
isql -U qipadmin -P <qipadmin password> -S <Sybase server>
```

- If VitalQIP is not installed:

```
isql -U sa -P -S <Sybase server>
```

Note: The *-S* parameter is required.

END OF STEPS

Windows: Configure and check connectivity to the database

Purpose

Connectivity to the database must be configured to point to the database and tested after installing the Sybase client. The procedures in this section apply to a Sybase client installed on Windows.

Procedure

Follow these steps:

1. From your desktop, select **Run** from the **Start** menu.
2. Type **`dsedit`**.
3. In the Select Directory Service screen, click **OK**. The Interfaces Driver screen opens.
4. Select **Add** from the **Server Object** menu and enter the VitalQIP enterprise server name (this is case sensitive) in the **Server Name** field. When you are installing VitalQIP, make sure you enter the name exactly as it appears during the installation process. The name must match the name in the `[VitalQIP Login Service]` section of the *qip.pcy* file. The file is located on the server running **`QIP loginservice`** in the server name field.
5. Click **OK** and double-click **Server Address** in the **Attributes** list. The Network Address Attribute screen opens.
6. Click **Add**. The Input Network Address For Protocol screen opens.
7. Leave **TCP** in the **Protocol** field and enter the VitalQIP enterprise server IP address and port number in the **Network Address** field (for example, 111.114.105.121,5000).
8. Click **OK** and click **OK** in the Network Address Attribute screen.

9 Validate the values for the TCP entry in the **Server Address** attribute and exit **`dsedit`**.

10 Test with the following command to verify connectivity to the Sybase server:

- If VitalQIP is already installed locally:

```
isql -U qipadmin -P <qipadmin password>
```

- If VitalQIP is not installed locally:

```
isql -U sa -P -S <Sybase server>
```

Note: The *-S* parameter is required because there is no environment variable for DS Query.

END OF STEPS

Uninstall Sybase

Overview

Introduction

If needed, Sybase can be uninstalled if a problem occurs or an error occurred while installing Sybase. If an existing database is installed and has data in it, the database should be backed up before uninstalling Sybase.

UNIX: Uninstall Sybase

Purpose

This section describes how to uninstall Sybase on UNIX.

Procedure

Follow these steps:

1 Stop VitalQIP-related services, including VitalQIP Add-On products that share the database.

2 Stop the Monitor and the Backup Servers before stopping the Adaptive Server.

3 If the SYBASE script has not been sourced, source the script from the *$SYBASE* directory:

- For a C shell, run:

```
source SYBASE.csh
```

- For a Bourne shell, run:

```
. ./SYBASE.sh
```

4 Start the Studio Installer:

a. Go to the *$SYBASE/uninstall/ASESuite* directory.

b. Run:

```
./uninstall
```

Note: If a period (.) is in the PATH, **`./`** must be added before the script at the command line.

The Studio Install starts and the Uninstall screen opens.

5 At the "Uninstall components now" prompt, click **Yes**.

6 A component selection screen opens. Select the components to uninstall, click the check box next to the components or click **Select All** to remove all components.

7 Click **Next**. The Uninstall summary screen opens and displays the components to be removed. Review the screen.

8 Click **Next**. The Studio Installer begins to remove the components.

9 After a few moments, a screen opens stating the uninstall has successful removed the components. Click **OK**. The Studio installer removes all files installed by the Sybase installation and all directories the installation created, unless the directory was not empty.

10 After the uninstall is complete, a message opens stating that any remaining directories and files should be removed. Remove any remaining directories and files.

END OF STEPS

Windows: Uninstall Sybase

Purpose

This section describes how to uninstall Sybase on Windows. If you had previously installed and uninstalled Sybase, and a new installation fails there may be remnants of older Sybase installations still residing on the computer. Use this section to uninstall Sybase.

Before you begin

When you are required to delete environment variables and registry entries, be careful to not delete the environment variable or registry entry itself if other values not related Sybase values are present. You may damage your system.

Clean the registry

Some Sybase related registry entries must be removed from the Windows registry. Follow these steps:

1 Stop Sybase and VitalQIP-related services, including VitalQIP Add-On products that share the database.

2 Open **`regedit`**:

a. From your Desktop, select **Run** from the **Start** menu.

b. Type:

`regedit`

c. Click **OK**.

3 Search the for the following registry entries and delete all references found in the registry entry:

- Sybase server name
- The word “sybase”
- The word “sysam”
- The word “flexlm”

4 Close **`regedit`**.

Delete the SYBASE directory

1 Open Windows Explorer.

2 Navigate the SYBASE directory.

3 Delete the directory and all sub-directories.

Delete environment variables

1 Remove all Sybase related environment variables. These variables include:

- **DSLISTEN**
- **DSQUERY**
- **LM_LICENSE_FILE**
- **QIPHOME**
- **SYBASE**
- **SYBASE_ASE**
- **SYBASE_JRE**
- **SYBASE_OCS**
- **SYBASE_SYSAM**

Also remove references to Sybase from the **ClassPath**, **INCLUDE**, **LIB**, **Path**, and **TEMP** environment variables.

2 Reboot the computer.

3 Once you have completed these steps, you can start the Sybase installation over again. If there are still problems, Sybase Support recommends running **regclean**, which can be downloaded from **www.download.com**.

END OF STEPS

3 VitalQIP requirements

Overview

Purpose

This chapter describes the pre-installation requirements for VitalQIP. Before you begin installing your VitalQIP system, refer to Part I of the *VitalQIP Administrator Reference Manual*. It will assist you in setting the optimum configuration for your network.

Contents

This chapter covers these topics.

Background	3-2
Overview	3-2
VitalQIP pre-installation requirements	3-3
Overview	3-3

Background

Overview

List of VitalQIP components

All VitalQIP components are described in Chapter 1 of the *VitalQIP Administrator Reference Manual*. The following is a list of components included in the VitalQIP installation software:

- VitalQIP enterprise server
- VitalQIP remote server
- VitalQIP web client interface
- VitalQIP GUI client
- VitalQIP distributed services

VitalQIP supported platforms and system requirements

Refer to the "System Requirements" section of the *VitalQIP 7.2 Release Notes* for this information.

VitalQIP pre-installation requirements

Overview

Introduction

This section discusses the requirements for installing VitalQIP with the Sybase database. This section pertains to installations on Windows and UNIX operating systems unless otherwise specified.

Obtain a license key

You must obtain a license key and serial number for the VitalQIP Enterprise Server system and any machines on which Distributed Services are installed. The installation program requests that you provide a license key and serial number during the installation. Contact technical support to obtain a license key.

Note: Do not add more objects to a network than your license allows. Doing so will lock you out of the VitalQIP application.

Determine if secure socket layer (SSL) is deployed

Find out if SSL will be used in the VitalQIP deployment. If SSL is going to be deployed, Alcatel-Lucent recommends you write down the private key encryption password that will be used. This information is needed during the installation of the various VitalQIP components. For more information on secure messaging, refer to the Secure Message Routes chapter in the *Administrator Reference Manual*.

Determine if HTTPS versus HTTP messaging is deployed

Find out if HTTPS or HTTP messages will be used for communication with the Apache Tomcat web server. You need to know the port on which HTTPS or HTTP messages are sent and received. By default, 80 is the default port for HTTP and 743 is the default port for HTTPS.

Alcatel-Lucent recommends you make a note of the type of messages you are using, the port used, and the IP address of the Apache Tomcat web server. These items are needed for other VitalQIP component installations.

UNIX: Minimum disk space

You must have a minimum of 160 MB of disk space allocated for VitalQIP under */opt* (for UNIX), or within the file system you choose to use.

Note: If there is not enough temporary disk space available, an error message will appear stating there is not enough disk space. Try executing:

- For Linux:

./qip72setupLinuxgccr<#>.bin -is:tempdir *<temporary directory>*

- For Solaris:

./qip72setupSolarisr<#>.bin -is:tempdir *<temporary directory>*

- For Windows:

qip72setupwin32r<#>.bin -is:tempdir *<temporary directory>*

For all executables, the **#** denotes the repackaging number of the executable.

Access to xterm or telnet

Ensure that you have access to xterm or telnet. Check this by running the following:

- For xterm:

xterm

- For telnet:

telnet

Linux: Install JRE

On Linux, ensure jre1.4.2_05 or higher is installed before installing VitalQIP. The software can be downloaded from Sun's website:

www.sun.com

UNIX: Set database environment variables

Prior to installing VitalQIP, the database environment variables need to be set for the installation to run correctly. To do so:

Run one of the following scripts from the *$SYBASE* directory:

- For a C shell, run:

source SYBASE.csh

- For a Bourne shell, run:

. ./SYBASE.sh

The script sets these environment variables:

- **INCLUDE**
- **LD_LIBRARY_PATH** (Solaris and Linux only)
- **LIB**
- **PATH**

- **SYBASE**
- **SYBASE_ASE**
- **SYBASE_JRE**
- **SYBASE_OCS**
- **SYBROOT**
- **SYBASE_UA**

Windows: standard characters for Windows administrator login

Due to a technical limitation with InstallShield, the VitalQIP installation on Windows requires that the administrator login for Windows machines use standard characters. The installation fails if the Windows login contains non-standard characters.

Stop all scheduled moves and reclaims

If VitalQIP is being upgraded, ensure there are no scheduled moves or reclaims waiting to occur. If any moves or reclaims are scheduled, the applicable data is removed from the database, and the move or reclaim does not occur. After you have completed your upgrade, you need to reschedule your moves and reclaims.

4 Install VitalQIP enterprise server

Overview

Purpose

This chapter covers installing VitalQIP enterprise server on supported Windows and UNIX platforms.

Contents

This chapter covers these topics.

Enterprise server installation overview	4-2
Enterprise server pre-installation checklist	4-2
Install the VitalQIP enterprise server	4-5

Enterprise server installation overview

What is installed

The VitalQIP enterprise server installation installs the following:

- VitalQIP GUI
- VitalQIP Schedule Service
- VitalQIP QIP Update Service
- VitalQIP Command Line Interface
- VitalQIP DNS Update Service
- VitalQIP File Generation Service
- VitalQIP Login Service

The VitalQIP Message Service and VitalQIP SSL Tunnel Service are installed by default in this installation. If needed, the VitalQIP enterprise server installation can also initialize the database.

Upgrade from previous versions

IIf VitalQIP is being upgraded from a previous version, refer to Part IV: “Upgrade VitalQIP” for instructions on upgrading to VitalQIP 7.2.

Enterprise server pre-installation checklist

Purpose

Use the checklist to determine what needs to be done before beginning the installation:

Table 4-1 Enterprise server pre-installation checklist

Task	Description	Status
Determine the configuration	You need to determine how and where the components are to be installed. Also, consider if this is an upgrade or if additional components are being installed. Refer to Part I of the *Administrator Reference Manual* for more information about various configurations of VitalQIP.	

Task	Description	Status
Determine if secure socket layer (SSL) is deployed	Find out if SSL will be used in the VitalQIP deployment. If it is used, the *qipkeystore* and *vitalqip.cer* files are required to be located on the enterprise server machine. These files are created during the VitalQIP enterprise server installation and are located in the VitalQIP home directory. For general information on secure message routing, refer to the Secure Message Routes chapter in the *Administrator Reference Manual*.	
Meet pre-installation requirements	The pre-installation requirements must be met before installing VitalQIP. Read the *VitalQIP 7.2 Release Notes* to ensure your system meets the pre-installation requirements for installing VitalQIP.	
Ensure the database is installed and running	The Sybase database must be installed. The installation also requires that the database be running before you start the VitalQIP installation.	
Stop all VitalQIP-related processes	If VitalQIP was previously installed, ensure all VitalQIP-related processes are stopped before you commence installation of VitalQIP 7.2.	
Find information about the database server	The following information needs to be gathered about the database server: • The name of the database. If VitalQIP is already installed, the name of the database is the value set in the **`QIPDATASERVER`** environment variable. • The IP address of the server where the database is running. • The full path to the directory where the database is running.	
Find the IP address of the machine	Find the IP address of the machine where the VitalQIP enterprise server is being installed.	

Task	Description	Status
Find the IP address of the services	Find the address of the machines where these services are to be installed: • VitalQIP Schedule Service • VitalQIP QIP Update Service • VitalQIP DNS Update Service • VitalQIP File Generation Service • VitalQIP Login Service • VitalQIP Web Service	
Gather information about the Apache Tomcat web server	Gather the following information about the Apache Tomcat web server: • Find out if your web server is using standard HTTP or HTTPS messaging • Find the port your web server is using • Find the IP address of the machine where the web server is running	

Install the VitalQIP enterprise server

Purpose

This section explains how to install the VitalQIP enterprise server on supported platforms. If you have problems installing the software, contact technical support.

Before you begin

- If you wish to install the VitalQIP remote server on the same machine as the VitalQIP enterprise server, you should select Remote Server at the same time as you select the Server Package. Additionally, you should select the Web Client to access the web client on the VitalQIP enterprise server. Note that these are default selections when you launch the VitalQIP installation program.
- If your network includes DHCP, DNS, and/or Bootp servers that are running exclusively on the VitalQIP enterprise server, the VitalQIP remote service package must also be installed.

Windows

- Ensure you are logged into your system as a user with administrative privileges.
- Check the Event Viewer and ensure your database is running.
- Ensure you exit all programs you are currently running.

Unix

- Ensure you are logged into your system as the root user.
- Ensure your database is running. Enter the following:

```
$SYBASE/ASE-15_0/install/showserver
```

- Alcatel-Lucent recommends that Sybase environment variables be sourced. This eliminates the need to enter Sybase-related values during the installation. To source the Sybase environment, execute the following from the Sybase directory:

  Cshell

  ```
  source SYBASE.csh
  ```

  Bourne

  ```
  . ./SYBASE.sh
  ```

Procedure

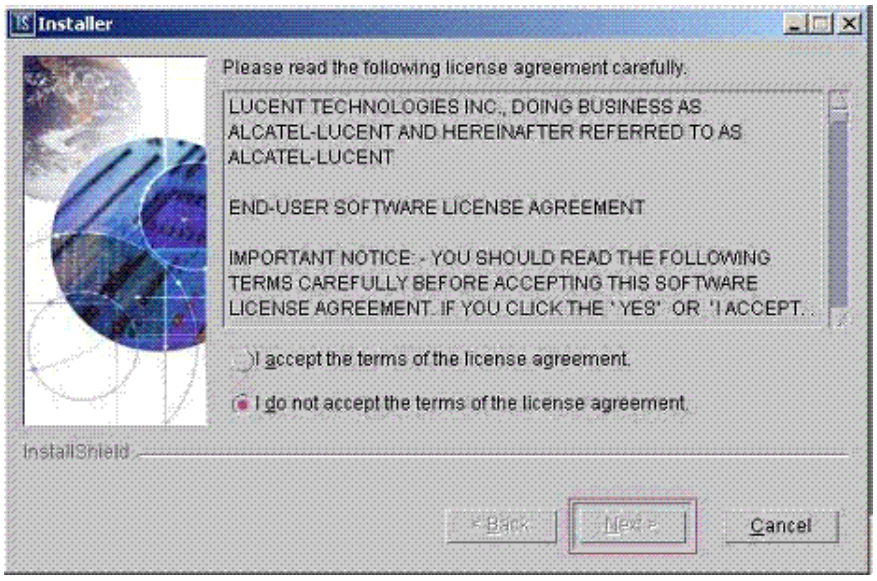
To install the VitalQIP enterprise server, follow these steps:

1 Choose one of the following:

If you want to…	Then…
Install on a Linux platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72setupLinuxgccr<#>.bin`**
Install on a Solaris platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72setupSolarisr<#>.bin`**
Install on a Windows platform	1. Open a command window and change directory to the installation file location. This is the location you selected when you downloaded the Windows installation executable from the Alcatel-Lucent Electronic Download site (*c:\temp* is the default location). 2. Enter: **`qip72setupwin32r<#>.exe`**

For all executables, the **#** denotes the repackaging number of the executable.

2 The Software License Agreement screen opens.

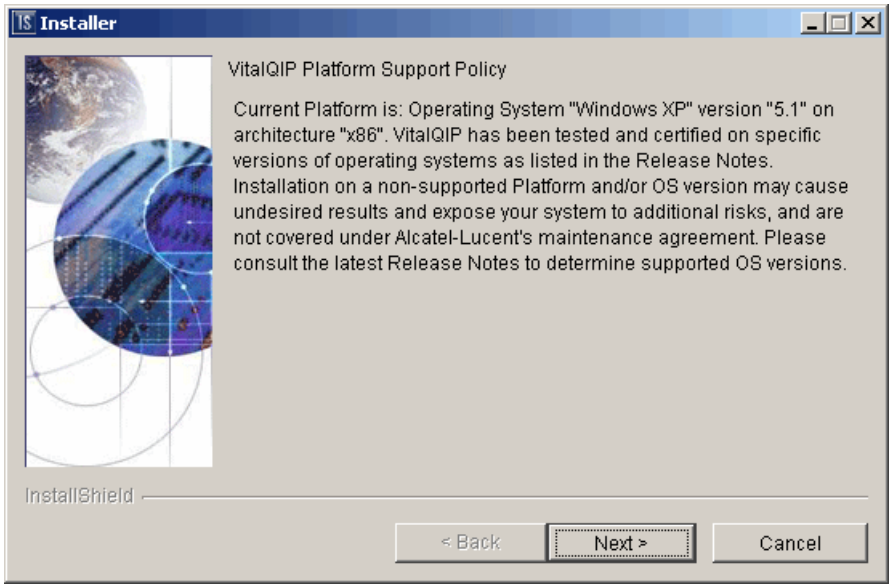


Read the software license agreement and:

- Select **I accept the terms of the license agreement** to accept the license agreement.
- Select **I do not accept the terms of the license agreement** if you do not accept the license agreement. The installation is canceled.

3 Click **Next**. The installation checks that the operating system is a supported version. If the operating system is supported, the Welcome screen opens.

If it is not a supported operating system, a screen opens with the Platform Support Policy.

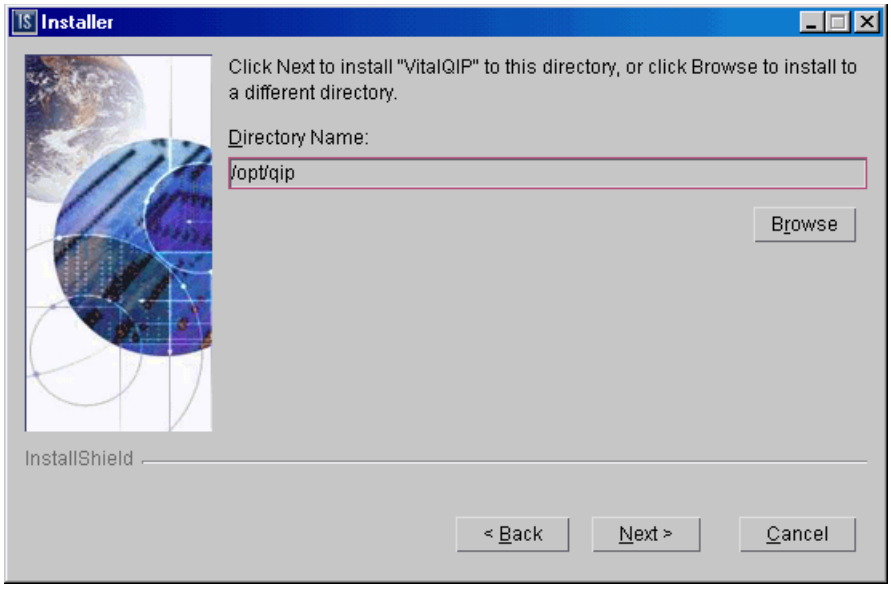


Click **Cancel** to exit the installation and upgrade the operating system to one of the supported versions listed in the *VitalQIP 7.2 Release Notes* before you install VitalQIP.

4 Click **Next**. Choose one of the following.

If you want to…	Then…
Install enterprise server on a UNIX platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, a screen opens showing the VitalQIP-related daemons that are running. 1. Choose one of the following options: • Click **yes, kill processes automatically** and have the installation stop the processes. • Click **no, they will be killed manually** and stop the processes manually. 2. Click **Next**.
Install enterprise server on a Windows platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, the processes are stopped by the installation.

5 The VitalQIP Home Directory screen opens.



The default destination directory for the VitalQIP software is shown. By default, the directory is */opt/qip* on UNIX and *c:\qip* on Windows. If a version of VitalQIP exists on the machine, the installation reads the **`QIPHOME`** environment variable and displays the value.

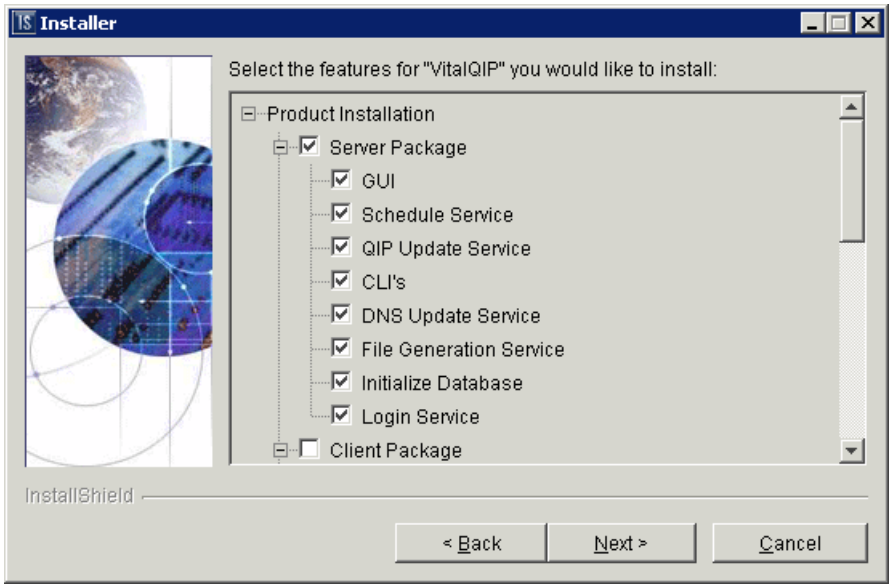
If necessary, type the destination directory directly in the **Directory Name** field. Alternatively:

a. Click **Browse**.

b. Find the directory and select the directory.

c. Click **Open**. The destination directory is shown in the field.

6 Click **Next**. After a few moments, the Features screen opens.



To install the VitalQIP enterprise server only, uncheck all components except the **Server Package** and its sub-components.

> **Important!** If any VitalQIP component is already installed, "`installed`" is shown next to it. If you want to keep that component, do ***not*** uncheck the checkbox: InstallShield will reinstall that component at the same time that it installs the components that you are now selecting.

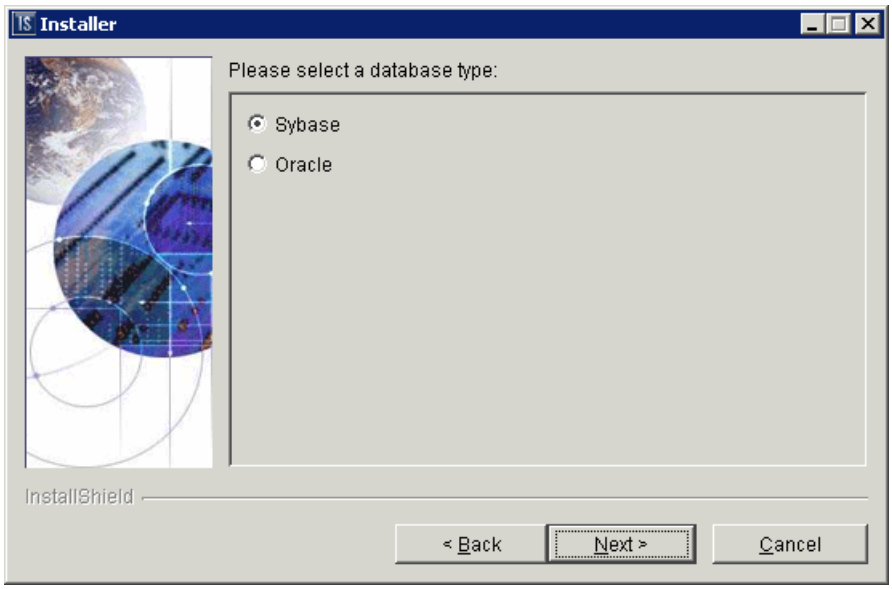
The following table describes the sub-components of the Server package. After reading the table, ensure **Server Package** is checked. Check or uncheck the sub-components you want to install.

Table 4-2 Enterprise server installation sub-components

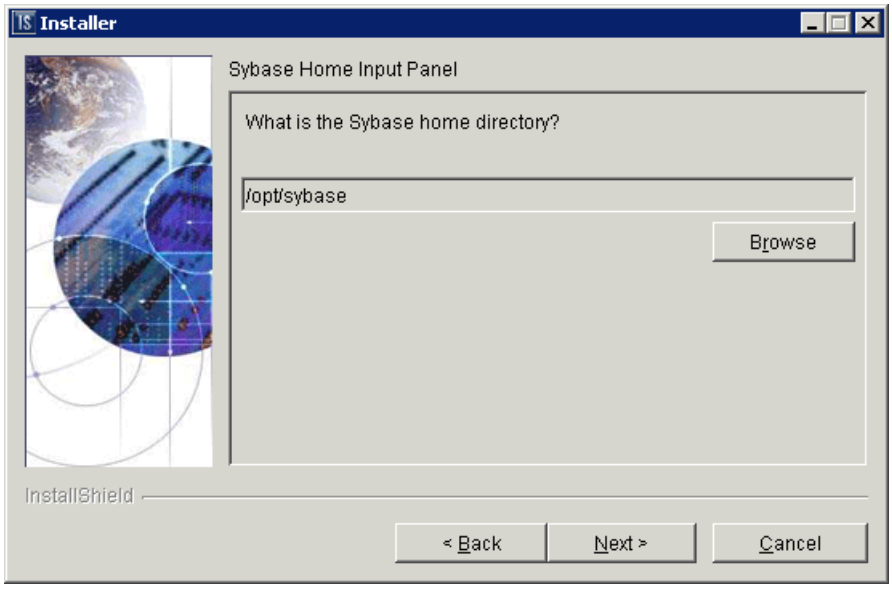
Sub-component	Description
GUI	Installs the user interface of VitalQIP.
Schedule Service	Handles all scheduled events managed by VitalQIP enterprise server: • Scheduled moves • Scheduled reclaims • Auto updates of DNS, Bootp table, and NIS/Local operating system files This service is required if you are installing the enterprise server.
QIP Update Service	Handles updates of DHCP addresses to the VitalQIP enterprise server. This service is required if you are installing the enterprise server.
CLI's	Installs the Command Line Interface.
DNS Update Service	Handles updates to DNS from DHCP servers, manages dynamic updates between DNS servers, and optionally sends DNS updates from VitalQIP clients.
File Generation Service	Generates, optionally encrypts, and compresses remote service configuration files in order to transfer configuration files to remote servers.
Initialize Database	Initializes the VitalQIP database. **Important!** If you are re-installing the enterprise server, do ***not*** select this option. If the database is re-initialized, any data in the database is deleted.
Login Service	Handles VitalQIP database logins. This service is required to connect to the VitalQIP database.

7 Click **Next**. The installation shows an information message. Read the message and follow any instructions that are shown in the message.

8 Click **Next**. The Database Type screen opens.



9 Select **Sybase** and click **Next**. The Database Home Directory screen opens.



If necessary, type the destination directory directly in the **What is the <*database*> home directory?** field. Alternatively:

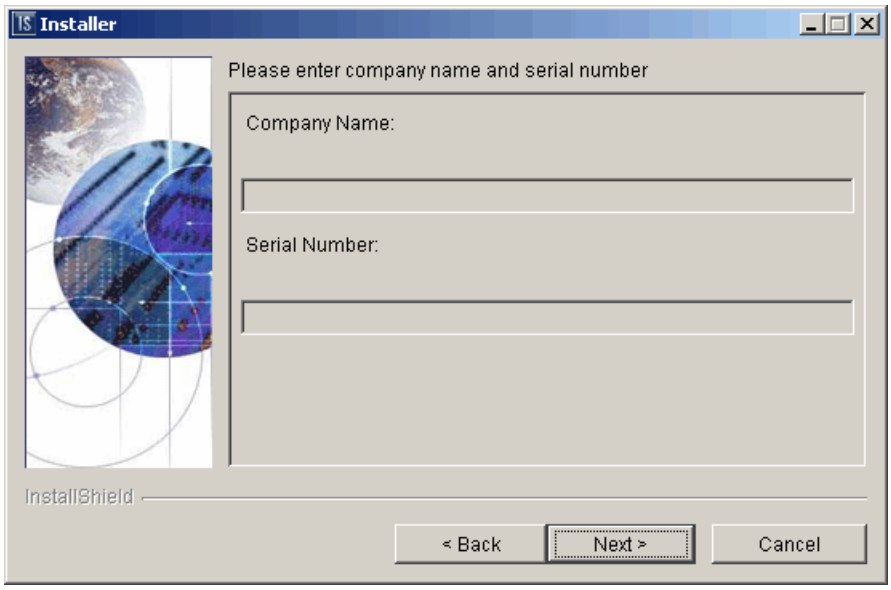
a. Click **Browse**.

b. Navigate to where the directory is located and select the directory.

c. Click **Open**. The destination directory is shown in the field.

Note: If you specify a Sybase home directory located on another machine, you may receive an error message that indicates that Sybase is not installed in the correct directory. Click **Next** to continue.

10 Click **Next**. The Company Name & Serial Number screen opens.

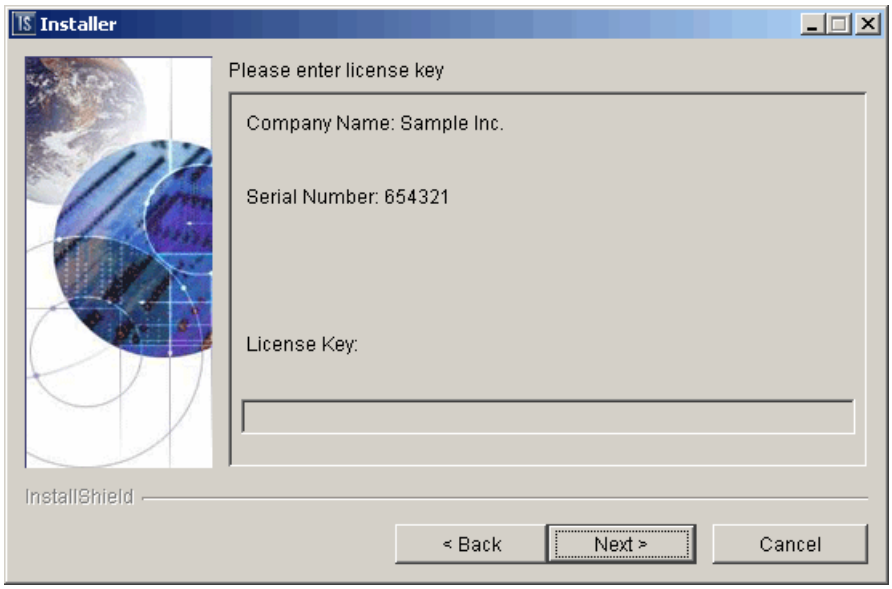


Do the following:

a. In the **Company Name** field, enter the name of your company.

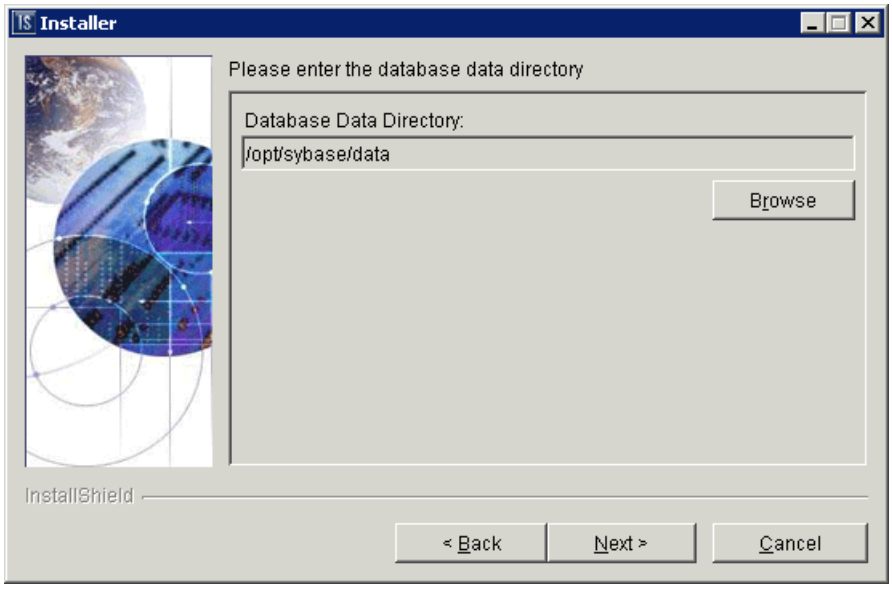
b. In the **Serial Number** field, enter the serial number supplied by Alcatel-Lucent.

11 Click **Next**. The License Key screen opens.



In the **License Key** field, enter the license key for VitalQIP that you obtained from Alcatel-Lucent.

12 Click **Next**. The Database Data Directory screen opens.



The destination directory where VitalQIP devices, **`qip_dat`**, **`qip_log`**, and **`qip_tempdb`**, will be installed is shown. By default, the directory is *$SYBASE/data* on UNIX and *%SYBASE%\data* on Windows.

> **Note:** The VitalQIP installation program expects to find a Sybase data directory on the VitalQIP enterprise server machine. If your Sybase server is located on a different machine than the VitalQIP enterprise server, you need to create a corresponding Sybase data directory on the enterprise server with the exact same pathname as you used on the Sybase server before you proceed any further. Otherwise, the enterprise installation will fail.

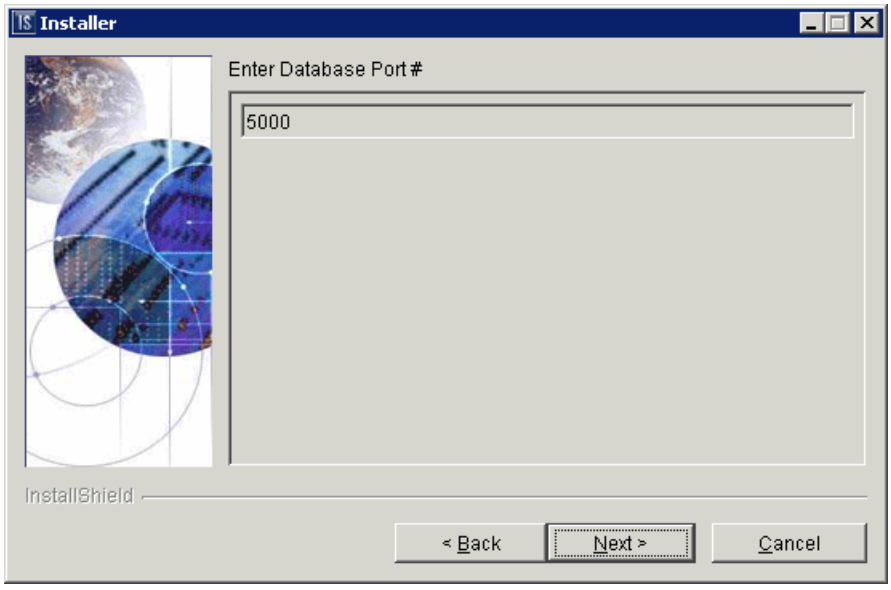
If necessary, type the destination directory directly in the **Database Data Directory** field. Alternatively:

a. Click **Browse**.

b. Find the directory and select the directory.

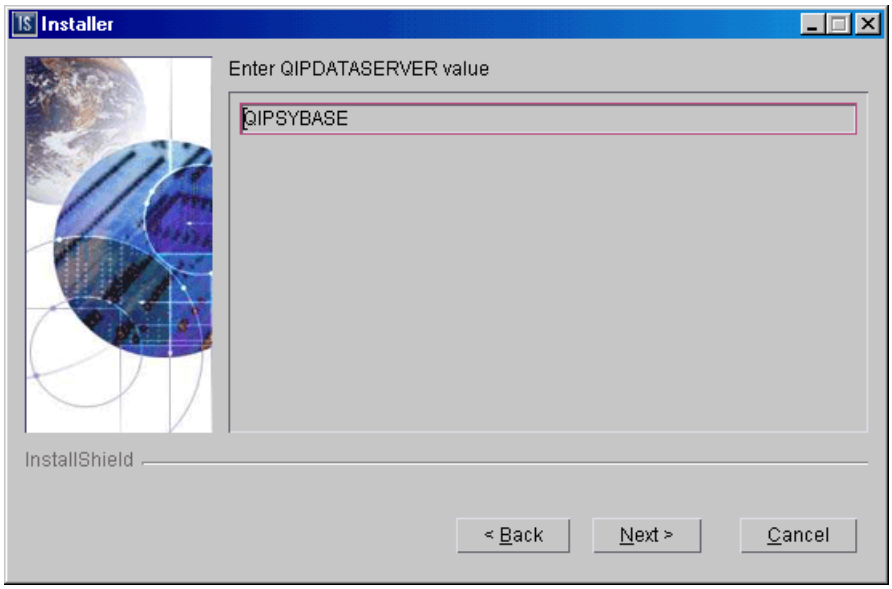
c. Click **Open**. The destination directory is shown in the field.

13 Click **Next**. The Database Port Number screen opens.



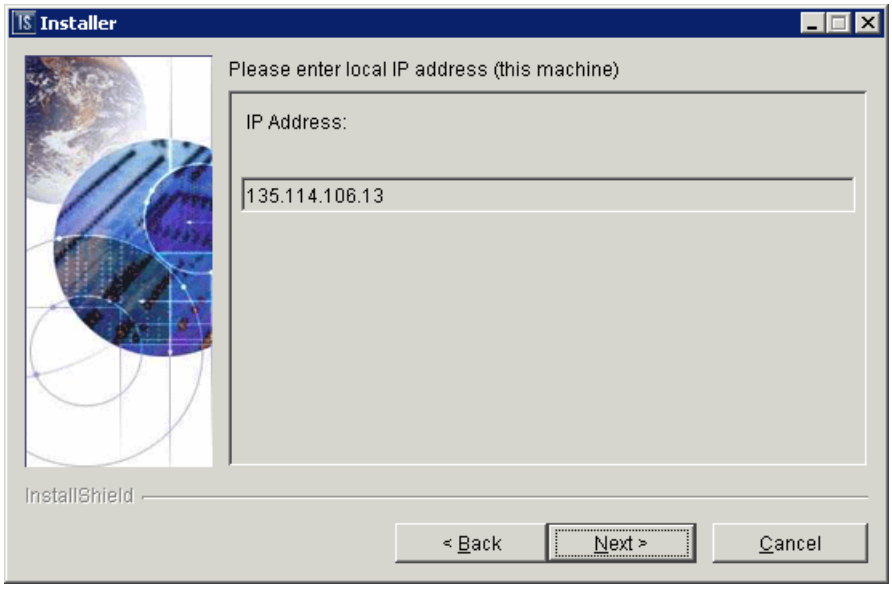
By default, the port number is 5000 for Sybase. In the **Enter Database Port #** field, change the port number for the database if necessary.

14 Click **Next**. The QIPDATASERVER Value screen opens.



This defines the value of the **`QIPDATASERVER`** environment variable. The **`QIPDATASERVER`** value is the name of the database server.

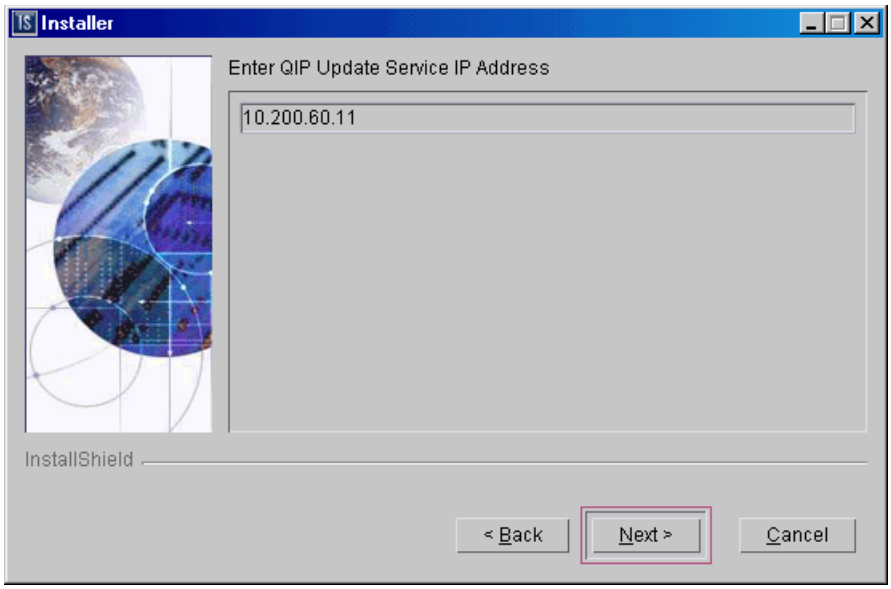
15 Click **Next**. The Local IP Address screen opens.



The IP address of the local machine is displayed. In the **IP Address** field, enter the IP address of the local machine on which VitalQIP is being installed if needed.

QIP Update Service, GUI, and CLIs only

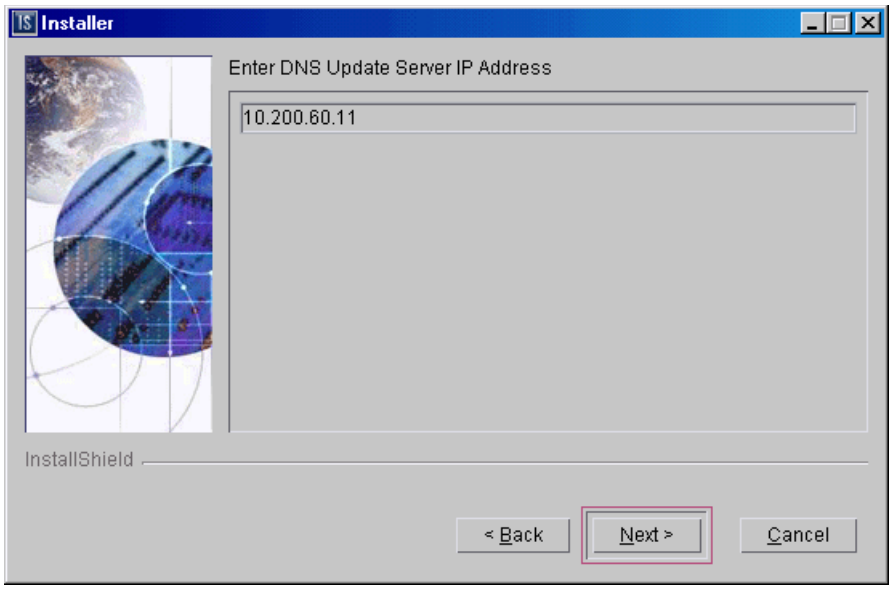
16 Click **Next**. If you selected QIP Update Service, GUI, or CLIs in Step 6, the QIP Update Service IP Address screen opens. Skip this step if you did not select QIP Update Service, GUI, and CLIs.



In the **Enter QIP Update Service IP Address** field, change the IP address of the QIP Update Server. The value is stored in the *qip.pcy* file.

DNS Update Service only

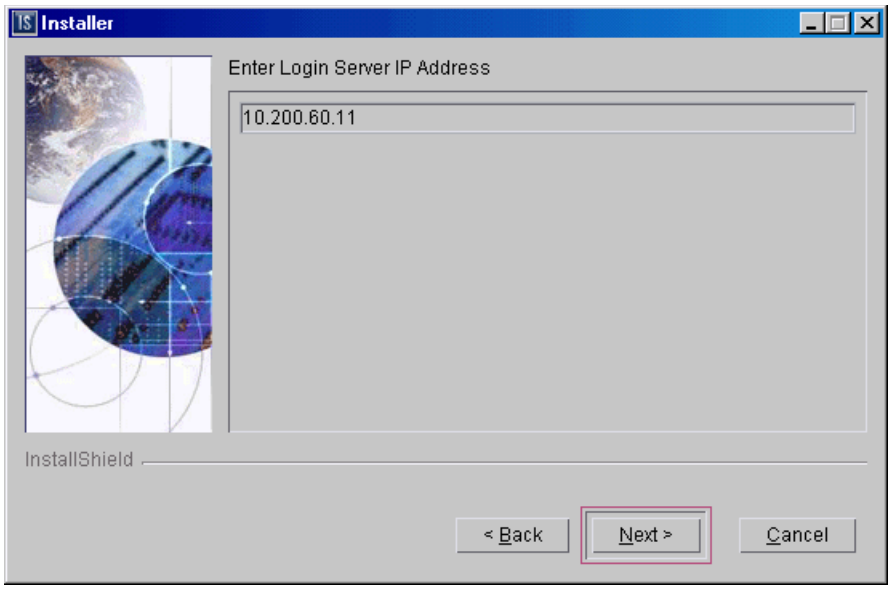
17 Click **Next**. If you selected DNS Update Service in Step 6, the DNS Update Server IP Address screen opens. Skip this step if you did not select DNS Update Service.



In the **Enter DNS Update Server IP Address** field, change the IP address for the DNS Update Server if needed. The value is stored in the *qip.pcy* file.

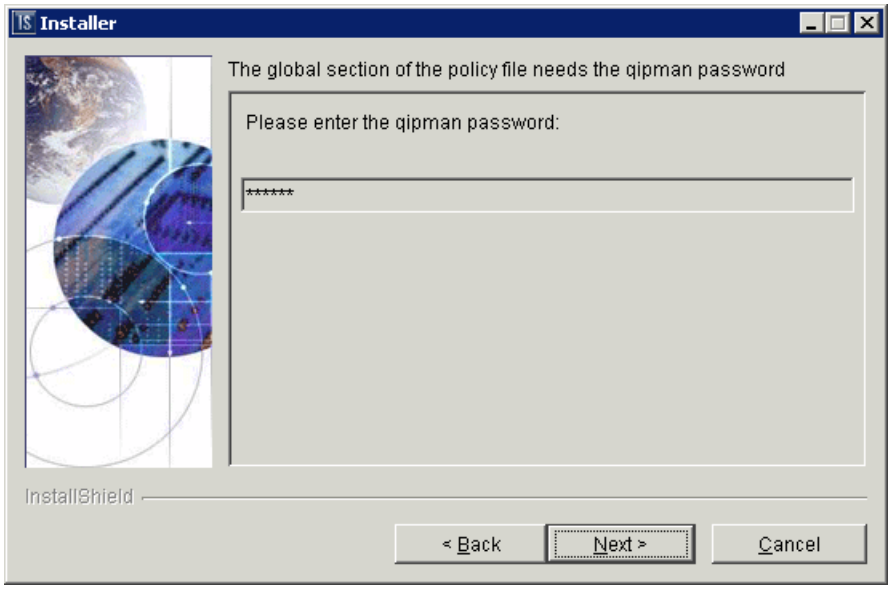
Login Service only

18 Click **Next**. If you selected Login Service in Step 6, the Login Server IP Address screen opens. Skip this step if you did not select Login Service.



In the **Enter Login Server IP Address** field, change the IP address for the Login Server if needed. The value is stored in the *qip.pcy*.

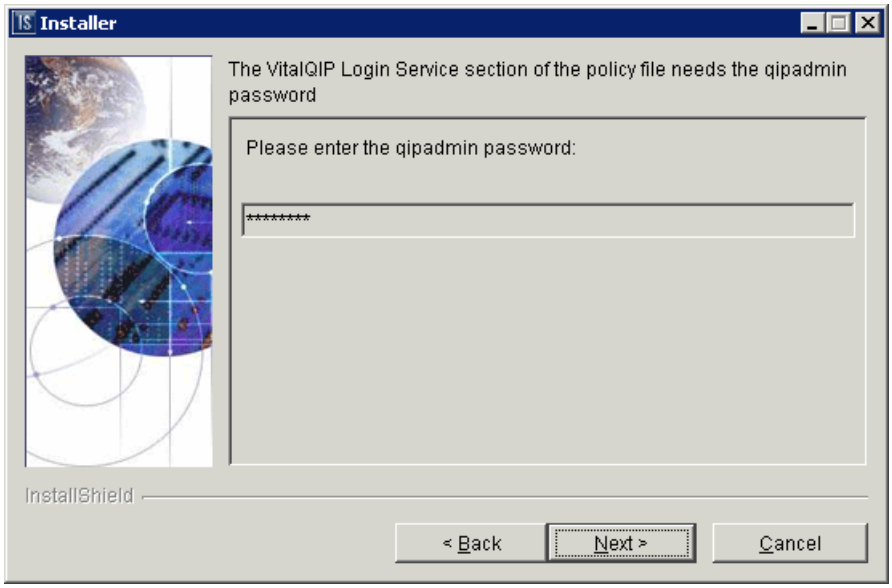
19 Click **Next**. The qipman Password screen opens.



By default, the password for qipman is **`qipman`**. You should use the default and change it later if you wish. The qipman password is stored in the Global policy section of the *qip.pcy* file.

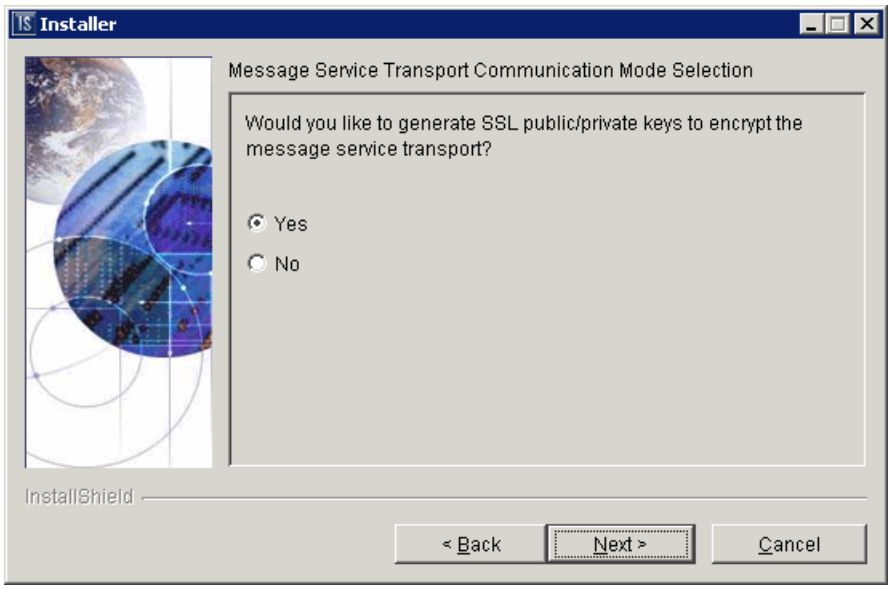
Login Service only

20 Click **Next**. If you selected Login Service in Step 6, the qipadmin Password screen opens. Skip this step if you did not select Login Service.



By default, the password for qipadmin is **`qipadmin`**. You should use the default and change it later if you wish. The qipadman password is stored in the VitalQIP Login Service section of the *qip.pcy* file.

21 Click **Next**. The Generate SSL Public/Private Keys screen opens.

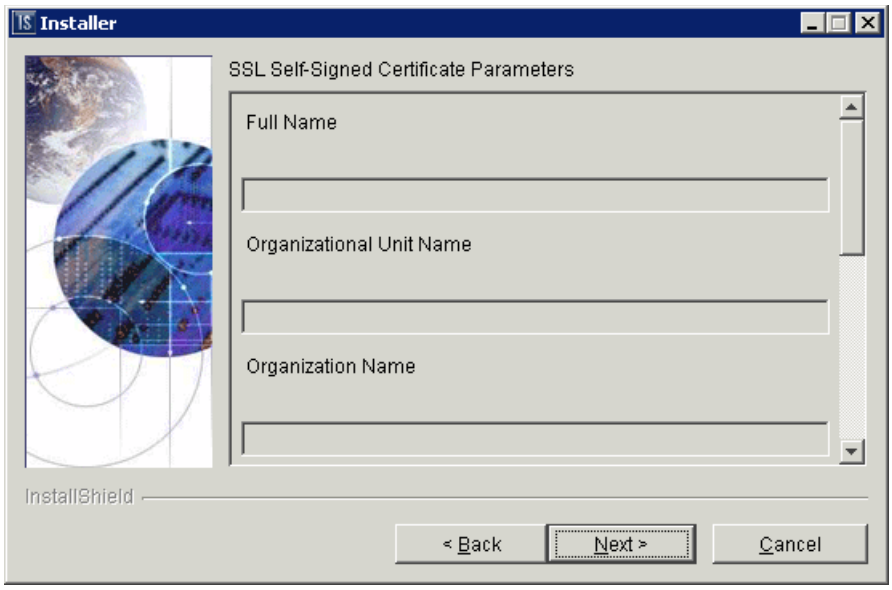


Select one of the following:

- **Yes** if you are planning on using the secure socket layer
- **No** if you are not using the secure socket layer

Use secure socket layer

22 Click **Next**. If you selected **Yes** in Step 21, the SSL Self Signed Certificate Parameters screen opens. Skip this step if you selected **No**.



Note: You need to scroll down to view the remaining fields in the screen.

Review the following table and enter the values in the fields.

Table 4-3 SSL Self Signed Certificate Parameters fields

Field	Description
Full Name	Your full name.
Organizational Unit Name	The name of the organization unit.
Organization Name	The name of the organization.
City or Locality	The city or locality where your organization is located.
State or Province	The state or province where your organization is located.
Two-Letter Country Code	The two letter country code your organization is located in. For a list of country codes, refer to **www.digicert.com/ssl-certificate-country-codes.htm**

Field	Description
Private Key Encryption Password	***Required***. The private key password. Enter a password that adheres to the following rules (and be sure to make a note of it since you will need it again when installing other VitalQIP components): • Can be any length except null • All characters must match the pattern: [a-zA-Z0-9~!@#$%^&*()l_+={}?] • Cannot contain the space character

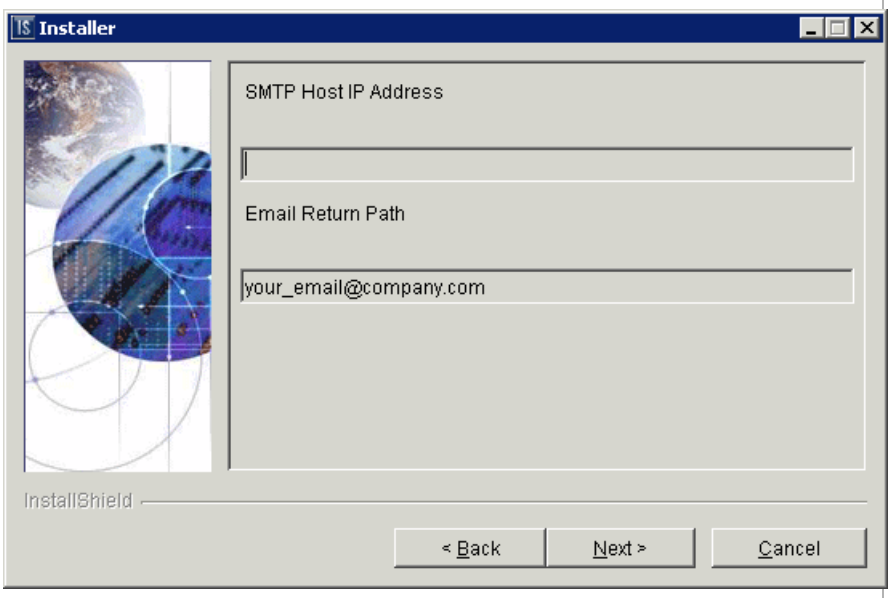
If you did not enter a password in the Private Key Encryption Password, a message opens after you click **Next**:

```
SSL Private Key Encryption Password must be set.
```

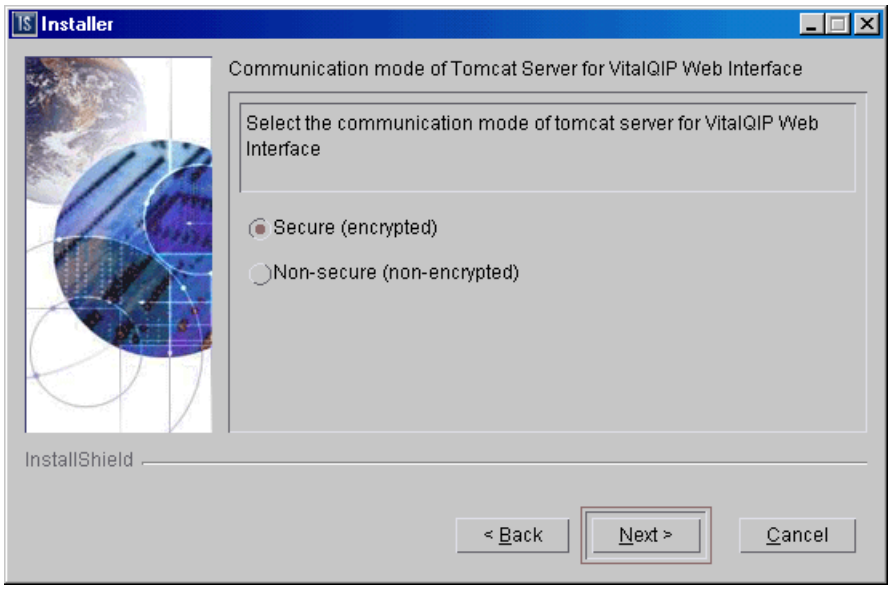
Click **Back** and enter a password in the **Private Key Encryption Password** field. Once a password is entered, continue with the installation.

23 Choose one of the following.

If you want to…	Then…
Install enterprise server on a UNIX platform	Click **Next**. **Result:** The Tomcat Server Communication Mode opens (Step 24).

If you want to…	Then…
Install enterprise server on a Windows platform	1. Click **Next**. **Result:** The SMTP Host Information screen opens.  VitalQIP requires information about the Email server. This information is used to send email alerts to defined administrators. 2. In the **SMTP Host IP Address** field, enter the IP address of the SMTP (email) server. 3. In the **Email Return Path** field, enter the email address of the administrator who will receive email alerts. 4. Click **Next**.

24 The Tomcat Server Communication Mode opens.

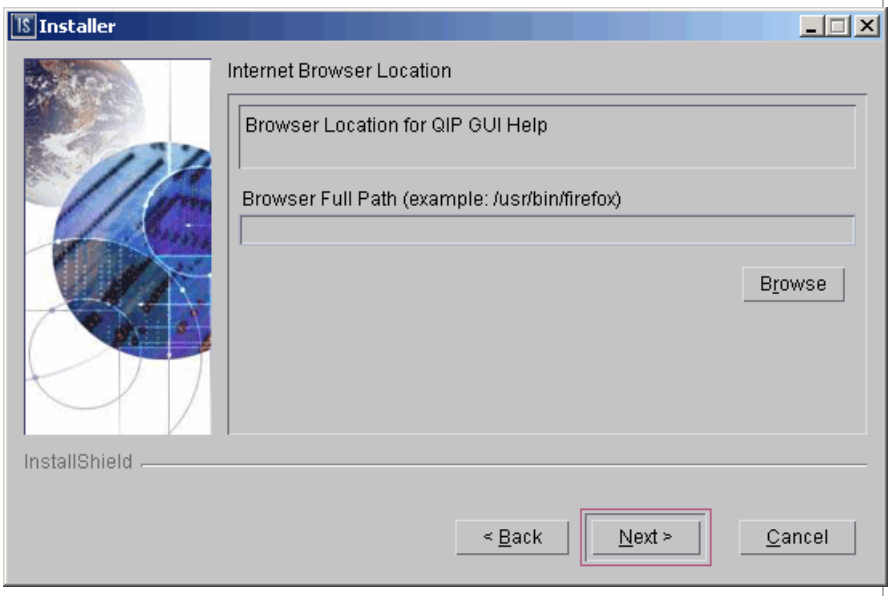


The installation needs to know what mode of communication the Apache Tomcat web server will use. This information is written to the VitalQIP Service Layer section of the *qip.pcy* file.

Select one of the following:

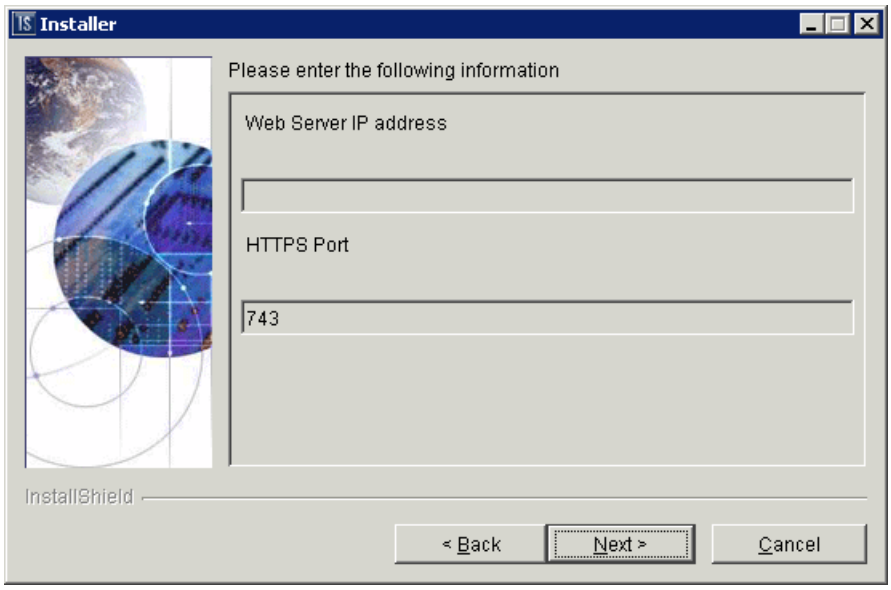
- **Secure (encrypted)** - uses HTTPS to send encrypted messages to and from the server
- **Non-secure (not-encrypted)** - messages to and from the server are not encrypted

25 Choose one of the following..

If you want to…	Then…
Select a browser location on a UNIX platform	1. Click **Next**. **Result:** The Internet Browser Location screen opens.  To access the VitalQIP GUI help screens on a UNIX server, the installation program needs to locate a browser such as Mozilla Firefox on the enterprise server. 2. Enter the full path to the browser, or click **Browse** and select a file in the Select a file dialog box. 3. Click **Next**. **Result:** If the browser is found, the Tomcat Server Information screen opens (Step 26). If no browser path was entered or it was invalid, an information window opens with the message: `The "Browser Full Path" was either not entered or is not a valid file full path. Please select "Back" and correct. If you wish to proceed without a valid entry, note that help files will not be available unless the QIPHELP environment variable is set to the full path of a valid internet browser in the QIP user's environment.` Click **Back** to enter the correct browser path, or click **Next** to continue.

If you want to...	Then...
Continue to the Tomcat Server Information screen on a Windows platform	Click **Next**. **Result:** The Tomcat Server Information screen opens (Step 26).

26 The Tomcat Server Information screen opens.



Note: Either **HTTP Port** or **HTTPS Port** field is displayed in this screen. The field that is displayed is determined by your selection in Step 24.

Review the following table and fill in the fields.

Table 4-4 Tomcat Server Information fields

Field	Description
Web Server IP address	The IP address where the Apache Tomcat web server resides.
HTTP Port	***Displayed when Non-secure (not-encrypted) is selected in Step 24.*** The port used by the web client to connect to the Apache Tomcat web server. By default, the port is 80.
HTTPS Port	***Displayed when Secure (encrypted) is selected in Step 24.*** The SSL port used by the web client to connect to the Apache Tomcat web server. By default, the port is 743.

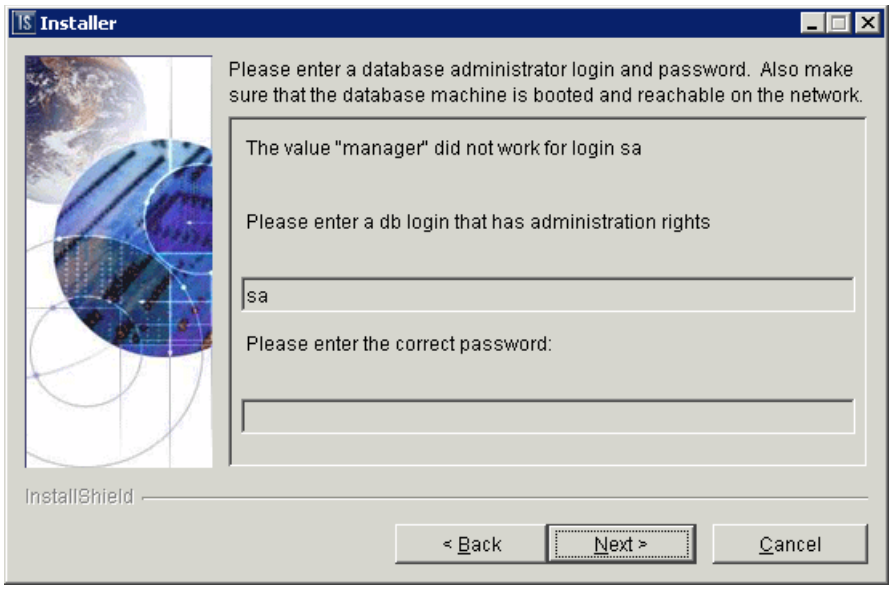
27 Click **Next**. After a few moments, the Summary screen opens. Examine the features to be installed. If changes are necessary, click **Back** to make changes to the installation. If everything looks correct, click **Next**.

The installer commences extracting files and installing VitalQIP. After a few minutes, the Successful Install screen opens.

28 Click **Next** to continue the VitalQIP Wizard.

Cannot connect to the database

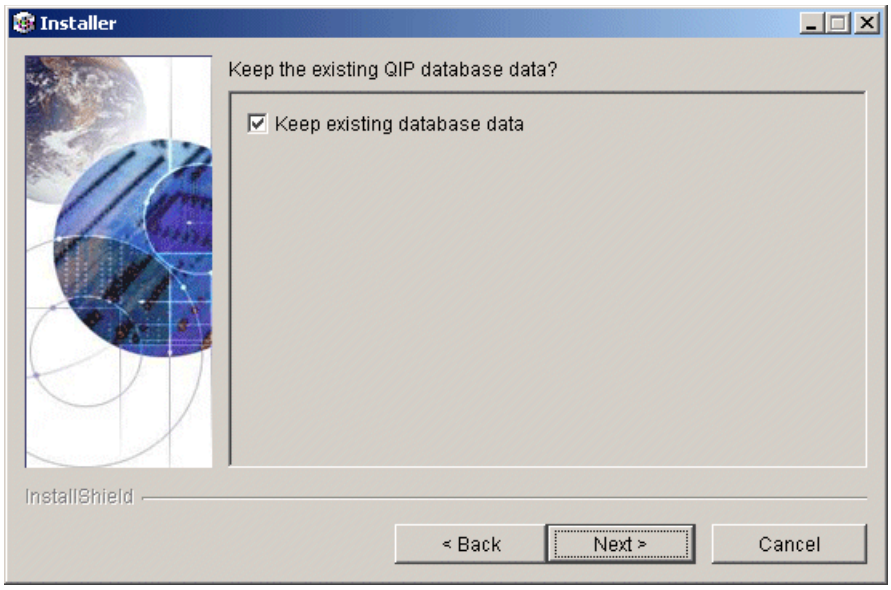
29 If the database cannot be reached, a screen opens prompting for the **sa** password. Skip this step if this screen does not open.



Ensure the database is started or enter the correct database administrator ID or password. If the database is not running, click **Back** to the previous screen. Once the database is started, proceed with the installation.

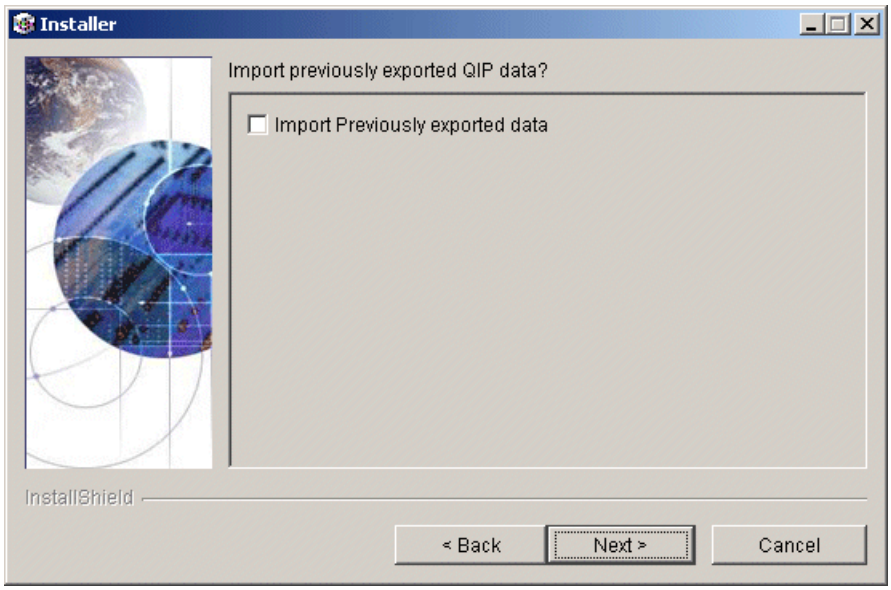
Existing database detected

30 If an existing VitalQIP database is detected, the Keep Existing QIP Data screen opens. Go to the next step if an existing VitalQIP database is not detected.



If you want to keep existing VitalQIP data, select **Keep existing database data**.

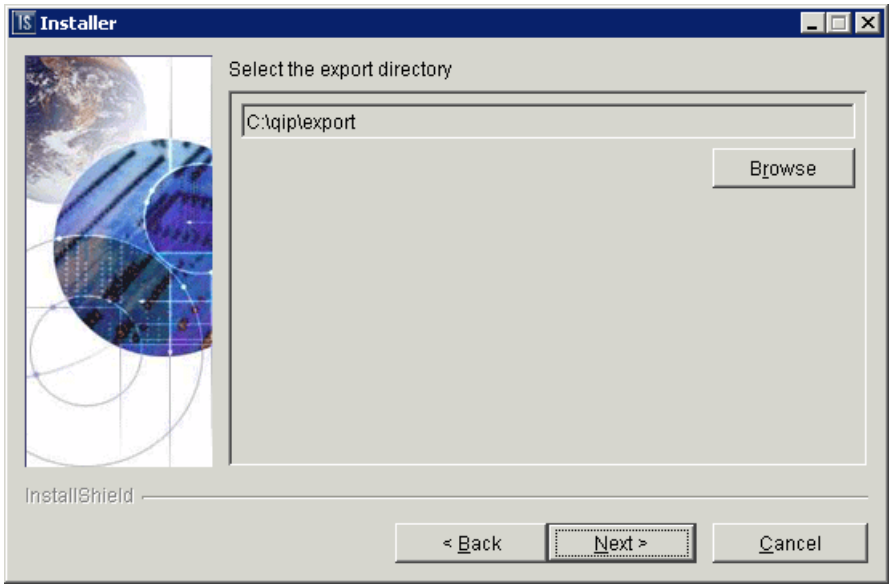
31 Click **Next**. The Import Exported Data screen opens if **Keep existing database data** is not selected or if no QIP devices exist for the Sybase database.



If you want to import exported data, check **Import Previously exported data**.

Import exported data

32 Click **Next**. If **Import previously exported database** was selected or **Keep existing database data** was selected, the Export Data screen opens.



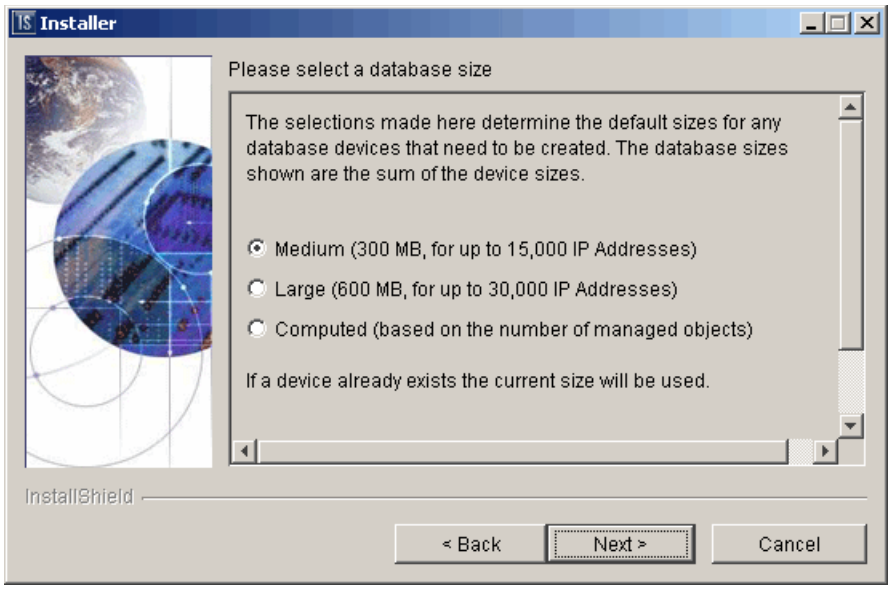
The directory where the data was exported is shown. The default is */opt/qip/export* on UNIX and *%QIPHOME%\data* on Windows. If necessary, type the destination directory directly in the **Select Export Directory** field. In the case where **Import previously exported database** was selected, type the directory where the exported data resides. Alternatively, you can:

a. Click **Browse**, locate and select the directory.

b. Click **Open**. The destination directory is shown in the field.

Size new VitalQIP database

33 Click **Next**. If the Sybase database has never been sized, the Select a Database Size screen opens.

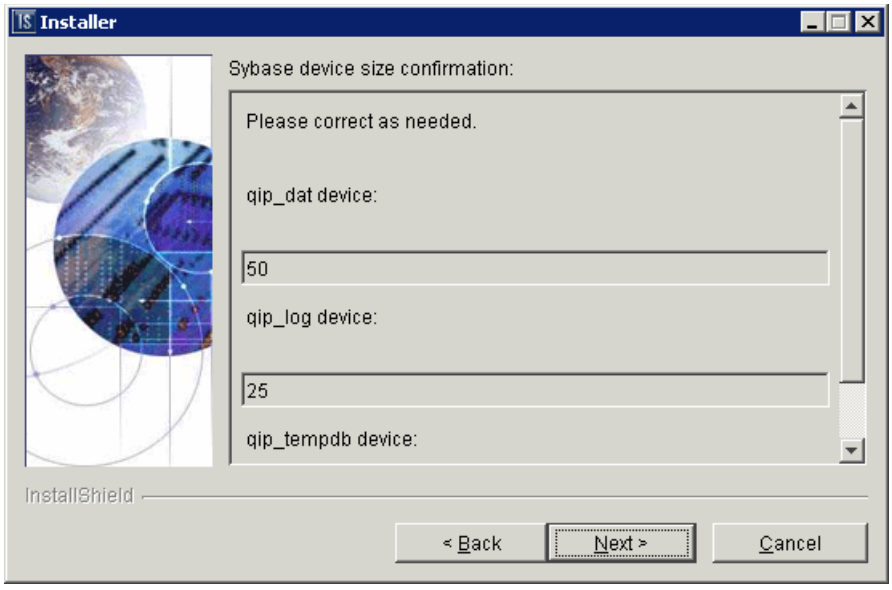


Choose a database size from the selections offered and click **Next**. In the next step, one of two screens opens based on your selection. Go to:

- If **Medium** or **Large** is selected, refer to "Medium or large database size" (p. 4-31).
- If **Computed** is selected, refer to "Computed database size" (p. 4-32).

Medium or large database size

If **Medium** or **Large** was selected in the previous screen, the Device Size screen opens.



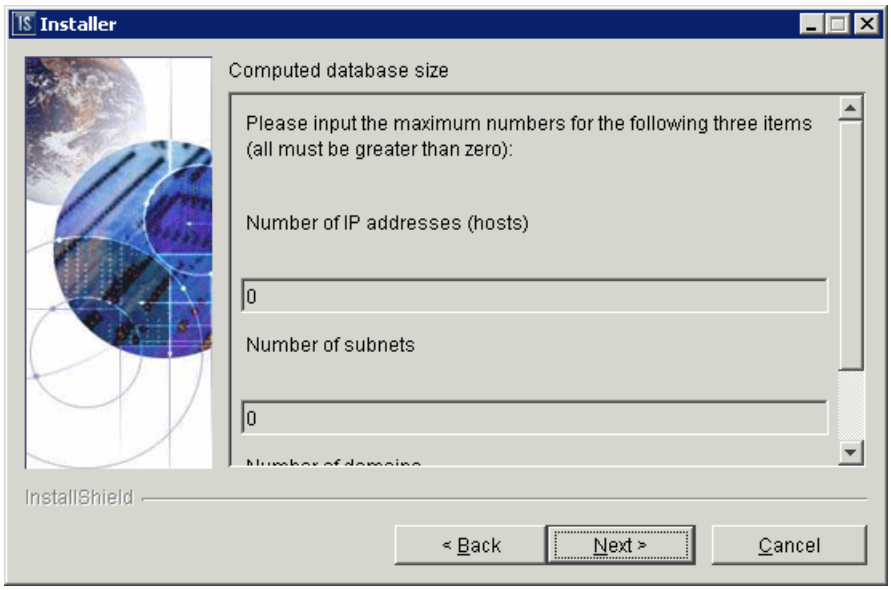
The following table shows the default for the fields based on the database size selected. Review the table and change the values as needed. Once you have entered the information, go to the next step.

Table 4-5 Sybase device size fields

Database size	qip_dat device	qip_log device	qip_tempdb device
Medium (300 MB)	150	75	75
Large (600 MB)	300	150	150

Computed database size

If you selected **Computed** in the previous screen, the Computed Database Size screen opens. Skip to the next step if you did not select **Computed**.

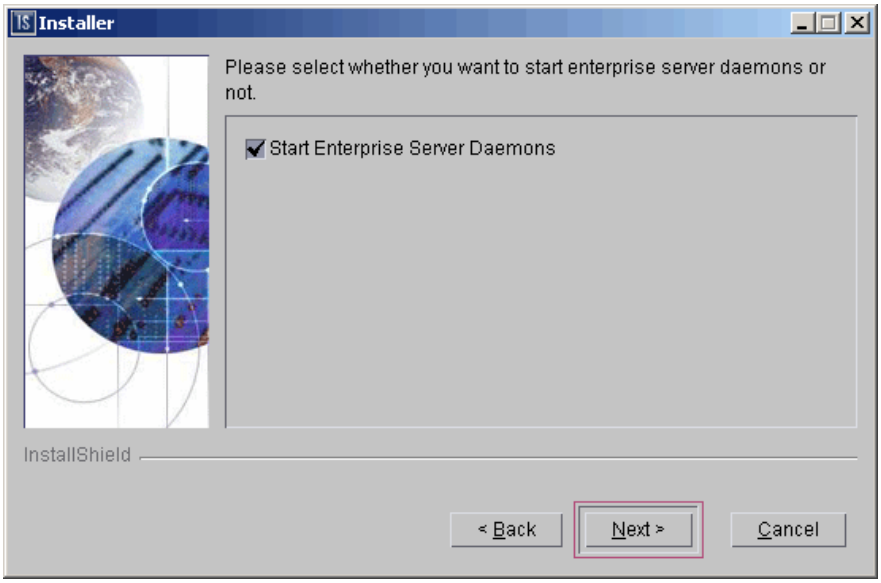


Review the following table and fill in the fields. Once you have entered the information, go to the next step.

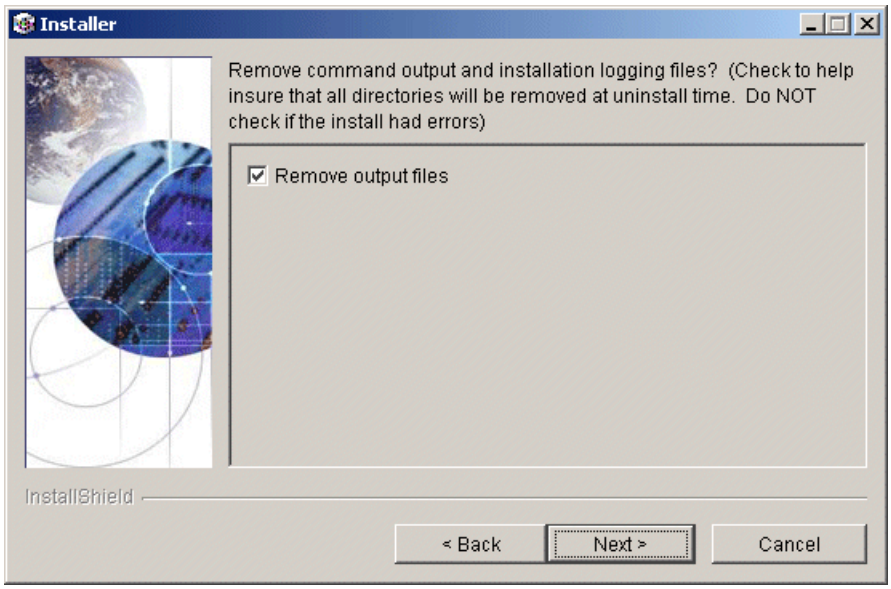
Table 4-6 Computed Database Size fields

Fields	Description
Number of IP addresses	Enter the number of hosts VitalQIP will manage.
Number of subnets	Enter the number of subnets VitalQIP will manage.
Number of domains	Enter the number of domains VitalQIP will manage.

34 Click **Next**..

If you want to…	Then…
Start the enterprise daemons on a UNIX platform	1. Click **Next**. **Result:** The Start Enterprise Daemons screen opens.  The installation gives you the option to start the enterprise server daemons. Follow these steps if you want to start the enterprise server daemon: 2. Select **Start Enterprise Server Daemons** and click **Next**. **Result:** A screen opens showing the daemons that are to be started. Depending on how many other VitalQIP components are installed on your system, additional Start Daemon screens can open. Follow the directions on the screen to complete the installation. 3. Click **Next**.
Remove the output files on a Windows platform	Click **Next**. **Result:** The Remove Output Files screen opens (Step 35).

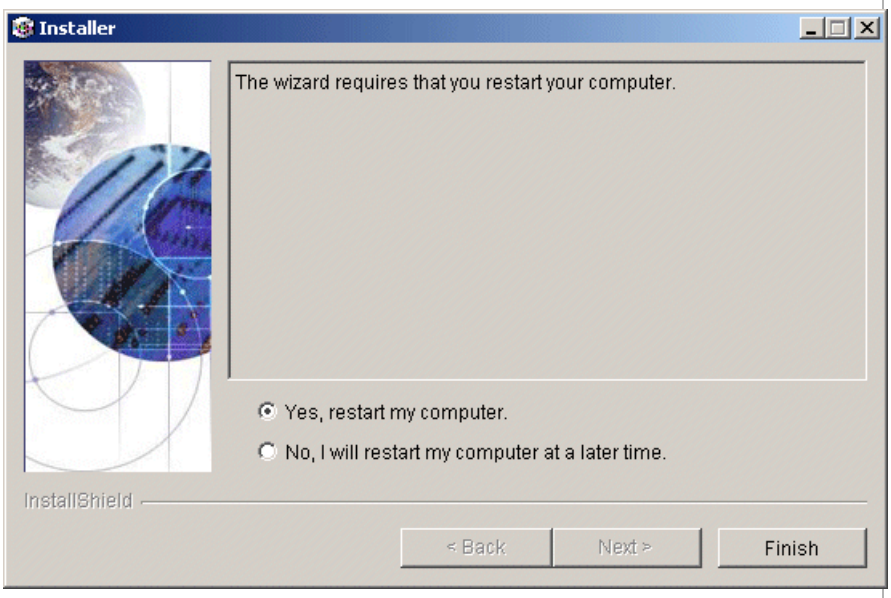
35 The Remove Output Files screen opens.



During the installation, VitalQIP produces output files that are no longer needed for the installation. The installation files can be kept or removed from your system. It is recommended that you keep the files if the install had errors. If you want to keep the files, uncheck **Remove output files**.

36 Choose one of the following..

If you want to…	Then…
Complete the installation on a UNIX platform	1. Click **Next**. **Result:** The Installation complete screen opens. 2. Click **Finish**.

If you want to...	Then...
Complete the installation on a Windows platform	1. Click **Next**. **Result:** The Installation complete screen opens.  2. Before you can begin using VitalQIP, you must reboot your computer. Select **Yes** to restart your computer. If you would rather work on other tasks before configuring VitalQIP, click **No**. 3. Click **Finish**.

37 After the installation, Sybase needs additional configuration. Refer to "VitalQIP configuration" (p. 9-1) for more information.

END OF STEPS

5 Install VitalQIP remote server

Overview

Purpose

This chapter covers installing VitalQIP remote server on supported platforms. To increase the usability of this chapter, portions of the installation steps are labeled. If a label does not apply to a particular installation situation, skip to the next labeled section.

Contents

This chapter covers these topics.

Remote server installation overview	5-2
Remote server pre-installation checklist	5-3
Install the VitalQIP remote server	5-5
Install the VitalQIP remote server as a secondary server to a non-managed DNS server	5-21

Remote server installation overview

What is installed

The VitalQIP remote server installation installs the following:

- Lucent DHCP Server
- Lucent DNS
- Microsoft DHCP Support (Windows only)
- Microsoft DNS Support (Windows only)
- VitalQIP Remote Service
- VitalQIP Active Lease Service
- VitalQIP Message Service

Install the remote server on separate machines

If your network includes DHCP, DNS, and/or Bootp servers that are physically separate from the VitalQIP enterprise server, the VitalQIP remote service package must be installed on these servers. If these network services are running exclusively on the VitalQIP enterprise server, the VitalQIP remote service package must also be installed.

> **Note:** On Windows only, Alcatel-Lucent recommends that you define all servers in *\windows\system32\drivers\etc\hosts*. If the servers are not defined in this file, you may receive a "connect" or "gethostbyname" error when you attempt to generate your configuration files.

Secondary server to non-managed DNS server

The VitalQIP remote server can be installed as secondary server to a non-managed DNS server (a DNS server that is not managed by VitalQIP). Refer to "Install the VitalQIP remote server as a secondary server to a non-managed DNS server" (p. 5-21) for information on how to set up the VitalQIP remote server as a secondary server to a non-managed DNS server.

Failover configuration

In a failover configuration where the secondary is currently active, the primary DHCP server should not be started until ***after*** a push has been performed.

Upgrade from previous versions

If VitalQIP is being upgraded from a previous version, refer to Part IV: "Upgrade VitalQIP" for instructions on upgrading to VitalQIP 7.2.

Remote server pre-installation checklist

Purpose

Use the following checklist to determine what needs to be done before beginning the remote server installation:

Table 5-1 Remote server checklist

Task	Description	Status
Determine the configuration	Determine how and where the components are to be installed. Additionally, consider if this is an upgrade and whether additional components are being installed. Refer to Part I of the *Administrator Reference Manual* for more information on configurations.	
Determine if SSL is deployed	Find out if SSL will be used in the VitalQIP deployment. If it is being used, the *qipkeystore* and *vitalqip.cer* files are required to be located on the remote server machine as well. These files are created during the VitalQIP enterprise server installation and can be copied from their location in the VitalQIP home directory to the same location on the remote server. The private key password also needs to be obtained. For more information on setting up secure message routes with SSL, refer to the Secure Message Routes chapter in the *Administrator Reference Manual*.	
Meet pre-installation requirements	The pre-installation requirements must be met before installing VitalQIP. Check the *VitalQIP 7.2 Release Notes* to ensure your system meets the pre-installation requirements for installing VitalQIP.	
MS DHCP or MS DNS only: Install and configure Perl	If you are using Microsoft DHCP or Microsoft DNS, Perl must be installed before beginning the VitalQIP installation. Alcatel-Lucent recommends that you install a full version on Perl 5.6 or higher, including supporting libraries.	
Stop all VitalQIP-related processes	If VitalQIP was previously installed, ensure all VitalQIP-related processes are stopped before you commence installation of VitalQIP 7.2.	

Task	Description	Status
Find database information	Find the name of the database. For Sybase, the database name is the name of the Adaptive Server. If VitalQIP is already installed, the name of the database is the value set in the **`QIPDATASERVER`** environment variable.	
Find IP address of machine	Find the IP address of the machine where the component is being installed.	
Find IP addresses of services	Find the address of the machine or machines where these services are to be installed: • VitalQIP QIP Update Service • VitalQIP File Generation Service	

Install the VitalQIP remote server

Purpose

This section explains how to install the VitalQIP remote server on supported platforms. If you have problems installing the software, contact technical support.

Before you begin

Windows

- Ensure you are logged into your system as a user with administrative privileges.
- Ensure you exit all programs you are currently running.

UNIX

- Log into your system as the root user. If the installation is not done as the root user the **`qping`** utility does not work. The utility must have root permission with the **`SUID`** bit set for the administrator. This is an operating system limitation.

  To work around this limitation:

  a. Log into the system as the root user:

  b. Change the mode and permissions on the **`qping`** utility to be:

```
root:sys & 4755
```

- Ensure your database is running.

Procedure

To install the VitalQIP remote server, follow these steps:

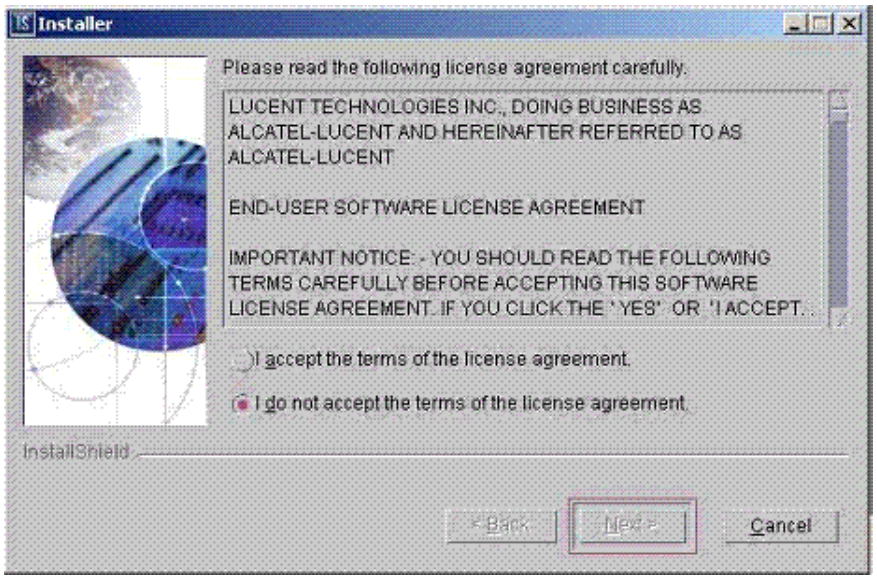
1 Choose one of the following:

If you want to…	Then…
Install on a Linux platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72setupLinuxgccr<#>.bin`**
Install on a Solaris platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72setupSolarisr<#>.bin`**

If you want to...	Then...
Install on a Windows platform	1. Open a command window and change directory to the installation file location. This is the location you selected when you downloaded the Windows installation executable from the Alcatel-Lucent Electronic Download site (*c:\temp* is the default location). 2. Enter: **`qip72setupwin32r<#>.exe`**

For all executables, the **#** denotes the repackaging number of the executable.

2 The Software License Agreement screen opens.

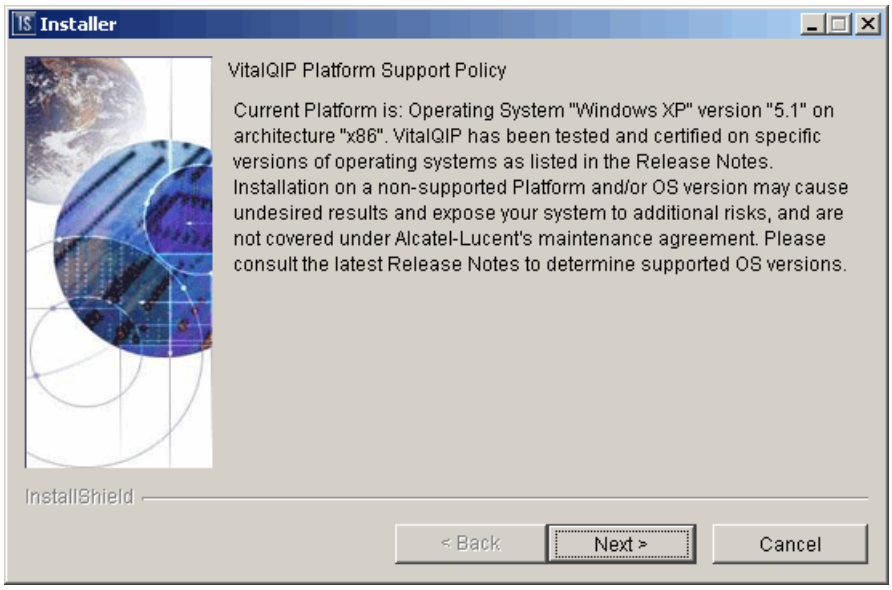


Read the software license agreement and:

- Select **I accept the terms of the license agreement** to accept the license agreement.
- Select **I do not accept the terms of the license agreement** if you do not accept the license agreement. The installation is canceled.

3 Click **Next**. The Welcome screen opens.

4 Click **Next**. The installation checks that the operating system is a supported version. If it is not a supported operating system, a screen opens with the Platform Support Policy.

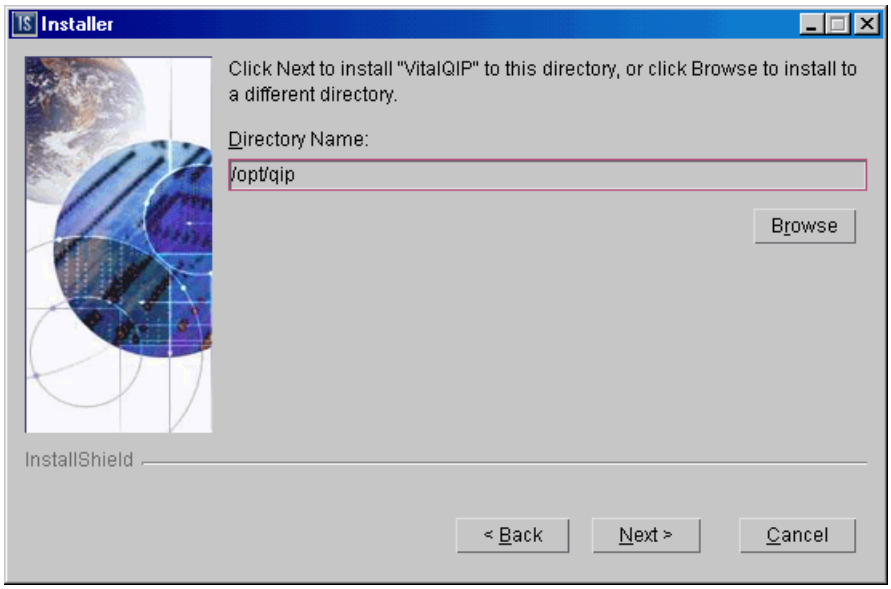


Click **Cancel** to exit the installation and upgrade the operating system to one of the supported versions listed in the *VitalQIP 7.2 Release Notes* before you install VitalQIP.

5 Click **Next**. Choose one of the following.

If you want to…	Then…
Install remote server on a UNIX platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, a screen opens showing the VitalQIP-related daemons that are running. 1. Choose one of the following options: • Click **yes, kill processes automatically** and have the installation stop the processes. • Click **no, they will be killed manually** and stop the processes manually. 2. Click **Next**.
Install remote server on a Windows platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, the processes are stopped by the installation.

6 The VitalQIP Home Directory screen opens.



The default destination directory for the VitalQIP software is shown. By default, the directory is */opt/qip* on UNIX and *c:\qip* on Windows. If a version of VitalQIP exists on the machine, the installation reads the **`QIPHOME`** environment variable and displays the value.

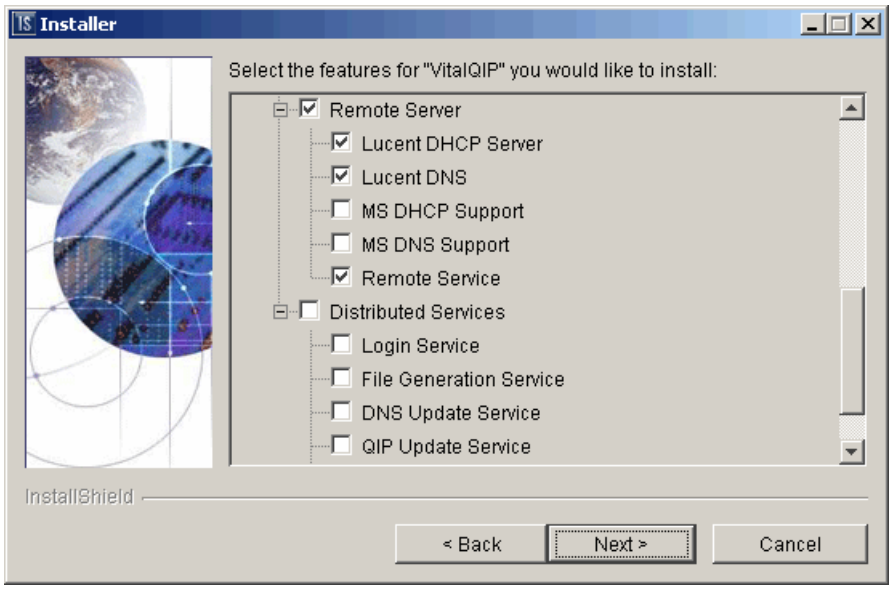
If necessary, type the destination directory directly in the **Directory Name** field. Alternatively:

a. Click **Browse**.

b. Find the directory and select the directory.

c. Click **Open**. The destination directory is shown in the field.

7 Click **Next**. In a few moments, the Features screen opens.



To install the VitalQIP Remote Server only, uncheck all components except the **Remote Server** and its sub-components.

> **Important!** If any VitalQIP component is already installed, "`installed`" is shown next to it. If you want to keep that component, do ***not*** uncheck the checkbox: InstallShield will reinstall that component at the same time that it installs the components that you are now selecting.

The following table describes the sub-components of the Remote Server package. After reading the table, ensure **Remote Server** is checked. Check or uncheck the sub-components you want to install.

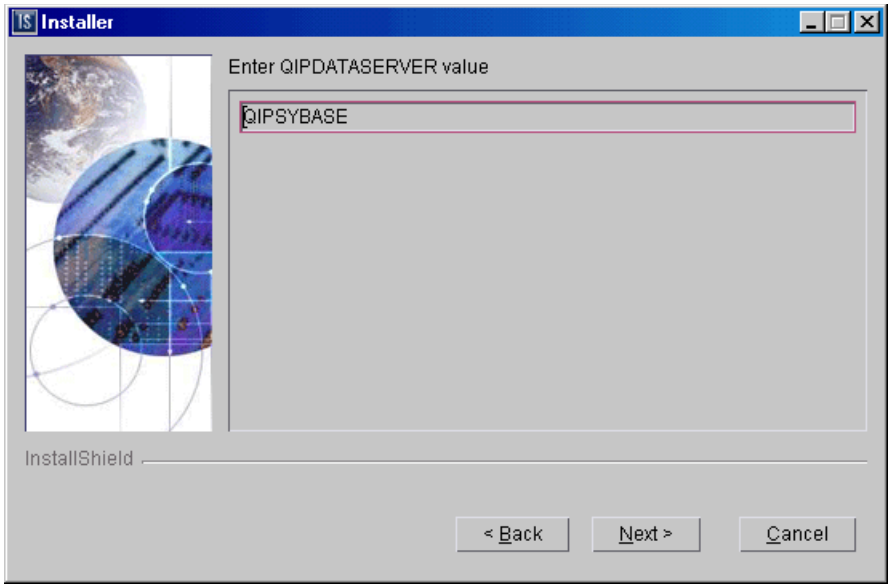
Table 5-2 Remote Server installation sub-components

Sub-component	Description
Lucent DHCP Server	Select if you want to install Lucent's DHCP services. This is the default setting.
Lucent DNS	Select if you want to install Lucent's DNS services. This is the default setting.
MS DHCP Support	***Only available when installing on Windows.*** Installs Microsoft DHCP Support.
MS DNS Support	***Only available when installing on Windows***. Installs Microsoft DNS Support.

Sub-component	Description
Remote Service	Required. Installs the Remote Service. This is the default setting.

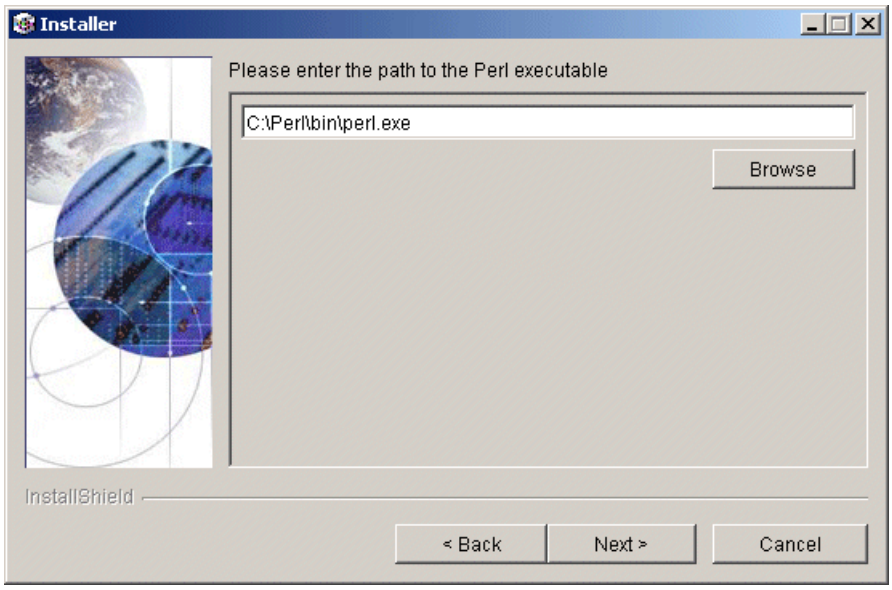
8 Click **Next**. The installation shows an information message. Read the message and follow any instructions that are shown in the message.

9 Click **Next**. The QIPDATASERVER Value screen opens.



This defines the value of the **`QIPDATASERVER`** environment variable.The **`QIPDATASERVER`** value is the name of the database server.

10 Click **Next**. If **MS DHCP Support** or **MS DNS Support** was selected in Step 7, the Perl Executable screen opens.

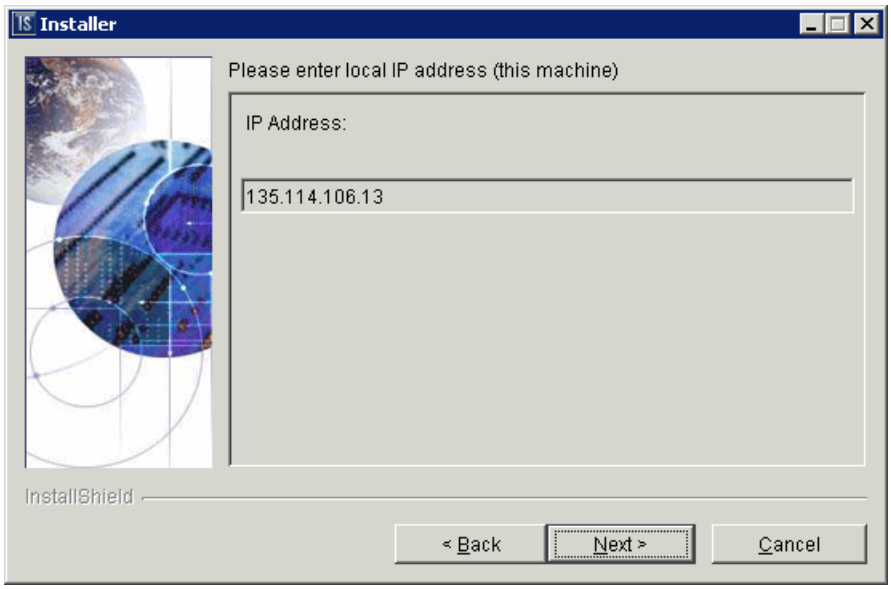


MS DHCP and MS DNS only

If **MS DHCP Support** or **MS DNS Support** was not selected, skip this section.

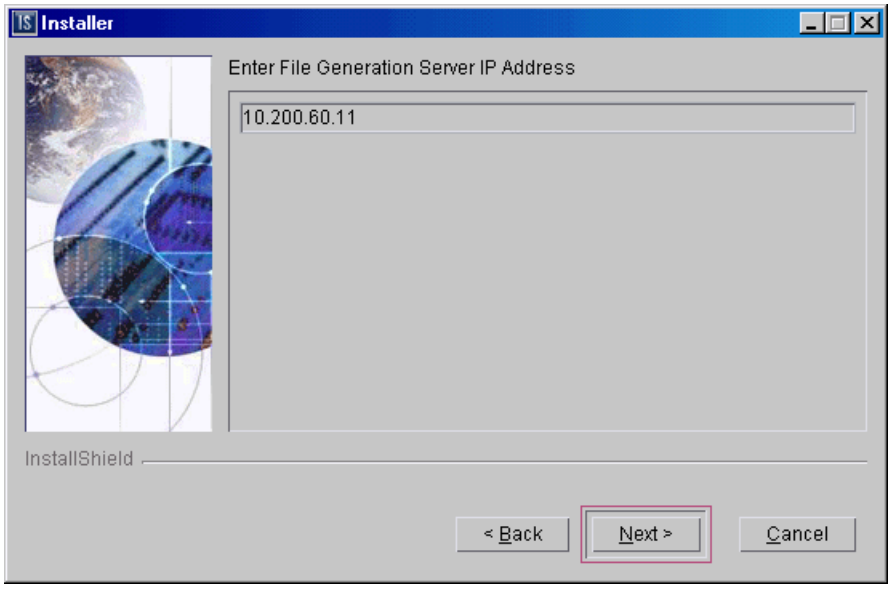
11 By default, the location of the executable is *c:\Perl\bin\perl.exe*. If necessary, click **Browse** to change the path to the executable or type the path to the location in the field.

12 Click **Next**. The Local IP Address screen opens.



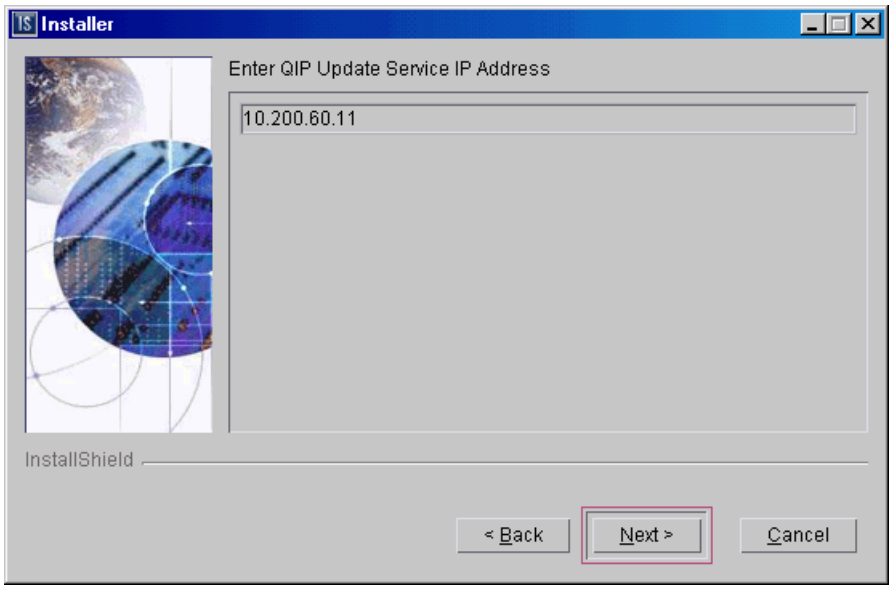
The IP address of the local machine is displayed. In the **IP Address** field, change the IP address of the local machine on which VitalQIP is being installed if needed.

13 Click **Next**. The File Generation Service IP Address screen opens.



The IP address of the local machine is displayed. In the **Enter File Generation Server IP Address** field, change the IP address to the machine on which the File Generation Service is installed.

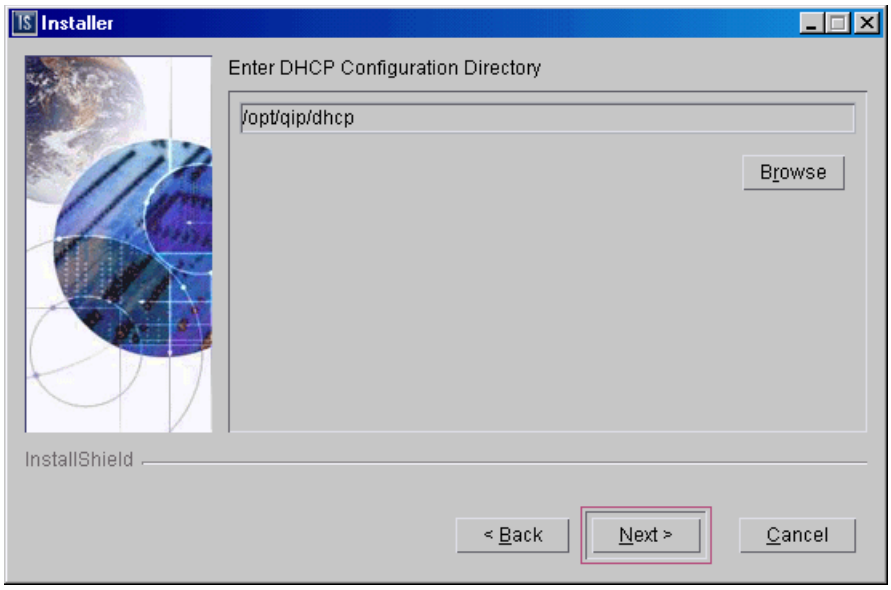
14 Click **Next**. The QIP Update Service IP Address screen opens.



The IP address of the local machine is displayed. In the **Enter QIP Update Server IP Address** field, change the IP address to the machine on which the QIP Update Service is installed.

Lucent DHCP Server

15 Click **Next**. If Lucent DHCP was selected in Step 7, the DHCP Configuration Directory screen opens. If you did not select Lucent DHCP, skip this step.



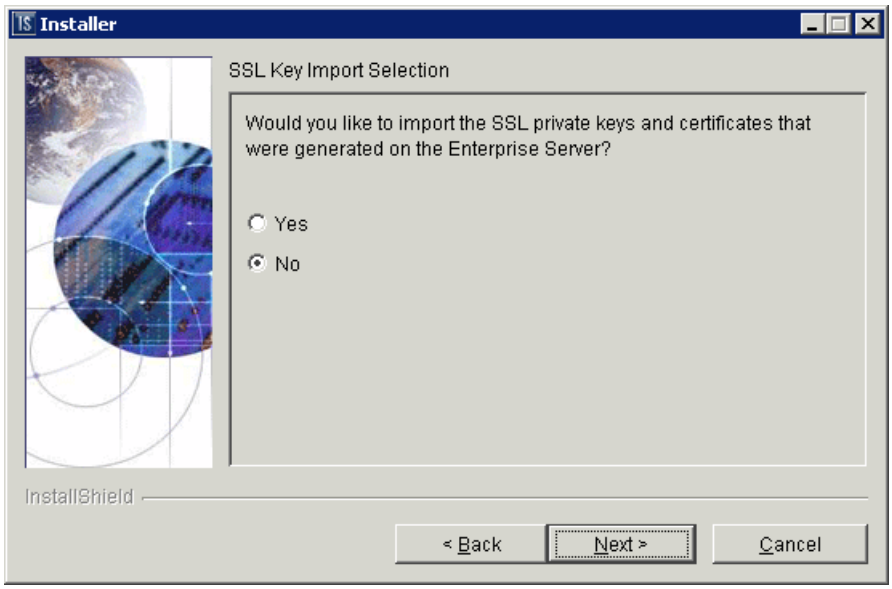
By default, the *dhcp* directory under QIPHOME is shown. If necessary, type the destination directory into the **Enter DHCP Configuration Directory** field. Alternatively:

a. Click **Browse**.

b. Navigate to where the directory is located and select the directory.

c. Click **Open**. The destination directory is shown in the field.

16 Click **Next**. The Import SSL Public/Private Keys screen opens.

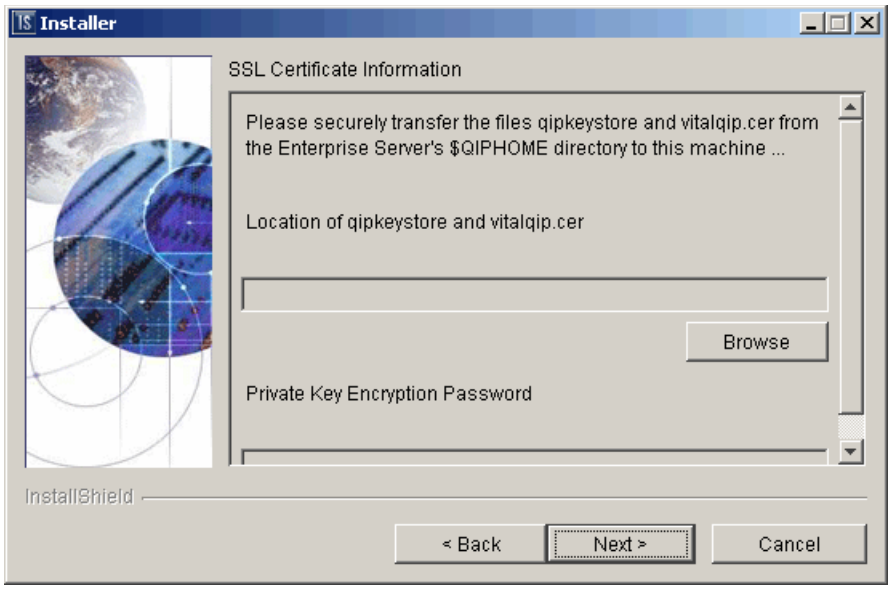


Select one of the following:

- **Yes** if you are planning on using the SSL Tunnel Service
- **No** if you are not planning on using the SSL Tunnel Service

SSL security

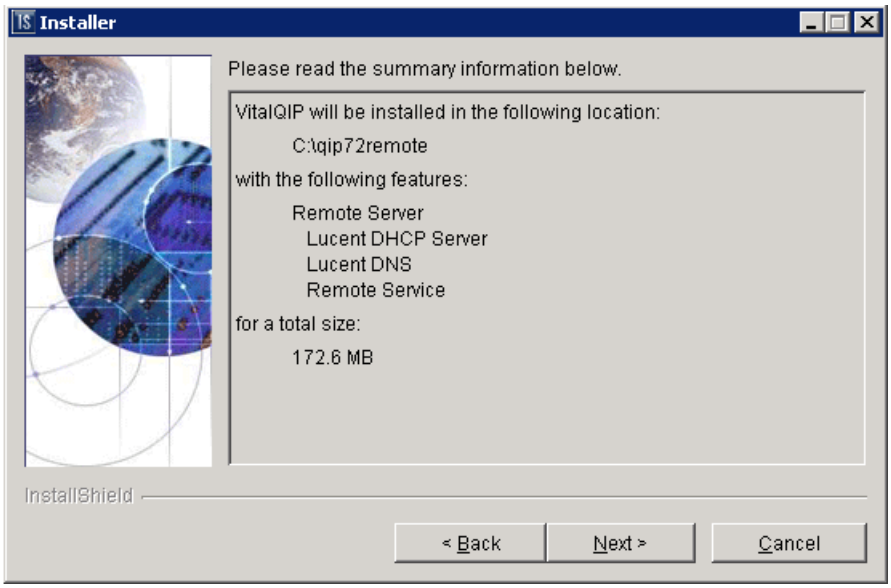
17 Click **Next**. If you selected Yes in the previous screen, the SSL Certificate Information screen opens. Skip this step if you selected No.



Do the following:

- In the **Location of qipkeystore and vitalqip.cert files** field type the location of the *qipkeystore* and *vitalqip.cert* files. Alternatively:
  a. Click **Browse**.
  b. Navigate to where the directory is located and select the directory.
  c. Click **Open**. The destination directory is shown in the field.
- In the **Private Key Encryption Password** field, enter the SSL private key password that was used during the VitalQIP enterprise server installation.

18 Click **Next**. In a few moments, the Summary screen opens.



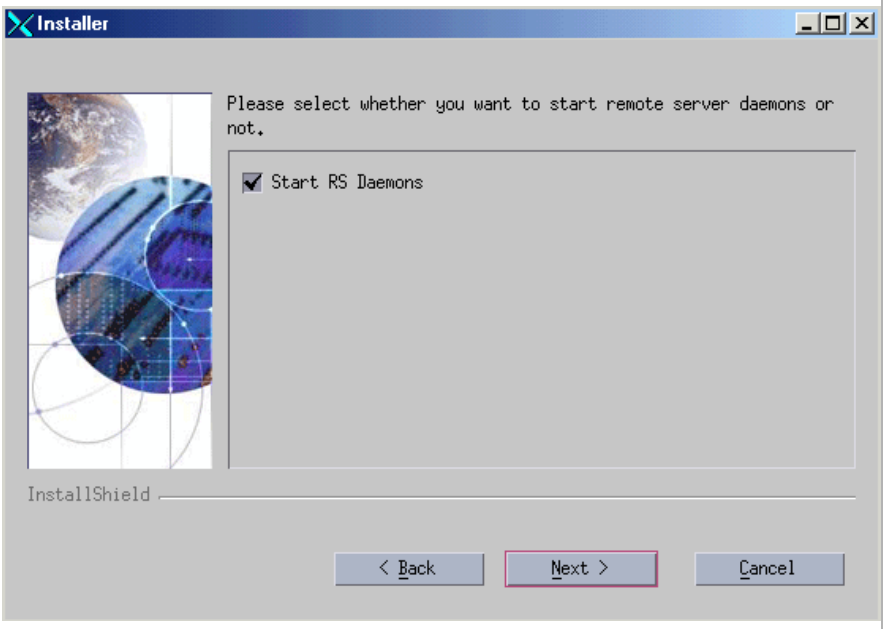
Examine the features to be installed. If changes are necessary, click **Back** to make changes to the installation. If everything looks correct, click **Next**.

The installer commences extracting files and installing VitalQIP.

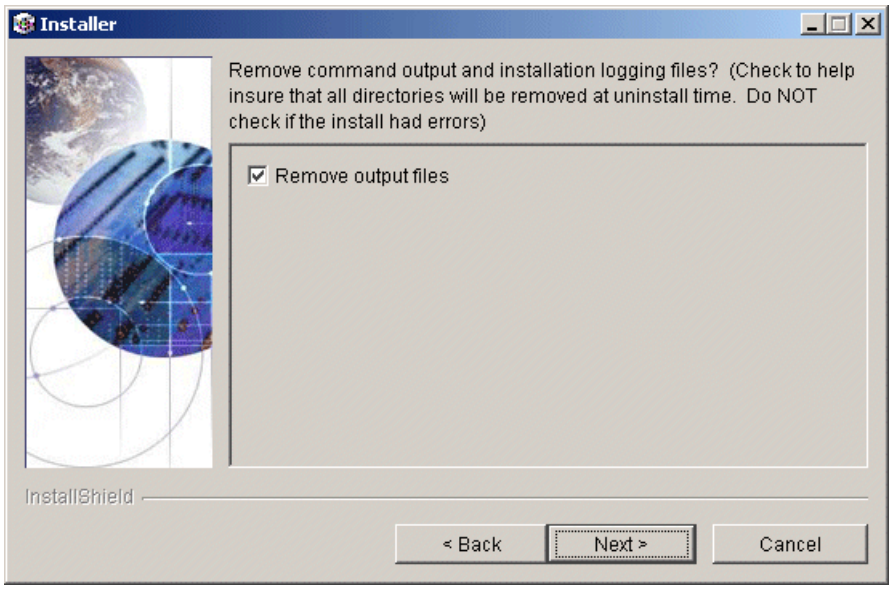
> **Note:** During installation on a Windows platform, a message may open, asking if you want to overwrite *mfc42.dll*. Click **No** to continue.

In a few minutes, the Successful Install screen opens.

19 Choose one of the following.

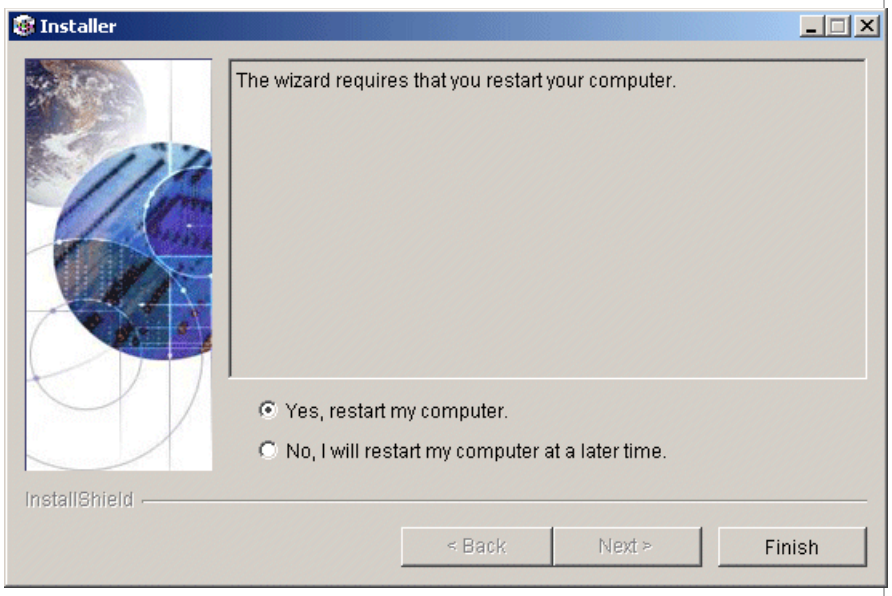
If you want to...	Then...
Start the remote daemons on a UNIX platform	1. Click **Next**. **Result:** The Start Remote Daemons screen opens.  The installation gives you the option to start the remote server daemons, Follow these steps if you want to start the remote server daemon: 2. Select **Start RS Daemons**. A screen opens showing the daemons that are to be started. **Note:** If no *named.conf* file is configured found on the machine, a message opens that states no **`named`** configuration files are found. Depending on how many other VitalQIP components are installed on your system, additional Start Daemon screens can open. Follow the directions on the screen to complete the installation. 3. Click **Next**.
Remove output files	1. Click **Next**. **Result:** The Remove Output Files screen opens. 2. Go to Step 20.

20 In a few moments, the Remove Output Files screen opens.



During the installation, VitalQIP produces output files that are no longer needed for the installation. The installation files can be kept or removed from your system. Alcatel-Lucent recommends you keep the files if the installation had errors. If you want to keep the files, uncheck **Remove output files**.

21 Choose one of the following..

If you want to…	Then…
Complete the installation on a UNIX platform	1. Click **Next**. **Result:** The Installation complete screen opens. 2. Click **Finish**.
Complete the installation on a Windows platform	1. Click **Next**. **Result:** The Installation complete screen opens.  2. Before you can begin using VitalQIP, you must reboot your computer. Select **Yes** to restart your computer. If you would rather work on other tasks before configuring VitalQIP, click **No**. 3. Click **Finish**.

END OF STEPS

Install the VitalQIP remote server as a secondary server to a non-managed DNS server

Purpose

You can use VitalQIP to manage a secondary server for a domain that is not managed by VitalQIP (for example, the primary DNS server is not managed by VitalQIP, but the secondary server is managed by VitalQIP).

Procedure

Follow these steps:

1. Install the VitalQIP remote server package on the secondary server, as described in this chapter.

2. Run the remote service on the secondary server, and any other services necessary (for example, DNS, DHCP, and/or BOOTP). For instructions, refer to the *VitalQIP User's Guide*.

3. If you want to execute the remote services automatically when your system boots, set them to Automatic in the Windows Services panel or the VitalQIP Service Controller. For instructions, refer to the *VitalQIP User's Guide*.

4. Define the secondary DNS server via the **Infrastructure|Non-Managed DNS Server** function in VitalQIP. For details, refer to the *VitalQIP User's Guide.*

END OF STEPS

6 Install VitalQIP web client interface

Overview

Purpose

This chapter covers installing VitalQIP web client on supported platforms.

Contents

This chapter covers these topics.

Web client installation overview	6-2
Web client installation overview	6-2
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Web client installation overview

What is installed

The VitalQIP web client interface installation installs the following:

- VitalQIP web client interface files
- Apache Tomcat web server
- VitalQIP Message Service
- VitalQIP SSL Tunnel Service
- Command Line Interface

Upgrade from previous versions

If VitalQIP is being upgraded from a previous version, refer to Part IV: "Upgrade VitalQIP" for instructions on upgrading to VitalQIP 7.2.

Web client pre-installation checklist

Purpose

Use the checklist to determine what needs to be done before beginning the installation:

Table 6-1 Web client pre-installation checklist

Task	Description	Status
Determine the configuration	Determine how and where the components are to be installed. Also, consider if this is an upgrade or are additional components are being installed. Refer to Part I of the *Administrator Reference Manual* for more information on configurations.	

Task	Description	Status
Determine if secure socket layer is deployed	Find out if secure socket layer will be used in the VitalQIP deployment. If it is, the *qipkeystore* and *vitalqip.cer* files are required to be located on the machine. These files are created during the VitalQIP enterprise server installation. The files are located in the directory where VitalQIP is installed. The encyrpted password needs to be obtained also. For general information on secure message routing, refer to the Secure Message Routes chapter in the *Administrator Reference Manual*.	
Determine if HTTPS versus HTTP messaging is deployed	Find out if HTTPS or HTTP messages will be used when communicating with the Apache Tomcat web server. You need to know the port on which HTTPS or HTTP messages are sent and received. By default, 80 is the default port for HTTP and 743 is the default port for HTTPS. It is recommended that the you write down the type of messages you are using, the port used, and the IP address of the Apache Tomcat web server. These items are needed for other VitalQIP component installations.	
Back up prior version Apache web server	The VitalQIP 7.x installation installs a new version of the Apache web server: the Apache Tomcat web server. Alcatel-Lucent does not recommend that the version of the Apache web server that was installed with VitalQIP 6.x releases be used. Unpredictable results will occur with the web client interface. However, it is recommended that you back up and rename the directory where the prior version of the Apache files are stored. (Apache web server files are stored in the *apache* directory under *QIPHOME*.) It can be useful if you need to revert to the previous version of VitalQIP that uses an earlier version of the Apache web server. Alternatively, the Apache directory can be deleted.	

Task	Description	Status
Meet pre-installation requirements	The pre-installation requirements must be met before installing VitalQIP. Read the *VitalQIP 7.2 Release Notes* to ensure your system meets the pre-installation requirements for installing VitalQIP.	
Install the database client	If the web client interface is being installed on a separate machine from the enterprise server, you must install a Sybase client.	
Stop all VitalQIP-related processes	If VitalQIP is installed, ensure all VitalQIP-related processes are stopped.	
Gather information about the database	The following information needs to be gathered about the database server: • The name of the database. For Sybase, the name of the database is of the Adaptive Server. If VitalQIP is already installed, the value set in the **`QIPDATASERVER`** environment variable • The IP address of the server where the database is running. • The full path to the directory where the database is running. For Sybase, find the names of the *OCS* directory. These directories are sub-directories of the Sybase home directory. • Password for qipadmin.	
UNIX only: Find the IP address of the machine	Find the IP addresses of the machines where the component is being installed and of the VitalQIP enterprise server.	

Install the VitalQIP web client interface

Purpose

This section explains how to install the VitalQIP web client interface on supported platforms. If you have problems installing the software, contact technical support.

Before you begin

- Ensure your database is running.

Windows

- Ensure you are logged into your system as a user with administrative privileges.
- Ensure you exit all programs you are currently running.

UNIX

- Log into your system as the root user. If the installation is not done as the root user the **`qping`** utility does not work. The utility must have root permission with the **`SUID`** bit set for the administrator. This is an operating system limitation. To work around this limitation:
  a. Log into the system as the root user:
  b. Change the mode and permissions on the **`qping`** utility to be:

```
root:sys & 4755
```

- For Sybase, it is recommended that Sybase environment variables are sourced. This eliminates the need to enter Sybase related values in during the installation. To do so, execute the following from the Sybase directory:
  – For Cshell:

    `source SYBASE.csh`

  – For Bourne shell:

    `. ./SYBASE.sh`

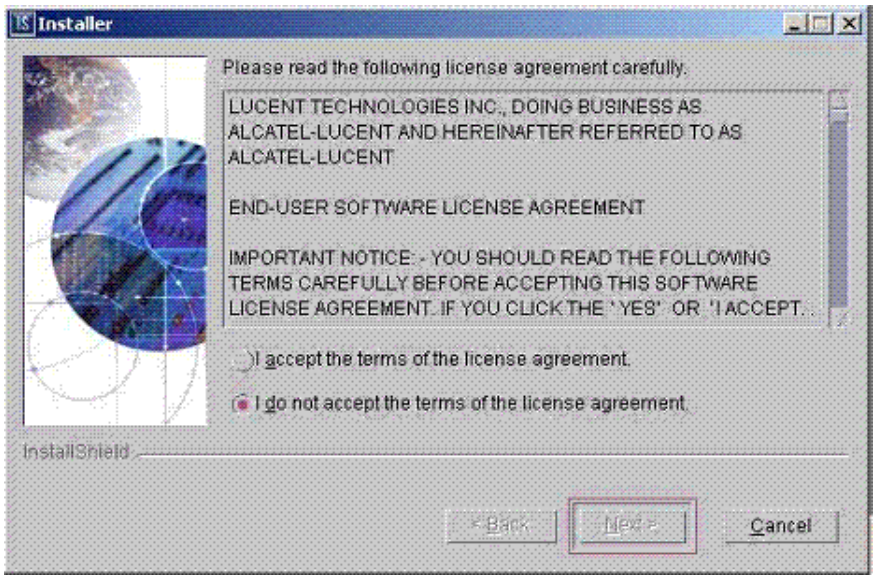
Procedure

1 Choose one of the following:

If you want to…	Then…
Install on a Linux platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72setupLinuxgccr<#>.bin`**
Install on a Solaris platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72setupSolarisr<#>.bin`**
Install on a Windows platform	1. Open a command window and change directory to the installation file location. This is the location you selected when you downloaded the Windows installation executable from the Alcatel-Lucent Electronic Download site (*c:\temp* is the default location). 2. Enter: **`qip72setupwin32r<#>.exe`**

For all executables, the **#** denotes the repackaging number of the executable.

2 The Software License Agreement screen opens.

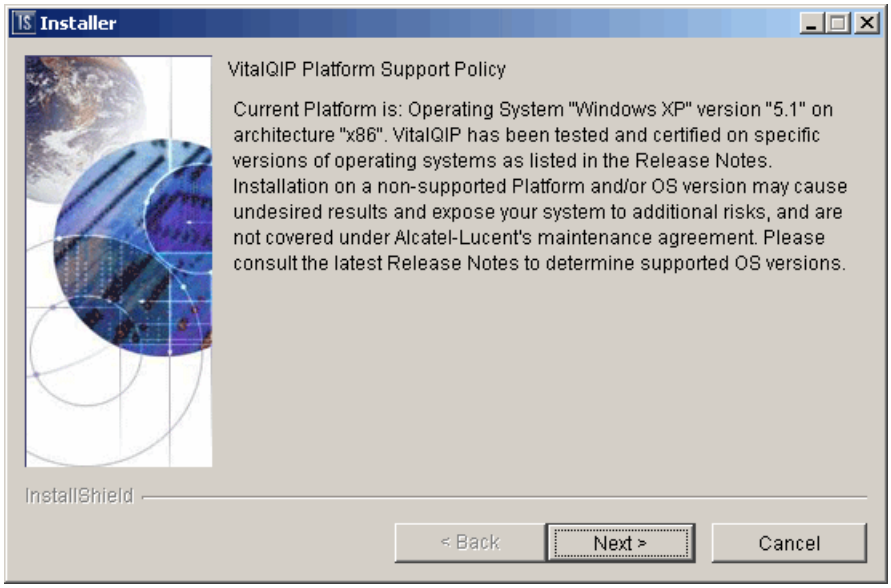


Read the software license agreement and:

- Select **I accept the terms of the license agreement** to accept the license agreement.
- Select **I do not accept the terms of the license agreement** if you do not accept the license agreement. The installation is canceled.

3 Click **Next**. The installation checks that the operating system is a supported version. If the operating system is supported, the Welcome screen opens.

If it is not a supported operating system, a screen opens with the Platform Support Policy.



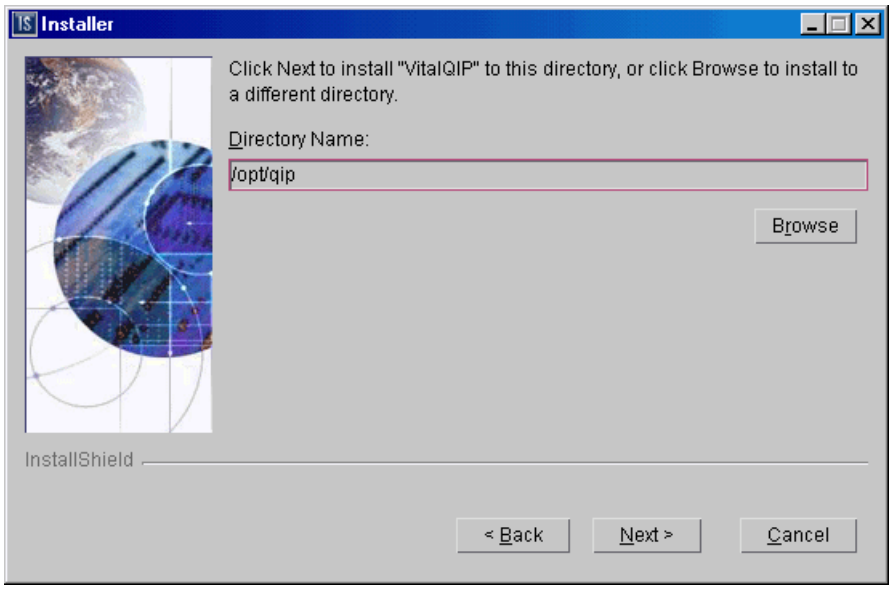
Click **Cancel** to exit the installation and upgrade the operating system to one of the supported versions listed in the *VitalQIP 7.2 Release Notes* before you install VitalQIP.

4 Click **Next**. Choose one of the following.

If you want to…	Then…
Install web client on a UNIX platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, a screen opens showing the VitalQIP-related daemons that are running. 1. Choose one of the following options: • Click **yes, kill processes automatically** and have the installation stop the processes. • Click **no, they will be killed manually** and stop the processes manually. 2. Click **Next**.
Install web client on a Windows platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, the processes are stopped by the installation.

Important! If an Apache Tomcat web server is running, the daemon is not stopped. The web server needs to be stopped manually.

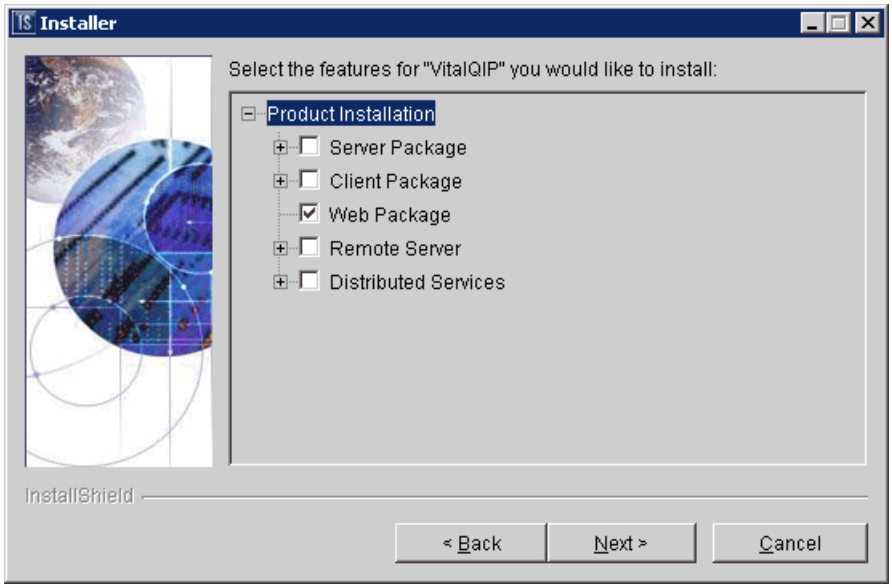
5 Click **Next**. The VitalQIP Home Directory screen opens.



The default destination directory for the VitalQIP software is shown. By default, the directory is */opt/qip* on UNIX and *c:\qip* on Windows.

Do not install the web client in a directory other than the *QIPHOME* directory.

6 Click **Next**. The Features screen opens.

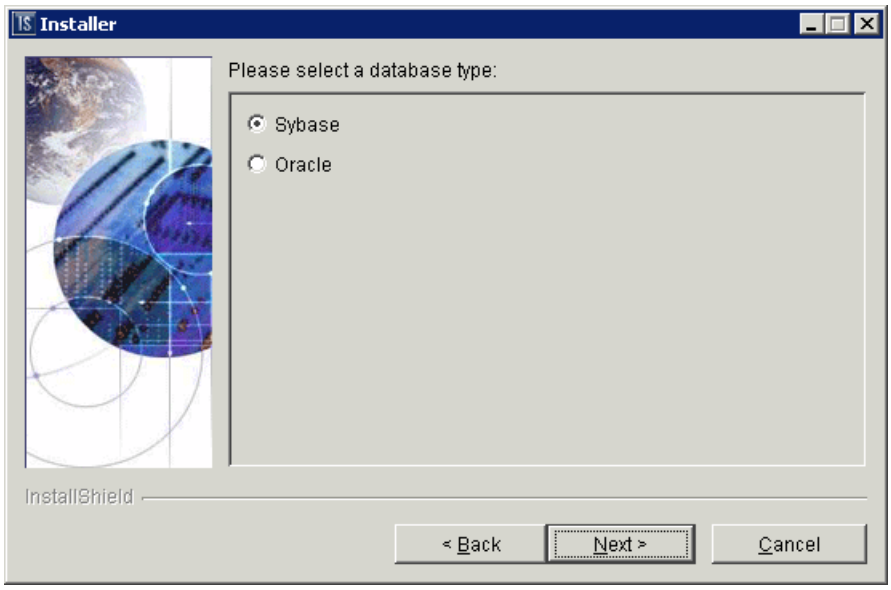


To install the Web package only, uncheck all components except the **Web Package**.

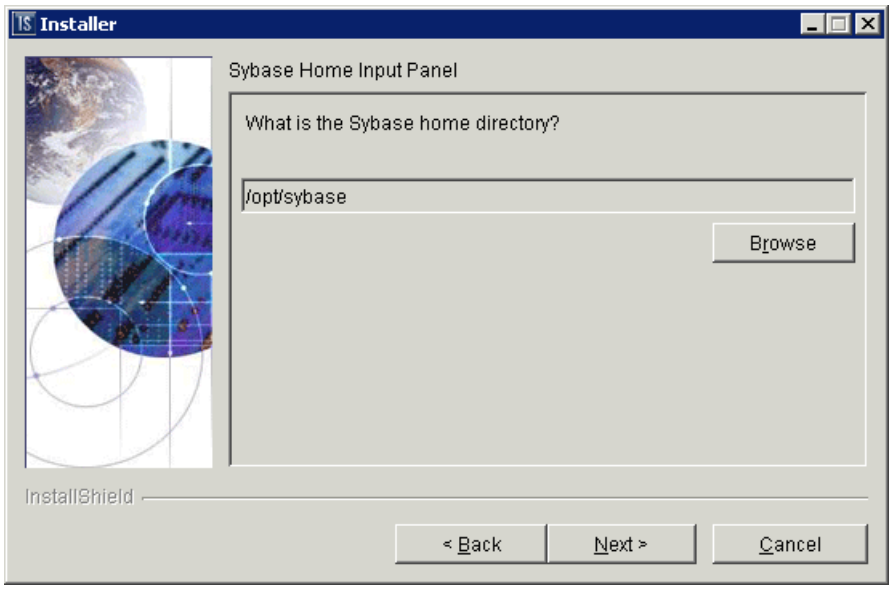
Important! If any VitalQIP component is already installed, "`installed`" is shown next to it. If you want to keep that component, do ***not*** uncheck the checkbox: InstallShield will reinstall that component at the same time that it installs the component that you are now selecting.

7 Click **Next**. The installation shows an information message. Read the message and follow any instructions that are shown in the message.

8 Click **Next**. The Database Type screen opens.



9 Select **Sybase** and click **Next**. The Database Home Directory screen opens.



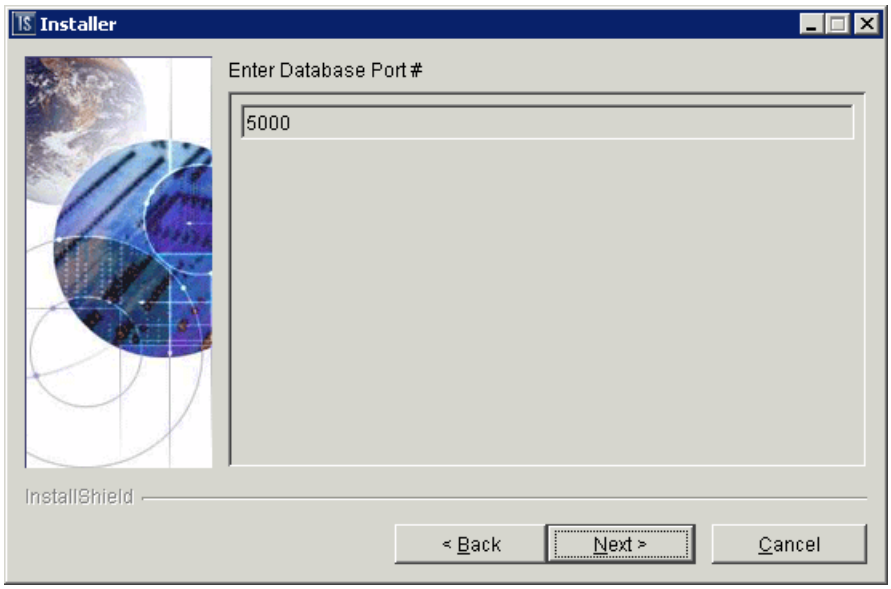
10 If necessary, type the destination directory directly in the **What is the Sybase home directory?** field. Alternatively:

a. Click **Browse**.

b. Navigate to where the directory is located and select the directory.

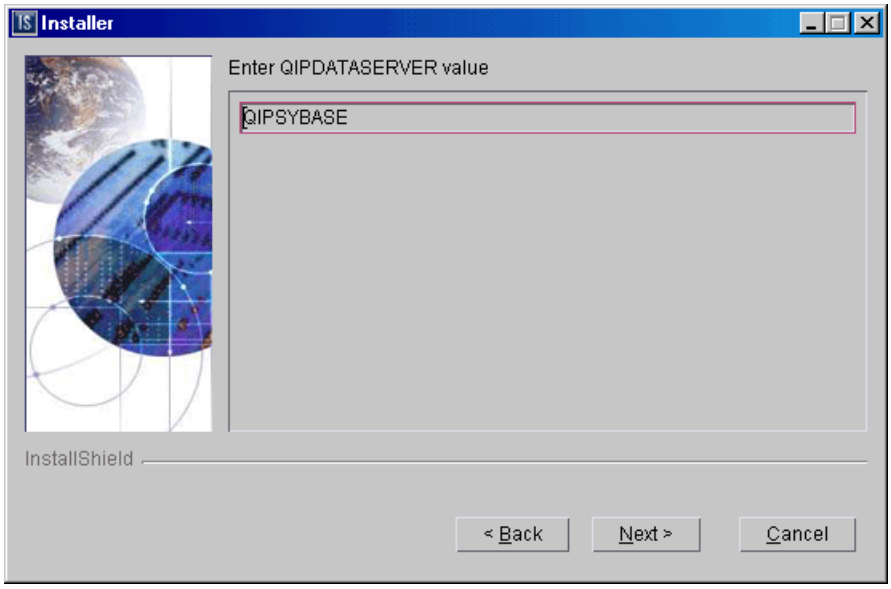
c. Click **Open**. The destination directory is shown in the field.

11 Click **Next**. The Database Port Number screen opens.



By default, the port number is 5000 for Sybase. In the **Enter Database Port #** field, change the port number for the database if necessary.

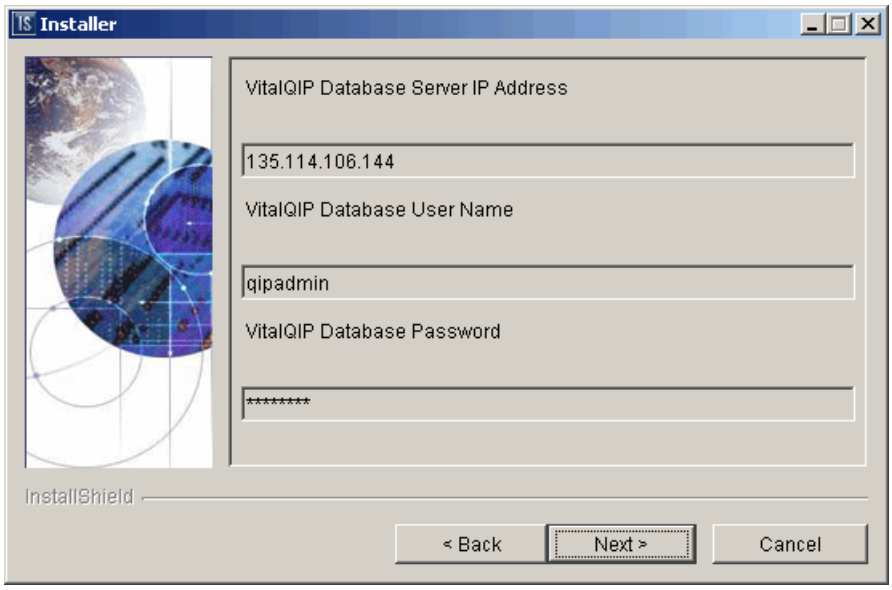
12 Click **Next**. The QIPDATASERVER Value screen opens.



This defines the value of the **QIPDATASERVER** environment variable. The **QIPDATASERVER** value is the name of the database server.

13 In the **Enter QIPDATASERVER value** field, enter the name of your database.

14 Click **Next**. The Database Information screen opens.

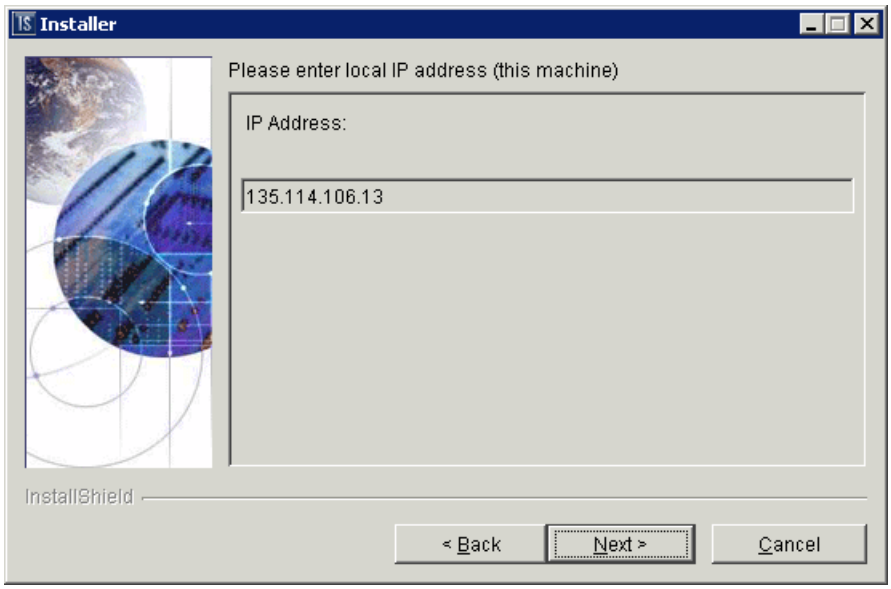


15 Review the following table and fill in the fields.

Table 6-2 Database Information fields

Field	Description
VitalQIP Database Server IP Address	IP address of the database server. Change the IP address of the database server if needed.
VitalQIP Database User Name	By default, the name of the qipadmin user is shown. If the VitalQIP database user name is different from the one displayed, change the database user name.
VitalQIP Database Password	By default, the password for the qipadmin user is **qipadmin**. If the database password is different, change the password.

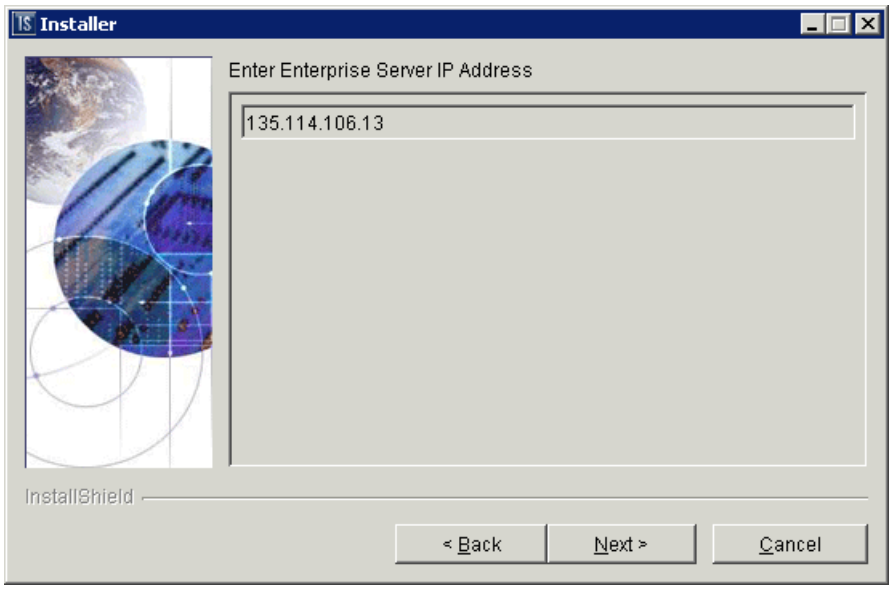
16 Click **Next**. The Local IP Address screen opens.



The IP address of the local machine is displayed.

17 In the **IP Address** field, change the IP address of the local machine on which VitalQIP is being installed if needed.

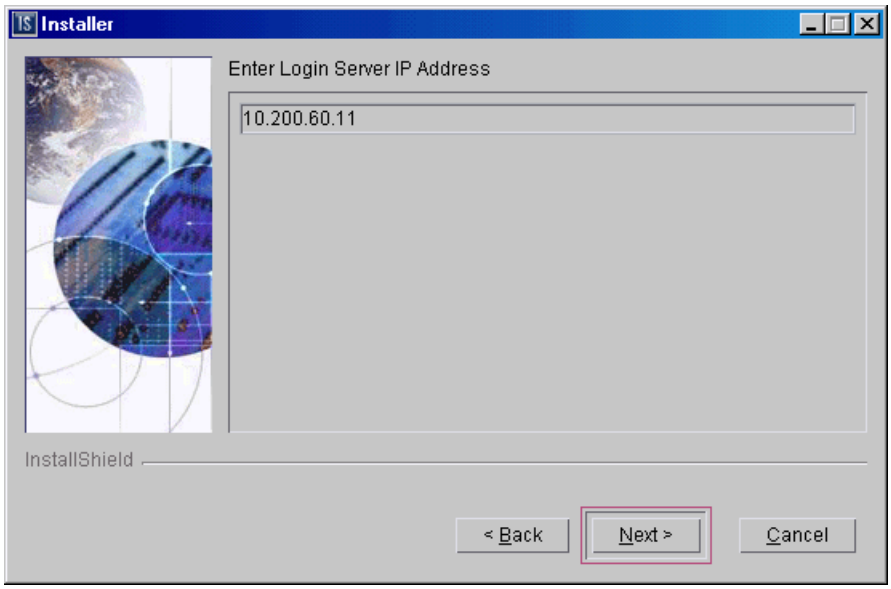
18 Click **Next**. The Enterprise Server IP Address screen opens.



The IP address of the local machine is displayed.

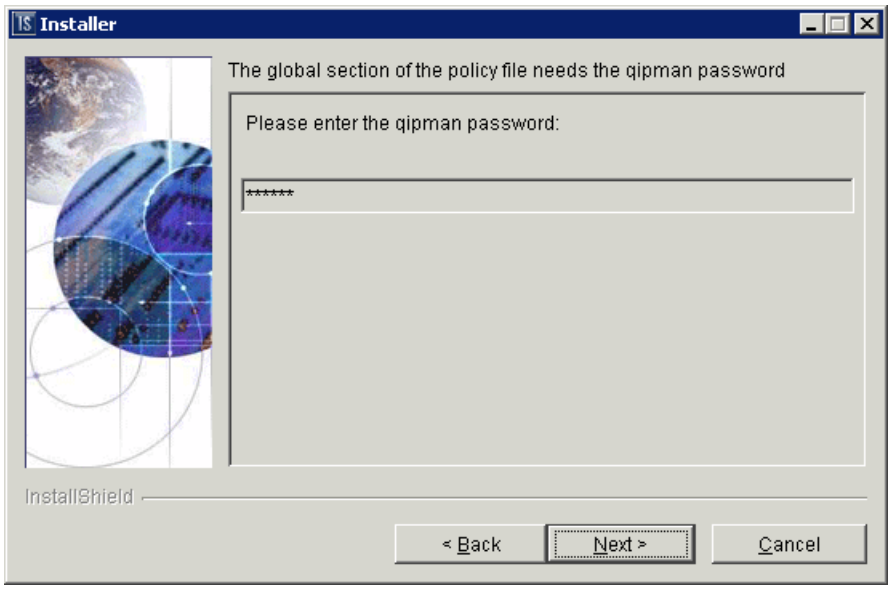
19 In the **Enter Enterprise Server IP Address** field, change the IP address to the machine where the VitalQIP enterprise server is installed.

20 Click **Next**. The Login Server IP Address screen opens.



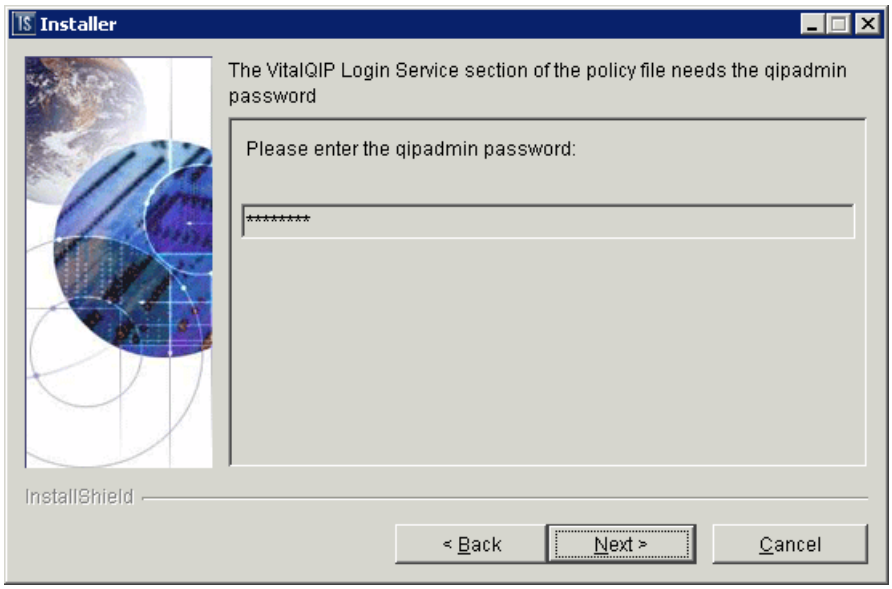
21 In the **Enter Login Server IP Address** field, change the IP address for the Login Server if needed. The value is stored in the *qip.pcy* file.

22 Click **Next**. The qipman Password screen opens.



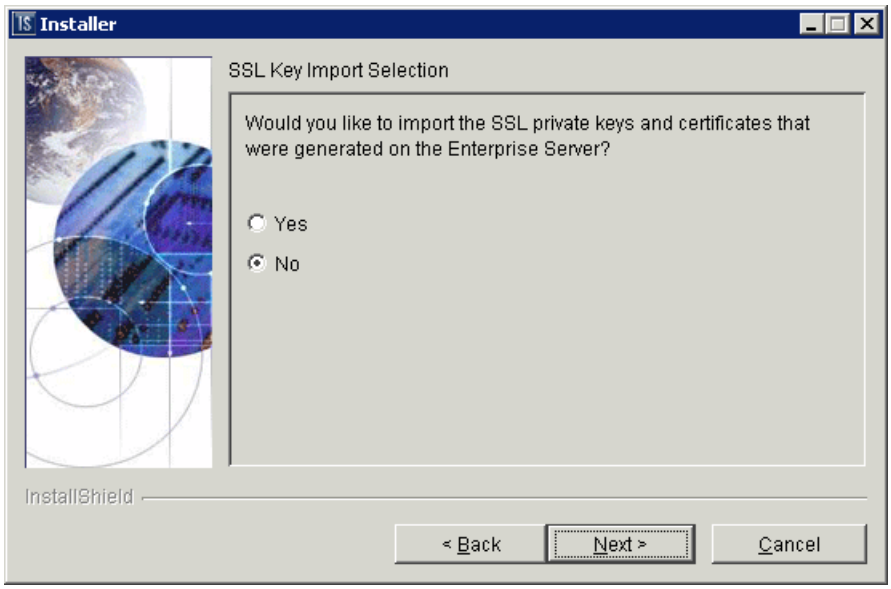
By default, the password for qipman is **qipman**. You should use the default and change it later if you wish. The qipman password is stored in the Global policy section of the *qip.pcy* file.

23 Click **Next**. The qipadmin Password screen opens.



By default, the password for qipadmin is **qipadmin**. You should use the default and change it later if you wish. The qipadmin password is stored in the VitalQIP Login Service section of the *qip.pcy* file.

24 Click **Next**. The Import SSL Public/Private Keys screen opens.

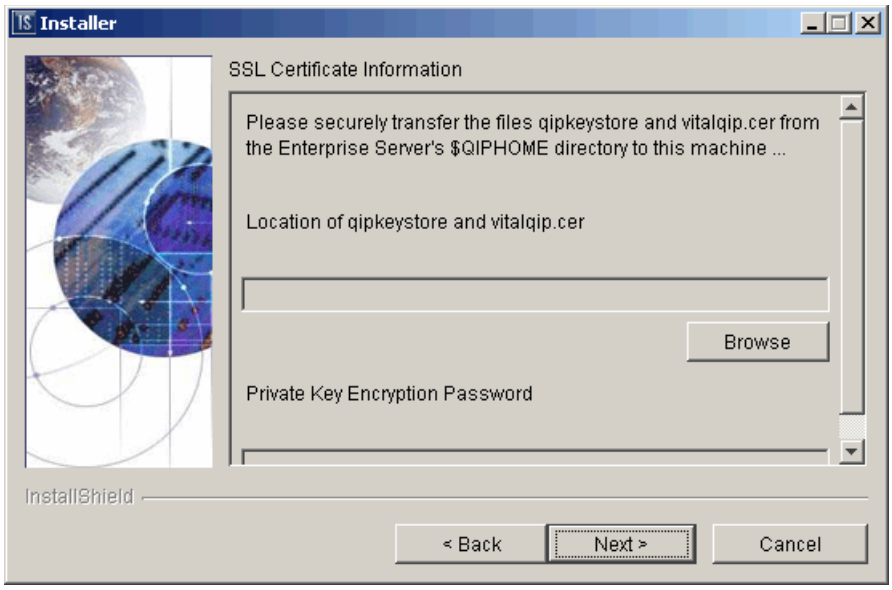


Select one of the following:

- **Yes** if you are using the SSL Tunnel Service
- **No** if you are not using the SSL Tunnel Service

SSL security

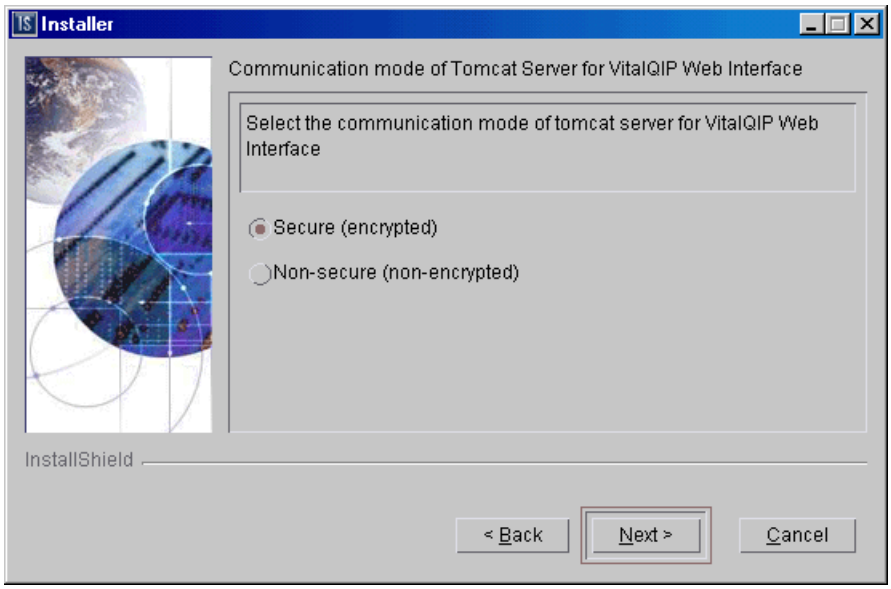
25 Click **Next**. If you selected **Yes** in the previous screen, the SSL Certificate Information screen opens. Skip this step if you selected **No**.



26 Do the following:

- In the **Location of qipkeystore and vitalqip.cert files** field type the location of the *qipkeystore* and *vitalqip.cert* files.The files are located in the directory where VitalQIP is installed on the enterprise server. Alternatively:
  a. Click **Browse**.
  b. Navigate to where the directory is located and select the directory.
  c. Click **Open**. The destination directory is shown in the field.
- In the **Private Key Encryption Password** field, enter the SSL private key password.

27 Click **Next**. The Tomcat Server Communication Mode opens.

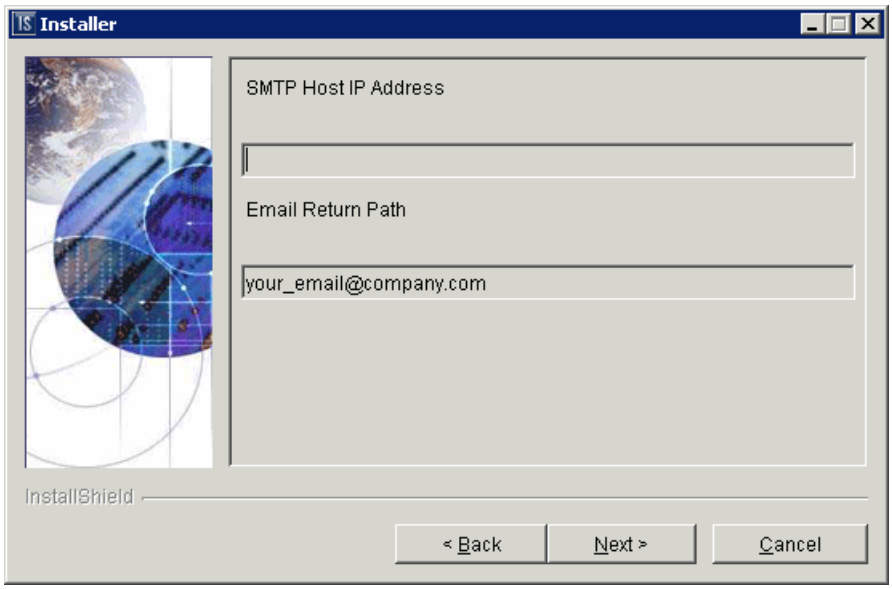


The installation needs to know what mode of communication the Apache Tomcat web server will use. This information is written to the VitalQIP Service Layer section of the *qip.pcy* file.

28 Select:

- **Secure (encrypted)** - uses HTTPS to send encrypted messages to and from the server
- **Non-secure (not-encrypted)** - messages to and from the server are not encrypted

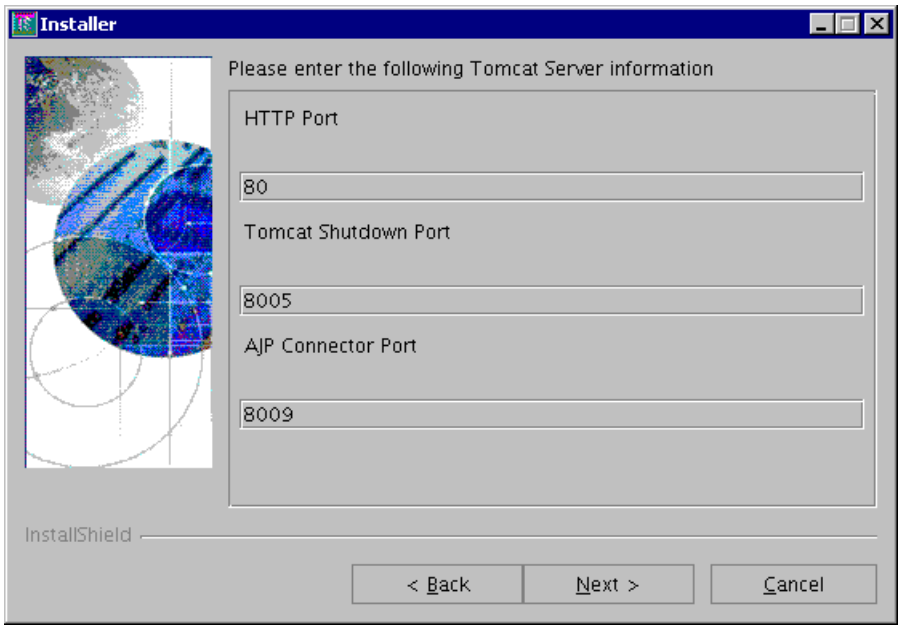
29 Click **Next**. The SMTP IP Address screen opens.



30 In the **SMTP Host IP Address** field, enter the IP address of the SMTP (email) server.

31 In the **Email Return Path** field, enter the email address of the administrator who will receive email alerts.

32 Click **Next**. The Tomcat Server Information screen opens.



Note: Either **HTTP Port** or **HTTPS Port** field is displayed in this screen. The field that is displayed is determined by your selection in Step 28.

33 Review the following table and fill in the fields.

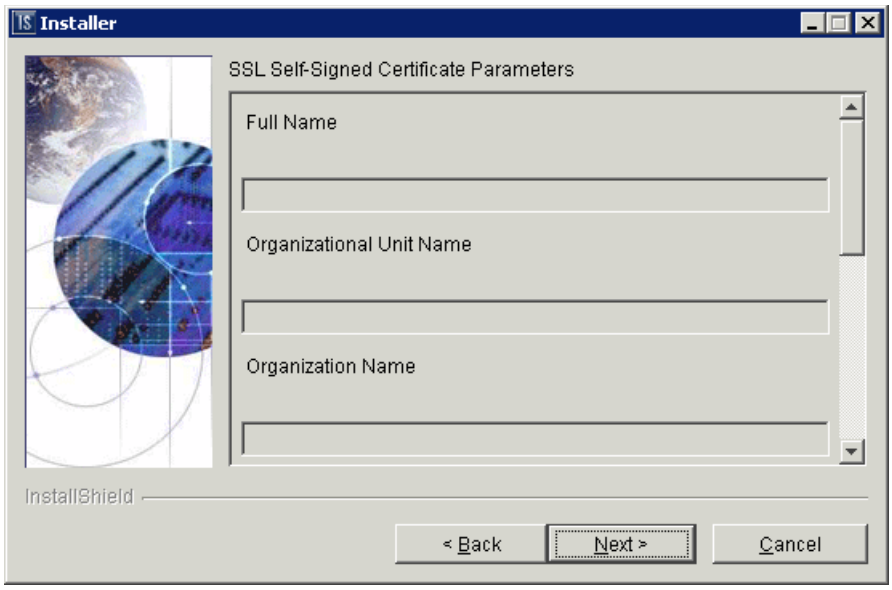
Table 6-3 Tomcat Server Information fields

Field	Description
HTTP Port	***Displayed when Non-secure (not-encrypted) is selected in Step 28.*** The port used by the web client to connect to the Apache Tomcat web server. By default, the port is 80.
HTTPS Port	***Displayed when Secure (encrypted) is selected in Step 28.*** The SSL port used by the web client to connect to the Apache Tomcat web server. By default, the port is 743.
Tomcat Shutdown Port	A local administrative port used to shutdown the Apache Tomcat web server. By default, the port is 8005.
AJP Connect Port	The port used to connect the Apache Tomcat web server. By default, the port is 8009.

Secure (encrypted) communication for the Tomcat server

34 If secure (encrypted) communication was selected in Step 28, the SSL Self Signed Certificate Parameters screen opens. Skip this step if you selected non-secure (not encrypted).

Note: This screen does not display if secure communications was selected in Step 24 (import secure info).



Note: You need to scroll down to view the remaining fields in the screen.

Review the following table as you enter values in the fields.

Table 6-4 SSL Self Signed Certificate Parameters fields

Field	Description
Full Name	Your full name.
Organizational Unit Name	The name of the organization unit.
Organization Name	The name of the organization.
City or Locality	The city or locality where your organization is located.
State or Province	The state or province where your organization is located.
Two-Letter Country Code	The two letter country code your organization is located in. For a list of country codes, refer to **www.digicert.com/ssl-certificate-country-codes.htm**

Field	Description
Private Key Encryption Password	***Required***. The private key password. Enter a password that adheres to the following rules (and be sure to make a note of it since you will need it again when installing other VitalQIP components): • Can be any length except null • All characters must match the pattern: [a-zA-Z0-9~!@#$%^&*()l_+={}?] • Cannot contain the space character

Important! If you did not enter a password in the **Private Key Encryption Password** field, a message opens after you click **Next**:

```
SSL Private Key Encryption Password must be set.
```

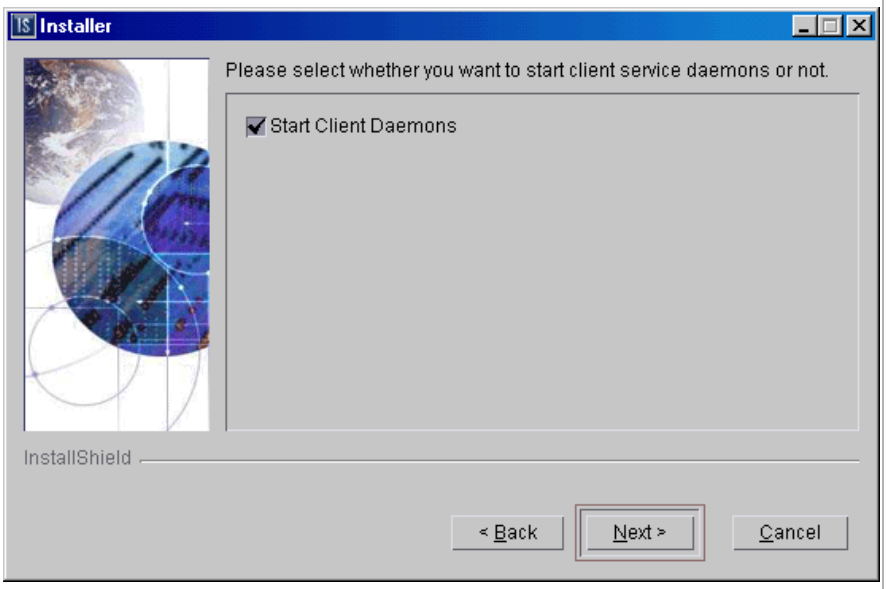
Click **Back** and enter a password in the **Private Key Encryption Password** field. After you have entered a password, continue with the installation.

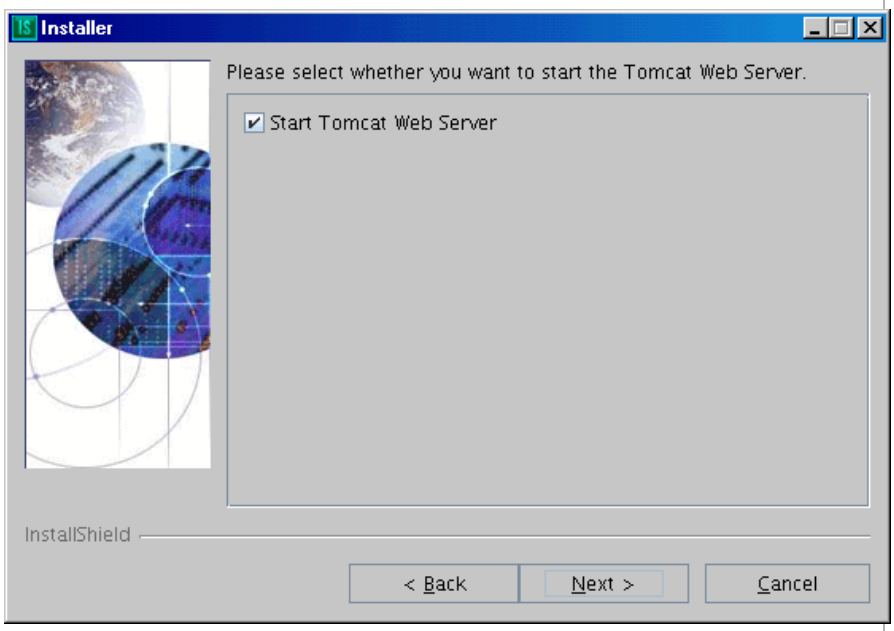
35 Click **Next**. After a few moments, the Summary screen opens. Examine the features to be installed. If changes are necessary, click **Back** to make changes to the installation. If everything looks correct, click **Next**.

The installer commences extracting files and installing VitalQIP. After a few minutes, the Successful Install screen opens.

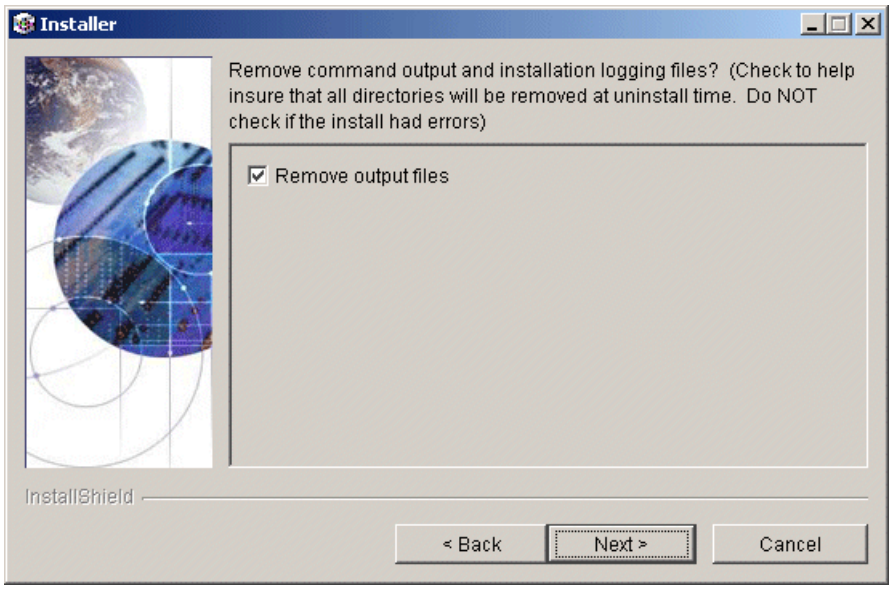
Note: On Windows, a message may open asking if you want to overwrite *mfc42.dll.* Click **No** to continue.

36 Choose one of the following:.

If you want to…	Then…
Start the web client on a UNIX platform	1. Click **Next**. **Result:** The Start Client Daemons screen opens.  The installation gives you the option to start the web client daemons. Follow these steps if you want to start the web client daemons: 2. Select **Start Client Daemons**. A screen opens showing the daemons that are to be started. 3. Click **Next**.

If you want to...	Then...
Start the Tomcat Server on a UNIX platform	The Start Tomcat Web Server screen opens.  Follow these steps if you want to start the daemons: a. Select the Start Tomcat Web Server. A screen opens showing the daemons that are to be started. b. Go to the next step. **Note:** Depending on how many other VitalQIP components are installed on your system, additional Start Daemon screens can open. Follow the directions on the screen to continue complete the installation.
Remove output files	1. Click **Next**. **Result:** The Remove Output Files screen opens. 2. Go to Step 37.

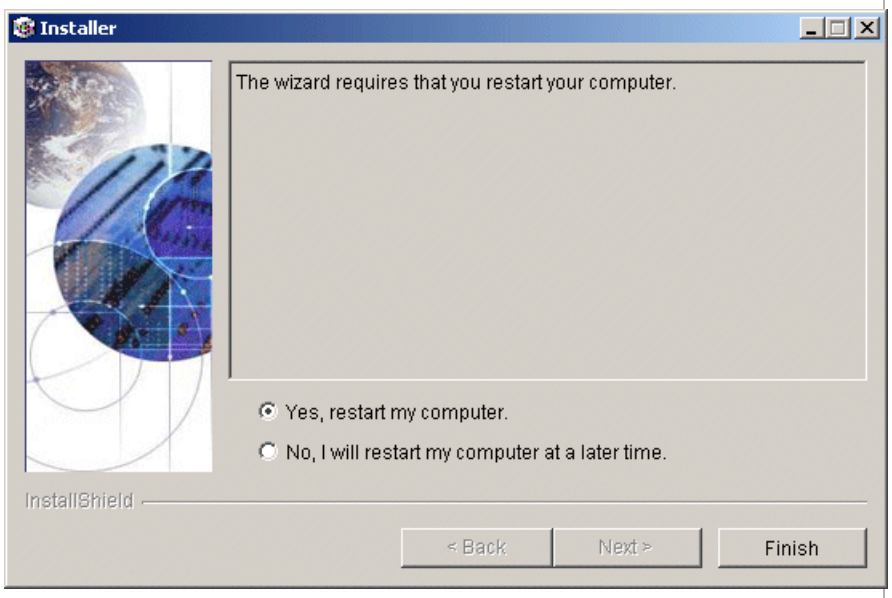
37 The Remove Output Files screen opens.



During the installation, VitalQIP produces output files that are no longer needed for the installation. The installation files can be kept or removed from your system. It is recommended that you keep the files if the install had errors. If you want to keep the files, uncheck **Remove output files**.

38 Choose one of the following..

If you want to…	Then…
Complete the installation on a UNIX platform	1. Click **Next**. **Result:** The Installation complete screen opens. 2. Click **Finish**.

If you want to…	Then…
Complete the installation on a Windows platform	1. Click **Next**. **Result:** The Installation complete screen opens.  2. Before you can begin using VitalQIP, you must reboot your computer. Select **Yes** to restart your computer. If you would rather work on other tasks before configuring VitalQIP, click **No**. 3. Click **Finish**.

39 If your VitalQIP system is supporting multiple languages and characters other than English, additional configuration is needed to ensure your language and characters are supported properly by VitalQIP. Refer to Chapter 17, “Web client configuration” of the *VitalQIP Administrator Reference Manual* for information on how to set up your system for multiple language and character support.

END OF STEPS

Windows only: set environment variables after installing web interface

After installation of the VitalQIP web interface, ensure these environment variables are set. To ensure environment variables are set, follow these steps:

1 From your desktop, select **Settings | Control Panel** from the **Start** menu.

2 In the Control Panel screen**,** click the **System** icon.

3 In the System Properties screen, click the **Advanced** tab.

4 In the **Advanced** tab, click the **Environment Variables** button.

5 Ensure the variables and values in the following table are set correctly.

Table 6-5 Web client environment variables and values

Variable	Value
PATH	**%PATH%;C:\SYBASE\BIN;C:\SYBASE\DLL**
SYBASE	Path to Sybase directory (*C:\SYBASE* is the default).
DSQUERY	The name of your VitalQIP Sybase server (**QIPSYBASE** is the default).
QIPDBASE	SYBASE
QIPDATASERVER	The name of your VitalQIP Sybase server (**QIPSYBASE** is the default.).
QIPHOME	The path to the *QIP* directory.

END OF STEPS

7 Install VitalQIP GUI client

Overview

Purpose

This chapter covers installing VitalQIP GUI on supported platforms.

Contents

This chapter covers these topics.

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GUI client installation overview

What is installed

The VitalQIP GUI client installation installs the following:

- VitalQIP GUI client
- VitalQIP Command Line Interface
- VitalQIP Message Service
- VitalQIP SSL Tunnel Service

Upgrade from previous versions

If VitalQIP is being upgraded from a previous version, refer to Part IV: "Upgrade VitalQIP" for instructions on upgrading to VitalQIP 7.2.

GUI client pre-installation checklist

Purpose

Use the following checklist to determine what needs to be done before beginning the installation:

Table 7-1 GUI client pre-installation checklist

Task	Description	Status
Determine the configuration	Determine how and where the components are to be installed. Also consider if this is an upgrade or are additional components being installed. Refer to Part I of the *Administrator Reference Manual* for more information about configurations.	

Task	Description	Status
Determine if secure socket layer is deployed	Find out if secure socket layer will be used in the VitalQIP deployment. If it is, the *qipkeystore* and *vitalqip.cer* files are required to be located on the machine. These files are created during the VitalQIP enterprise server installation and are located in the directory where VitalQIP is installed. You also need to obtain the encrypted password. For general information on secure message routing, refer to the Secure Message Routes chapter in the *Administrator Reference Manual*.	
Meet pre-installation requirements	The pre-installation requirements must be met before installing VitalQIP. Read the *VitalQIP 7.2 Release Notes* to ensure your system meets the pre-installation requirements for installing VitalQIP.	
Install the database client	If the GUI client is being installed on a separate machine from the enterprise server, a Sybase client must be installed.	
Stop all VitalQIP-related processes	If VitalQIP is installed, ensure all VitalQIP-related processes are stopped.	
Gather information about the database	The following information needs to be gathered about the database server: • The name of the database. For Sybase, the name of the database is of the Adaptive Server. If VitalQIP is already installed, the value is set in the **`QIPDATASERVER`** environment variable. • The IP address of the server where the database is running. • The full path to the directory where the database is running.	
Find the IP address of the machine	Find the IP addresses of the machines where the component is being installed and of the VitalQIP enterprise server.	
Find IP address of services	Find the address of the machine or machines where these services are to be installed: • VitalQIP QIP Update Service • VitalQIP Login Service	

Task	Description	Status
Gather information about the Apache Tomcat web server	Gather the following information about the Apache Tomcat web server: • Find out if your web server is using standard HTTP or HTTPS messaging • Find the port your web server is using • Find the IP address of the machine where the web server is running	

Install the VitalQIP GUI client

Purpose

This section explains how to install the VitalQIP GUI interface on supported platforms. If you have problems installing the software, contact technical support.

Before you begin

- Ensure your database is running.

Windows

- Ensure you are logged into your system as a user with administrative privileges.
- Ensure you exit all programs you are currently running.

UNIX

- Log into your system as the root user. If the installation is not done as the root user the **`qping`** utility does not work. The utility must have root permission with the **`SUID`** bit set for the administrator. This is an operating system limitation.

  To work around this limitation:

  a. Log into the system as the root user:

  b. Change the mode and permissions on the **`qping`** utility to be:

  ```
  root:sys & 4755
  ```

- For Sybase, Alcatel-Lucent recommends that Sybase environment variables be sourced. This eliminates the need to enter Sybase-related values during the installation. To do so, execute the following from the Sybase directory:

  – For Cshell:

  ```
  source SYBASE.csh
  ```

  – For Bourne shell:

  ```
  . ./SYBASE.sh
  ```

Procedure

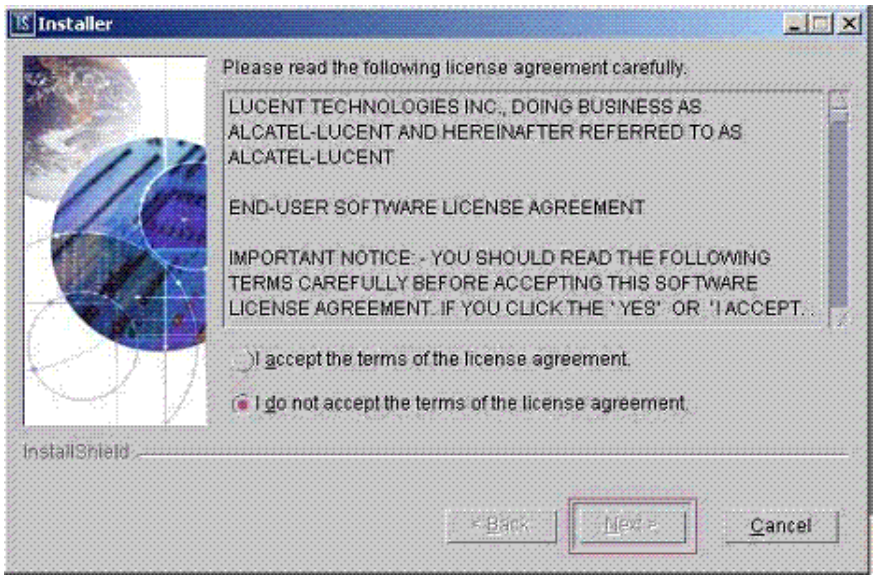
To install the VitalQIP GUI client, follow these steps:

1 Choose one of the following:

If you want to…	Then…
Install on a Linux platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72setupLinuxgccr<#>.bin`**
Install on a Solaris platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72setupSolarisr<#>.bin`**
Install on a Windows platform	1. Open a command window and change directory to the installation file location. This is the location you selected when you downloaded the Windows installation executable from the Alcatel-Lucent Electronic Download site (*c:\temp* is the default location). 2. Enter: **`qip72setupwin32r<#>.exe`**

For all executables, the **#** denotes the repackaging number of the executable.

2 The Software License Agreement screen opens.

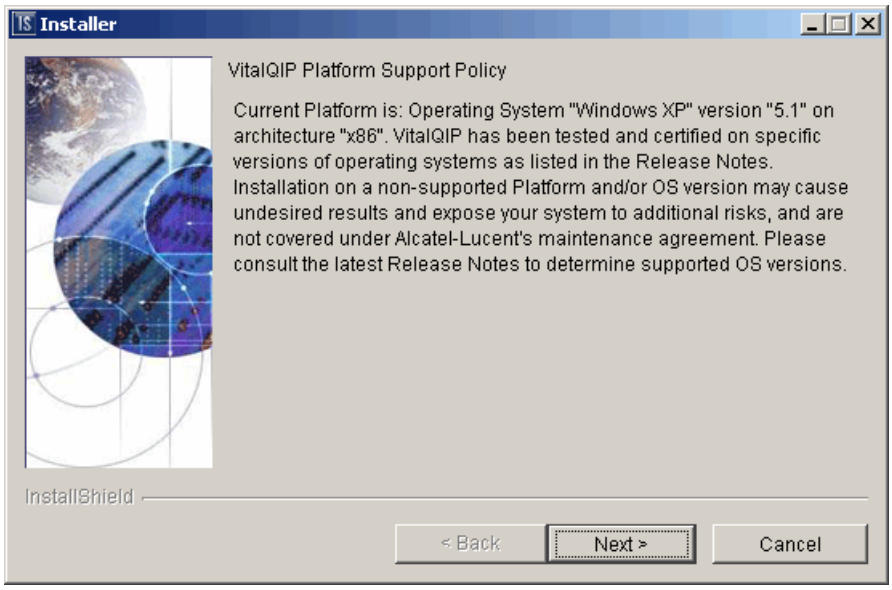


Read the software license agreement and:

- Select **I accept the terms of the license agreement** to accept the license agreement.
- Select **I do not accept the terms of the license agreement** if you do not accept the license agreement. The installation is canceled.

3 Click **Next**. The Welcome screen opens.

4 Click **Next**. If it is not a supported operating system, a screen opens with the Platform Support Policy.

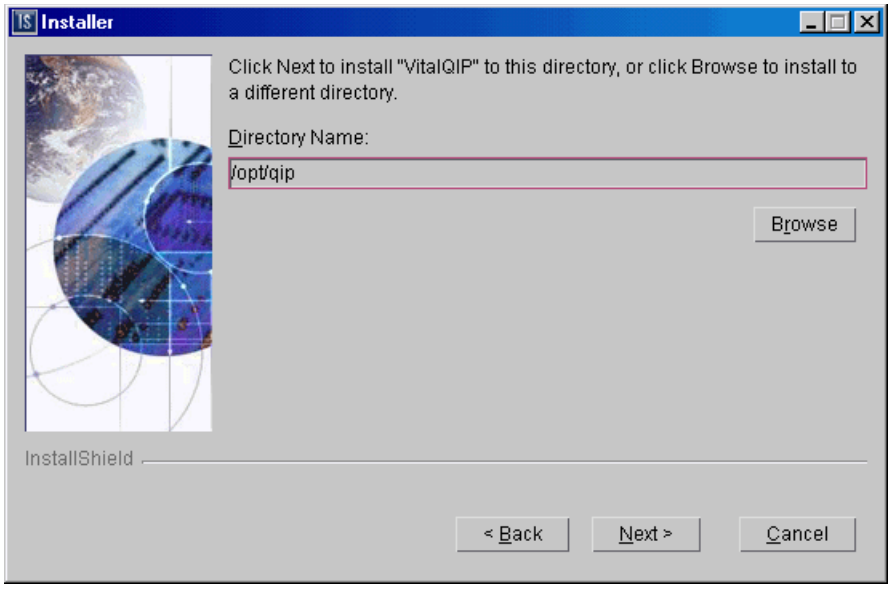


Click **Cancel** to exit the installation and upgrade the operating system to one of the supported versions listed in the *VitalQIP 7.2 Release Notes* before you install VitalQIP.

5 Click **Next**. Choose one of the following.

If you want to…	Then…
Install GUI client on a UNIX platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, a screen opens showing the VitalQIP-related daemons that are running. 1. Choose one of the following options: • Click **yes, kill processes automatically** and have the installation stop the processes. • Click **no, they will be killed manually** and stop the processes manually. 2. Click **Next**.
Install GUI client on a Windows platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, the processes are stopped by the installation.

6 The VitalQIP Home Directory screen opens.



The default destination directory for the VitalQIP software is shown. By default, the directory is */opt/qip* on UNIX and *c:\qip* on Windows. If a version of VitalQIP exists on the machine, the installation reads the **`QIPHOME`** environment variable and displays the value.

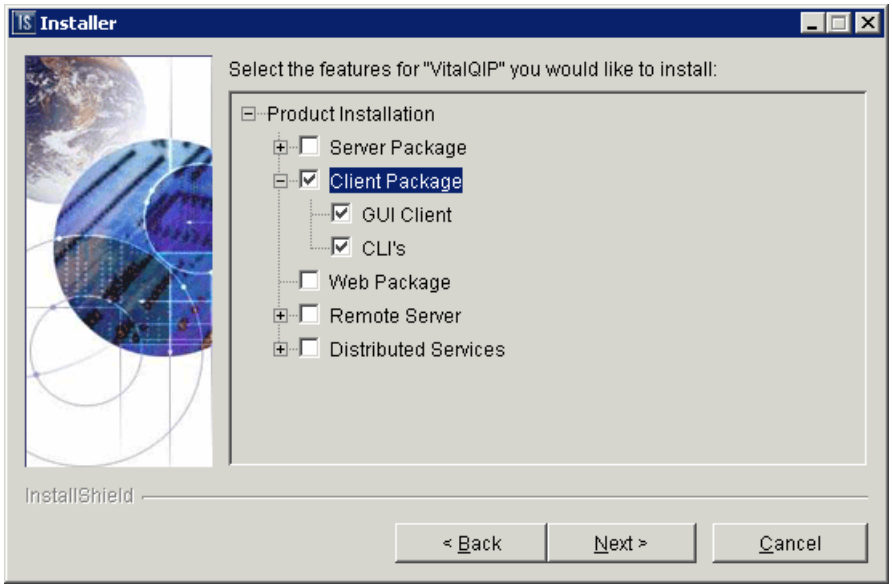
If necessary, type the destination directory directly in the **Directory Name** field. Alternatively:

a. Click **Browse**.

b. Navigate to where the directory is located and select the directory.

c. Click **Open**. The destination directory is shown in the field.

7 Click **Next.** The Features screen opens.



To install the VitalQIP client only, uncheck all components except the **Client Package** and its sub-components.

> **Important!** If any VitalQIP component is already installed, "`installed`" is shown next to it. If you want to keep that component, do ***not*** uncheck the checkbox: InstallShield will reinstall that component at the same time that it installs the components that you are now selecting.

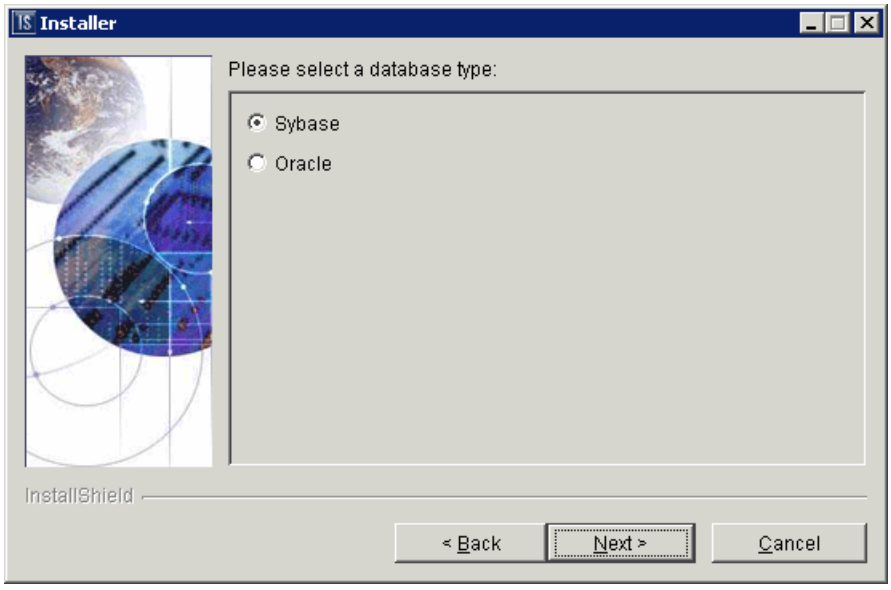
The following table describes the sub-components of the Client package. After reading the table, ensure **Client Package** is checked. Check or uncheck the sub-components you want to install.

Table 7-2 Client installation sub-components

Sub-component	Description
GUI Client	Installs the user interface of VitalQIP.
CLI	Installs the Command Line Interface.

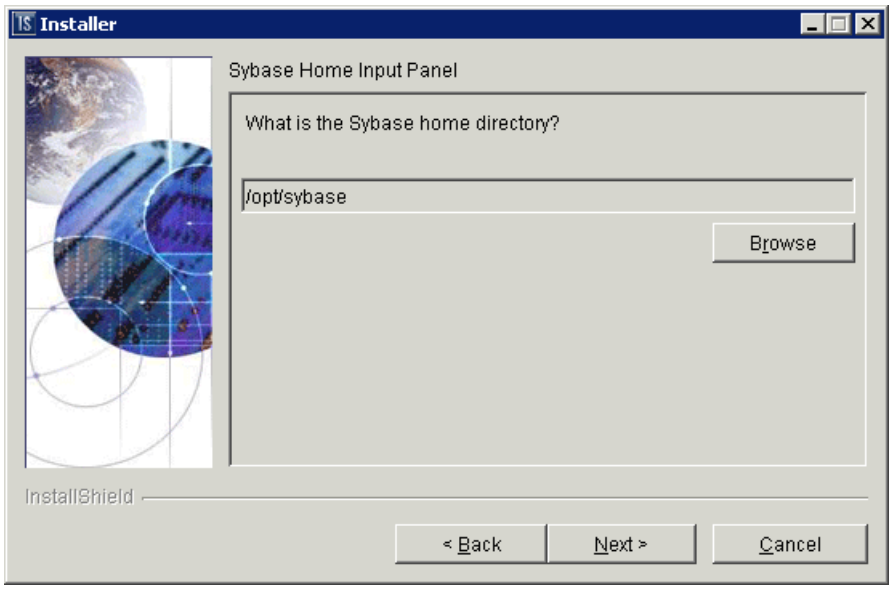
8 Click **Next**. The installation shows an information message. Read the message and follow any instructions that are shown.

9 Click **Next**. The Database Type screen opens.



Select **Sybase**.

10 Click **Next**. The Database Home Directory screen opens.



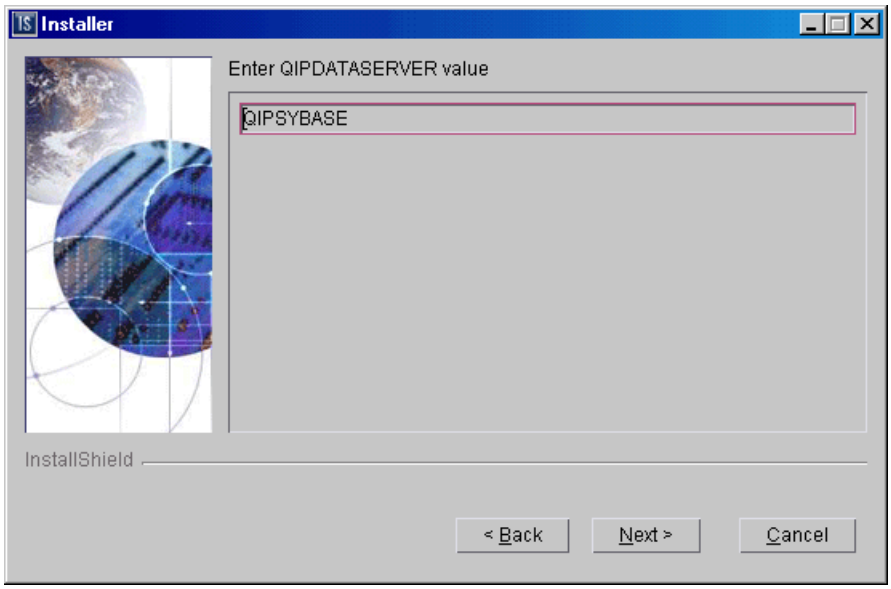
If necessary, type the destination directory directly in the **What is the Sybase home directory?** field. Alternatively:

a. Click **Browse**.

b. Navigate to where the directory is located and select the directory.

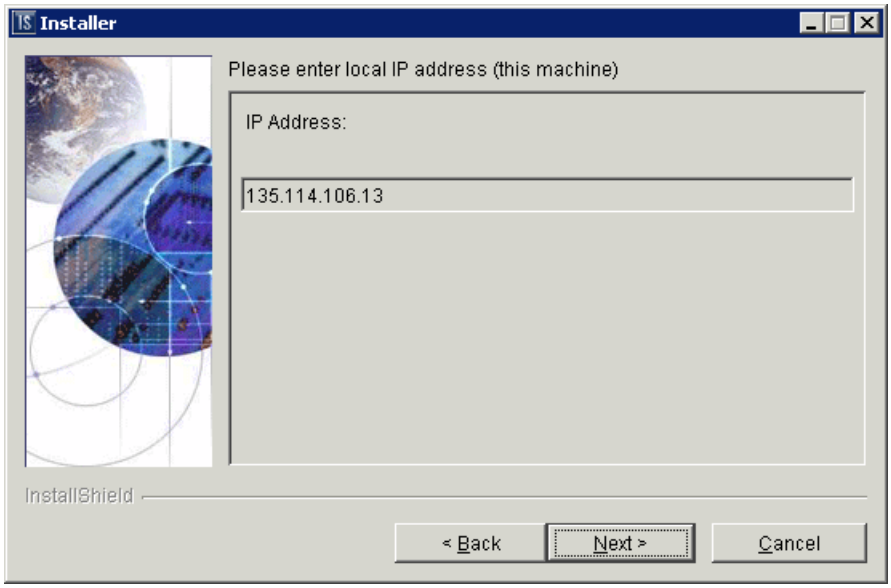
c. Click **Open**. The destination directory is shown in the field.

11 Click **Next**. The QIPDATASERVER Value screen opens.



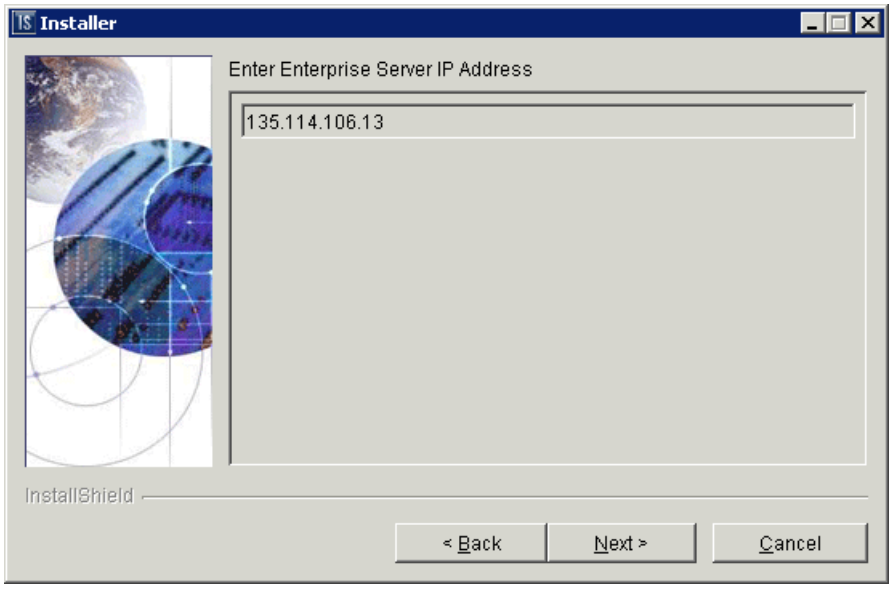
This defines the value of the **`QIPDATASERVER`** environment variable. The **`QIPDATASERVER`** value is the name of the database server.

12 Click **Next**. The Local IP Address screen opens.



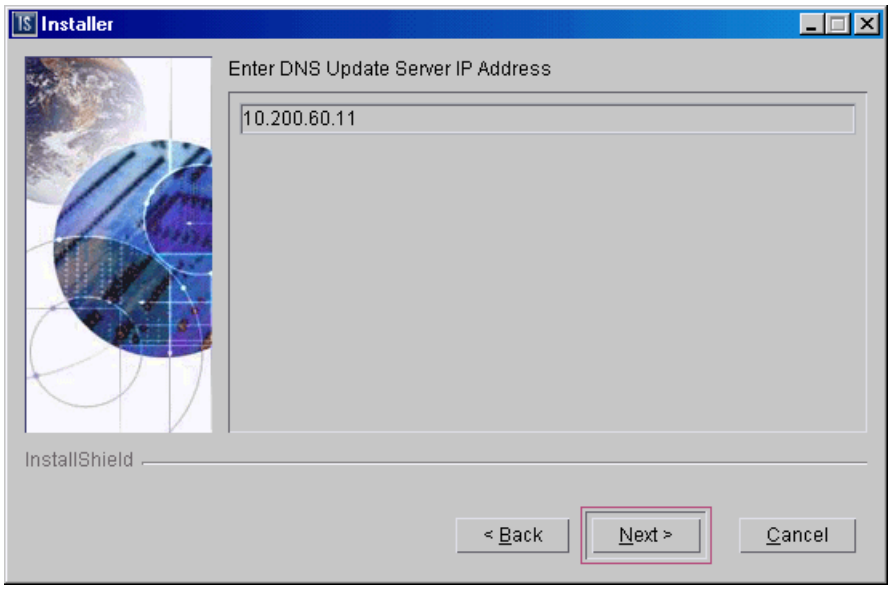
The IP address of the local machine is displayed. This screen sets the QIPMESSAGESERVICE variable. In the **IP Address** field, change the IP address of the machine on which VitalQIP is being installed if needed. If you are installing the Client on an enterprise server, the local IP address will be the enterprise server IP address.

13 Click **Next**. The Enterprise Server IP Address screen opens.



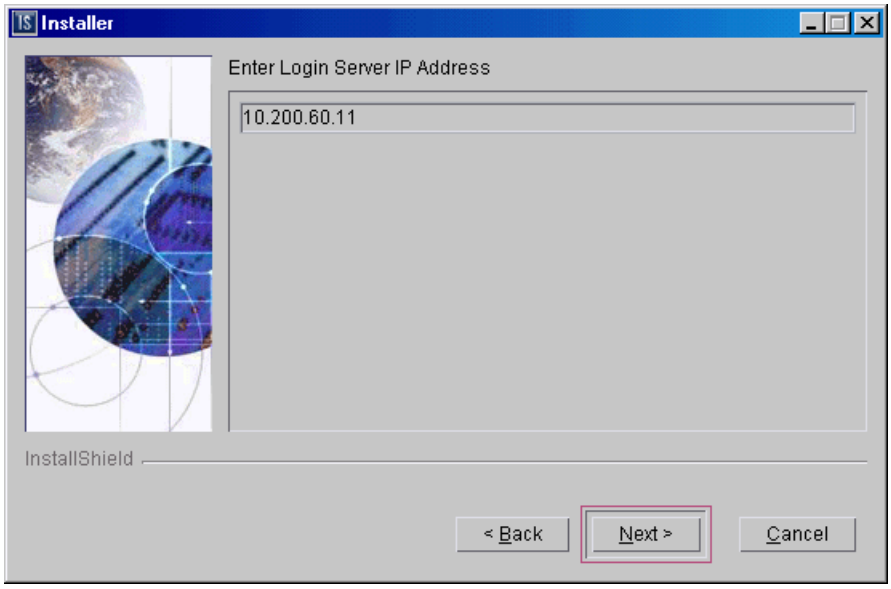
The IP address of the local machine is displayed. In the **Enter Enterprise Server IP Address** field, change the IP address of the machine on which the Enterprise Server is installed.

14 Click **Next**. The DNS Update Service IP Address screen opens.



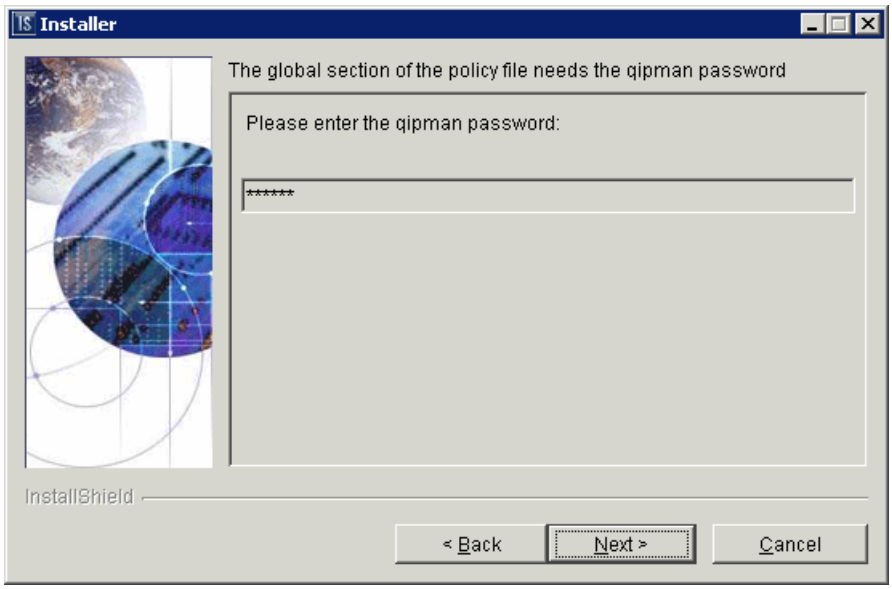
In the **Enter DNS Server IP Address** field, change the IP address of the DNS Update Service. The value is stored in the *qip.pcy* file.

15 Click **Next**. The Login Server IP Address screen opens.



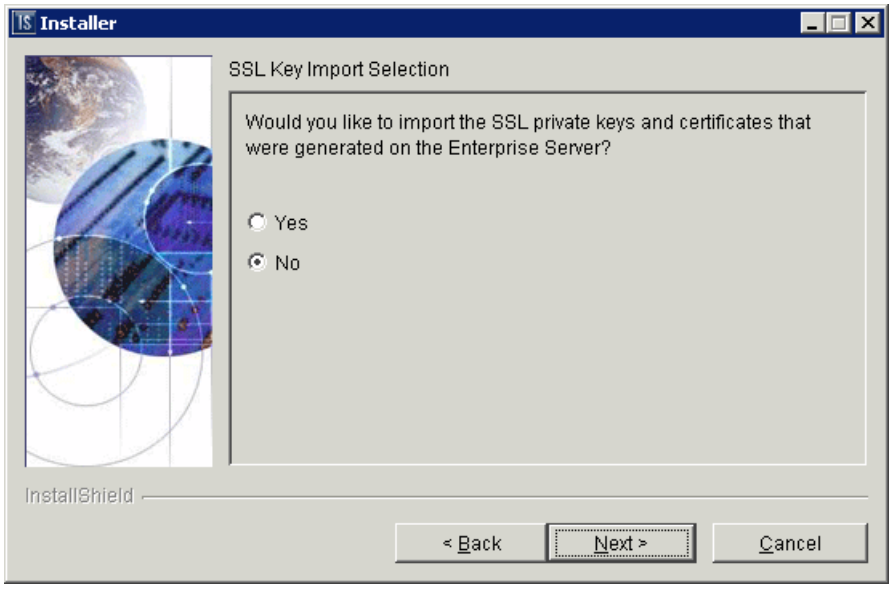
In the **Enter Login Server IP Address** field, change the IP address for the Login Server if needed. The value is stored in the *qip.pcy* file.

16 Click **Next**. The qipman Password screen opens.



By default, the password for qipman is **`qipman`**. You should use the default and change it later if you wish. The qipman password is stored in the Global policy section of the *qip.pcy* file.

17 Click **Next**. The Import SSL Public/Private Keys screen opens.

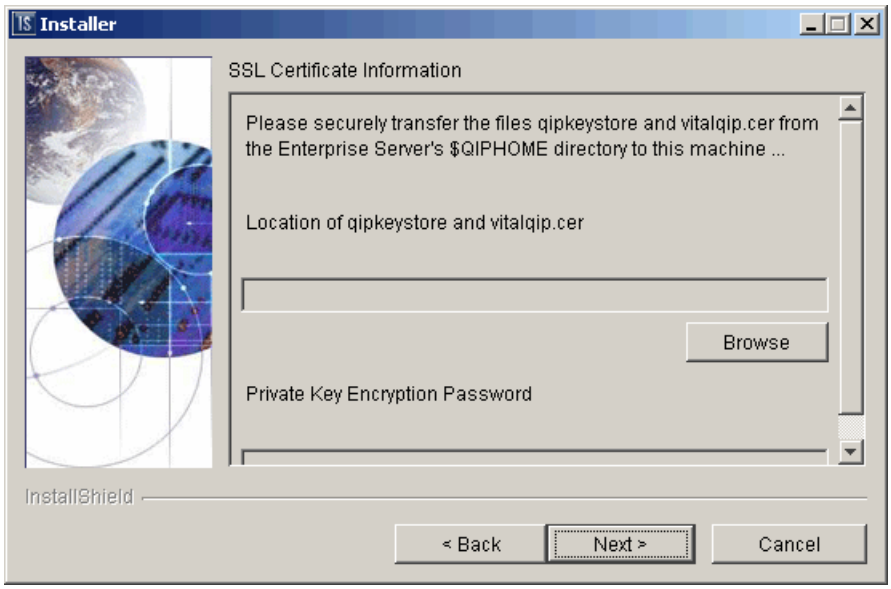


Select one of the following:

- **Yes** if you are planning on using the SSL Tunnel Service
- **No** if you are not using the SSL Tunnel Service

SSL security

18 Click **Next**. If you selected Yes in the previous screen, the SSL Certificate Information screen opens.

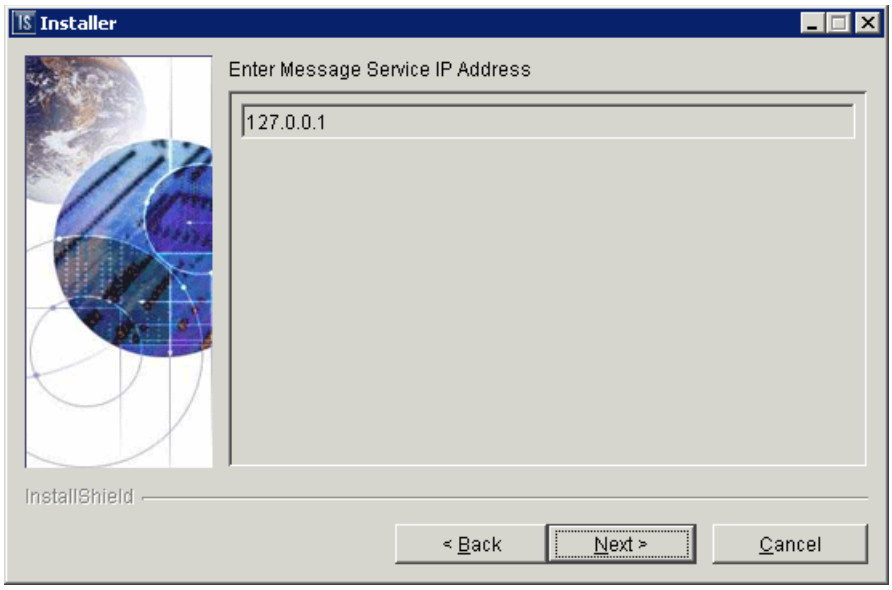


Do the following:

- In the **Location of qipkeystore and vitalqip.cert files** field type the location of the *qipkeystore* and *vitalqip.cert* files. Alternatively:
  a. Click **Browse**.
  b. Navigate to where the directory is located and select the directory.
  c. Click **Open**. The destination directory is shown in the field.
- In the **Private Key Encryption Password** field, enter the SSL private key password.

Without SSL security

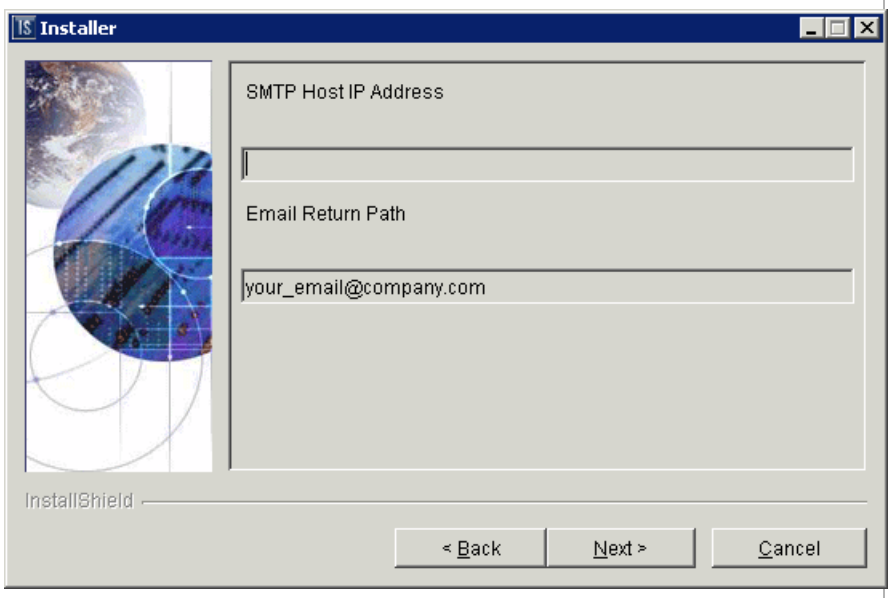
19 Click **Next**. If SSL is set to No, the installation prompts for the IP address of the VitalQIP Message Service.



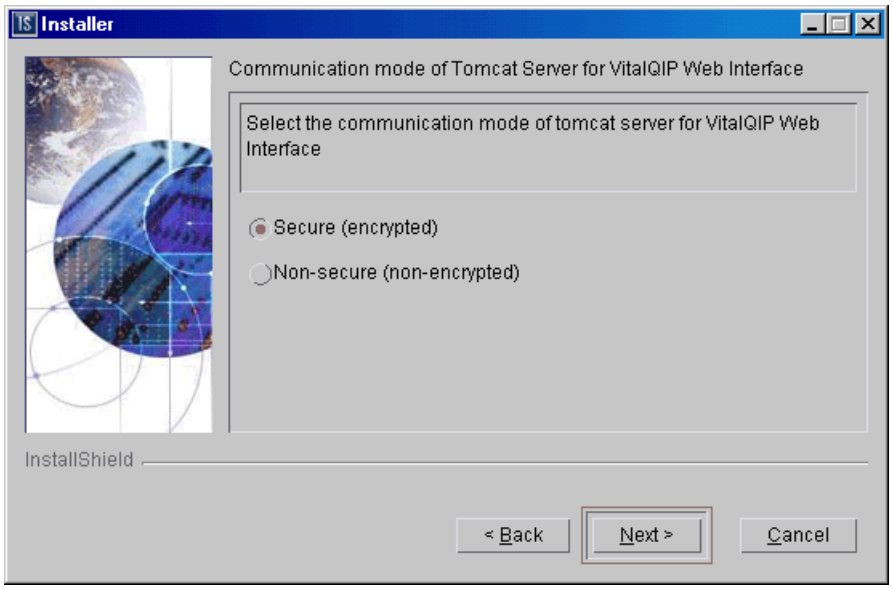
The default is 127.0.0.1. Change the IP address if the VitalQIP Message Service is not installed on a local machine.

20 Choose one of the following.

If you want to…	Then…
Install GUI client on a UNIX platform	1. Click **Next**. **Result:** The Tomcat Server Communication Mode opens. 2. Proceed to Step 21.

If you want to...	Then...
Install GUI client on a Windows platform	1. Click **Next**. **Result:** The SMTP Host Information screen opens.  VitalQIP requires information about the Email server. This information is used to send email alerts to defined administrators. 2. In the **SMTP Host IP Address** field, enter the IP address of the SMTP (email) server. 3. In the **Email Return Path** field, enter the email address of the administrator who will receive email alerts. 4. Click **Next**.

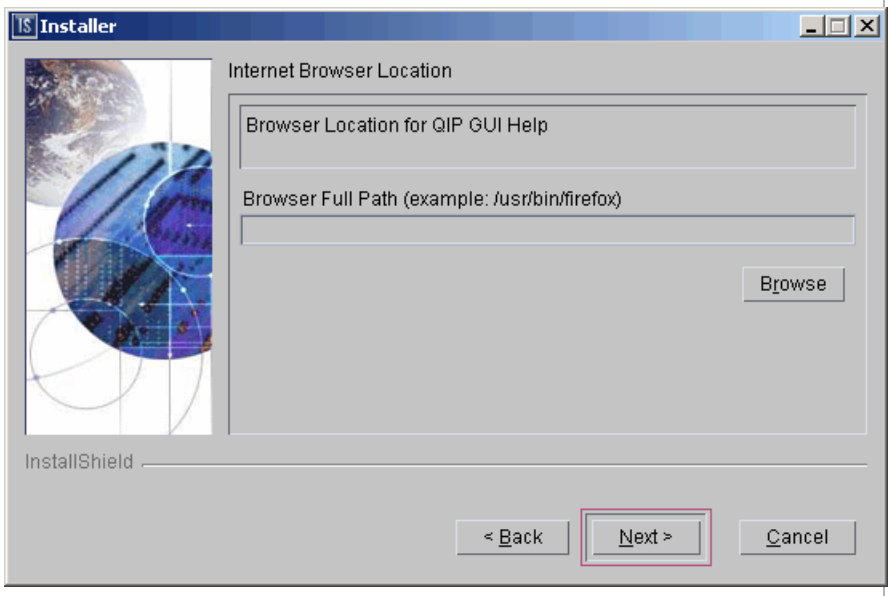
21 The Tomcat Server Communication Mode opens.



The installation needs to know what mode of communication the Apache Tomcat web server will use. This information is written to the VitalQIP Service Layer section of the *qip.pcy* file. Select:

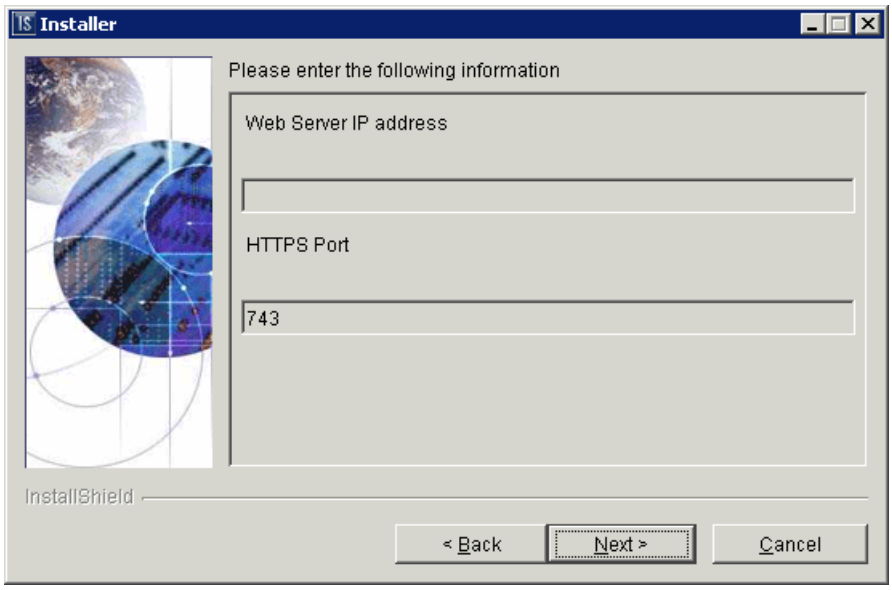
- **Secure (encrypted)** - uses HTTPS to send encrypted messages to and from the server
- **Non-secure (not-encrypted)** - messages to and from the server are not encrypted

22 Choose one of the following..

If you want to…	Then…
Select a browser location on a UNIX platform	1. Click **Next**. **Result:** The Internet Browser Location screen opens.  To access the VitalQIP GUI help screens on a UNIX server, the installation program needs to locate a browser such as Mozilla Firefox on the enterprise server. 2. Enter the full path to the browser, or click **Browse** and select a file in the Select a file dialog box. 3. Click **Next**. **Result:** If the browser is found, the Tomcat Server Information screen opens (Step 23). If no browser path was entered or it was invalid, an information window opens with the message: `The "Browser Full Path" was either not entered or is not a valid file full path. Please select "Back" and correct. If you wish to proceed without a valid entry, note that help files will not be available unless the QIPHELP environment variable is set to the full path of a valid internet browser in the QIP user's environment.` Click **Back** to enter the correct browser path, or click **Next** to continue.

If you want to...	Then...
Continue to the Tomcat Server Information screen on a Windows platform	Click **Next**. **Result:** The Tomcat Server Information screen opens (Step 23).

23 The Tomcat Server Information screen opens.



Note: Either **HTTP Port** or **HTTPS Port** field is displayed in this screen. The field that is displayed is determined by your selection in Step 21.

Review the following table and fill in the fields.

Table 7-3 Tomcat Server Information fields

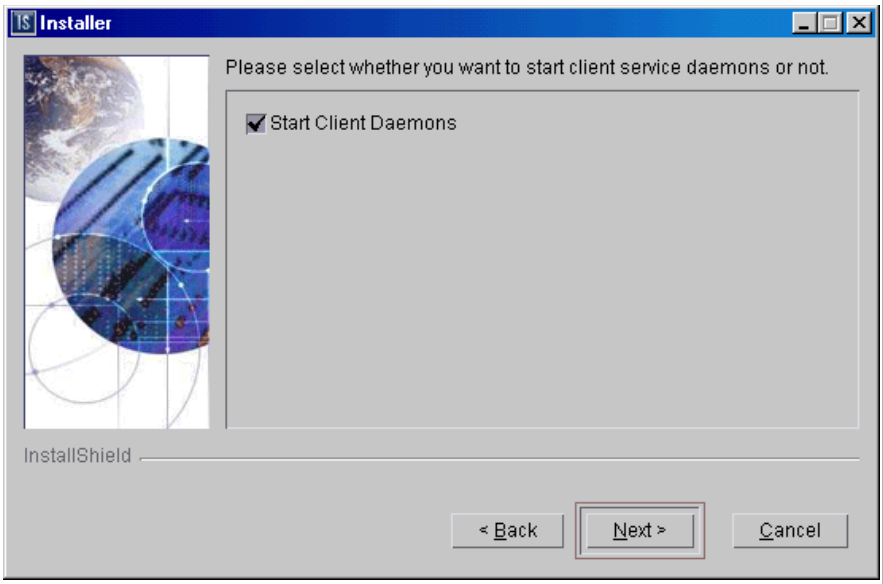
Field	Description
Web Server IP address	The IP address where the Apache Tomcat web server resides.
HTTP Port	***Displayed when Non-secure (not-encrypted) is selected in Step 21.*** The port used by the web client to connect to the Apache Tomcat web server. By default, the port is 80.
HTTPS Port	***Displayed when Secure (encrypted) is selected in Step 21.*** The SSL port used by the web client to connect to the Apache Tomcat web server. By default, the port is 743.

24 Click **Next**. After a few moments, the Summary screen opens. Examine the features to be installed. If changes are necessary, click **Back** to make changes to the installation. If everything looks correct, click **Next**.

The installer commences extracting files and installing VitalQIP. After a few moments, the Successful Install screen opens.

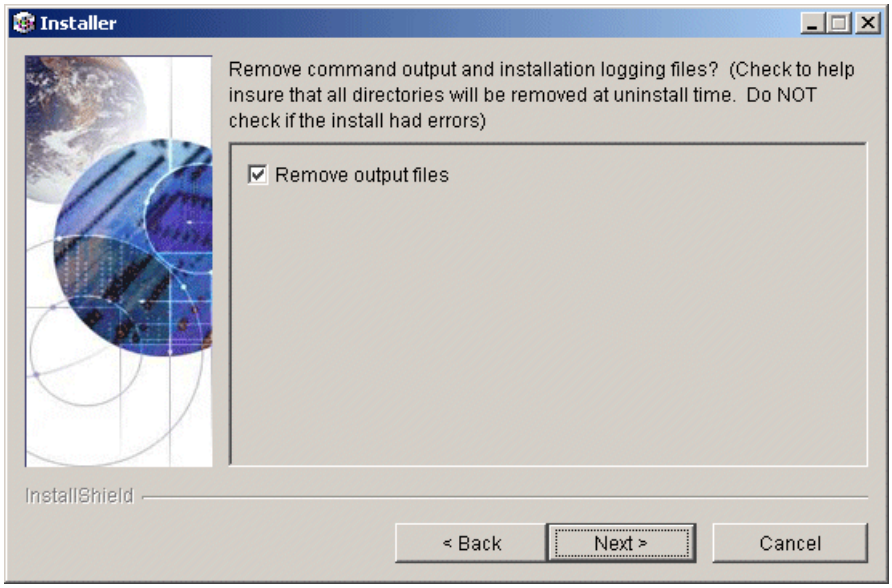
Note: On Windows, a message may open asking if you want to overwrite *mfc42.dll*. Click **No** to continue.

25 Choose one of the following.

If you want to...	Then...
Start client daemons on a UNIX platform	1. Click **Next**. **Result:** The Start Client Daemons screen opens.  The installation gives you the option to start the client daemons, 2. Select **Start Client Daemons**. A screen opens showing the client daemons that are to be started. Depending on how many other VitalQIP components are installed on your system, additional Start Daemon screens can open. Follow the directions on the screen to complete the installation. 3. Click **Next**.

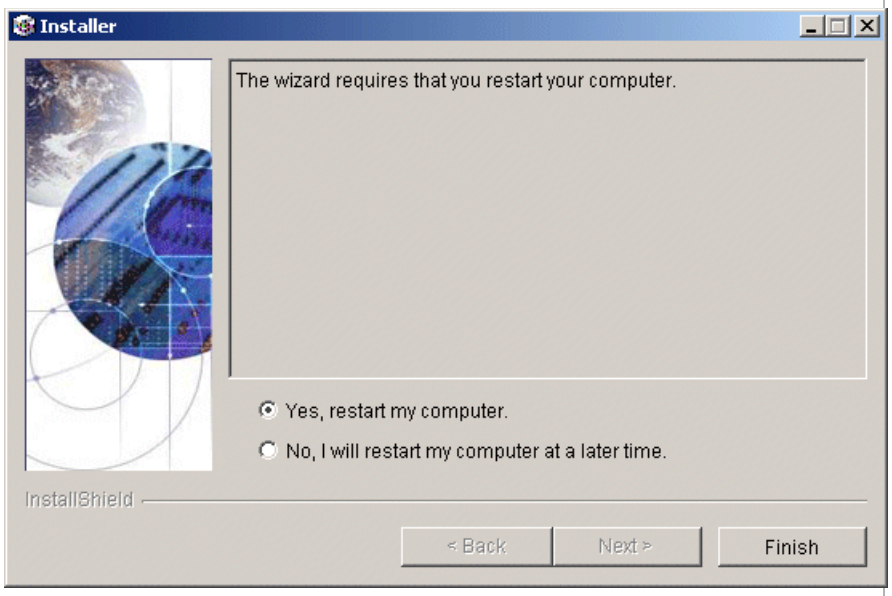
If you want to...	Then...
Remove output files	1. Click **Next**. **Result:** The Remove Output Files screen opens. 2. Go to Step 26.

26 The Remove Output Files screen opens.



During the installation, VitalQIP produces output files that are no longer needed for the installation. The installation files can be kept or removed from your system. It is recommended that you keep the files if the install had errors. If you want to keep the files, uncheck **Remove output files**.

27 Choose one of the following..

If you want to...	Then...
Complete the installation on a UNIX platform	1. Click **Next**. **Result:** The Installation complete screen opens. 2. Click **Finish**.
Complete the installation on a Windows platform	1. Click **Next**. **Result:** The Installation complete screen opens.  2. Before you can begin using VitalQIP, you must reboot your computer. Select **Yes** to restart your computer. If you would rather work on other tasks before configuring VitalQIP, click **No**. 3. Click **Finish**.

END OF STEPS

8 Install VitalQIP Distributed Services

Overview

Purpose

This chapter covers installing VitalQIP Distributed Services on a supported platforms.

Contents

This chapter covers these topics.

VitalQIP Distributed Services installation overview	8-2
VitalQIP Distributed Services pre-installation checklist	8-2
Install the VitalQIP Distributed Services	8-5

VitalQIP Distributed Services installation overview

What is installed

The VitalQIP Distributed Services installation installs the following:

- VitalQIP Login Service
- VitalQIP File Generation Service
- VitalQIP DNS Update Service
- VitalQIP QIP Update Service
- VitalQIP Message Service
- VitalQIP Schedule Service
- VitalQIP SSL Tunnel Service

Note: If you are installing the DNS Update Service, and plan to perform DNS pushes from this server (qip-genddns), you must also have either a remote server, the CLIs, or a client GUI installed on this server.

Upgrade from previous versions

If VitalQIP is being upgraded from a previous version, refer to Part IV: "Upgrade VitalQIP" for instructions on upgrading to VitalQIP 7.2.

VitalQIP Distributed Services pre-installation checklist

Purpose

Use the following checklist to determine what needs to be done before beginning the Distributed Services installation:

Table 8-1 Distributed Services pre-installation checklist

Task	Description	Status
Determine the configuration	Determine how and where the components are to be installed. Also, consider if this is an upgrade or if additional components are being installed. If a schedule service is installed, a license key is required. Refer to Part I of the *Administrator Reference Manual* for more information.	

Task	Description	Status
Determine if secure socket layer is deployed	Find out if secure socket layer will be used in the VitalQIP deployment. If it is, the *qipkeystore* and *vitalqip.cer* files are required to be located on the machine. These files are created during the VitalQIP enterprise server installation. The files are located in the directory where VitalQIP is installed. The encyrpted password needs to be obtained also.	
Meet pre-installation requirements	The pre-installation requirements must be met before installing VitalQIP. Read the *VitalQIP 7.2 Release Notes* to ensure your system meets the pre-installation requirements for installing VitalQIP.	
Install the database client	If the Distributed Services are being installed on a separate machine from the enterprise server, a Sybase client must be installed.	
Stop all VitalQIP-related processes	If VitalQIP is installed, ensure all VitalQIP-related processes are stopped.	
Gather information about the database	The following information needs to be gathered about the database server: • The name of the database. For Sybase, the name of the database is of the Adaptive Server. If VitalQIP is already installed, the value set in the **`QIPDATASERVER`** environment variable • The IP address of the server where the database is running. • The the full path to the directory where the database is running.	
Gather the IP address of the machine	Gather the IP addresses of the machines where the component is being installed and of the VitalQIP enterprise server.	

Task	Description	Status
Gather the IP address of services	Gather the address of the machine or machines where these services are to be installed: • VitalQIP Login Service • VitalQIP File Generation Service • VitalQIP DNS Update Service • VitalQIP QIP Update Service • VitalQIP Message Service • VitalQIP Schedule Service	
Gather information about the Apache Tomcat web server	Gather the following information about the Apache Tomcat web server: • Find out if your web server is using standard HTTP or HTTPS messaging • Find the port your web server is using • Find the IP address of the machine where the web server is running	

Install the VitalQIP Distributed Services

Purpose

This section explains how to install VitalQIP Distributed Services on supported platforms. If you have problems installing the software, contact technical support.

Before you begin

- Ensure your database is running.

Windows

- Ensure you are logged into your system as a user with administrative privileges.
- Ensure you exit all programs you are currently running.

UNIX

- Log into your system as the root user. If the installation is not done as the root user the **`qping`** utility does not work. The utility must have root permission with the **`SUID`** bit set for the administrator. This is an operating system limitation.

  To work around this limitation:

  a. Log into the system as the root user:

  b. Change the mode and permissions on the **`qping`** utility to be:

  ```
  root:sys & 4755
  ```

- Alcatel-Lucent recommends that Sybase environment variables be sourced, which. eliminates the need to enter Sybase-related values during the installation. To do so, execute the following from the Sybase directory:

  – For Cshell:

  ```
  source SYBASE.csh
  ```

  – For Bourne shell:

  ```
  . ./SYBASE.sh
  ```

Procedure

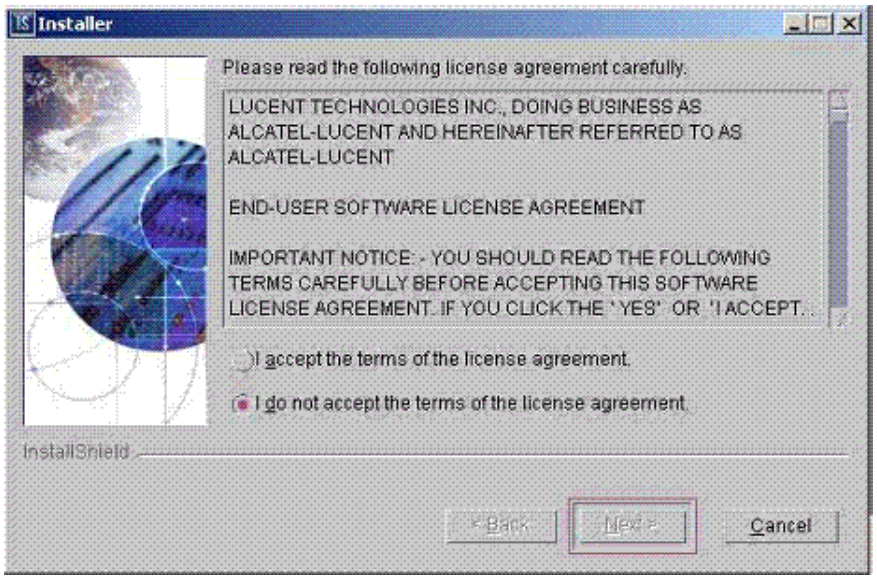
To install VitalQIP Distributed Services, follow these steps:

1 Choose one of the following:

If you want to…	Then…
Install on a Linux platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72setupLinuxgccr<#>.bin`**
Install on a Solaris platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72setupSolarisr<#>.bin`**
Install on a Windows platform	1. Open a command window and change directory to the installation file location. This is the location you selected when you downloaded the Windows installation executable from the Alcatel-Lucent Electronic Download site (*c:\temp* is the default location). 2. Enter: **`qip72setupwin32r<#>.exe`**

For all executables, the **#** denotes the repackaging number of the executable.

2 The Software License Agreement screen opens.

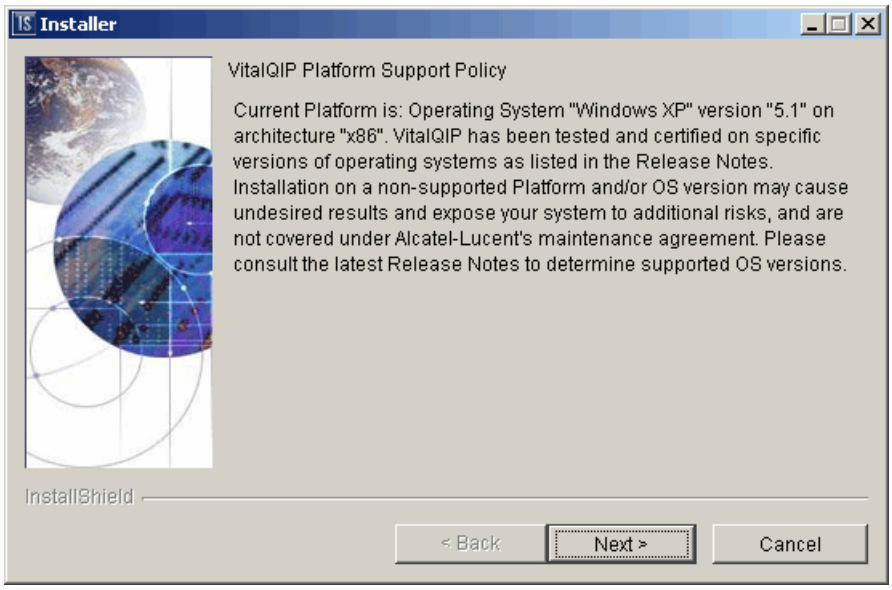


Read the software license agreement and:

- Select **I accept the terms of the license agreement** to accept the license agreement.
- Select **I do not accept the terms of the license agreement** if you do not accept the license agreement. The installation is canceled.

3 Click **Next**. The Welcome screen opens.

4 Click **Next**. The installation checks that the operating system is a supported version. If it is not a supported operating system, a screen opens with the Platform Support Policy.

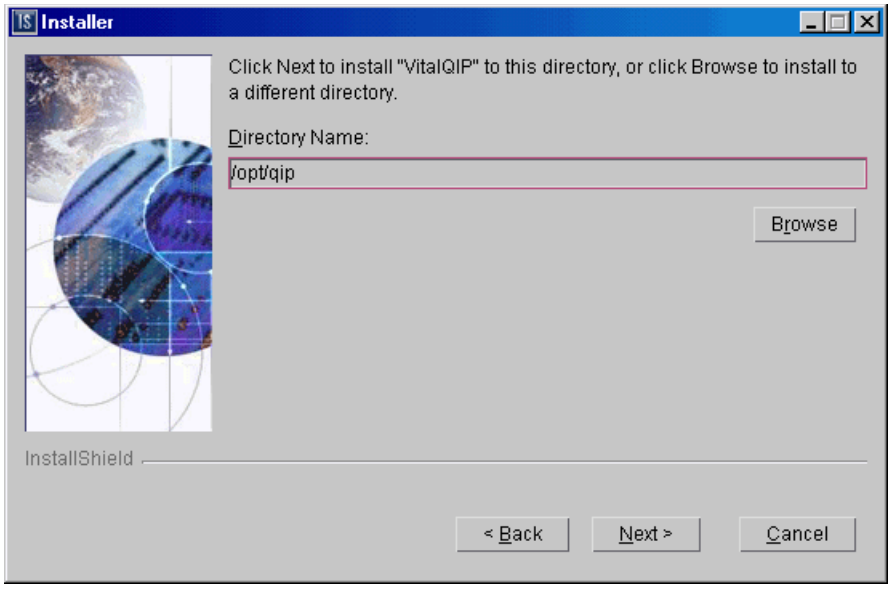


Click **Cancel** to exit the installation and upgrade the operating system to one of the supported versions listed in the *VitalQIP 7.2 Release Notes* before you install VitalQIP.

5 Click **Next**. Choose one of the following.

If you want to…	Then…
Install Distributed Services on a UNIX platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, a screen opens showing the VitalQIP-related daemons that are running. 1. Choose one of the following options: • Click **yes, kill processes automatically** and have the installation stop the processes. • Click **no, they will be killed manually** and stop the processes manually. 2. Click **Next**.
Install Distributed Services on a Windows platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, the processes are stopped by the installation.

6 The VitalQIP Home Directory screen opens.



The default destination directory for the VitalQIP software is shown. By default, the directory is */opt/qip* on UNIX and *c:\qip* on Windows. If a version of VitalQIP exists on the machine, the installation reads the **`QIPHOME`** environment variable and displays the value.

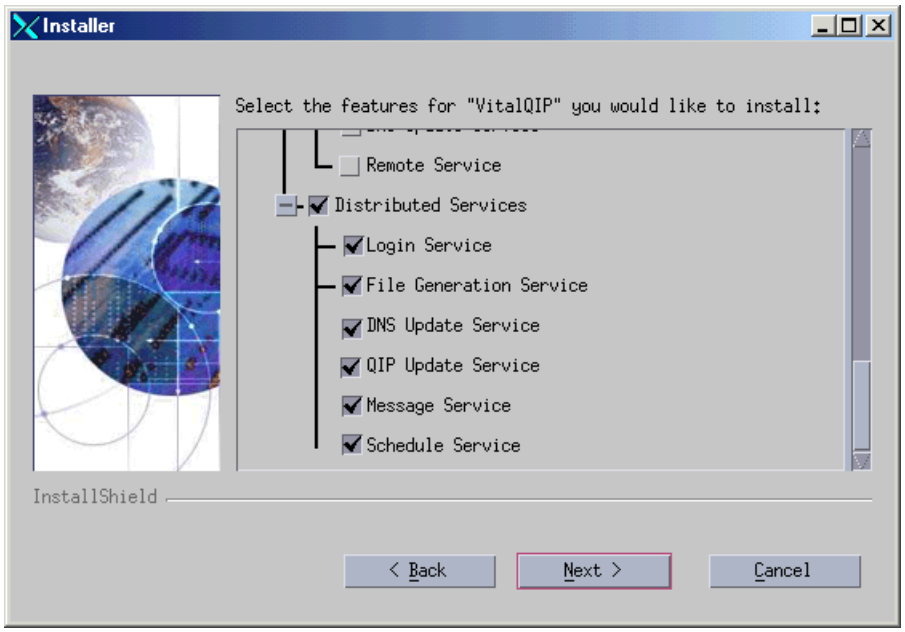
If necessary, type the destination directory into the **Directory Name** field. Alternatively:

a. Click **Browse**.

b. Navigate to where the directory is located and select the directory.

c. Click **Open**. The destination directory is shown in the field.

7 Click **Next**. In a few moments, the Features screen opens.



To install the VitalQIP Distributed Services only, uncheck all components except **Distributed Services** and its sub-components.

> **Important!** If any VitalQIP component is already installed, "`installed`" is shown next to it. If you want to keep that component, do ***not*** uncheck the checkbox: InstallShield will reinstall that component at the same time that it installs the components that you are now selecting.

The following table describes the sub-components of the Distributed Services package. After reading the table, ensure **Distributed Services** is checked. Check or uncheck the sub-components you want to install.

> **Note:** If you select at least one service, the Message Service option is automatically checked. The Message Service is required to communicate with VitalQIP.

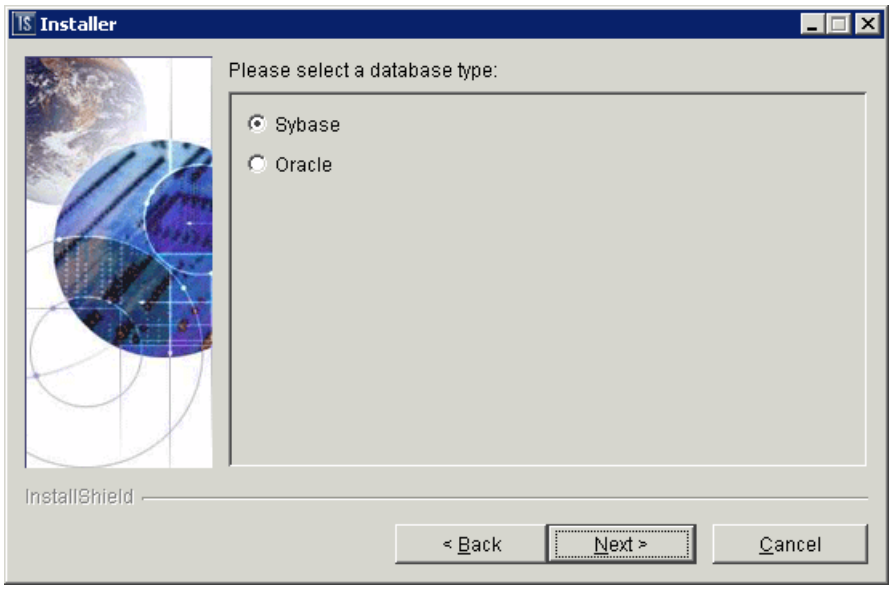
Note: If only the Login Service and Message Service are being installed, you are not prompted for database information.

Table 8-2 Distributed Services installation sub-components

Sub-components	Description
Login Service	Handles VitalQIP database logins. This service is required to connect to the VitalQIP database.
File Generation Service	Generates, optionally encrypts, and compresses remote service configuration files in order to transfer configuration files to remote servers.
DNS Update Service	Handles updates to DNS from DHCP servers, manages dynamic updates between DNS servers, and optionally sends DNS updates from administrative clients.
QIP Update Service	Handles updates to the VitalQIP enterprise server.
Message Service	Handles message routing from VitalQIP clients, DHCP, DNS, and VitalQIP services.
Schedule Service	Handles all scheduled events managed by VitalQIP enterprise server: • Scheduled moves • Scheduled reclaims • Auto updates of DNS, Bootp table, and NIS/Local operating system files

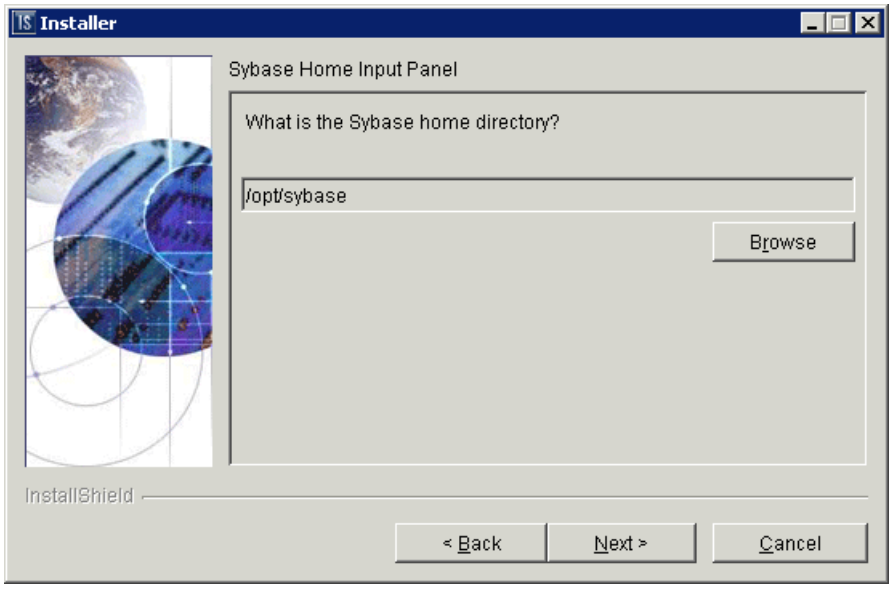
8 Click **Next**. The installation shows an information message. Read the message and follow any instructions that are shown in the message.

9 Click **Next**. The Database Type screen opens.



Select **Sybase**.

10 Click **Next**. The Database Home Directory screen opens.



If necessary, type the destination directory directly in the **What is the Sybase home directory?** field. Alternatively:

a. Click **Browse**.

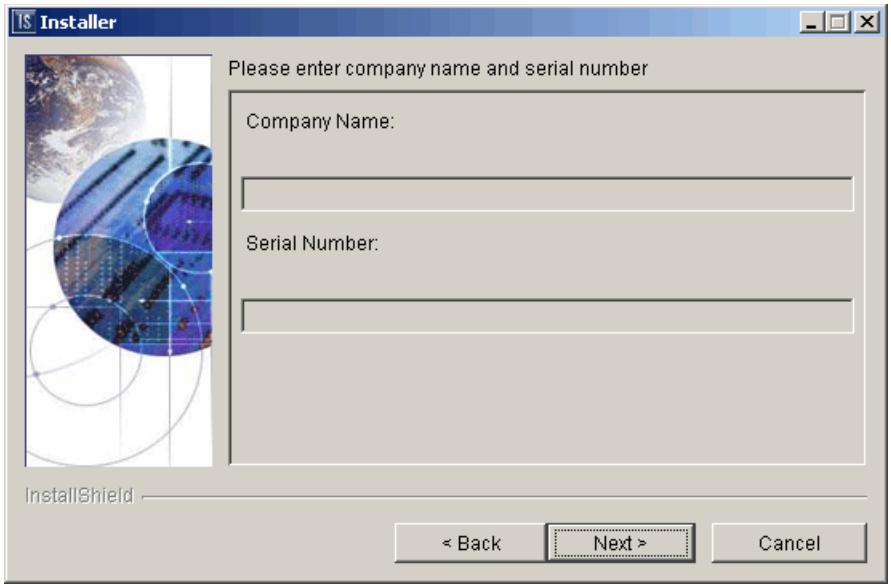
b. Navigate to where the directory is located and select the directory.

c. Click **Open**. The destination directory is shown in the field.

Schedule Service

11 If the Schedule Service is selected in Step 7, two additional screens are displayed. To continue with the installation, follow these steps:

a. Click **Next**. The Company Name & Serial Number screen opens.

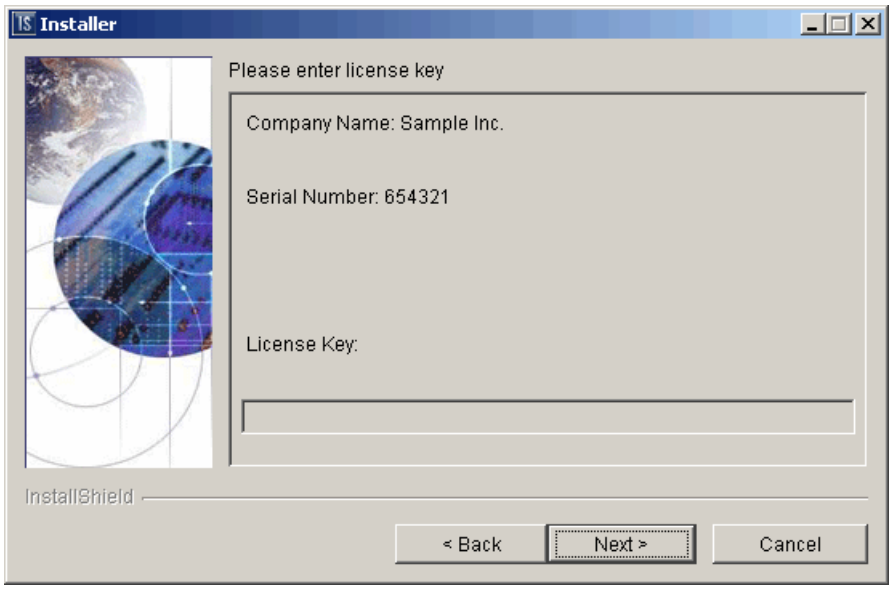


Do the following:

– In the **Company Name** field, enter the name of your company name.

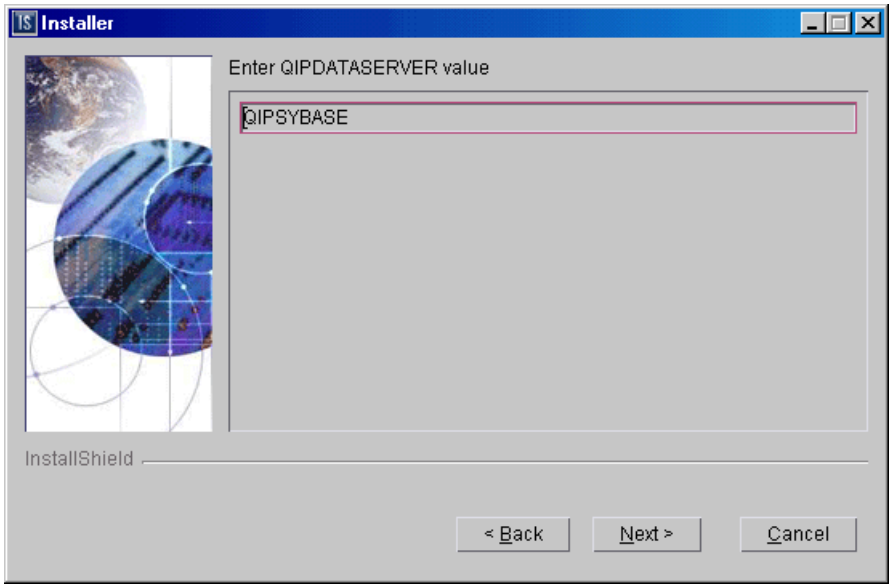
– In the **Serial Number** field, enter the serial number supplied by Alcatel-Lucent.

b. Click **Next**. The License Key screen opens.



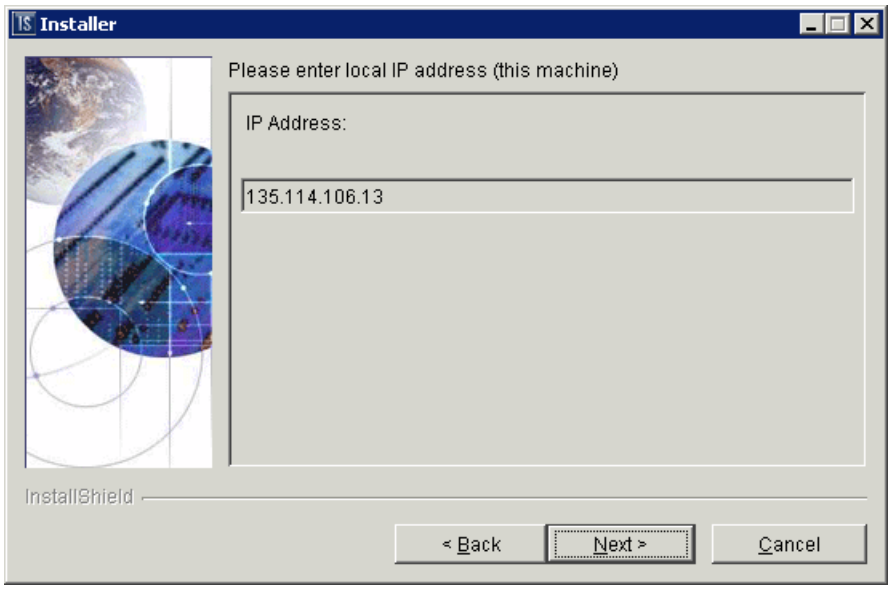
In the **License Key** field, enter the VitalQIP license key supplied by Alcatel-Lucent.

12 Click **Next**. The QIPDATASERVER Value screen opens.



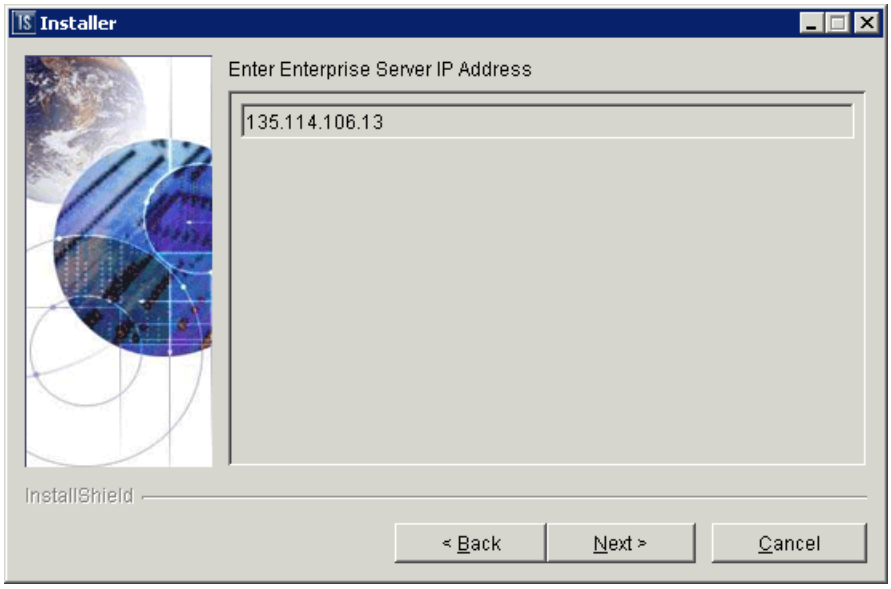
This defines the value of the **`QIPDATASERVER`** environment variable. The **`QIPDATASERVER`** value is the name of the database server. In the **Enter QIPDATASERVER value** field, enter the the name of your database.

13 Click **Next**. The Local IP Address screen opens.



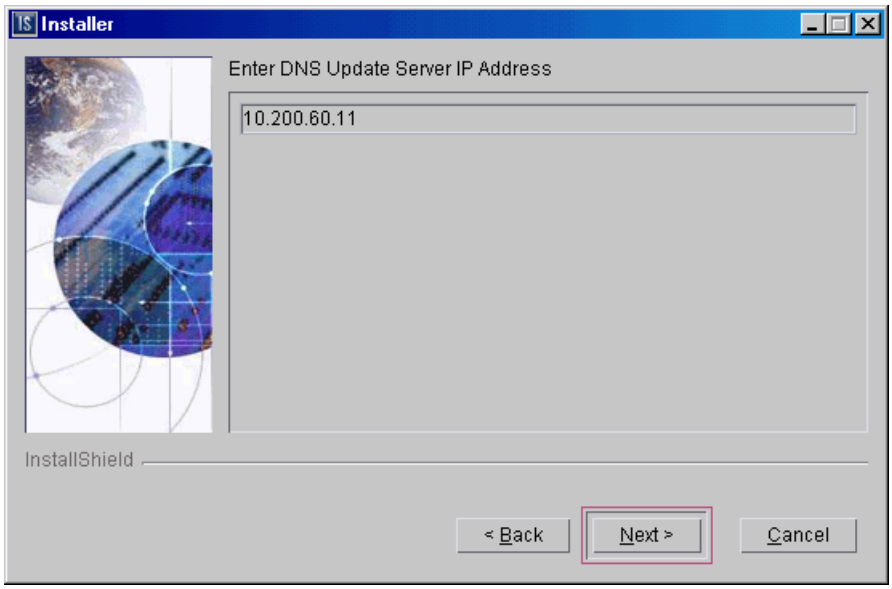
The IP address of the local machine is displayed. In the **IP Address** field, change the IP address of the machine on which the service is being installed if needed.

14 Click **Next**. The Enterprise Server IP Address screen opens.



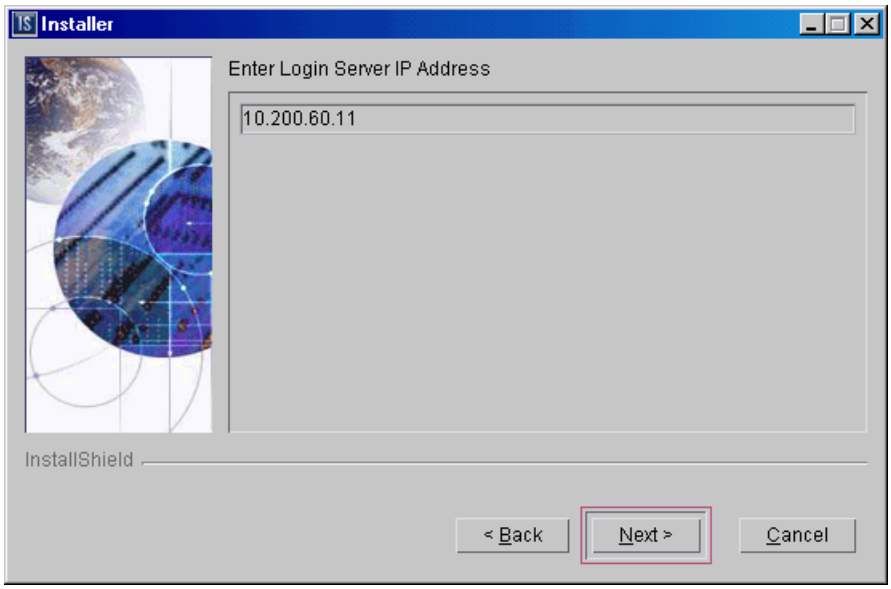
The IP address of the local machine is displayed. In the **Enter Enterprise Server IP Address** field, change the IP address of the machine on which the Enterprise Server was installed.

15 Click **Next**. The DNS Update Server IP Address for the QIP Update Service screen opens.



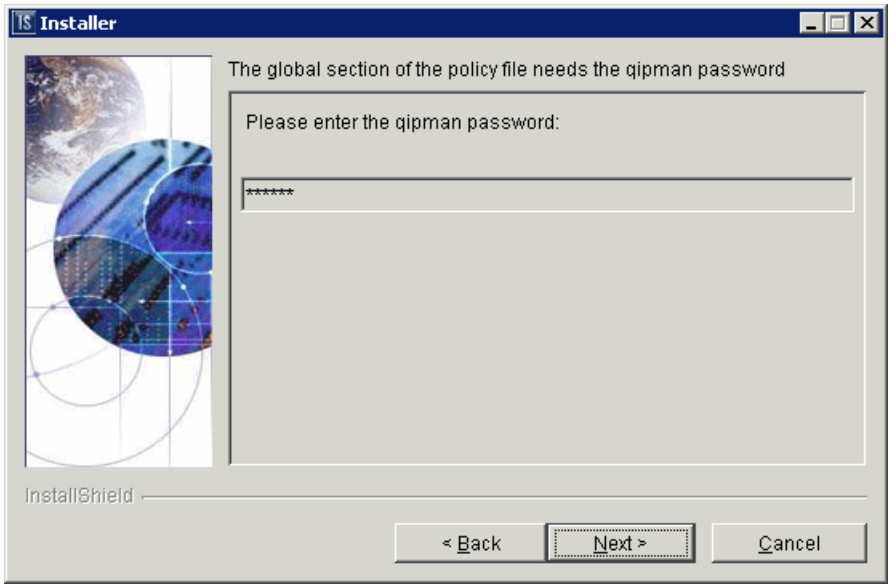
In the **Enter DNS Update Server IP Address** field, change the IP address of the DNS Update Server. The value is stored in the *qip.pcy* file.

16 Click **Next**. The Login Server IP Address screen opens.



In the **Enter Login Server IP Address** field, change the IP address for the Login Server if needed. The value is stored in the *qip.pcy* file.

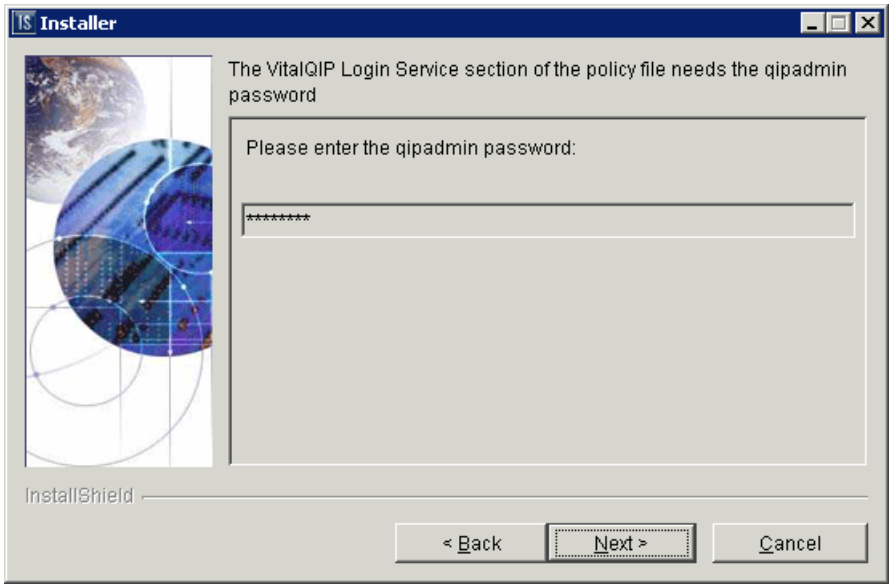
17 Click **Next**. The qipman Password screen opens.



By default, the password for qipman is **`qipman`**. You should use the default and change it later if you wish. The qipman password is stored in the Global policy section of the *qip.pcy* file as an encrypted password.

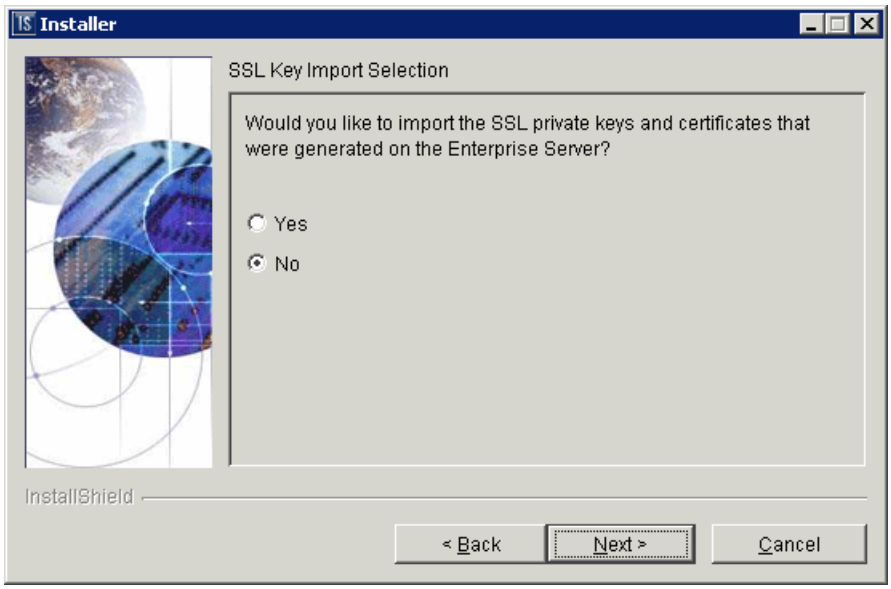
Login Service only

18 Click **Next**. If you selected Login Service in Step 7, the qipadmin Password screen opens. Skip this step if you did not select Login Service.



By default, the password for qipadmin is **`qipadmin`**. You should use the default and change it later if you wish. The qipman password is stored in the VitalQIP Login Service section of the *qip.pcy* file.

19 Click **Next**. The Import SSL Public/Private Keys screen opens.

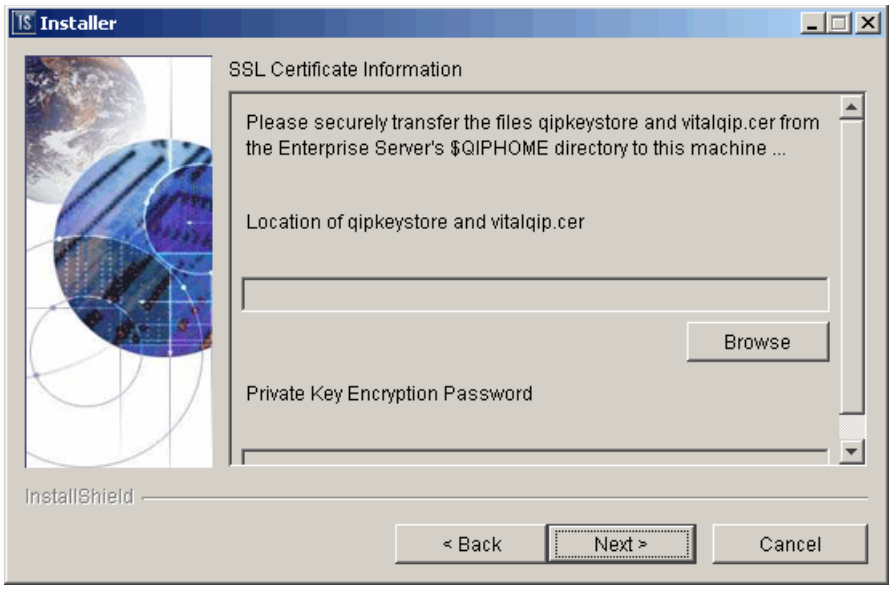


Select one of the following:

- **Yes** if you are planning on using the SSL Tunnel Service
- **No** if you are not using the SSL Tunnel Service

SSL security

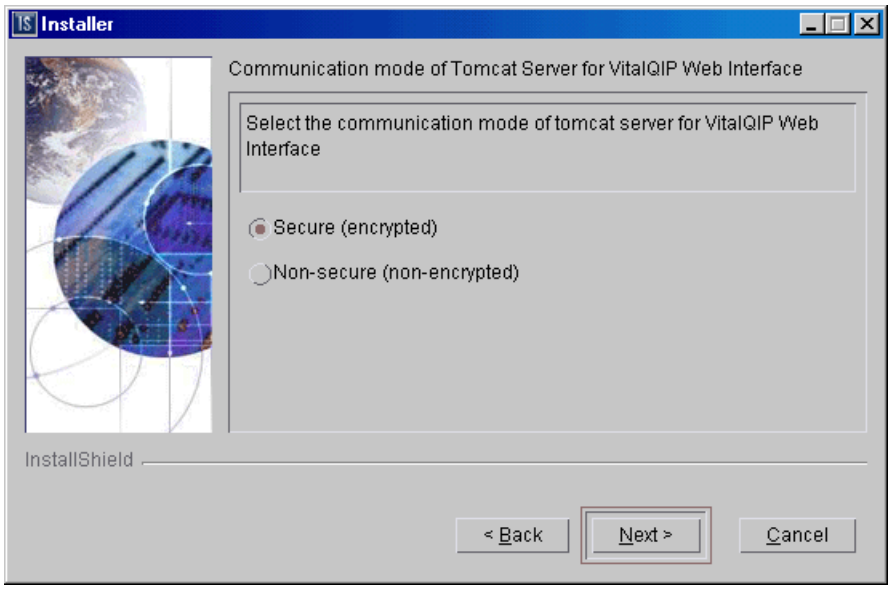
20 Click **Next**. If selected Yes in the previous screen, the SSL Certificate Information screen opens. Skip this step if you selected No.



Do the following:

- In the **Location of qipkeystore and vitalqip.cert files** field type the location of the *qipkeystore* and *vitalqip.cert* files. Alternatively:
  a. Click **Browse**.
  b. Navigate to where the directory is located and select the directory.
  c. Click **Open**. The destination directory is shown in the field.
- In the **Private Key Encryption Password** field, enter the SSL private key password.

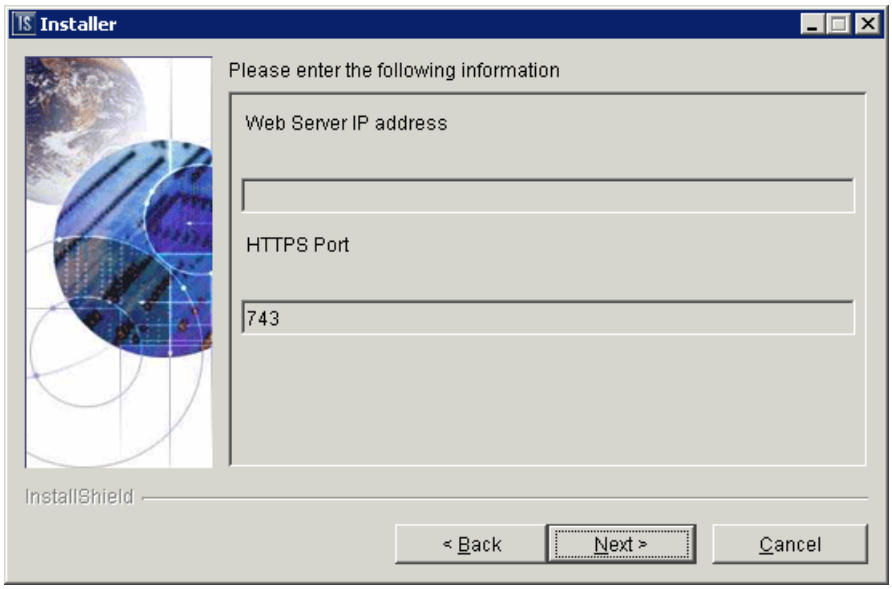
21 Click **Next**. The Tomcat Server Communication Mode opens.



The installation needs to know what mode of communication the Apache Tomcat web server will use. This information is written to the VitalQIP Service Layer section of the *qip.pcy* file. Select:

- **Secure (encrypted)** - uses HTTPS to send encrypted messages to and from the server
- **Non-secure (not-encrypted)** - messages to and from the server are not encrypted

22 Click **Next**. The Tomcat Server Information screen opens.



Note: Either **HTTP Port** or **HTTPS Port** field is displayed in this screen. The field that is displayed is determined by your selection in Step 21.

Review the following table and fill in the fields.

Table 8-3 Tomcat Server Information fields

Field	Description
Web Server IP address	The IP address where the Apache Tomcat web server resides.
HTTP Port	***Displayed when Non-secure (not-encrypted) is selected in Step 21.*** The port used by the web client to connect to the Apache Tomcat web server. By default, the port is 80.
HTTPS Port	***Displayed when Secure (encrypted) is selected in Step 21.*** The SSL port used by the web client to connect to the Apache Tomcat web server. By default, the port is 743.

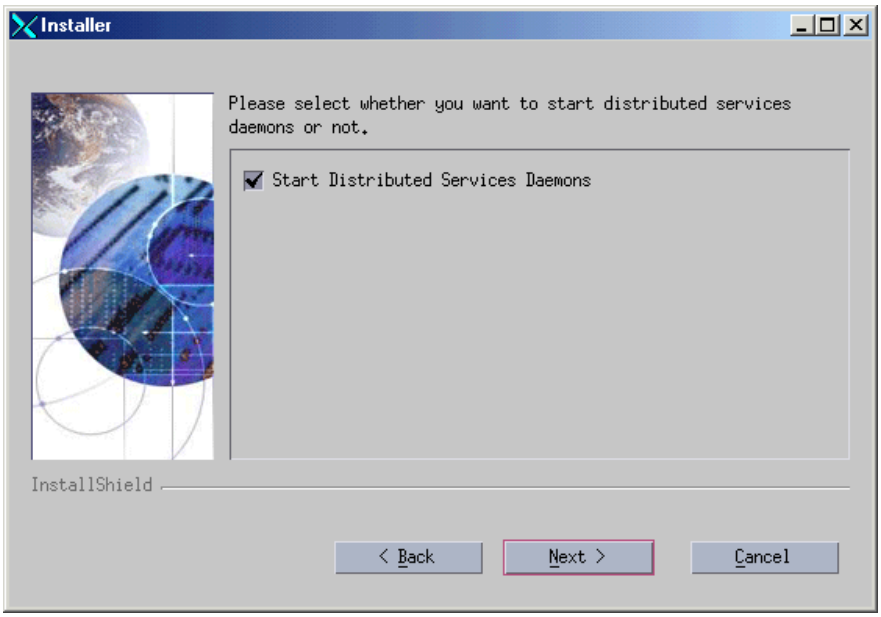
23 Click **Next**. After a few moments, the Summary screen opens. Examine the features to be installed. If changes are necessary, click **Back** to make changes to the installation. If everything looks correct, click **Next**.

The installer commences extracting files and installing VitalQIP.

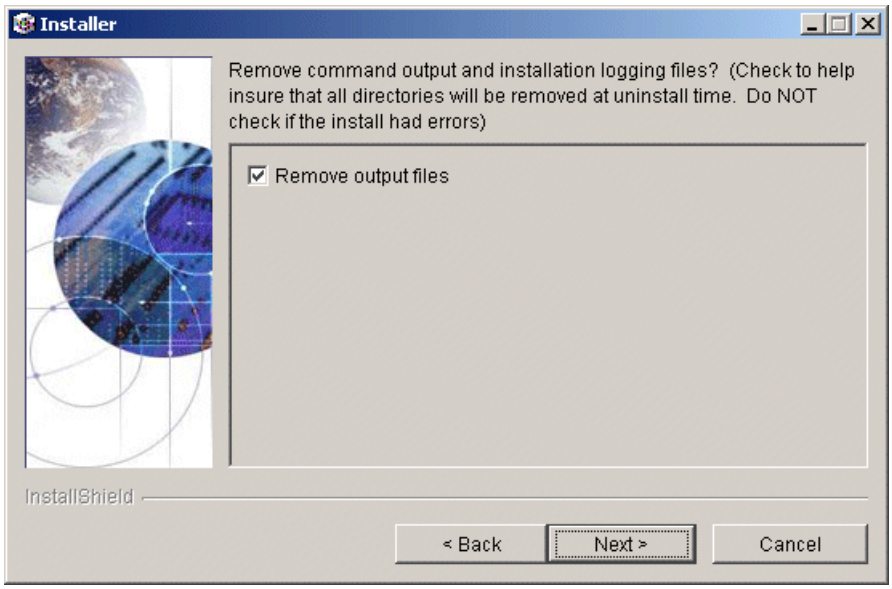
Note: During installation on a Windows platform, a message may open, asking if you want to overwrite *mfc42.dll*. Click **No** to continue.

In a few minutes, the Successful Install screen opens.

24 Choose one of the following.

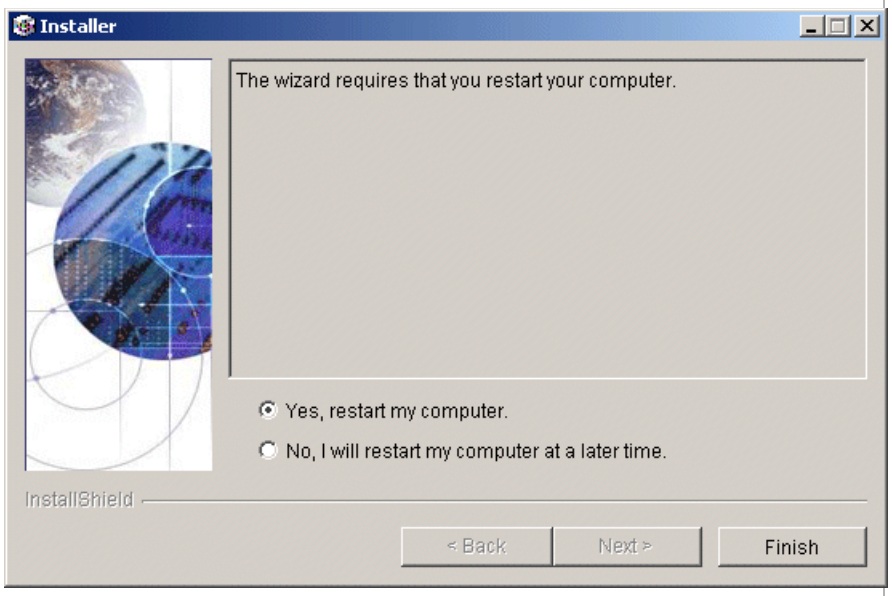
If you want to...	Then...
Start Distributed Services daemons on a UNIX platform	1. Click **Next**. **Result:** The Start Distributed Services Daemons screen opens.  The installation gives you the option to start the Distributed Services daemons. Follow these steps if you want to start the Distributed Services daemons: 2. Select the **Start Distributed Services Daemons**. A screen opens showing the daemons that are to be started. **Note:** Depending on how many other VitalQIP components are installed on your system, additional Start Daemon screens can open. Follow the directions on the screen to complete the installation. 3. Click **Next**.
Remove output files	1. Click **Next**. **Result:** The Remove Output Files screen opens. 2. Go to Step 25.

25 The Remove Output Files screen opens.



During the installation, VitalQIP produces output files that are no longer needed for the installation. The installation files can be kept or removed from your system. It is recommended that you keep the files if the install had errors. If you want to keep the files, uncheck **Remove output files**.

26 Choose one of the following..

If you want to…	Then…
Complete the installation on a UNIX platform	1. Click **Next**. **Result:** The Installation complete screen opens. 2. Click **Finish**.
Complete the installation on a Windows platform	1. Click **Next**. **Result:** The Installation complete screen opens.  2. Before you can begin using VitalQIP, you must reboot your computer. Select **Yes** to restart your computer. If you would rather work on other tasks before configuring VitalQIP, click **No**. 3. Click **Finish**.

END OF STEPS

9 VitalQIP configuration

Overview

Purpose

Prior to using the VitalQIP Management System, your system must be configured and services started. This chapter provides general instructions for getting your VitalQIP management system running. Instructions are also included for configuring web servers.

Contents

This chapter covers these topics.

Sybase configuration	9-2
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Increase Tomcat server memory allocation	9-17
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Sybase configuration

Sybase modifications after VitalQIP installation

Introduction

The VitalQIP installation makes changes to the Sybase database. Because of these changes, you need to perform additional configuration tasks after Sybase and the VitalQIP enterprise server has been installed. This section provides details on how Sybase can be configured and the order in which the configuration should occur.

Order for Sybase configuration

For you convenience, this section has been laid out in the order in which the configuration tasks should occur. The configuration tasks occur in this order:

1. Set the LANG environment variable.
2. ***UNIX only***. Modify *<name of Sybase server>.cfg* in *Sybase/ASE-15_0* directory.
3. ***UNIX only***. Configure the Sybase directory configuration file.
4. Linux and Solaris: Configure the server properties file.
5. Afterwards, configure your VitaQIP system. Refer to "VitalQIP configuration on a Windows platform" (p. 9-8) or "VitalQIP configuration on a UNIX platform" (p. 9-21) for more information.

Set the LANG environment variable

The VitalQIP enterprise server installation for Sybase sets the **`LANG`** environment variable. This is to enable the **`qip-import`** and **`qip-export`** command to import and export international and unicode data correctly.

The LANG environment variable is used by Sybase to determine the locale category for native language, local customs, and the coded character set environment on the machine. Appropriate values can be obtained from the *$SYBASE/locales* directory in the *locales.dat* file. The *locales.dat* file is used by Sybase for converting vendor-specific international locale information to a proprietary format that Sybase understands. The appropriate values are broken down by a machine's operating system and language. For example, locale values for french, english, spanish and korean (just to name a few) on Solaris, can be obtained under the `[sun_srr4]` section of the file. Section of the *locales.dat* file:

```
[sun_svr4]
Locale=fr_FR.UTF-8, french, utf8
Locale=de_DE.UTF-8, german, utf8
Locale=es_ES.UTF-8, spanish, utf8
Locale=ko_KR.UTF-8, korean, utf8
Locale=en_US.UTF-8, us_english, utf8
```

The VitalQIP enterprise server installation sets the LANG environment variable by default to the following value:

- For Windows:

LANG=en_english.utf8

- Linux and Solaris:

LANG=en_US.UTF-8

If your Sybase and VitalQIP enterprise server is not localized to English, you must set the LANG environment variable to the proper localized value as specified in the Sybase *locales.dat* file. For example: if your Sybase and VitalQIP enterprise server machine is localized to use Korean language, set the LANG environment variable to ko_KR.UTF-8. This must be done prior to using the **qip-import** and **qip-export** commands.

If you are installing VitalQIP 7.2 and do not have English as the locale within Sybase and the machine, we recommend not importing the data into the VitalQIP database via the VitalQIP 7.2 install. Rather, install VitalQIP 7.2 with an initial 7.2 database, set your LANG environment variable in the VitalQIP *shrc* file, and run **qip-import**.

Configure the Sybase configuration file

The VitalQIP enterprise server installation modifies the Sybase configuration file located in the *Sybase* home directory and establishes the following parameters. These settings allocate roughly 400MB of memory to Sybase.

```
max memory = 200000
procedure cache size = 100000
number of locks = 100000
lock scheme = datarows
number of open objects = 1000
number of open indexes = 1000
number of open partitions = 1000
enable java = 1
```

These are minimal settings for VitalQIP, so you may need to modify values to suit your specific configuration, data size requirements, and machine resources. The following table describes the parameters listed above.

Table 9-1 Description of Sybase parameters

Parameter	Description
max memory	Specifies the maximum amount of total physical memory that you can configure the Adaptive Server to allocate. The default value is platform-dependent. The VitalQIP enterprise server installation sets it to 200000, which is roughly 400MB for a minimum setting. Tune this value to obtain maximum performance within Sybase and the VitalQIP application.
procedure cache size	Specifies the size of the procedure cache in 2K pages. The Adaptive Server uses the procedure cache while running stored procedures. If the Adaptive Server finds a copy of a procedure already in the cache, it does not need to read it from the disk. The Adaptive server also uses space in the procedure cache to compile queries while creating stored procedures. The default value is 3271. The VitalQIP enterprise server installation sets it to 100000 which is roughly 200MB for a minimum setting. Tune this value to obtain maximum performance within Sybase and the VitalQIP application. The procedure cache size cannot exceed the setting of max memory.
number of locks	Sets the total number of available locks for all users on the Adaptive Server. The total number of locks needed by the Adaptive Server depends on the number and nature of the queries that are running. The number of locks required by a query can vary widely, depending on the number of concurrent and parallel processes and the types of actions performed by the transactions. The default value is 5000. The VitalQIP enterprise server sets this to 100000 due to possible large transactions within VitalQIP. This can be increased based on the amount of data that is being operated on in the VitalQIP database.
lock scheme	Sets the default locking scheme to be used by create table and select into commands when a lock scheme is not specified in the command. The default value is `allpages`. VitalQIP requires this to be set to `datarows` to avoid contention and deadlocks.
number of open objects	Sets the maximum number of objects that can be open simultaneously on the Adaptive Server. The default setting is 500, but the VitalQIP enterprise server installation increases it to 1000.
number of open indexes	Sets the maximum number of indexes that can be used simultaneously on the Adaptive Server. The default setting is 500, but the VitalQIP enterprise installation increases it to 1000.

Parameter	Description
number of open partitions	Specifies the number of open partitions that the Adaptive Server can access at one time. The default setting is 500, but the VitalQIP enterprise installation increases it to 1000.
enable java	Enables the Java JVM within the database.

Configure error message monitoring

During the VitalQIP enterprise server installation and operation within VitalQIP, the following Sybase errors and/or warnings may occur. These errors and warnings are written to the Sybase error log:

```
Error 8424 level 17 state 0: Cannot find an available index
descriptor for an index. Increase the value of 'number of open
indexes'. If sp_configure fails due to lack of index
descriptors, edit the configuration file and restart the
server.

Server Increase the config parameter 'number of open indexes'
to avoid descriptor reuse. Reuse may result in performance
degradation.

Server Increase the config parameter 'number of open
partitions' to avoid descriptor reuse. Reuse may result in
performance degradation.
```

The VitalQIP enterprise server installation changes the following parameters to avoid these messages:

- **number of open objects**
- **number of open indexes**
- **number of open partitions**

These parameters should be monitored in Sybase to ensure proper settings. These settings do impact Sybase memory use, so be careful when setting these parameters. Sybase recommends using the **sp_countmetadata** and **sp_monitorconfig** commands to monitor the values. Table 9-2 describes how to reset them.

Table 9-2 Monitor error message parameters

Parameter	How to reset and monitor
number of open objects	If this number is insufficient, the Adaptive server displays a message after trying to reuse active object descriptors. This value must be adjusted. To set the number of open objects parameter, use **sp_countmetadata** within **isql** to find the total number of object metadata cache descriptors. For example: **sp_countmetadata "open objects"** If Adaptive Server reports that there are 1500 user objects in all databases, set the number of open objects to that value plus 10%. For example: **sp_configure "number of open objects", 1650**
number of open partitions	If this number is insufficient, the Adaptive server displays a message after trying to reuse active partition descriptors. This value must be adjusted. To set the number of open partitions parameter, use **sp_countmetadata** within isql to find the total number of open partitions. For example: **sp_countmetadata "open partitions"** If the Adaptive server reports that the **open partitions** configuration parameter is currently set to 1000, set the number of open partitions to that value plus 10%. For example: **sp_configure "number of open partitions", 1100** Use **sp_monitorconfig** within **isql** to monitor the number of open partitions. For example: **sp_monitorconfig "open partitions"** If the Adaptive server reports the maximum number used partition descriptors is 1000, configure the number of open partitions to 1000 plus 10% for a total of 1100. For example: **sp_configure "number of open partitions", 1100**

Parameter	How to reset and monitor
number of open indexes	If this number is insufficient, the Adaptive server displays a message after trying to reuse active index descriptors. This value must be adjusted. To set the **number of open indexes** parameter, use **sp_countmetadata** within **isql** to find the total number of open indexes. For example: **sp_countmetadata "open indexes"** If the Adaptive server reports that there are 700 user indexes in all database(s), set the number of open indexes to that value plus 10%. For example: **sp_configure "number of open indexes", 770** Use **sp_monitorconfig** within **isql** to monitor the number of open indexes. For example: **sp_monitorconfig "open indexes"** If the Adaptive server reports the maximum number used index descriptors is 700, configure the number of open indexes to 700 plus 10% for a total of 770. For example: **sp_configure "number of open indexes", 770**

VitalQIP configuration on a Windows platform

Modifications after VitalQIP installation

Introduction

After you have installed VitalQIP, the VitalQIP Management software products should be set up. This section outlines some steps you need to take after VitalQIP is successfully installed on a Windows platform.

Before you begin

After installing Sybase, ensure the database is properly configured after the VitalQIP enterprise server has been installed. Refer to "Sybase configuration" (p. 9-2).

Add database service to Service Controller

To add your Sybase database service to the Alcatel-Lucent Service Controller, follow these steps:

1 Select **Start | Programs | VitalQIP | Service Controller**.

Result: The Alcatel-Lucent Service Controller opens.

2 Click **Configure**.

Result: The Configure Services screen opens.

3 Click **Select Services**, and then click **Search**.

4 Select your dataserver from the list on the left, and click **Add**.

5 Click **OK** to return to the Configure Services screen.

6 Click **OK** to exit.

END OF STEPS

Configure and start web server

1. If you set up the Tomcat server to use secure messages during the installation, you need to configure the self-signed certificate to work with Internet Explorer 7 (this is not required with other browsers or earlier versions of IE). Follow the instructions in "Enable a blocked Tomcat self-signed certificate" (p. 9-11).
2. If you have a large data set, you should follow the instructions in "Increase Tomcat server memory allocation" (p. 9-17) before you import your data into VitalQIP.
3. Configure and start your web server. For instructions on starting the Tomcat web server, refer to Chapter 2 "Manage VitalQIP Services", in the *VitalQIP Administrator Reference Manual*.

Start database

Start your database. For further information, refer to the *VitalQIP Administrator Reference Manual*.

Configure services

Configure and start all services. For information about configuring and starting services, refer to the *VitalQIP Administrator Reference Manual*.

Adjust TCP KeepAlive settings

On most systems, TCP KeepAlive is set to a default of two hours. If network hardware or software (including firewalls) has an idle limit of less than two hours, the KeepAlive time must be lowered to less than this to fit inside the firewall limits.

To lower the KeepAlive timeout setting on Windows systems, adjust the TCP KeepAlive setting at the operating system level, as follows:

1 Open your registry and find the `HKEY_LOCAL_MACHINE\System\CurrentControlSet\Services\Tcpip\Parameters` key.

2 Create a new DWORD value named "KeepAliveTime" and set it to equal the number of milliseconds to wait before sending keep alive packets (the default is 7,200,000 milliseconds).

3 Additionally, create a new DWORD value called “KeepAliveInterval” and set it to equal the time in milliseconds between retransmissions of keep alive packets, once the KeepAliveTime has expired (the default is 1000 milliseconds).

4 Restart Windows for the change to take effect.

END OF STEPS

Enable a blocked Tomcat self-signed certificate

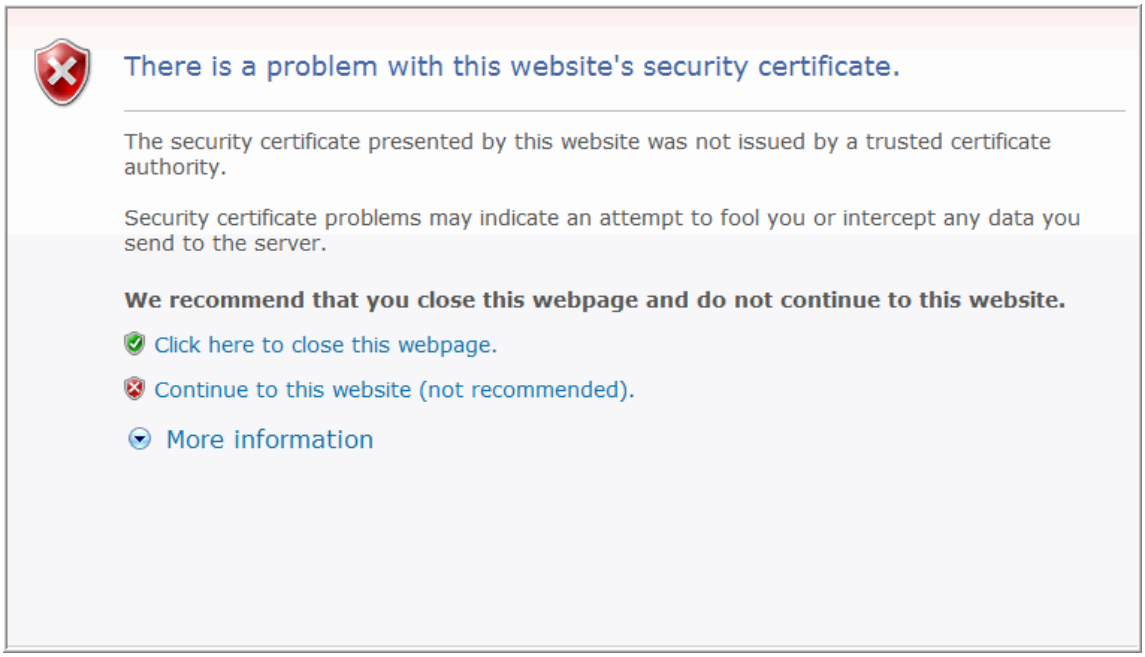
Purpose

To enable a blocked Tomcat self-signed certificate so that direct navigation to Internet Explorer 7 is permitted.

Procedure

To ensure that a Tomcat self-signed certificate works with Internet Explorer 7, follow these steps.

1 If the following window opens,

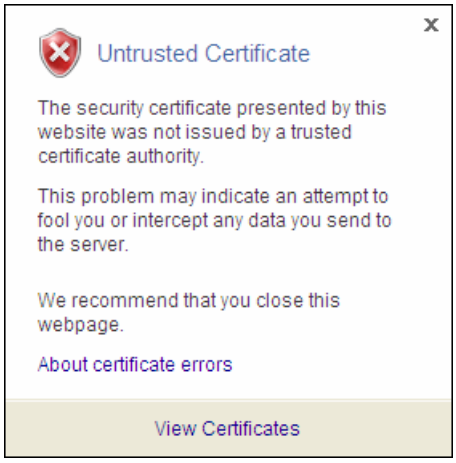


and the log-on URL is blocked by IE7, click **Continue to this website (not recommended)**.

Result: A Certificate Error opens in the browser toolbar.

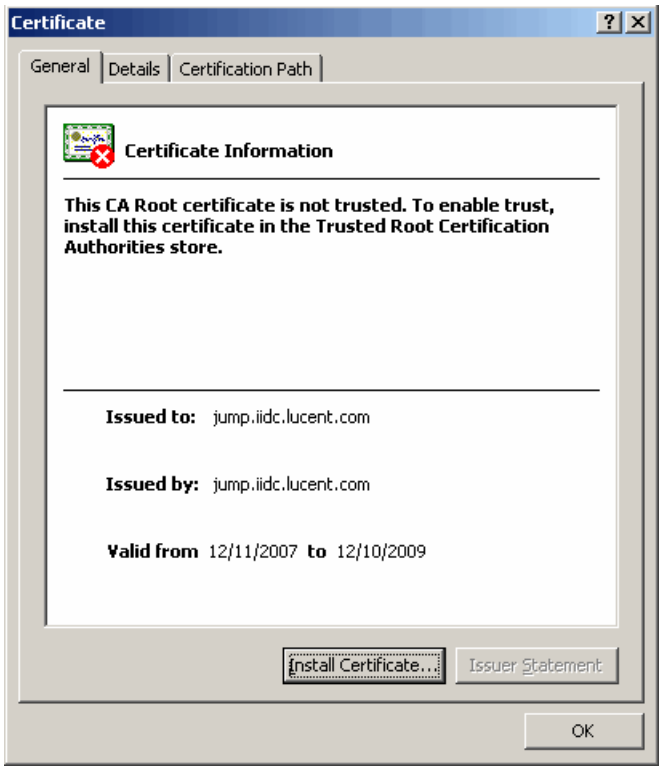
2 Click the **Certificate Error** button.

Result: An Untrusted Certificate dialog box opens.



3 Click **View Certificates**.

Result: The Certificate Information window opens.

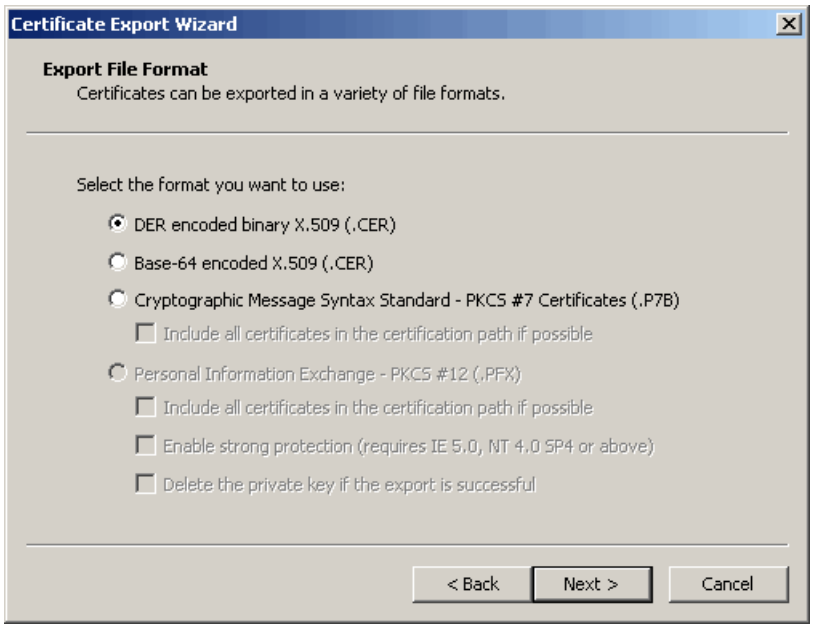


4 Click the **Details** tab, followed by **Copy to File...**

Result: The Certificate Export Wizard opens.

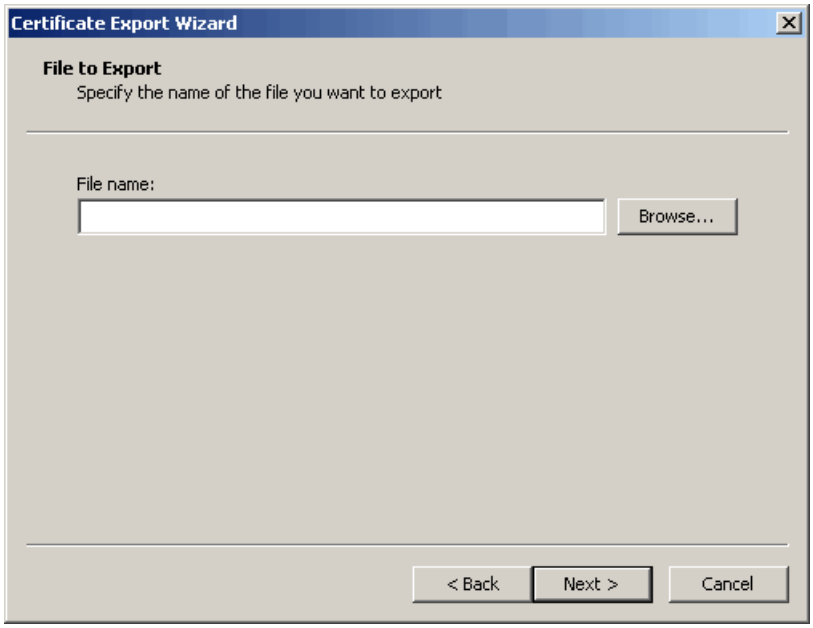
5 Click **Next**.

Result: The Export File Format window opens.



6 Select the **Base 64 encoded binary X.509 (.CER)** option and click **Next**.

Result: The File to Export window opens.



7 In the **File name** field, enter a certificate filename (*.crt* suffix), for example, *jump.crt*. The exported certificate file is saved in the *IE7.0* directory. (If you want to select another location for the certificate file, click **Browse** and navigate to the desired location.)

8 Click **Next**.

Result: The Completing the Certificate Export Wizard window opens.

9 Click **Finish**.

Result: A confirmation dialog box opens with the message **The export was successful**.

10 Click **OK**.

Result: The Certificate Details window opens.

11 To install the certificate you just exported, click the **General** tab.

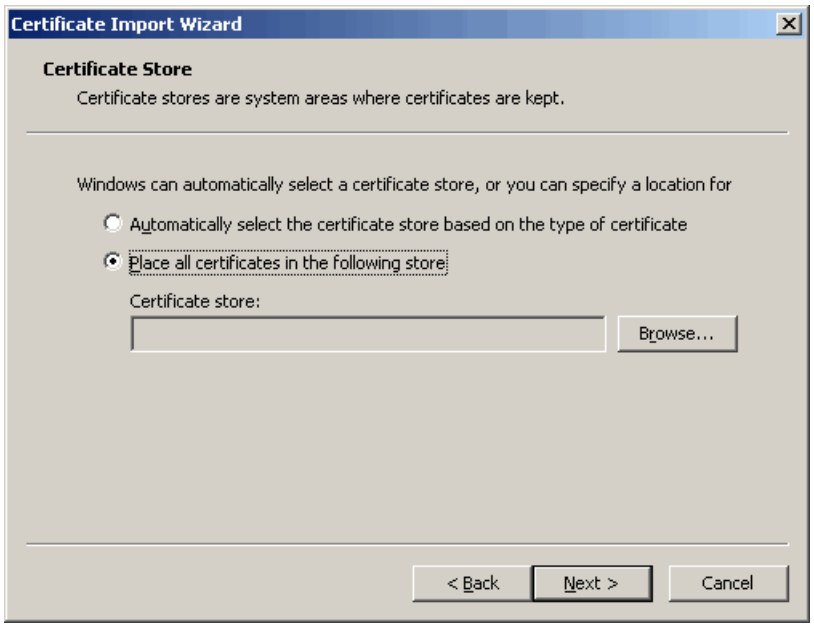
Result: The Certificate Information window opens.

12 Click **Install Certificate...**

Result: The Certificate Import Wizard opens.

13 Click **Next**.

Result: The Certificate Store window opens.



14 Select the **Place all certificates in the following store** option and click **Browse**.

Result: The Select Certificate Store window opens.

15 Select **Trusted Root Certification Authority** and click **OK**.

Result: The **Certificate store** field displays **Trusted Root Certification Authorities**.

16 Click **Next**.

Result: The Completing the Certificate Import Wizard opens.

17 Click **Finish**.

Result: The Security Warning window opens.

18 Click **Yes**.

Result: A confirmation dialog box opens with the message **The import was successful.**

19 Click **OK**.

20 Click **OK** to close the Certificate window.

After the certificate is successfully imported, no further Certificate errors should occur.

END OF STEPS

Increase Tomcat server memory allocation

Purpose

To increase memory allocation for the Tomcat server when customers have large data sets (typically over 500,000 records).

Procedure

To increase memory allocation for the Tomcat server, follow these steps.

On UNIX platforms

1 Modify the *startTomcat.sh* file in $QIPHOME and increase the `JAVA_OPTS -Xmx` value. For example, to increase the 256MB size to 512MB, enter the following:

```
if [ "$tmpBuf" = "" ] ; then
    JAVA_OPTS="-Xmx512m -Xms128m -XX:+UseConcMarkSweepGC -
   XX:+CMSPermGenSweepingEnabled -XX:+CMSClassUnloadingEnabled -
   XX:MaxPermSize=96M"
else
    JAVA_OPTS="-Xmx512m -Xms128m -XX:+UseConcMarkSweepGC -
   XX:+CMSPermGenSweepingEnabled -XX:+CMSClassUnloadingEnabled -
   XX:MaxPermSize=96M $JAVA_OPTS"
fi
export JAVA_OPT
```

END OF STEPS

On Windows platforms

1 Click **Start | Run** and enter **`regedit`**.

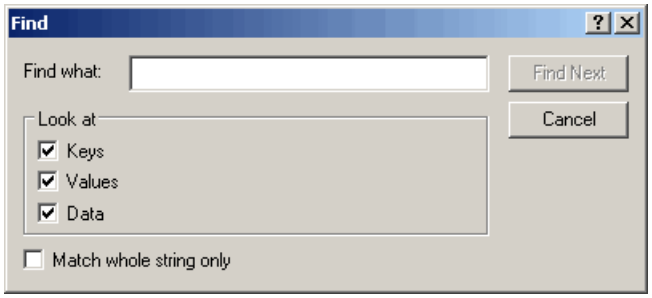
2 Click **OK**.

Result: The Registry Editor opens.

3 Select **Export** from the **File** menu and export your existing registry setting as a backup.

4 Select **Find** from the **Edit** menu.

Result: The Find dialog box opens.



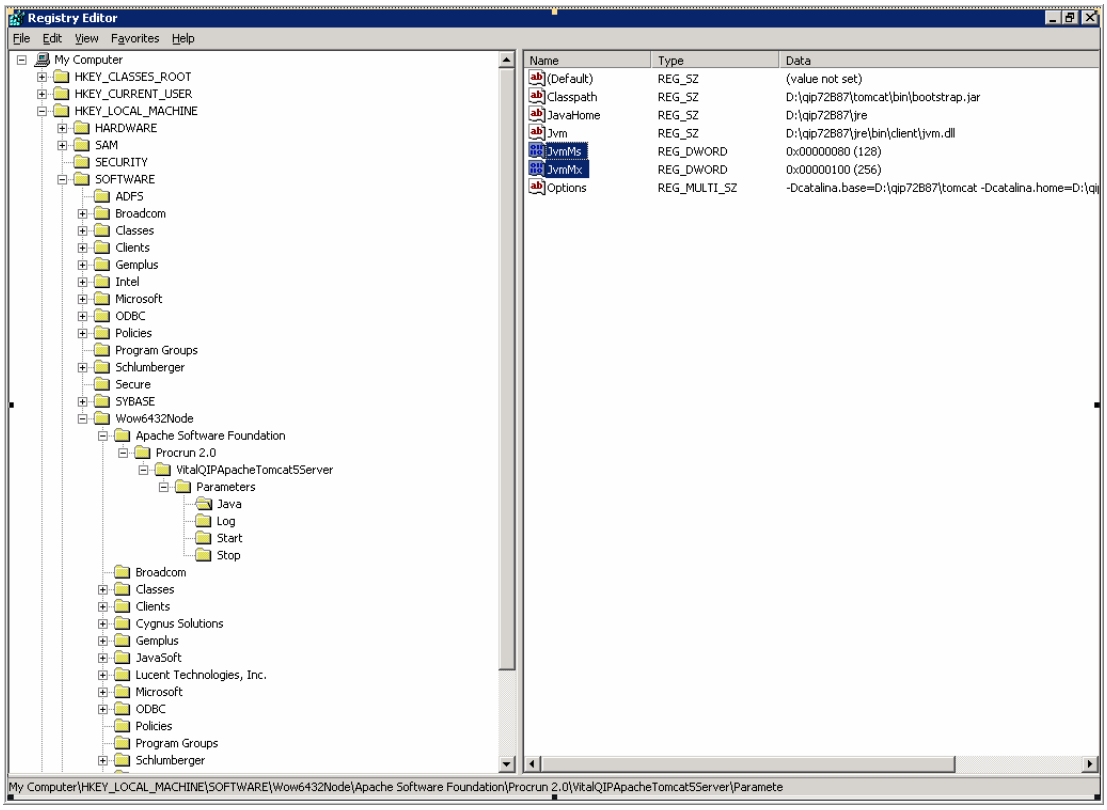
5 Enter **`VitalQIPApacheTomcat5Server`** in the **Find what** field.

6 Uncheck the **Values** and **Data** options.

7 Check the **Match whole string only** option.

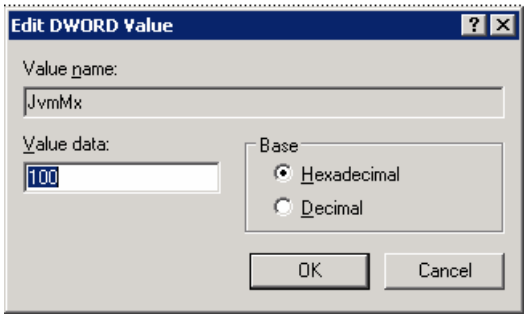
8 Click **Find Next**.

Result: The Java Parameters are displayed.



9 Double-click the **JvmMx** parameter. This is located in *MyComputer\HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Apache Software Foundation\Procrun 2.0\VitalQIPApacheTomcat5Server\Parameters\Java*.

Result: The Edit DWORD Value dialog box opens.



10 Click the **Decimal** option.

Result: The Value data changes.

11 Enter a value in the **Value data** field and click **OK**.

Note: By default, 256 MB of memory is allocated to the Tomcat server during installation. In production environments it is recommended to give 1/4 of total system memory (up a maximum of 1GB) to the Tomcat server.

Result: The maximum heap size is changed.

END OF STEPS

VitalQIP configuration on a UNIX platform

Modifications after VitalQIP installation

Introduction

After installing VitalQIP, the VitalQIP Management software products should be set up. This section outlines some steps you need to take after VitalQIP is successfully installed on a supported UNIX platform.

Procedure

Follow these instructions to begin using the IP Management software. If you have any questions, call technical support.

Note: If the **`qipd`** server daemon is started after the installation, there is no need to perform Step 1 through Step 3. Daemons can only be started by a root user.

1 Ensure you are logged in as the root user.

2 Ensure the environmental variables described in Table 9-3 are set correctly in your *.profile* or *.cshrc* file.

Note: If the environment variables are not set, the installation temporarily sets them based on your menu entries, and then removes them after the installation is finished.

Table 9-3 Set environment variables

Environment variable	Description
SYBASE	The full directory path to where Sybase is installed.
SYBASE_ASE	The full path to the *ASE* directory.
SYBASE_OCS	The full path to the *OCS* directory.
DSQUERY	The name of the Sybase server. The **`DSQUERY`** variable is a name that references the Sybase database server instance that contains and manages the VitalQIP database. By default, **`QIPSYBASE`** is used, commonly referred to as the SQL server name.
QIPHOME	The full path to the QIPHOME directory.
PATH	Include **`:/usr/bin/X11`** or the directory where your Motif/x-window binaries are installed (for example, “x-term”).

Environment variable	Description
QIPDBASE	The type of database that VitalQIP is using. When setting the **QIPDBASE** variable, **SYBASE** must be entered in all uppercase letters.
QIPDATASERVER	The name of the database server. The **QIPDATASERVER** variable must be the same value as **DSQUERY**. For VitalQIP, the value of the **QIPDATASERVER** environmental variable is the first entry displayed in the Login screen. The **QIPDATASERVER** value is displayed, even if the value is not contained in the Sybase Interfaces file. The Sybase Interfaces file is read and the values are displayed after the **QIPDATASERVER** value. The **QIPDATASERVER** value is removed from the list obtained from the database specific files, so that the name is not displayed twice.
QIPMESSAGESERVICE	The IP address of the machine where the VitalQIP Message Service is running.
QIPDEFAULTORG	***Optional.*** It is used if no **-o** is used on the command line, you are logging in as "qipman" and there are multiple organizations. Or, you want the default organization to be something other than the default organization supplied at install time - VitalQIP Organization.
LD_LIBRARY_PATH	Solaris and Linux only. Set the library path to: **$QIPHOME/usr/lib:$SYBASE/lib:$LD_LIBRARY_PATH**

3 VitalQIP is installed using the Bourne shell. When you perform the install, environment variables and their values are automatically stored in *$QIPHOME/etc/shrc* or *cshrc*. Reference this file under *$QIPHOME/etc* after you complete the installation. To set your environmental variables, issue the following commands:

```
#cd <VitalQIP_directory>/etc
#. ./shrc OR source cshrc
```

4 Start your database, as described in the *VitalQIP Administrator Reference Manual*.

5 If daemons have not been started, follow these steps:

a. Change the directory to *$QIPHOME/etc*.

b. Ensure your environment variables are set up, execute:

 # . ./shrc OR **source cshrc**

c. Execute the following to start the daemons:

- To start the VitalQIP enterprise server:

./qip-es-startup

- To start the VitalQIP remote server:

  ./qip-rs-startup

- To start Distributed Services:

  ./qip-ds-startup

Refer to the *VitalQIP Administrator Reference Manual* for information on the usage of the VitalQIP daemons.

d. Execute **ip-manage** and press **Enter**. Log into the system with the username "qipman" and password "qipman".

Note: Alcatel-Lucent recommends you change the default qipman password for security reasons.

6 On most systems, TCP KeepAlive is set to a default of two hours. If network hardware or software (including firewalls) has an idle limit of less than two hours, the KeepAlive time must be lowered to less than this to fit inside the firewall limits. To lower the KeepAlive timeout setting on Solaris systems, adjust the TCP KeepAlive setting at the operating system level, as follows:

ndd -set /dev/tcp tcp_keepalive_interval <value>

where **value** is the number of milliseconds to keep the connection alive.

7 Configure and start your web server if you installed the web client interface. Refer to Chapter 2 "Manage VitalQIP Services", in the *VitalQIP Administrator Reference Manual*.

8 Start the web client. Refer to the *VitalQIP Web Client User's Guide* for information starting the web client.

9 Import your current VitalQIP data (refer to the *VitalQIP Administrator Reference Manual*).

Note: Sybase user only. The system has been set up to truncate the log file automatically to avoid any log device full situation during the initial data import. Now you can turn off this function to support up-to-the-minute recovery. To do this, run the following commands:

```
# isql -U sa -P <your_sa_password>
1> sp_dboption QIP,'trunc.log on chkpt.',false
2> go
1> use QIP
```

```
2> go
1> checkpoint
2> go
1> quit
```

10 After you import your VitalQIP data, backup the database (refer to the *VitalQIP Administrator Reference Manual*). Without a complete backup now, there is no way you can recover your system with the log device.

It is also a good idea to have a current export of your VitalQIP data as a secondary precaution. Refer to the *VitalQIP Command Line Interface User's Guide* for information on how to execute the **qip-export** command.

11 If your VitalQIP system uses remote Bootp and/or DHCP servers, you must install and run the VitalQIP remote server software on them.

12 If your VitalQIP system is managing secondary servers in non-VitalQIP-managed domains, you must deploy the **qip-rmtd** (Remote Service) daemon on the secondary servers. Refer to the *VitalQIP Administrator Reference Manual* for details.

Note: It is your responsibility to back up the transaction log daily and to back up the entire data device weekly. (Refer to the V*italQIP Administrator Reference Manual* for instructions on backing up the data device.) It is critical that you perform this complete Sybase backup of the VitalQIP transaction log and database. A file system backup is not sufficient.

END OF STEPS

Part II: Oracle

Overview

Purpose

This part of the *VitalQIP Installation Guide* contains information on how to install VitalQIP components when you are using Oracle as your database.

Contents

This part includes these chapters.

Chapter 11, “Introduction”	11-1
Chapter 12, “Oracle requirements”	12-1
Chapter 13, “VitalQIP requirements”	13-1
Chapter 14, “Install VitalQIP enterprise server”	14-1
Chapter 15, “Install VitalQIP remote server”	15-1
Chapter 16, “Install VitalQIP web client interface”	16-1
Chapter 17, “Install VitalQIP GUI client”	17-1
Chapter 18, “Install VitalQIP Distributed Services”	18-1
Chapter 19, “VitalQIP configuration”	19-1

11 Introduction

Overview

Purpose

This chapter provides information about the types of VitalQIP installations and the suggested order for installing VitalQIP components.

Contents

This chapter covers these topics.

Installation overview	11-2
Available types of installations	11-2
Recommended order to install VitalQIP components	11-3

Installation overview

Available types of installations

Installation types

VitalQIP offers three ways to install VitalQIP components. You can pick the type that best suits your needs.

Standard installation

The standard installation offers a graphical user interface that takes you step by step through the VitalQIP installation. This installation offers those users who are not familiar with console and template installation a visual way to install VitalQIP.

Console installation

The console installation is a text based installation. Since the console installation is not GUI based, it is much faster. All the information that is collected in the regular VitalQIP installation appears as prompts in the console installation. The console installation is not platform-dependent.

Template installation

The template installation runs the standard installation and creates a template. The template can be transported to another machine and used to install VitalQIP on that machine. This can be useful in situations where VitalQIP is being installed on more than one machine, for example, when installing multiple remote servers with the same configuration options.

Recommended order to install VitalQIP components

Purpose

This section suggests the recommended order for installing VitalQIP.

Before you begin

As required by the VitalQIP and database prerequisites, ensure your system is running the correct operating system and is patched to the required operating system level. Refer to the *VitalQIP 7.2 Release Notes*.

Procedure

Follow these steps:

1 Install the database and the necessary patches.

2 Install the VitalQIP enterprise server.

3 Install the VitalQIP clients.

4 Install the VitalQIP remote servers.

5 Install the VitalQIP web package. If you are planning on using a language other than English for VitalQIP, additional configuration is required. Refer to Chapter 17, “Web client configuration” in the *VitalQIP Administrator Reference Manual* for more information.

Note: You can complete this step at any time after you have installed the VitalQIP enterprise server.

END OF STEPS

12 Oracle requirements

Overview

Purpose

This chapter describes the pre-installation requirements for Oracle. Before you begin installing your VitalQIP system, refer to Part I of the *VitalQIP Administrator Reference Manual*. It will assist you in deciding on the optimal configuration for your network.

Contents

This chapter covers these topics.

Oracle pre-installation requirements	12-2
Recommendations for Oracle	12-2
Set up Oracle	12-4

Oracle pre-installation requirements

Overview

This section discusses the requirements for installing Oracle on a Windows or UNIX operating system unless otherwise specified. Because Alcatel-Lucent does not supply the Oracle database or runtime, it is the responsibility of the customer to obtain, install, and configure the Oracle database. Alcatel-Lucent is not responsible for your Oracle database or runtime installation.

Recommendations for Oracle

Oracle installation recommendations for VitalQIP

Several Oracle parameters need to be modified for your database and operational environment. Increasing these parameters within Oracle can result in better performance within Oracle and VitalQIP. These parameter settings represent minimum requirements for an Oracle and VitalQIP configuration:

- **cursor_sharing = exact**
- **db_file_multiblock_read_count = 16**
- **shared_pool_size = 234881024**
- **processes = 150**
- **dml_locks = 500**
- **log_buffer = 14306304**
- **db_block_size = 8192**
- **pga_aggregate_target=383778816**

Note: Alcatel-Lucent recommends that the settings for **sga_max_size** and **sga_target** parameters be set to the maximum allowed based on available memory to Oracle. Refer to Oracle installation documentation for more details on how to set the **sga_max_size** and **sga_target** parameters.

Note: The *compatible* parameter must be set to at least 9.2.0.0 (for example, **compatible=9.2.0.0**) to support the *MAXEXTENTS UNLIMITED* parameter. This storage parameter is used when creating temporary tables, and the indexes are used to move the database design. These tables and indexes are dropped at the end of the migration. Following the upgrade, export and import data into the Oracle database to defragment the disk space that was fragmented by temporary tables and indexes.

Linux: Requirement for Oracle

If Oracle 10gR2 is being installed on Red Hat Enterprise Linux5, refer to Oracle's *Requirements for Installing 10gR2 RDBMS ON RHEL 5 Doc ID: Note: 421308.1* for additonal information on hardware and software requirements.

Set up Oracle

Purpose

This section outlines the Oracle software components and minimum configuration settings required by VitalQIP to run on Windows and UNIX operating systems.

Important! An Oracle database administrator should perform the steps in this section.

Before you begin

During the VitalQIP install, a database owner account named "qipadmin" is created. The Oracle database administrator should not create this database owner account.

Install Oracle

VitalQIP requires these Oracle modules to be installed:

1 At a minimum, install the following modules:

- Oracle Database 10g 10.2.0.1.0
- Oracle Net Services 10.2.0.1.0
- Oracle Call Interface (OCI) 10.2.0.1.0
- Configure Net Services
- JVM

2 Since VitalQIP supports a database that stores multiple languages, the Oracle database character set must be set to AL32UTF8 and the Oracle National Character to AL16UTF16. These settings can be configured in the Oracle Database Creation Assistant (DBCA) when an Oracle database instance is being created.

3 VitalQIP displays the value of **`$QIPDATASERVER`** and the service names from the *tnsnames.ora* file in the Login screen. VitalQIP searches for the *tnsnames.ora* file in the following order:

- *ORACLE_HOME/network/admin*
- The directory specified by the environment variable, **`TNS_ADMIN`**, if set.

- In addition, the fully qualified service name (DB_NAME.DB_DOMAIN) is displayed in the **Login Server** field. The *names.default_domain* parameter in the *sqlnet.ora* file does not need to be set to the DB_DOMAIN of the Oracle database supporting VitalQIP.

During the install, a database owner account named “qipadmin” is created. The qipadmin account is granted the following VitalQIP privileges:

- Create sessions
- Create snapshot
- Create table
- Create trigger
- Create procedure
- Create view
- Select any table
- Select on dba_role_privs
- Select any dictionary
- Query rewrite

END OF STEPS

Create tablespace

System tablespace contains VitalQIP stored procedures and VitalQIP triggers. The Oracle structures (system catalog, system stored procedures, and so on), VitalQIP stored procedures, and VitalQIP triggers use approximately 40 MB.

You need to create the following tablespaces in Oracle:

- QIP_DATA contains the VitalQIP tables
- QIP_INDEX contains the VitalQIP indexes
- QIP_TEMP ***temporary*** space for VitalQIP installation
- QIP_LOB contains space used by VitalQIP Managed Files

Note: The QIP_LOB tablespace is a recommended size and not dependent on the number of IP addresses, subnets, and domains in your network configuration.

tablespace calculation formula

Use the following calculation to determine the tablespace sizes you will need:

```
x=(# of IP Addresses * 2500) + (# of subnets * 500) + (# of domains * 1300)
y = x/(1024*1024)(to convert to MB)
```

Take the value of ‘y’ and calculate tablespace requirements as follows:

```
qip_data tablespace (MB) = y * 5
qip_index table space (MB) = y * 5
qip_temp table space (MB) = qip_data table space/2
```

tablespace examples

To create tablespace, an Oracle DBA needs to log into SQL*Plus as **sys** and execute the following. Substitute the values you calculated above in the size examples that follow:

QIP_DATA

```
create tablespace QIP_DATA
datafile '/opt/app/oracle/oradata/QIP/qip_data01.dbf' size 500M;
```

QIP_INDEX

```
create tablespace QIP_INDEX
datafile '/opt/app/oracle/oradata/QIP/qip_index01.dbf' size 500M;
```

QIP_TEMP

```
create temporary tablespace QIP_TEMP
tempfile '/opt/app/oracle/oradata/QIP/qip_temp01.dbf' size 250M;
```

Note: Ensure that **`qip_temp`** is ***temporary*** tablespace. Otherwise, the VitalQIP installation fails.

QIP_LOB

```
create tablespace QIP_LOB
datafile '/opt/app/oracle/oradata/QIP/qip_lob01.dbf' size 10M;
```

Calculate and customize initial/extent specifications

Depending on the size of your installation, some VitalQIP tables can be extremely large. The script used to create tables does not specify initial or next extents due to varying customer database sizes. Alcatel-Lucent recommends you calculate the potential size of the tables in Table 12-1 and Table 12-2. and add initial/next specifications to the create table statements by modifying the *$QIPHOME/scripts/tab_storage.conf file*.

The file *$QIPHOME/scripts/tab_storage.conf* on UNIX and *%QIPHOME%\scripts\tab_storage.conf* on Windows contains the storage clauses for most of the large VitalQIP tables and VitalQIP indexes in the VitalQIP database.

When calculating the average row size for each table, the DBA must plug in each table column below. The example below shows two columns in the *obj_prof table*. You must first install VitalQIP to get this data.

```
/* TABLE */

select
```

```
avg(nvl(vsize(obj_desc ),32)+1 +  nvl(vsize(obj_ip_addr1),2)+1)
   "Total bytes per row" from   obj_prof

Total bytes per row
--------------------
                37

/* INDEX */

 select sum(COLUMN_LENGTH)
   from dba_ind_columns
  where  TABLE_NAME = 'OBJ_PROF';

SUM(COLUMN_LENGTH) - in bytes
-------------------------
                        330
```

Use the row sizes, along with the information in Table 12-1 and Table 12-2 to calculate the total size of each table. The number of row sizes in Table 12-1 and Table 12-2 are approximate.

Table 12-1 Data table

Table	Number of rows
obj_prof:	1 row per IP address
subnet:	1 row per subnet
dhcp_ext:	1 row per IP address
obj_alias	1 row per DNS alias
obj_name_prof:	1 row per IP address
obj_servers	1 row per object * the number of routers per object 1 row per template * the number of routers per template 1 row per subnet * the number of routers per subnet 1 row per manual Bootp object * the number of DNS servers per manual Bootp object 1 row per template * the number of DNS servers per template 1 row per subnet * the number of DNS servers per subnet 1 row per manual Bootp object * the number of time servers per manual Bootp object 1 row per template * the number of time servers per template 1 row per subnet * the number of time servers per subnet
mx_host:	1 row per DNS MX record

Table	Number of rows
subnet_domns	1 row per domain associated with each Subnet. For example, if subnet 199.10.15.0 is associated with a.com and b.com, and subnet 197.10.15.0 is associated with b.com and c.com, this would be counted as 4 rows.)
thresholds	1 row per network 1 row per OSPF area 1 row per subnet group 1 row per subnet
person_prof	1 row per contact. For example, if person A is associated with user group 1, person B is associated with subnet 199.10.15.0, and person B is associated with object 199.10.15.0, this would be counted as 2 rows.
admin_access	1 row per administrator per type of data the administrator manages. If Administrator Test 1 manages domain a.com, subnet 199.10.15.0, and object 197.10.15.5, this would be counted as 3 rows.
users	1 row per user
user_addrs	1 row per user per IP address and/or MAC address, and/or hostname
location	1 row per location
subnet_orgs	1 row per subnet organization

Use the row sizes, along with the information in Table 12-2, to calculate the number of rows per table, and the table size for the Audit table. The row sizes in Table 12-2 are approximate.

Table 12-2 Audit tables

Table	Number of rows
obj_prof_aud	1 row per dml performed to an IP address via VitalQIP
subnet_aud	1 row per dml performed to a subnet
obj_alias_aud	1 row per dml performed to a DNS alias
obj_name_prof_aud	1 row per dml performed to an IP address' hostname

Table	Number of rows
obj_servers_aud	1 row per dml performed to an object/router combination 1 row per dml performed to a template/router combination 1 row per dml performed to a subnet/router combination 1 row per dml performed to a manual Bootp object/DNS server combination 1 row per dml performed to a template/DNS server combination 1 row per dml performed to a subnet/DNS server combination 1 row per dml performed to a manual Bootp object/time server combination 1 row per dml performed to a template/time server combination 1 row per dml performed to a subnet/time server combination
mx_host_aud	1 row per dml performed to a DNS MX record
subnet_domns_aud	1 row per dml performed to a subnet/domain combination
person_prof_aud	1 row per dml performed to a contact
admin_access_aud	1 row per dml performed to an administrator/managed data combination
location_aud	1 row per dml performed to a location
subnet_orgs_aud	1 row per dml performed to a subnet organization

Since one row is written to the appropriate audit table during a dml statement to its data table, these audit tables can grow very large if left unattended. VitalQIP provides a command line interface (CLI), **`qip-clear`**, that clears entries inserted into the audit table before a specified date. Refer to the *VitalQIP Command Line Interface User's Guide* for **`qip-clear`** instructions.

tab_storage.conf

The initial and next storage parameters for data tables are located in *$QIPHOME/script/tab_storage.conf* on UNIX and *%QIPHOME%\scripts\tab_storage.conf* on Windows. During the VitalQIP enterprise server installation, you are informed when it is appropriate to modify this file (Step 27 on p. 14-23).

sys password

During the VitalQIP installation, you may be prompted for the Oracle **sys** password. Obtain this password from your Oracle database administrator.

END OF STEPS

13 VitalQIP requirements

Overview

Purpose

This chapter describes the pre-installation requirements for VitalQIP. Before you begin installing your VitalQIP system, refer to Part I of the *VitalQIP Administrator Reference Manual*. It will assist you in setting the optimum configuration for your network.

Contents

This chapter covers these topics.

Background	13-2
Overview	13-2
VitalQIP pre-installation requirements	13-3
Overview	13-3

Background

Overview

List of VitalQIP components

All VitalQIP components are described in Chapter 1 of the *VitalQIP Administrator Reference Manual*. The following is a list of components included in the VitalQIP installation software:

- VitalQIP enterprise server
- VitalQIP remote server
- VitalQIP web client interface
- VitalQIP GUI client
- VitalQIP distributed services

VitalQIP supported platforms and system requirements

Refer to the "System Requirements" section of the *VitalQIP 7.2 Release Notes* for this information.

VitalQIP pre-installation requirements

Overview

Introduction

This section discusses the requirements for installing VitalQIP with the Oracle database. This section pertains to installations on Windows and UNIX operating systems unless otherwise specified.

Obtain a license key

You must obtain a license key and serial number for the VitalQIP Enterprise Server system and any machines on which Distributed Services are installed. The installation program requests that you provide a license key and serial number during the installation. Contact technical support to obtain a license key.

Note: Do not add more objects to a network than your license allows. Doing so will lock you out of the VitalQIP application.

Determine if secure socket layer (SSL) is deployed

Find out if SSL will be used in the VitalQIP deployment. If SSL is going to be deployed, Alcatel-Lucent recommends you write down the private key encryption password that will be used. This information is needed during the installation of the various VitalQIP components. For more information on secure messaging, refer to the Secure Message Routes chapter in the *Administrator Reference Manual*.

Determine if HTTPS versus HTTP messaging is deployed

Find out if HTTPS or HTTP messages will be used for communication with the Apache Tomcat web server. You need to know the port on which HTTPS or HTTP messages are sent and received. By default, 80 is the default port for HTTP and 743 is the default port for HTTPS.

Alcatel-Lucent recommends you make a note of the type of messages you are using, the port used, and the IP address of the Apache Tomcat web server. These items are needed for other VitalQIP component installations.

UNIX: Minimum disk space

You must have a minimum of 160 MB of disk space allocated for VitalQIP under */opt* or within the file system you choose to use.

Note: If there is not enough temporary disk space available, an error message will appear stating there is not enough disk space. Try executing:

- For Linux:

./qip72setupLinuxgccr<#>.bin -is:tempdir *<temporary directory>*

- For Solaris:

./qip72setupSolarisr<#>.bin -is:tempdir *<temporary directory>*

- For Windows:

qip72setupwin32r<#>.bin -is:tempdir *<temporary directory>*

For all executables, the **#** denotes the repackaging number of the executable.

Access to xterm or telnet

Ensure that you have access to xterm or telnet. Check this by running the following:

- For xterm:

xterm

- For telnet:

telnet

Linux: Install JRE

On Linux, ensure jre1.4.2_05 or higher is installed before installing VitalQIP. The software can be downloaded from Sun's website:

www.sun.com

UNIX: Set database environment variables

Prior to installing VitalQIP, the database environment variables need to be set for the installation to run correctly. To do so, have your Oracle database administrator set these environment variables:

- **ORACLE_HOME** - Set to the full path of the Oracle home directory
- **ORACLE_SID** - Set to the Oracle database instance created for VitalQIP
- **PATH** - Set to *$ORACLE_HOME/bin*
- **LD_LIBRARY_PATH** (Solaris and Linux only) - Set to *$ORACLE_HOME/lib:$LD_LIBRARY_PATH*

Windows: standard characters for Windows administrator login

Due to a technical limitation with InstallShield, the VitalQIP installation on Windows requires that the administrator login for Windows machines use standard characters. The installation fails if the Windows login contains non-standard characters.

Stop all scheduled moves and reclaims

If VitalQIP is being upgraded, ensure there are no scheduled moves or reclaims waiting to occur. If any moves or reclaims are scheduled, the applicable data is removed from the database, and the move or reclaim does not occur. After you have completed your upgrade, you need to reschedule your moves and reclaims.

14 Install VitalQIP enterprise server

Overview

Purpose

This chapter covers installing VitalQIP enterprise server on supported Windows and UNIX platforms.

Contents

This chapter covers these topics.

Enterprise server overview	14-2
Enterprise server pre-installation checklist	14-2
Install the VitalQIP enterprise server	14-5

Enterprise server overview

What is installed

The VitalQIP enterprise server installation installs the following:

- VitalQIP GUI
- VitalQIP Schedule Service
- VitalQIP QIP Update Service
- VitalQIP Command Line Interface
- VitalQIP DNS Update Service
- VitalQIP File Generation Service
- VitalQIP Login Service

The VitalQIP Message Service and VitalQIP SSL Tunnel Service are installed by default in this installation. If needed, the VitalQIP enterprise server installation can also initialize the database.

Upgrade from previous versions

If VitalQIP is being upgraded from a previous version, refer to Part IV: “Upgrade VitalQIP” for instructions on upgrading to VitalQIP 7.2.

Enterprise server pre-installation checklist

Purpose

Use the checklist to determine what needs to be done before beginning the installation:

Table 14-1 Enterprise server pre-installation checklist

Task	Description	Status
Determine the configuration	You need to determine how and where the components are to be installed. Also, consider if this is an upgrade or if additional components are being installed. Refer to Part I of the *Administrator Reference Manual* for more information about various configurations of VitalQIP.	

Task	Description	Status
Determine if secure socket layer (SSL) is deployed	Find out if SSL will be used in the VitalQIP deployment. If it is used, the *qipkeystore* and *vitalqip.cer* files are required to be located on the enterprise server machine. These files are created during the VitalQIP enterprise server installation and are located in the VitalQIP home directory. For general information on secure message routing, refer to the Secure Message Routes chapter in the *Administrator Reference Manual*.	
Meet pre-installation requirements	The pre-installation requirements must be met before installing VitalQIP. Read the *VitalQIP 7.2 Release Notes* to ensure your system meets the pre-installation requirements for installing VitalQIP.	
Ensure the database is installed and running	The Oracle database must be installed. Your Oracle database administrator is responsible for ensuring the Oracle database is correctly in place. The installation also requires that the database be running before you start the VitalQIP installation.	
Stop all VitalQIP-related processes	If VitalQIP was previously installed, ensure all VitalQIP-related processes are stopped before you commence installation of VitalQIP 7.2.	
Find information about the database server	The following information needs to be gathered about the database server: • The name of the database. If VitalQIP is already installed, the name of the database is the value set in the **`QIPDATASERVER`** environment variable. • The IP address of the server where the database is running. • The full path to the directory where the database is running.	
Find the IP address of the machine	Find the IP address of the machine where the VitalQIP enterprise server is being installed.	

Task	Description	Status
Find the IP address of the services	Find the address of the machines where these services are to be installed: • VitalQIP Schedule Service • VitalQIP QIP Update Service • VitalQIP DNS Update Service • VitalQIP File Generation Service • VitalQIP Login Service • VitalQIP Web Service	
Gather information about the Apache Tomcat web server	Gather the following information about the Apache Tomcat web server: • Find out if your web server is using standard HTTP or HTTPS messaging • Find the port your web server is using • Find the IP address of the machine where the web server is running	

Install the VitalQIP enterprise server

Purpose

This section explains how to install the VitalQIP enterprise server on supported platforms. If you have problems installing the software, contact technical support.

Before you begin

- Devices must be created and sized before you install VitalQIP. Refer to "Set up Oracle" (p. 12-4) for more information.
- If you wish to install the VitalQIP remote server on the same machine as the VitalQIP enterprise server, you should select Remote Server at the same time as you select the Server Package. Additionally, you should select the Web Client to access the web client on the VitalQIP enterprise server. Note that these are default selections when you launch the VitalQIP installation program.
- If the Oracle database and VitalQIP enterprise server are on different boxes, the Oracle client needs to be installed on the enterprise server and the ORACLE_HOME environment variable on the enterprise server needs to point to the Oracle client directory.
- If your network includes DHCP, DNS, and/or Bootp servers that are running exclusively on the VitalQIP enterprise server, the VitalQIP remote service package must also be installed.
- If an Apache Tomcat web server is running, the daemon is not stopped. You must manually stop the web server.

Windows

- Ensure you are logged into your system as a user with administrative privileges.
- Check the Event Viewer and ensure your database is running.
- Ensure you exit all programs you are currently running.

Unix

- Ensure you are logged into your system as the root user.
- Ensure your database is running.
- Alcatel-Lucent recommends that Oracle environment variables be sourced. This eliminates the need to enter Oracle-related values during the installation.

Procedure

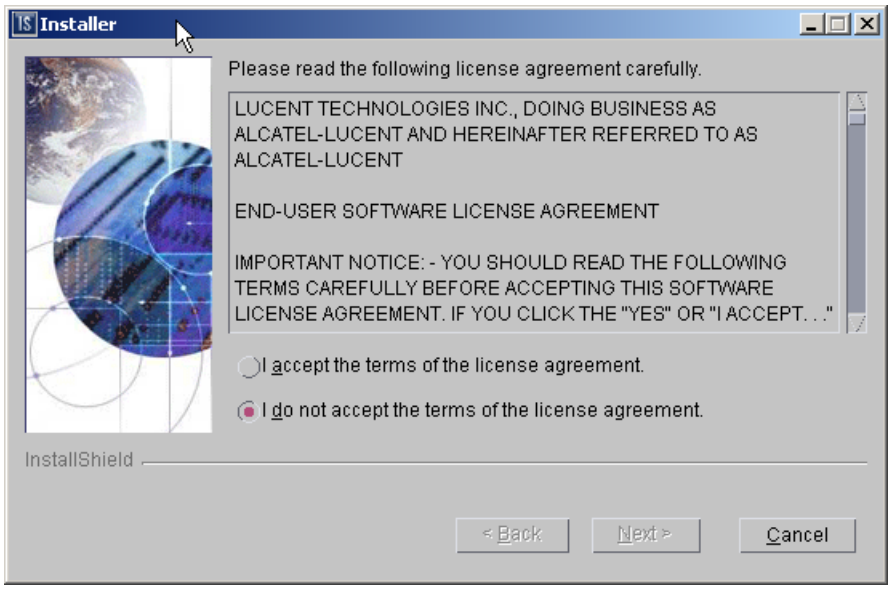
To install the VitalQIP enterprise server, follow these steps:

1 Choose one of the following:

If you want to…	Then…
Install on a Linux platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72setupLinuxgccr<#>.bin`**
Install on a Solaris platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72setupSolarisr<#>.bin`**
Install on a Windows platform	1. Open a command window and change directory to the installation file location. This is the location you selected when you downloaded the Windows installation executable from the Alcatel-Lucent Electronic Download site (*c:\temp* is the default location). 2. Enter: **`qip72setupwin32r<#>.exe`**

For all executables, the **#** denotes the repackaging number of the executable.

2 The Software License Agreement screen opens.

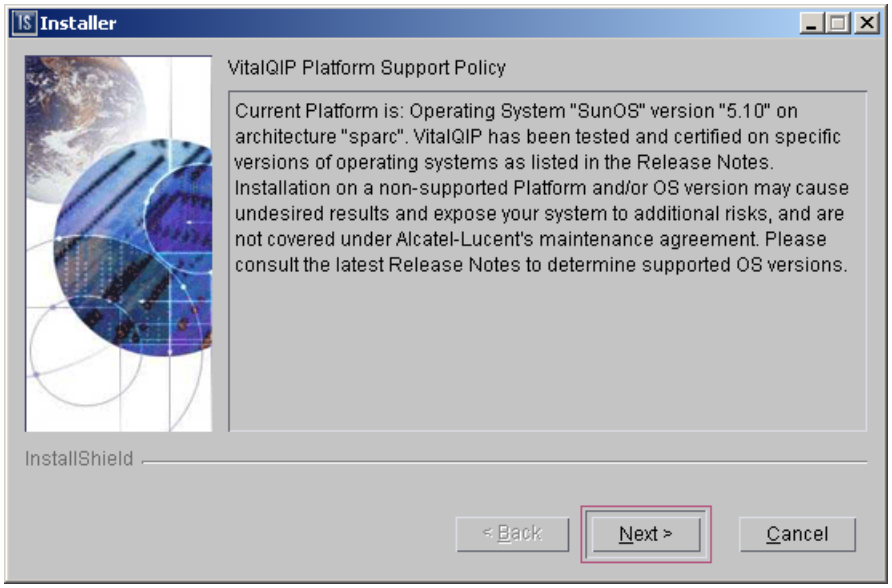


Read the software license agreement and:

- Select **I accept the terms of the license agreement.** to accept the license agreement.
- Select **I do not accept the terms of the license agreement.** if you do not accept the license agreement. The installation is canceled.

3 Click **Next**. The installation checks that the operating system is a supported version. If the operating system is supported, the Welcome screen opens.

If it is not a supported operating system, a screen opens with the Platform Support Policy.



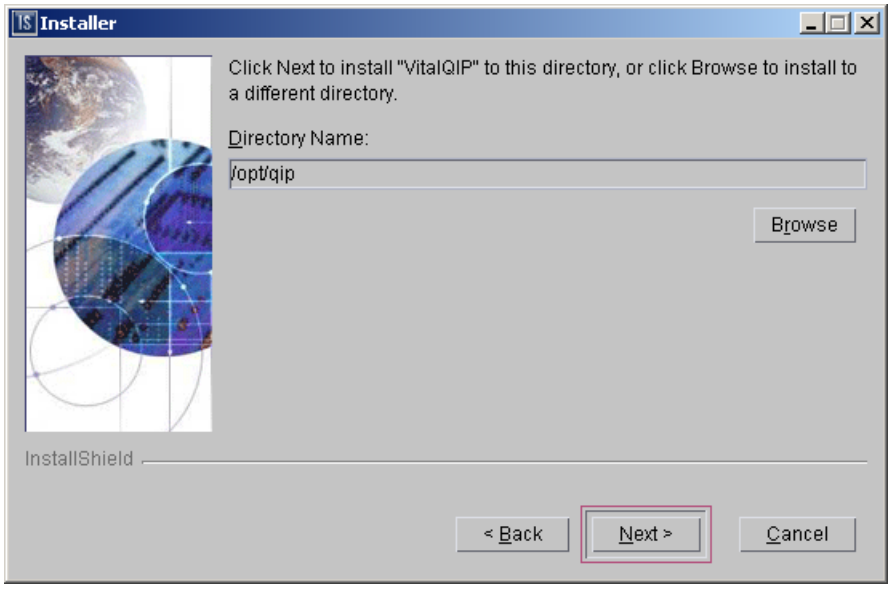
Click **Cancel** to exit the installation and upgrade the operating system to one of the supported versions listed in the *VitalQIP 7.2 Release Notes* before you install VitalQIP.

4 Click **Next**. Choose one of the following.

If you want to…	Then…
Install enterprise server on a UNIX platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, a screen opens showing the VitalQIP-related daemons that are running. 1. Choose one of the following options: • Click **yes, kill processes automatically** and have the installation stop the processes. • Click **no, they will be killed manually** and stop the processes manually. 2. Click **Next**.
Install enterprise server on a Windows platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, the processes are stopped by the installation.

Important! If an Apache Tomcat web server is running, the daemon is not stopped. The web server needs to be stopped manually.

5 The VitalQIP Home Directory screen opens.



The default destination directory for the VitalQIP software is shown. By default, the directory is */opt/qip* on UNIX and *c:\qip* on Windows. If a version of VitalQIP exists on the machine, the installation reads the **`QIPHOME`** environment variable and displays the value.

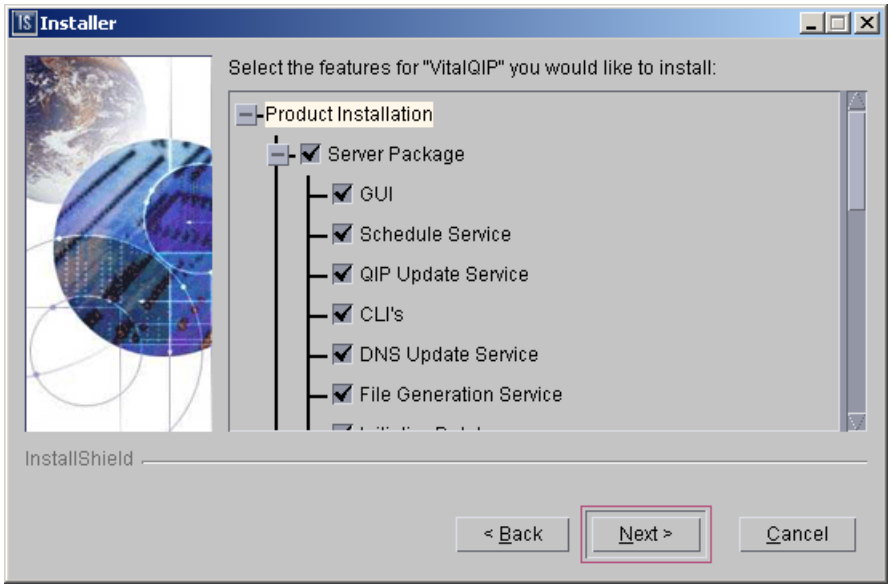
If necessary, type the destination directory directly in the **Directory Name** field. Alternatively:

a. Click **Browse**.

b. Find the directory and select the directory.

c. Click **Open**. The destination directory is shown in the field.

6 Click **Next**. After a few moments, the Features screen opens.



To install the VitalQIP enterprise server only, uncheck all components except the **Server Package** and its sub-components.

> **Important!** If any VitalQIP component is already installed, "`installed`" is shown next to it. If you want to keep that component, do ***not*** uncheck the checkbox: InstallShield will reinstall that component at the same time that it installs the components that you are now selecting.

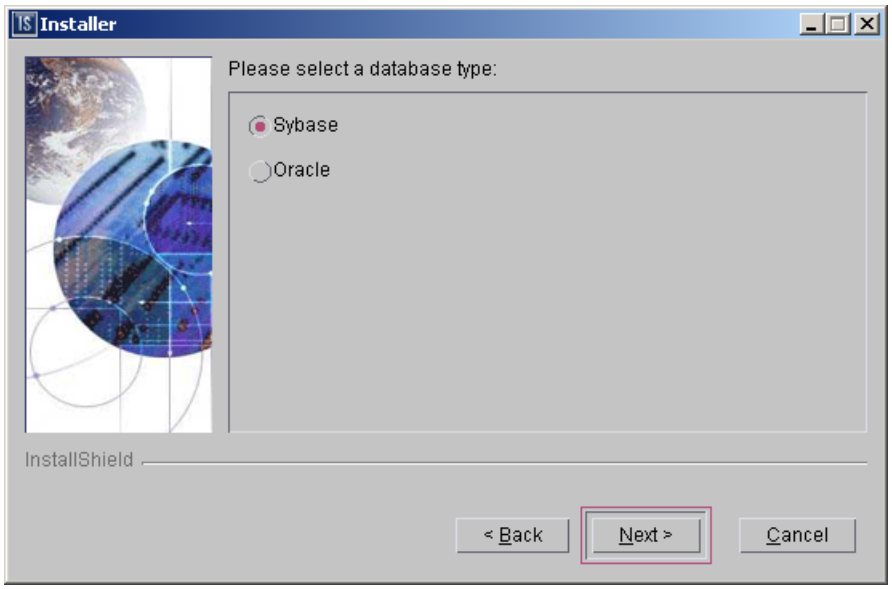
The following table describes the sub-components of the Server package. After reading the table, ensure **Server Package** is checked. Check or uncheck the sub-components you want to install.

Table 14-2 Enterprise server installation sub-components

Sub-component	Description
GUI	Installs the user interface of VitalQIP.
Schedule Service	Handles all scheduled events managed by VitalQIP enterprise server: • Scheduled moves • Scheduled reclaims • Auto updates of DNS, Bootp table, and NIS/Local operating system files This service is required if you are installing the enterprise server.
QIP Update Service	Handles updates of DHCP addresses to the VitalQIP enterprise server. This service is required if you are installing the enterprise server.
CLI's	Installs the Command Line Interface.
DNS Update Service	Handles updates to DNS from DHCP servers, manages dynamic updates between DNS servers, and optionally sends DNS updates from VitalQIP clients.
File Generation Service	Generates, optionally encrypts, and compresses remote service configuration files in order to transfer configuration files to remote servers.
Initialize Database	Initializes the VitalQIP database. **Important!** If you are re-installing the enterprise server, do ***not*** select this option. If the database is re-initialized, any data in the database is deleted.
Login Service	Handles VitalQIP database logins. This service is required to connect to the VitalQIP database.

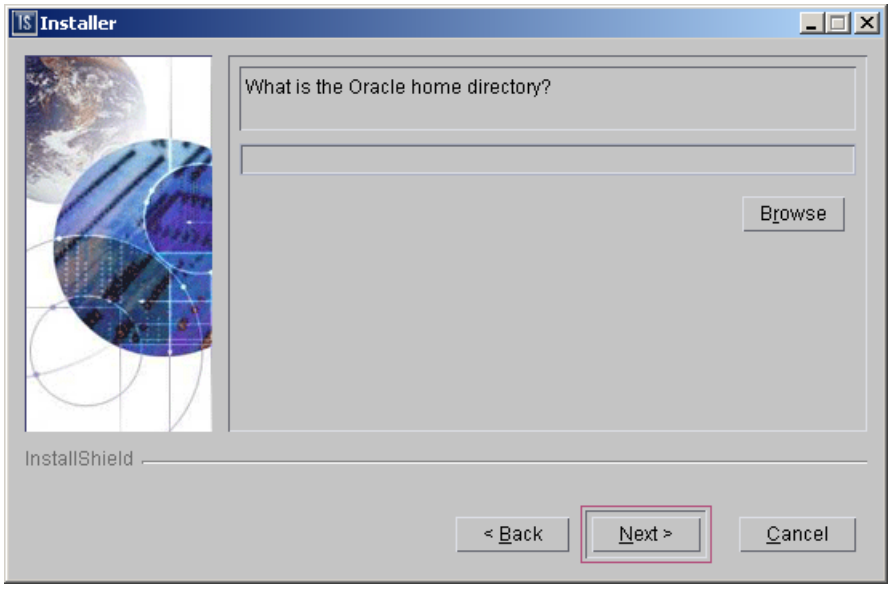
7 Click **Next**. The installation shows an information message. Read the message and follow any instructions that are shown in the message.

8 Click **Next**. The Database Type screen opens.



Select the **Oracle** database type.

9 Click **Next**. The Database Home Directory screen opens.



If necessary, type the destination directory directly in the **What is the Oracle home directory?** field. Alternatively:

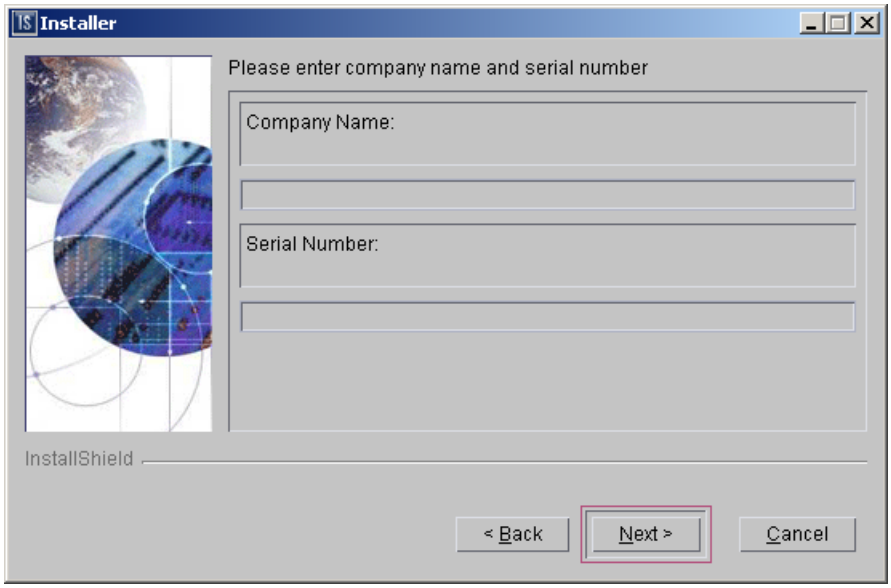
a. Click **Browse**.

b. Navigate to where the directory is located and select the directory.

c. Click **Open**. The destination directory is shown in the field.

Note: If the Oracle server database is on a different box than the VitalQIP enterprise server, the location of the Oracle client on the enterprise server should be entered in this screen.

10 Click **Next**. The Company Name & Serial Number screen opens.

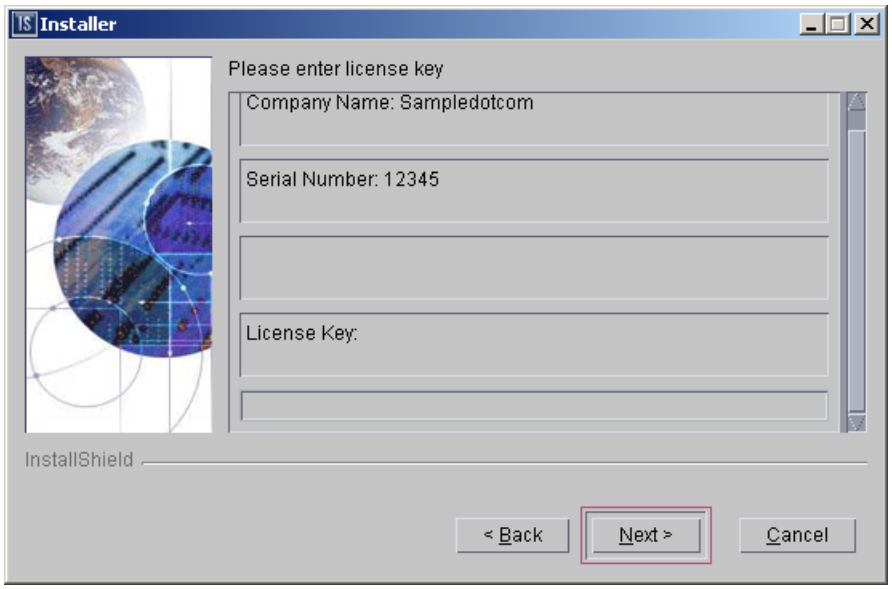


Do the following:

a. In the **Company Name** field, enter the name of your company.

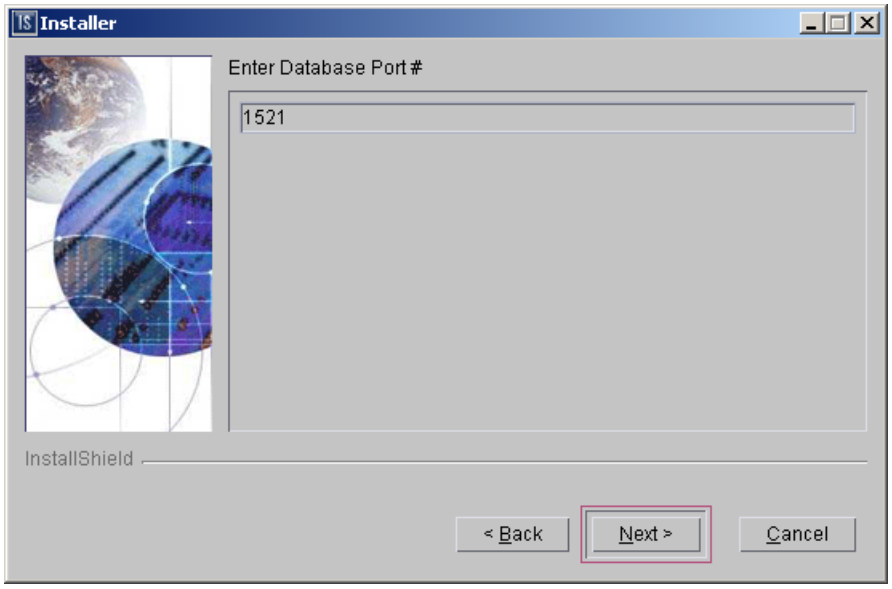
b. In the **Serial Number** field, enter the serial number supplied by Alcatel-Lucent.

11 Click **Next**. The License Key screen opens.



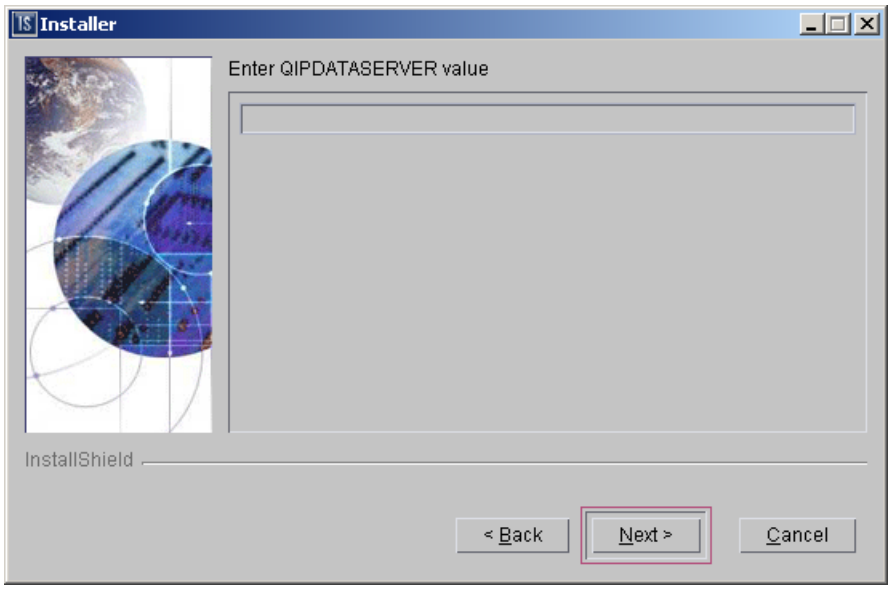
In the **License Key** field, enter the license key for VitalQIP supplied by Alcatel-Lucent.

12 Click **Next**. The Database Port Number screen opens.



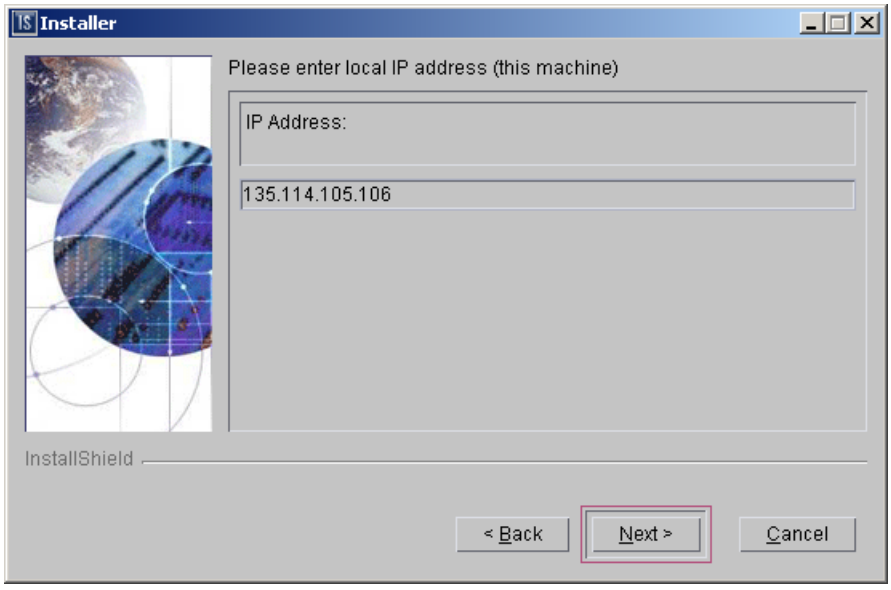
By default, the port number is 1521 for Oracle. In the **Enter Database Port #** field, change the port number for the database if necessary.

13 Click **Next**. The QIPDATASERVER Value screen opens.



This defines the value of the **`QIPDATASERVER`** environment variable. The **`QIPDATASERVER`** value is the name of the database server. In the **Enter QIPDATASERVER value** field, enter the database server name if necessary.

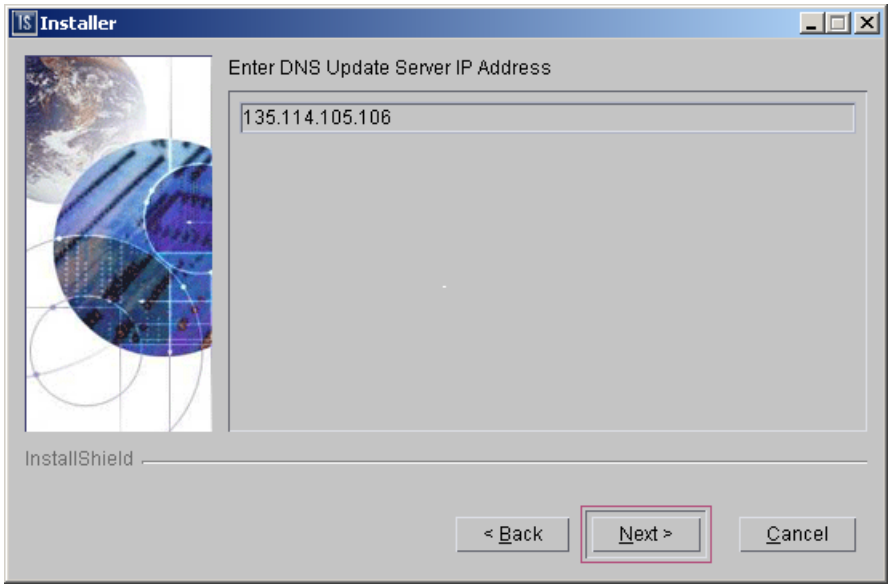
14 Click **Next**. The Local IP Address screen opens.



The IP address of the local machine is displayed. In the **IP Address** field, enter the IP address of the local machine on which VitalQIP is being installed if needed.

DNS Update Service only

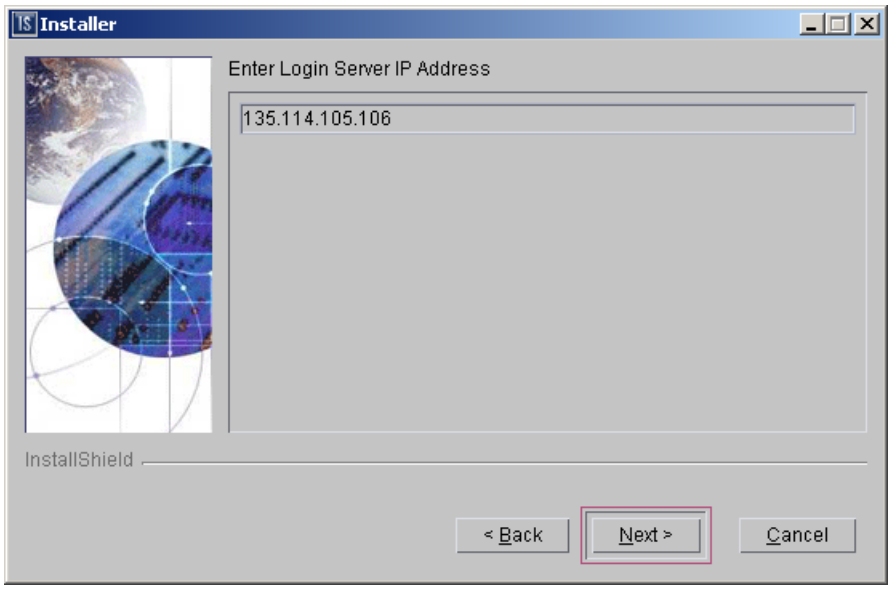
15 Click **Next**. If you selected DNS Update Service in Step 6, the DNS Update Server IP Address screen opens. Skip this step if you did not select DNS Update Service.



In the **Enter DNS Update Server IP Address** field, change the IP address for the DNS Update Server if needed. The value is stored in the *qip.pcy* file

Login Service only

16 Click **Next**. If you selected Login Service in Step 6, the Login Server IP Address screen opens. Skip this step if you did not select Login Service.



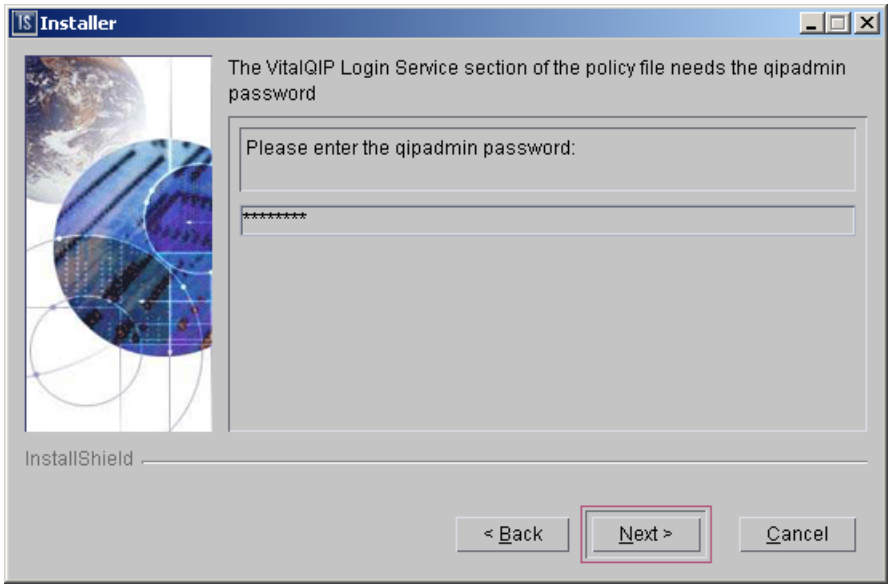
In the **Enter Login Server IP Address** field, change the IP address for the Login Server if needed. The value is stored in the *qip.pcy* file.

17 Click **Next**. The qipman Password screen opens.

By default, the password for qipman is **`qipman`**. You should use the default and change it later if you wish. The qipman password is stored in the Global policy section of the *qip.pcy* file.

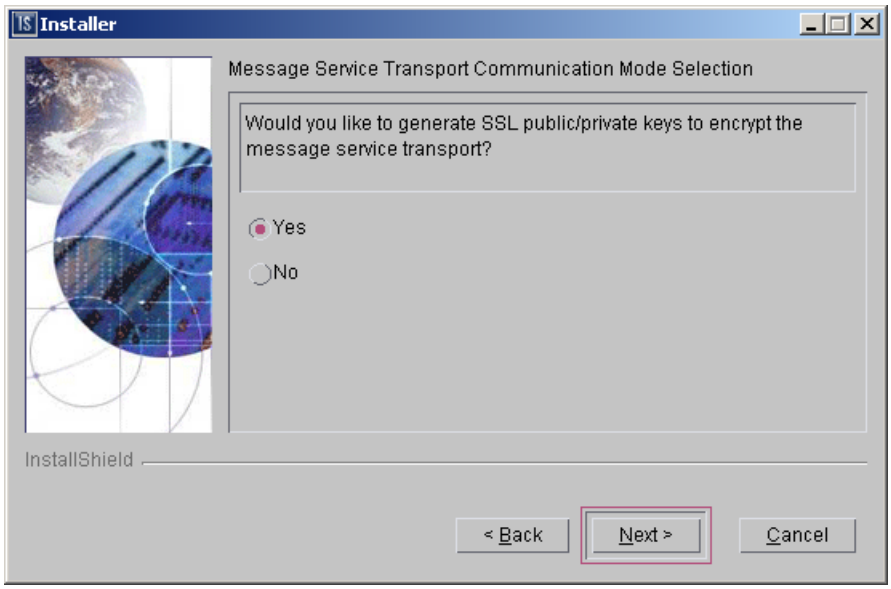
Login Service only

18 Click **Next**. If you selected Login Service in Step 6, the qipadmin Password screen opens. Skip this step if you did not select Login Service.



By default, the password for qipadmin is **`qipadmin`**. You should use the default and change it later if you wish. The qipadman password is stored in the VitalQIP Login Service section of the *qip.pcy* file.

19 Click **Next**. The Generate SSL Public/Private Keys screen opens.

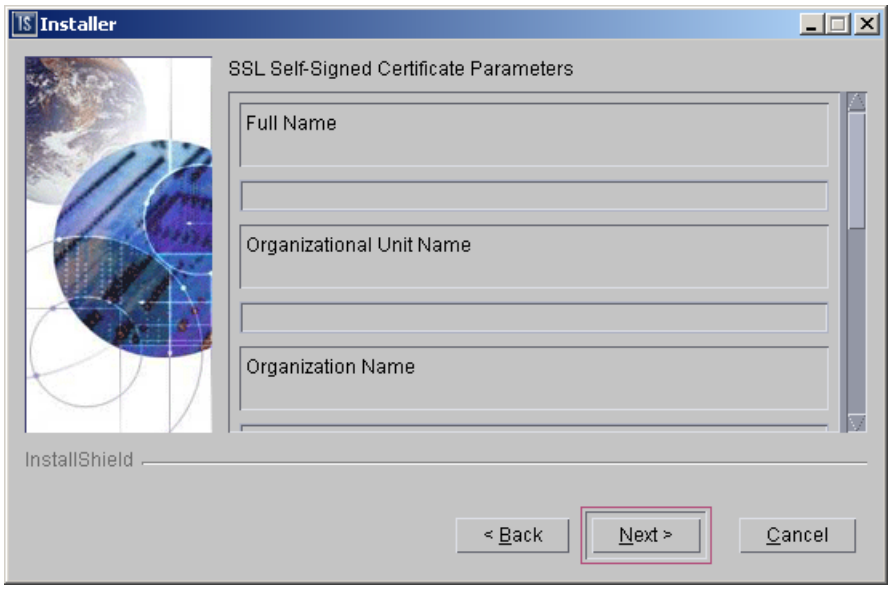


Select one of the following:

- **Yes** if you are planning on using the secure socket layer
- **No** if you are not using the secure socket layer

Use SSL

20 Click **Next**. If you selected Yes in Step 19, the SSL Self Signed Certificate Parameters screen opens. Skip this step if you selected No.



Note: You need to scroll down to view the remaining fields in the screen.

Review the following table and enter the values in the fields.

Table 14-3 SSL Self Signed Certificate Parameters fields

Field	Description
Full Name	Your full name.
Organizational Unit Name	The name of the organization unit.
Organization Name	The name of the organization.
City or Locality	The city or locality where your organization is located.
State or Province	The state or province where your organization is located.
Two-Letter Country Code	The two letter country code your organization is located in. For a list of country codes, refer to **www.digicert.com/ssl-certificate-country-codes.htm**

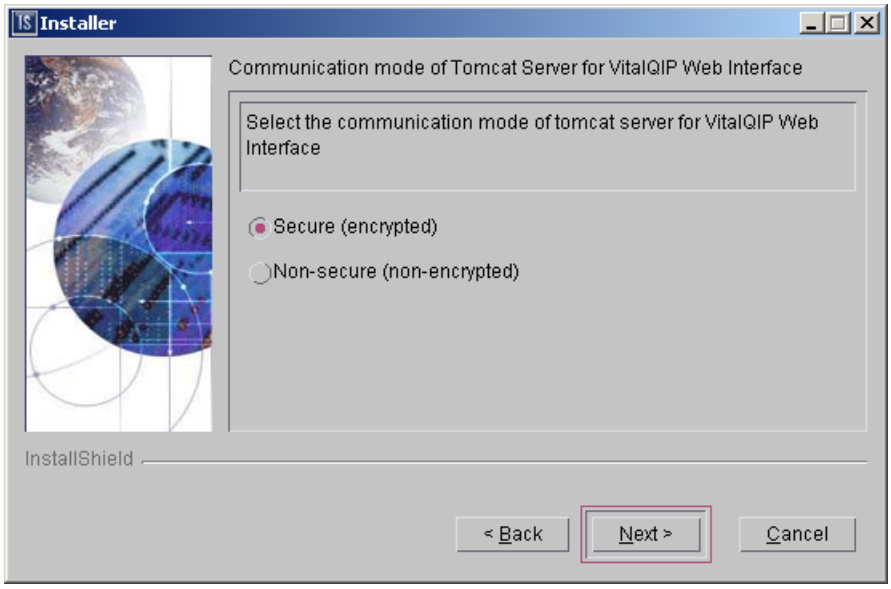
Field	Description
Private Key Encryption Password	***Required***. The private key password. Enter a password that adheres to the following rules (and be sure to make a note of it since you will need it again when installing other VitalQIP components): • Can be any length except null • All characters must match the pattern: [a-zA-Z0-9~!@#$%^&*()l_+={}?] • Cannot contain the space character

If you did not enter a password in the Private Key Encryption Password, a message opens after you click **Next**:

```
SSL Private Key Encryption Password must be set.
```

Click **Back** and enter a password in the **Private Key Encryption Password** field. Once a password is entered, continue with the installation.

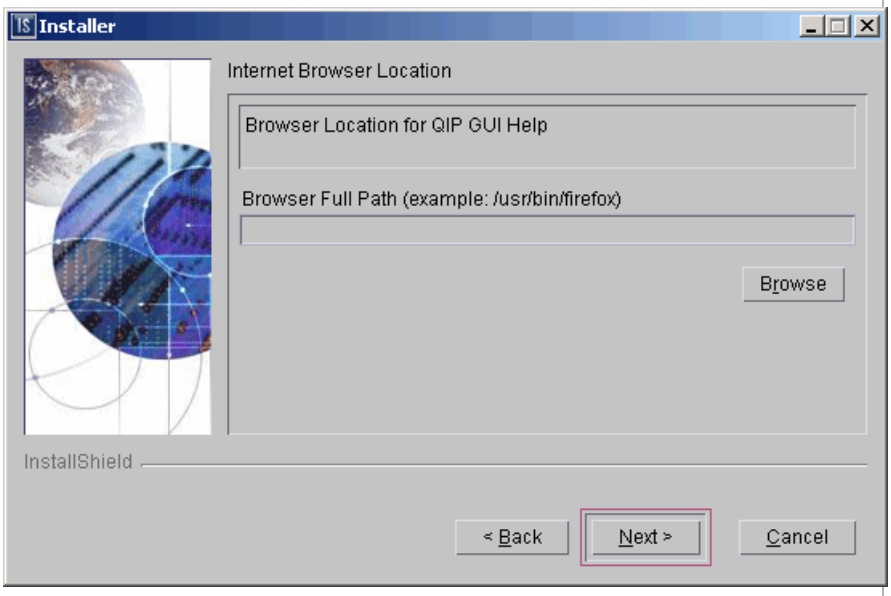
21 Click **Next**. The Tomcat Server Communication Mode opens.



The installation needs to know what mode of communication the Apache Tomcat web server will use. This information is written to the VitalQIP Service Layer section of the *qip.pcy* file. Select:

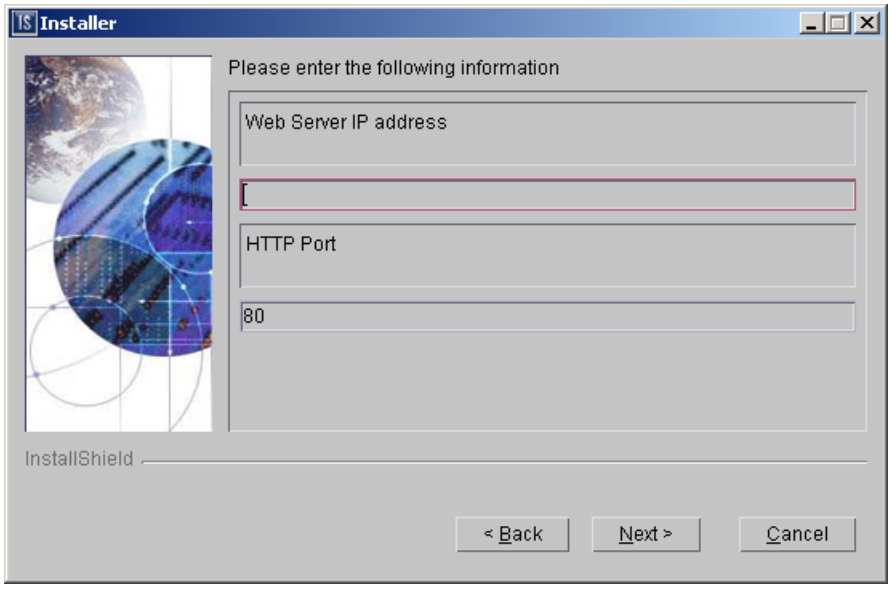
- **Secure (encrypted)** - uses HTTPS to send encrypted messages to and from the server
- **Non-secure (not-encrypted)** - messages to and from the server are not encrypted

22 Choose one of the following..

If you want to…	Then…
Select a browser location on a UNIX platform	1. Click **Next**. **Result:** The Internet Browser Location screen opens.  To access the VitalQIP GUI help screens on a UNIX server, the installation program needs to locate a browser such as Mozilla Firefox on the enterprise server. 2. Enter the full path to the browser, or click **Browse** and select a file in the Select a file dialog box. 3. Click **Next**. **Result:** If the browser is found, the Tomcat Server Information screen opens (Step 23). If no browser path was entered or it was invalid, an information window opens with the message: `The "Browser Full Path" was either not entered or is not a valid file full path. Please select "Back" and correct. If you wish to proceed without a valid entry, note that help files will not be available unless the QIPHELP environment variable is set to the full path of a valid internet browser in the QIP user's environment.` Click **Back** to enter the correct browser path, or click **Next** to continue.

If you want to...	Then...
Continue to the Tomcat Server Information screen on a Windows platform	Click **Next**. **Result:** The Tomcat Server Information screen opens (Step 23).

23 The Tomcat Server Information screen opens.



Note: Either **HTTP Port** or **HTTPS Port** field is displayed in this screen. The field that is displayed is determined by your selection in Step 21.

Review the following table and fill in the fields.

Table 14-4 Tomcat Server Information fields

Field	Description
Web Server IP address	The IP address where the Apache Tomcat web server resides.
HTTP Port	***Displayed when Non-secure (not-encrypted) is selected in Step 21.*** The port used by the web client to connect to the Apache Tomcat web server. By default, the port is 80.
HTTPS Port	***Displayed when Secure (encrypted) is selected in Step 21.*** The SSL port used by the web client to connect to the Apache Tomcat web server. By default, the port is 743.

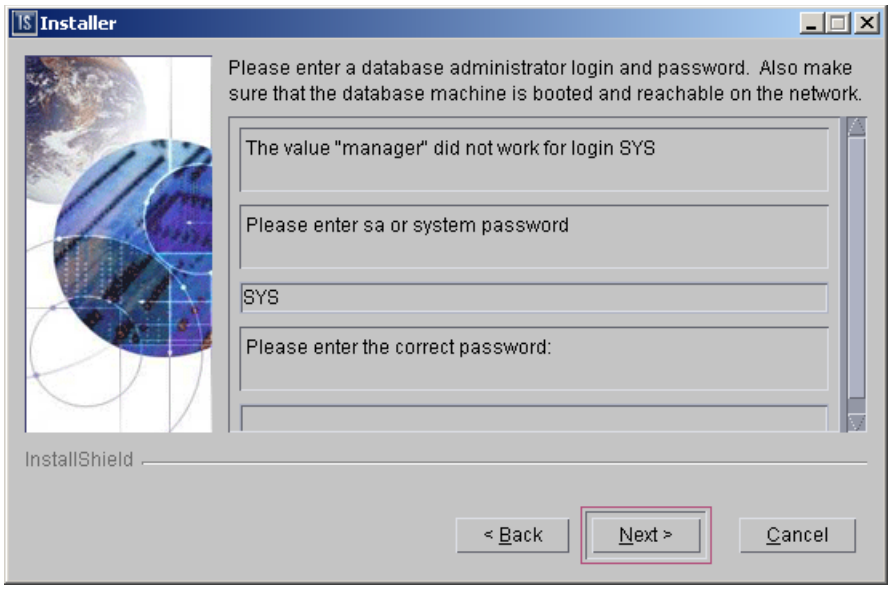
24 Click **Next**. After a few moments, the Summary screen opens. Examine the features to be installed. If changes are necessary, click **Back** to make changes to the installation. If everything looks correct, click **Next**.

The installer commences extracting files and installing VitalQIP. After a few minutes, the Successful Install screen opens.

25 Click **Next** to continue the VitalQIP Wizard.

Cannot connect to the database

26 If the database cannot be reached, a screen opens prompting for the SYS password for Oracle. Enter the SYS password and click **Next**. Skip this step if this screen does not open.



Ensure the database is started or enter the correct database administrator ID or password. If the database is not running, click **Back** to the previous screen. Once the database is started, proceed with the installation.

27 A screen opens with the following message:

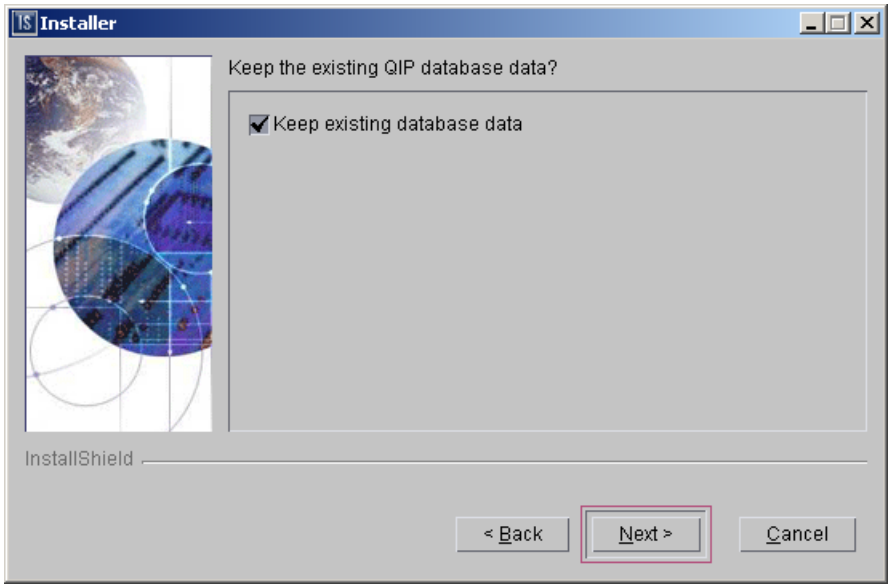
```
Tab_storage.conf contains initial and next storage parameters for
several large tables. If you want to modify this file, modify it
now. Also uncomment the OracleUpdateStatistics lines of the
```

```
qipinst.config file to have qip-import automatically analyze the
QIP tables. Click Next to skip or after performing the optional
steps above.
```

Read the message and make your configuration changes as needed. Information on the settings for *tab_storage.conf* is located in "Calculate and customize initial/extent specifications" (p. 12-6).

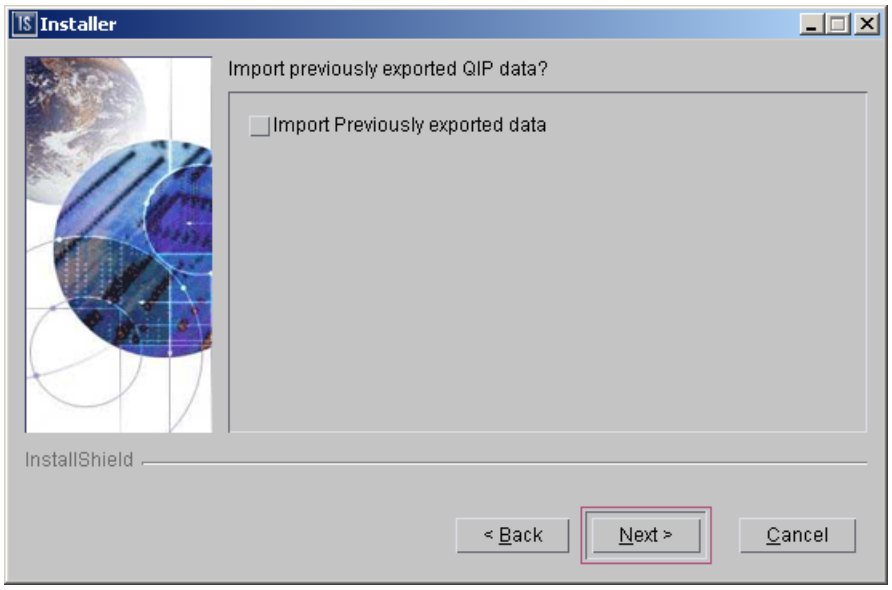
Existing database detected

28 If an existing VitalQIP database is detected, The Keep Existing QIP Data screen opens. Go to the next step if an existing VitalQIP database is not detected.



If you want to keep existing VitalQIP data, select **Keep existing database data**.

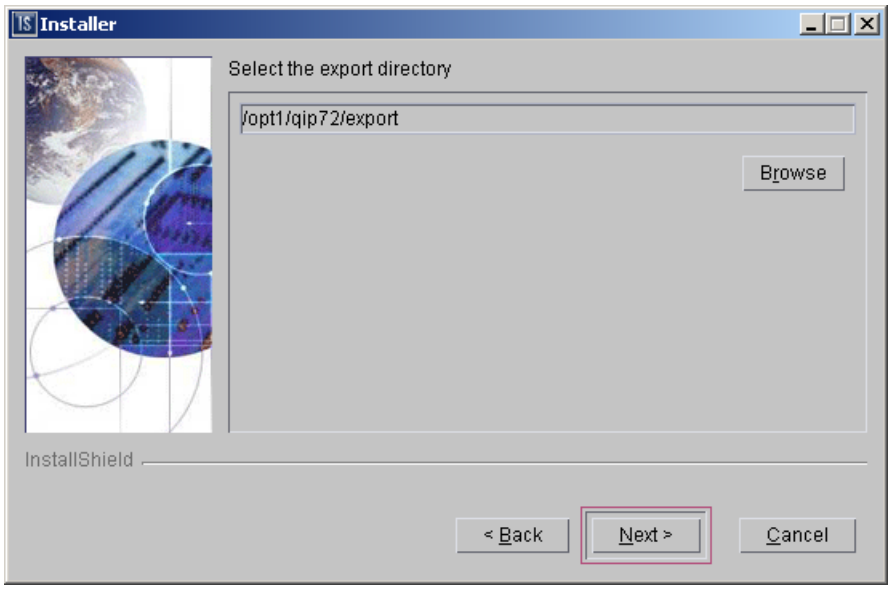
29 Click **Next**. The Import Exported Data screen opens if **Keep existing database data** is not selected or if no QIP Devices exist for Sybase Database.



If you want to import exported data, check **Import Previously exported data**.

Import exported data

30 Click **Next**. If **Import previously exported database** was selected or **Keep existing database data** was selected, the Export Data screen opens.



The directory where the data will be exported is shown. The default is */opt/qip/export* on UNIX and *%QIPHOME%\data* on Windows. If necessary, type the destination directory directly in the **Select Export Directory** field. In the case where **Import previously exported database** was selected, type the directory where the exported data resides. Alternatively, you can:

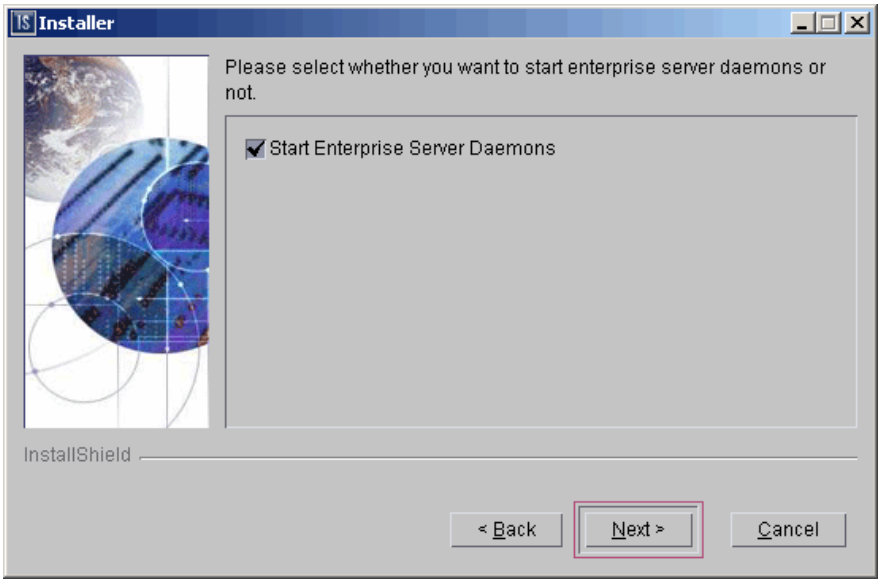
a. Click **Browse**, find the directory and select the directory.

b. Click **Open**. The destination directory is shown in the field.

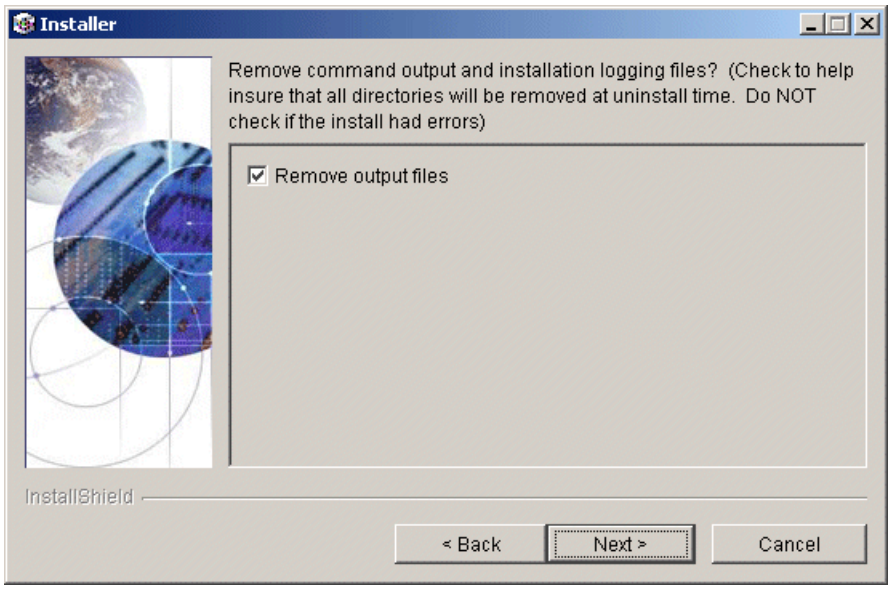
31 Click **Next**.

Result: The database is initialized.

32 Choose one of the following.

If you want to…	Then…
Start enterprise daemons on a UNIX platform	1. Click **Next**. **Result:** The Start Enterprise Daemons screen opens.  The installation gives you the option to start the enterprise server daemons. Follow these steps if you want to start the enterprise server daemons: 2. Select **Start Enterprise Server Daemons** and click **Next**. **Result:** A screen opens showing the daemons that are to be started. Depending on how many other VitalQIP components are installed on your system, additional Start Daemon screens can open. Follow the directions on the screen to complete the installation. 3. Click **Next**.
Remove output files	Click **Next**. **Result:** The Remove Output Files screen opens (Step 33).

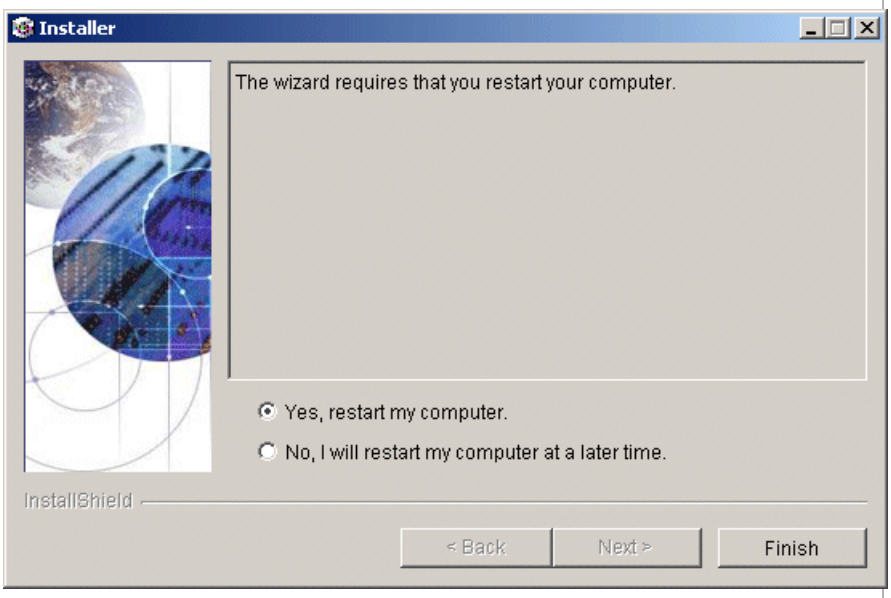
33 The Remove Output Files screen opens.



During the installation, VitalQIP produces output files that are no longer needed for the installation. The installation files can be kept or removed from your system. It is recommended that you keep the files if the install had errors. If you want to keep the files, uncheck **Remove output files**.

34 Choose one of the following..

If you want to…	Then…
Complete the installation on a UNIX platform	1. Click **Next**. **Result:** The Installation complete screen opens. 2. Click **Finish**.

If you want to…	Then…
Complete the installation on a Windows platform	1. Click **Next**. **Result:** The Installation complete screen opens.  2. Before you can begin using VitalQIP, you must reboot your computer. Select **Yes** to restart your computer. If you would rather work on other tasks before configuring VitalQIP, click **No**. 3. Click **Finish**.

35 After the installation, Oracle needs additional configuration, as described below.

END OF STEPS

Oracle only: set the NSL_LANG environment variable

After the installation of the VitalQIP enterprise server, set the **`NLS_LANG`** environment variable if you are configuring your VitalQIP Oracle database server to use a language other than American English. **`NLS_LANG`** ensures that data is stored in Oracle using the correct language. The **`NLS_LANG`** also ensures that the **`qip-import`** and **`qip-export`** commands import and export VitalQIP data in the correct language to and from the database.

The **`NLS_LANG`** environment variable sets the language, territory, and the database character set for Oracle. The **`NLS_LANG`** is set in the *$QIPHOME/shrc* or *$QIPHOME/cshrc* environment file. By default, this environment variable is set to **`AMERICAN_AMERICA.AL32UTF8`**. The format for this variable is:

NLS_LANG=<*LANGUAGE_TERRITORY*>.<*CHARACTERSET*>

Where:

- LANGUAGE specifies the language used for Oracle messages and day names and month names.
- TERRITORY specifies monetary and numeric formats.
- CHARACTERSET controls the character set used by the client application. Set this to **UTF8** or **AL32UTF8** for a unicode application.

Refer to the Oracle documentation *NLS Considerations in Import/Export* (DOC ID 227332.1) and *NLS_LANG Explained* (DOC ID 158577.1) for more information.

The following are examples of non-English language settings:

- Korean:

```
NLS_LANG=KOREAN_KOREA.AL32UTF8
```

- French:

```
NLS_LANG=FRENCH_FRANCE.AL32UTF8
```

For more examples, refer to Oracle documentation *The correct NLS_LANG in a Windows Environment* (DOC ID 179133.1) and *The correct NLS_LANG setting in UNIX Environments* (DOC ID 264157.

15 Install VitalQIP remote server

Overview

Purpose

This chapter covers installing VitalQIP remote server on supported platforms. To increase the usability of this chapter, portions of the installation steps are labeled. If a label does not apply to a particular installation situation, skip to the next labeled section.

Contents

This chapter covers these topics.

Remote server installation overview	15-2
Remote server pre-installation checklist	15-3
Install the VitalQIP remote server	15-5
Install the VitalQIP remote server as a secondary server to a non-managed DNS server	15-22

Remote server installation overview

What is installed

The VitalQIP remote server installation installs the following:

- Lucent DHCP Server
- Lucent DNS
- Microsoft DHCP Support (Windows only)
- Microsoft DNS Support (Windows only)
- VitalQIP Remote Service
- VitalQIP Message Service

Install the remote server on separate machines

If your network includes DHCP, DNS, and/or Bootp servers that are physically separate from the VitalQIP enterprise server, the VitalQIP remote service package must be installed on these servers. If these network services are running exclusively on the VitalQIP enterprise server, the VitalQIP remote service package must also be installed.

> **Note:** On Windows only, Alcatel-Lucent recommends that you define all servers in *\windows\system32\drivers\etc\hosts*. If the servers are not defined in this file, you may receive a "connect" or "gethostbyname" error when you attempt to generate your configuration files.

Secondary server to non-managed DNS server

The VitalQIP remote server can be installed as secondary server to a non-managed DNS server (a DNS server that is not managed by VitalQIP). Refer to "Install the VitalQIP remote server as a secondary server to a non-managed DNS server" (p. 15-22) for information on how to set up the VitalQIP remote server as a secondary server to a non-managed DNS server.

Failover configuration

In a failover configuration where the secondary is currently active, the primary DHCP server should not be started until ***after*** a push has been performed.

Upgrade from previous versions

If VitalQIP is being upgraded from a previous version, refer to Part IV: "Upgrade VitalQIP" for instructions on upgrading to VitalQIP 7.2.

Remote server pre-installation checklist

Purpose

Use the following checklist to determine what needs to be done before beginning the remote server installation:

Table 15-1 Remote server checklist

Task	Description	Status
Determine the configuration	Determine how and where the components are to be installed. Additionally, consider if this is an upgrade and whether additional components are being installed. Refer to Part I of the *Administrator Reference Manual* for more information on configurations.	
Determine if SSL is deployed	Find out if SSL will be used in the VitalQIP deployment. If it is being used, the *qipkeystore* and *vitalqip.cer* files are required to be located on the remote server machine as well. These files are created during the VitalQIP enterprise server installation and can be copied from their location in the VitalQIP home directory to the same location on the remote server. The private key password also needs to be obtained. For more information on setting up secure message routes with SSL, refer to the Secure Message Routes chapter in the *Administrator Reference Manual*.	
Meet pre-installation requirements	The pre-installation requirements must be met before installing VitalQIP. Check the *VitalQIP 7.2 Release Notes* to ensure your system meets the pre-installation requirements for installing VitalQIP.	
MS DHCP or MS DNS only: Install and configure Perl	If you are using Microsoft DHCP or Microsoft DNS, Perl must be installed before beginning the VitalQIP installation. Alcatel-Lucent recommends that you install a full version on Perl 5.6 or higher, including supporting libraries.	
Stop all VitalQIP-related processes	If VitalQIP was previously installed, ensure all VitalQIP-related processes are stopped before you commence installation of VitalQIP 7.2.	

Task	Description	Status
Find database information	Find the name of the database. If VitalQIP is already installed, the name of the database is the value set in the **`QIPDATASERVER`** environment variable.	
Find IP address of machine	Find the IP address of the machine where the component is being installed.	
Find IP addresses of services	Find the address of the machine or machines where these services are to be installed: • VitalQIP QIP Update Service • VitalQIP File Generation Service	

Install the VitalQIP remote server

Purpose

This section explains how to install the VitalQIP remote server on supported platforms. If you have problems installing the software, contact technical support.

Before you begin

Windows

- Ensure you are logged into your system as a user with administrative privileges.
- Ensure you exit all programs you are currently running.

UNIX

- Log into your system as the root user. If the installation is not done as the root user the **`qping`** utility does not work. The utility must have root permission with the **`SUID`** bit set for the administrator. This is an operating system limitation.

  To work around this limitation:

  a. Log into the system as the root user:

  b. Change the mode and permissions on the **`qping`** utility to be:

```
root:sys & 4755
```

- Ensure your database is running.

Procedure

To install the VitalQIP remote server, follow these steps:

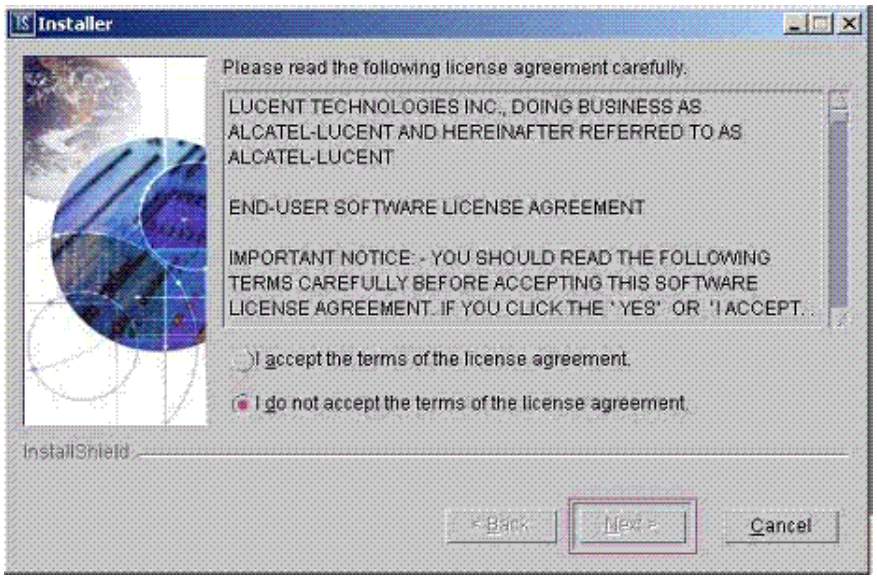
1 Choose one of the following:

If you want to…	Then…
Install on a Linux platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72setupLinuxgccr<#>.bin`**
Install on a Solaris platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72setupSolarisr<#>.bin`**

If you want to…	Then…
Install on a Windows platform	1. Open a command window and change directory to the installation file location. This is the location you selected when you downloaded the Windows installation executable from the Alcatel-Lucent Electronic Download site (*c:\temp* is the default location). 2. Enter: **`qip72setupwin32r<#>.exe`**

For all executables, the **#** denotes the repackaging number of the executable.

2 The Software License Agreement screen opens.

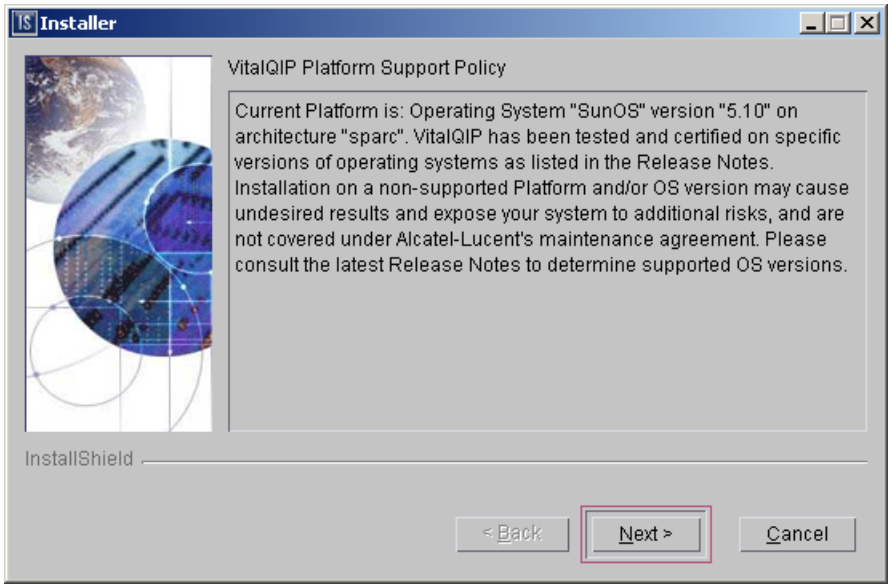


Read the software license agreement and:

- Select **I accept the terms of the license agreement** to accept the license agreement.
- Select **I do not accept the terms of the license agreement** if you do not accept the license agreement. The installation is canceled.

3 Click **Next**. The installation checks that the operating system is a supported version. If the operating system is supported, the Welcome screen opens.

If it is not a supported operating system, a screen opens with the Platform Support Policy.

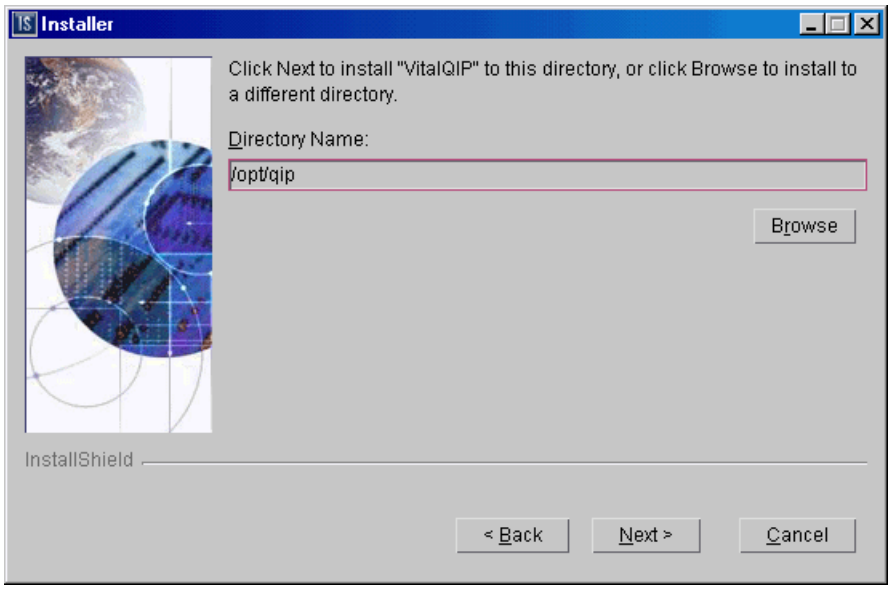


Click **Cancel** to exit the installation and upgrade the operating system to one of the supported versions listed in the *VitalQIP 7.2 Release Notes* before you install VitalQIP.

4 Click **Next**. Choose one of the following.

If you want to…	Then…
Install remote server on a UNIX platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, a screen opens showing the VitalQIP-related daemons that are running. 1. Choose one of the following options: • Click **yes, kill processes automatically** and have the installation stop the processes. • Click **no, they will be killed manually** and stop the processes manually. 2. Click **Next**.
Install remote server on a Windows platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, the processes are stopped by the installation.

5 The VitalQIP Home Directory screen opens.



The default destination directory for the VitalQIP software is shown. By default, the directory is */opt/qip* on UNIX and *c:\qip* on Windows. If a version of VitalQIP exists on the machine, the installation reads the **`QIPHOME`** environment variable and displays the value.

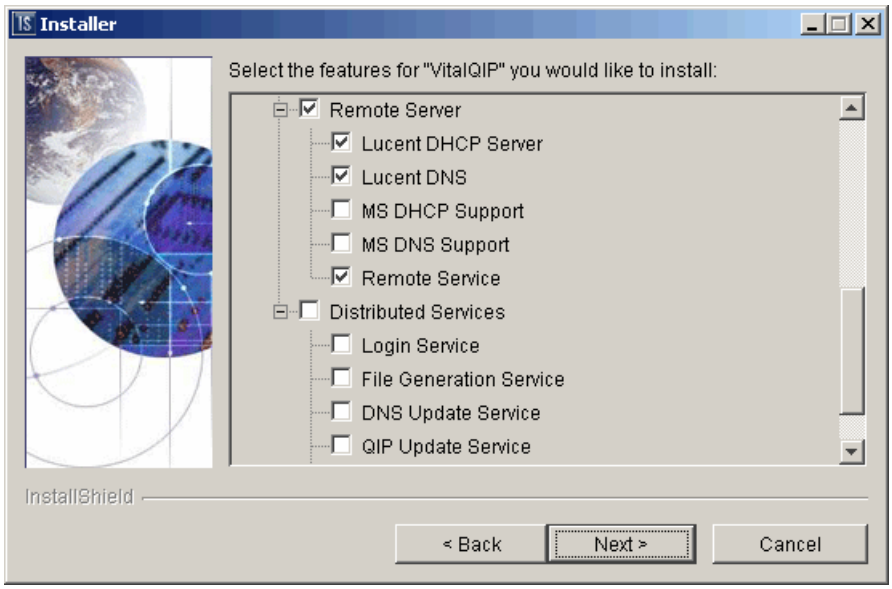
If necessary, type the destination directory directly in the **Directory Name** field. Alternatively:

a. Click **Browse**.

b. Find the directory and select the directory.

c. Click **Open**. The destination directory is shown in the field.

6 Click **Next**. In a few moments, the Features screen opens.



To install the VitalQIP Remote Server only, uncheck all components except the **Remote Server** and its sub-components.

> **Important!** If any VitalQIP component is already installed, "`installed`" is shown next to it. If you want to keep that component, do ***not*** uncheck the checkbox: InstallShield will reinstall that component at the same time that it installs the components that you are now selecting.

The following table describes the sub-components of the Remote Server package. After reading the table, ensure **Remote Server** is checked. Check or uncheck the sub-components you want to install.

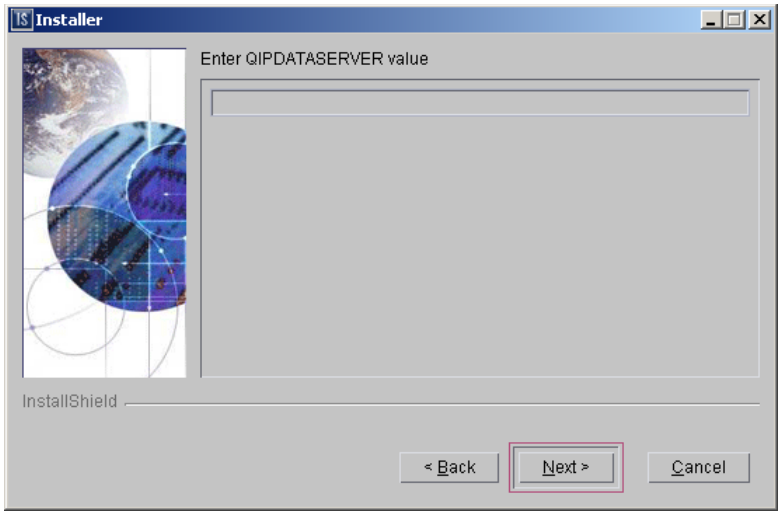
Table 15-2 Remote Server installation sub-components

Sub-component	Description
Lucent DHCP Server	Select if you want to install Lucent's DHCP services. This is the default setting.
Lucent DNS	Select if you want to install Lucent's DNS services. This is the default setting.
MS DHCP Support	***Only available when installing on Windows.*** Installs Microsoft DHCP Support.
MS DNS Support	***Only available when installing on Windows***. Installs Microsoft DNS Support.

Sub-component	Description
Remote Service	Required. Installs the Remote Service. This is the default setting.

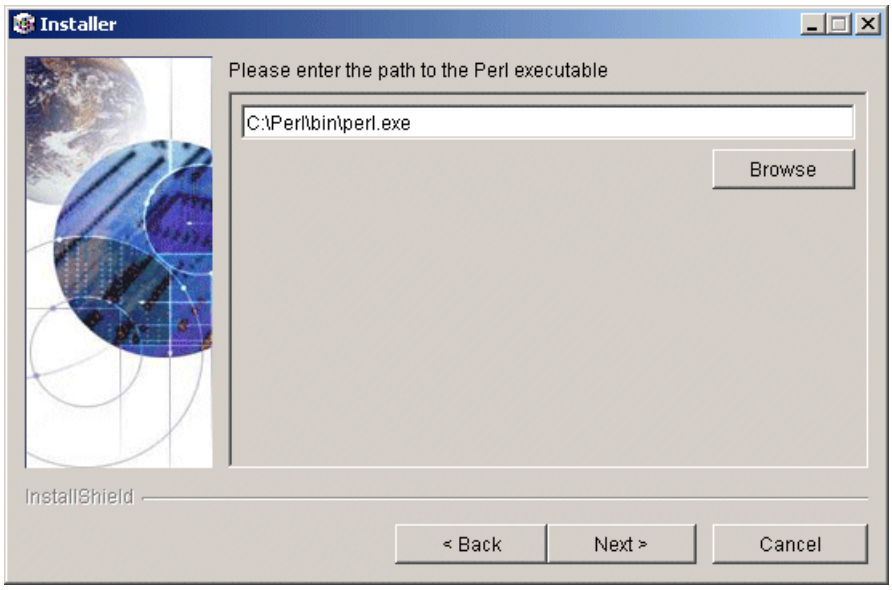
7 Click **Next**. The installation shows an information message. Read the message and follow any instructions that are shown in the message.

8 Click **Next**. The QIPDATASERVER Value screen opens.



This defines the value of the **`QIPDATASERVER`** environment variable.The **`QIPDATASERVER`** value is the name of the database server. In the **Enter QIPDATASERVER value** field, enter the database server name if necessary.

9 Click **Next**. If **MS DHCP Support** or **MS DNS Support** was selected in Step 6, the Perl Executable screen opens.

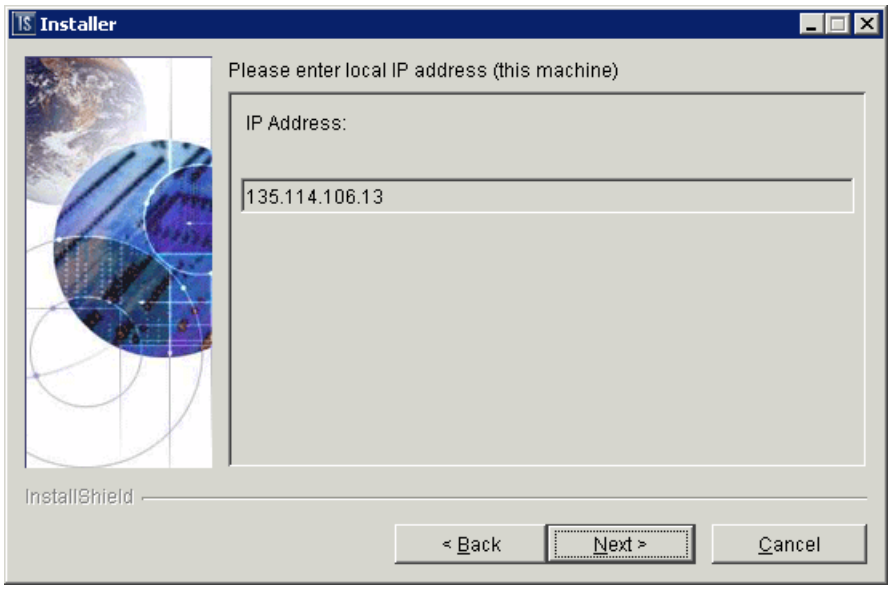


MS DHCP and MS DNS only

If **MS DHCP Support** or **MS DNS Support** was not selected, skip this section.

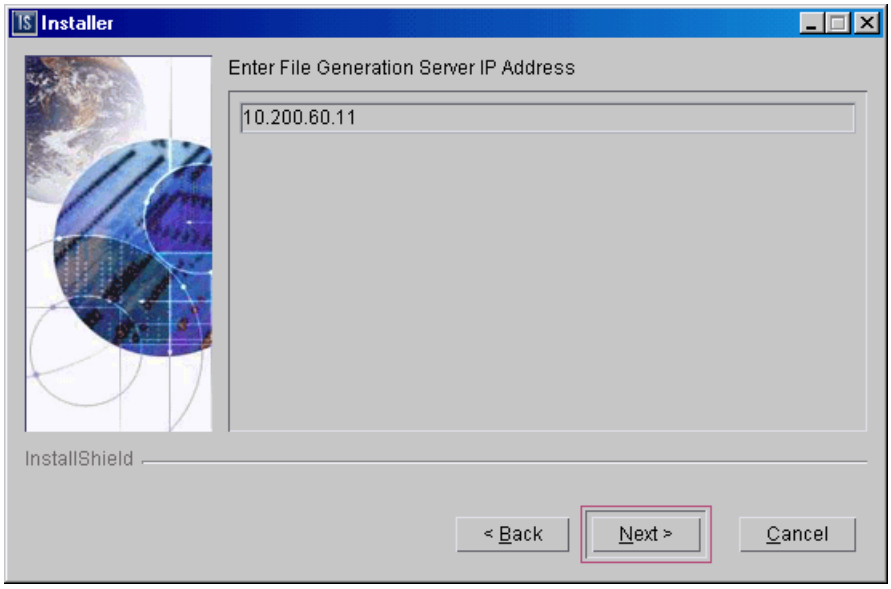
10 By default, the location of the executable is *c:\Perl\bin\perl.exe*. If necessary, click **Browse** to change the path to the executable or type the path to the location in the field.

11 Click **Next**. The Local IP Address screen opens.



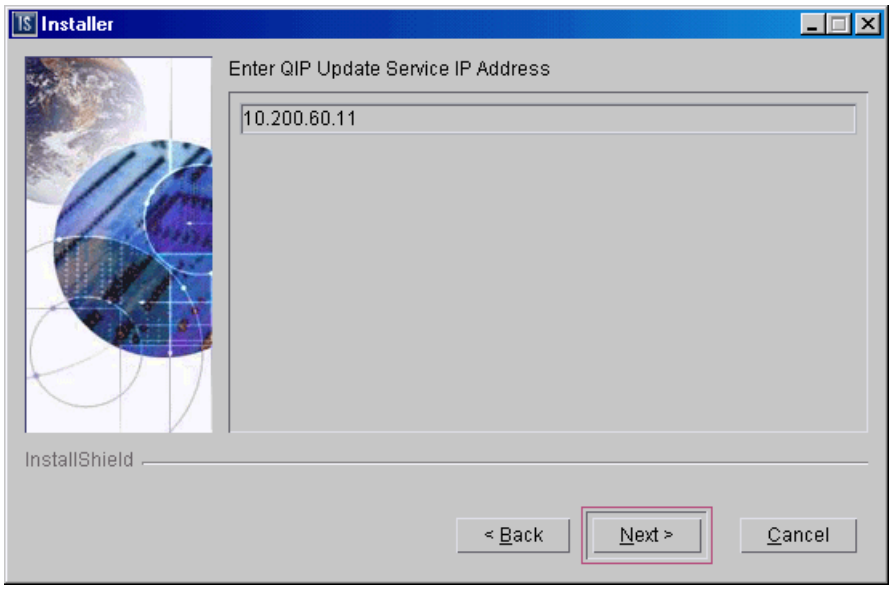
The IP address of the local machine is displayed. In the **IP Address** field, change the IP address of the local machine on which VitalQIP is being installed if needed.

12 Click **Next**. The File Generation Service IP Address screen opens.



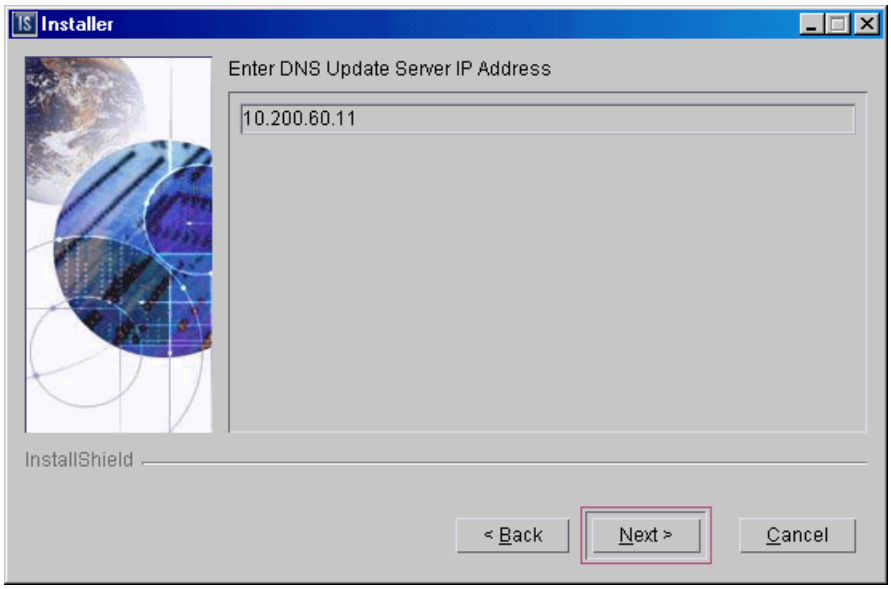
The IP address of the local machine is displayed. In the **Enter File Generation Server IP Address** field, change the IP address to the machine on which the File Generation Service is installed.

13 Click **Next**. The QIP Update Service IP Address screen opens.



The IP address of the local machine is displayed. In the **Enter QIP Update Server IP Address** field, change the IP address to the machine on which the QIP Update Service is installed.

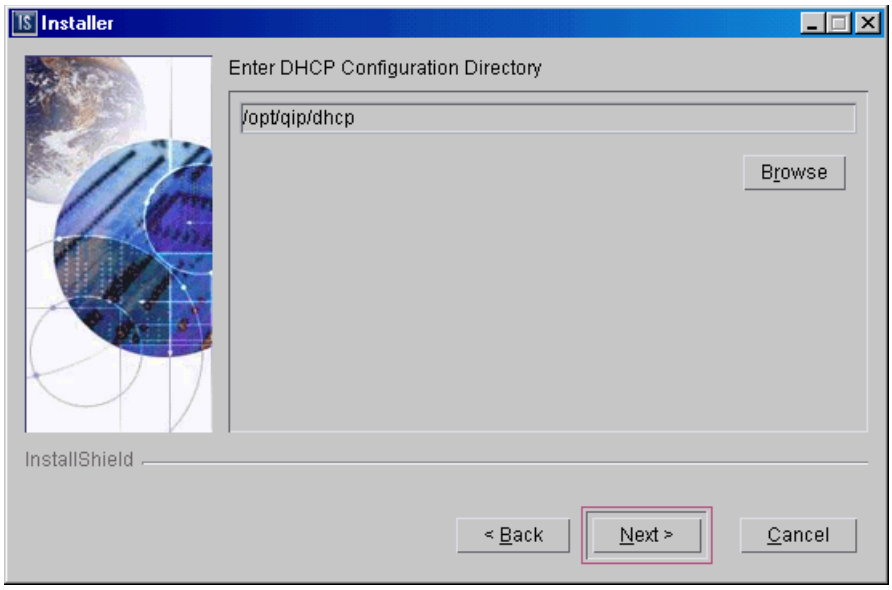
14 Click **Next**. The DNS Update Server IP Address screen opens.



In the **Enter DNS Update Server IP Address** field, change the IP address of the DNS Update Service if needed. The value collected in this screen is used to set the value in the $*QIPHOME/qip.pcy* file if the DNS Update Service is selected in Step 6. Otherwise, the value is used to connect to the machine where the DNS Update Service is running.

Lucent DHCP Server

15 Click **Next**. If Lucent DHCP was selected in Step 6, the DHCP Configuration Directory screen opens. If you did not select Lucent DHCP, skip this step.



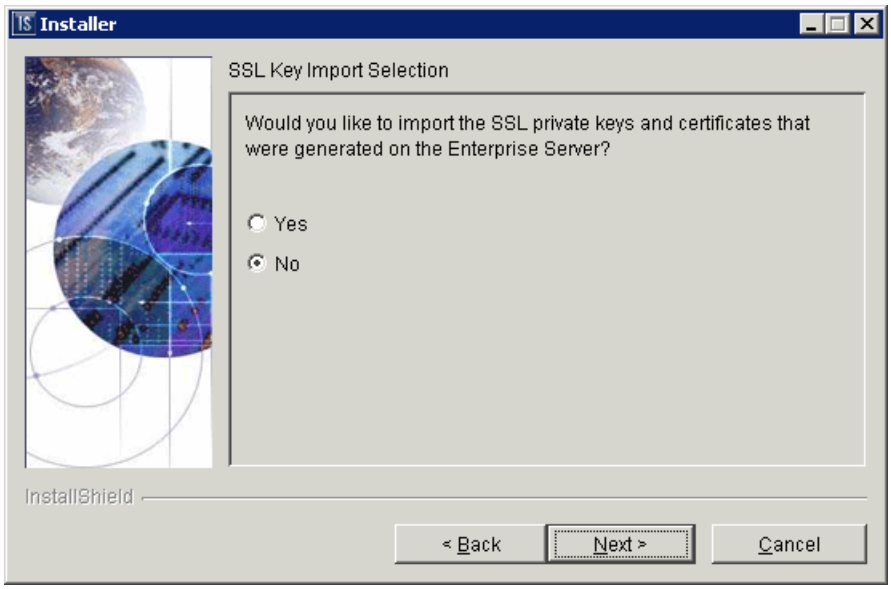
By default, *$QIPHOME/dhcp* directory is shown. If necessary, type the destination directory into the **Enter DHCP Configuration Directory** field. Alternatively:

a. Click **Browse**.

b. Navigate to where the directory is located and select the directory.

c. Click **Open**. The destination directory is shown in the field.

16 Click **Next**. The Import SSL Public/Private Keys screen opens.

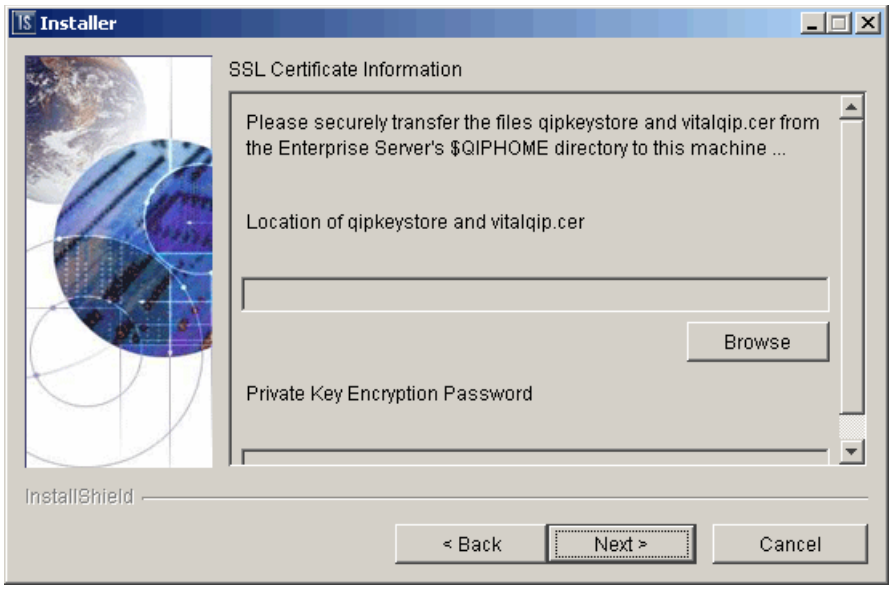


Select one of the following:

- **Yes** if you are planning on using the SSL Tunnel Service
- **No** if you are not planning on using the SSL Tunnel Service

SSL security

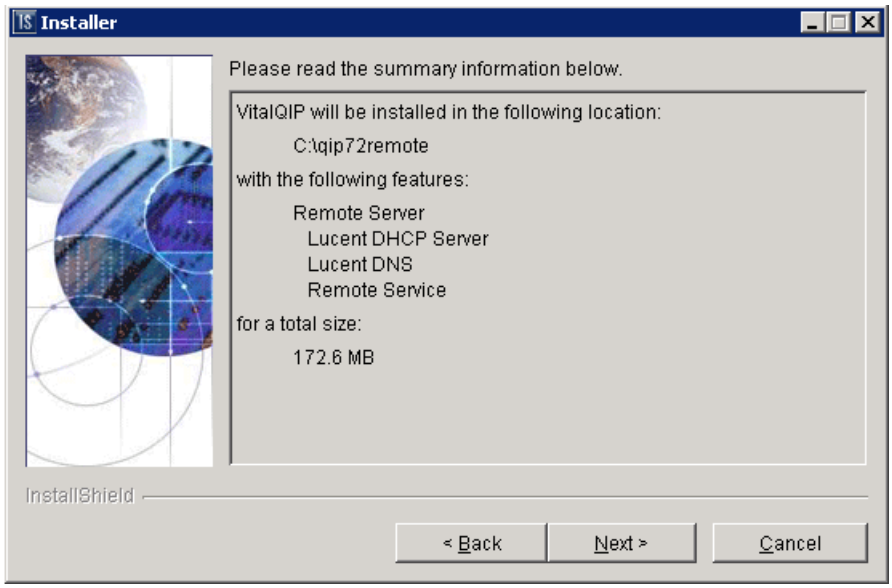
17 Click **Next**. If you selected Yes in the previous screen, the SSL Certificate Information screen opens. Skip this step if you selected No.



Do the following:

- In the **Location of qipkeystore and vitalqip.cert files** field type the location of the *qipkeystore* and *vitalqip.cert* files. Alternatively:
  a. Click **Browse**.
  b. Navigate to where the directory is located and select the directory.
  c. Click **Open**. The destination directory is shown in the field.
- In the **Private Key Encryption Password** field, enter the SSL private key password that was used during the VitalQIP enterprise server installation.

18 Click **Next**. In a few moments, the Summary screen opens.



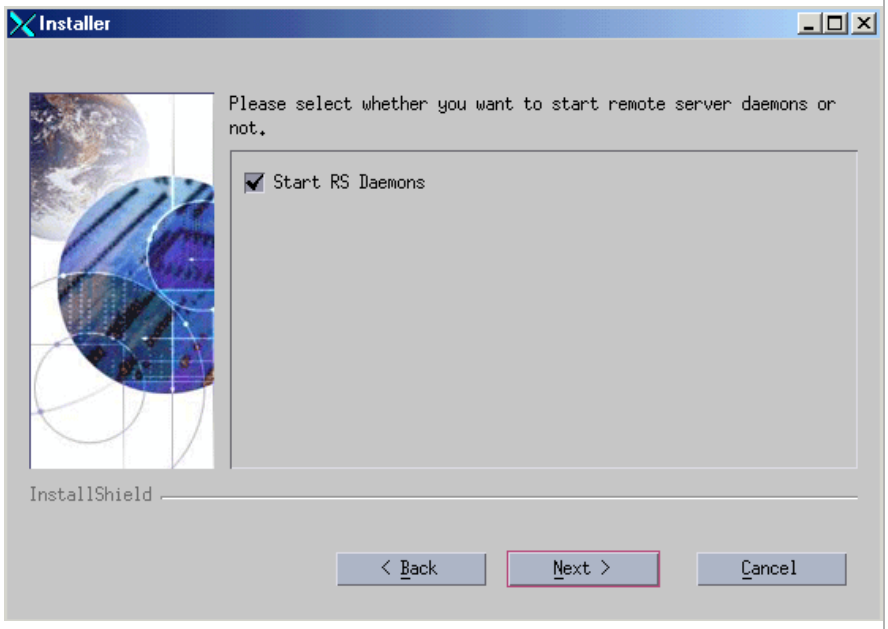
Examine the features to be installed. If changes are necessary, click **Back** to make changes to the installation. If everything looks correct, click **Next**.

The installer commences extracting files and installing VitalQIP.

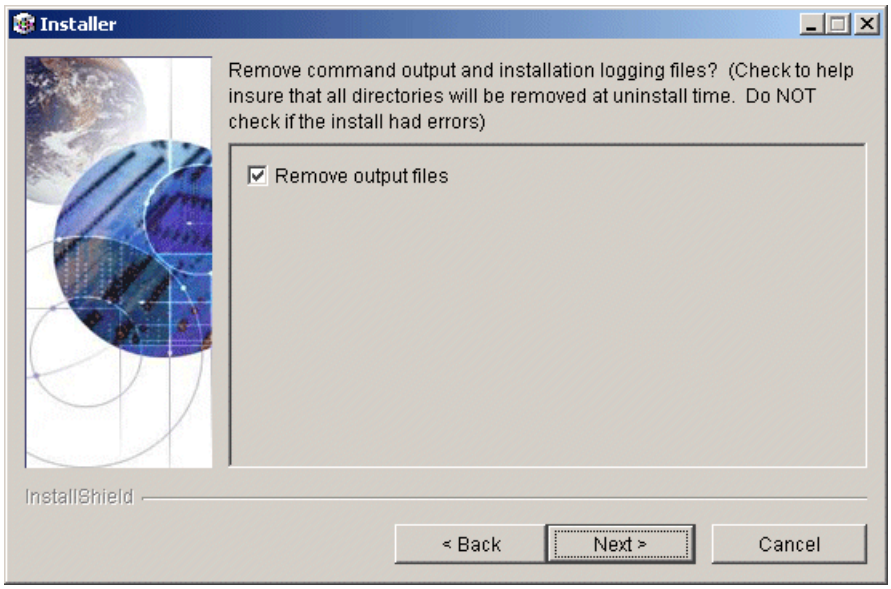
> **Note:** During installation on a Windows platform, a message may open, asking if you want to overwrite *mfc42.dll*. Click **No** to continue.

In a few minutes, the Successful Install screen opens.

19 Choose one of the following..

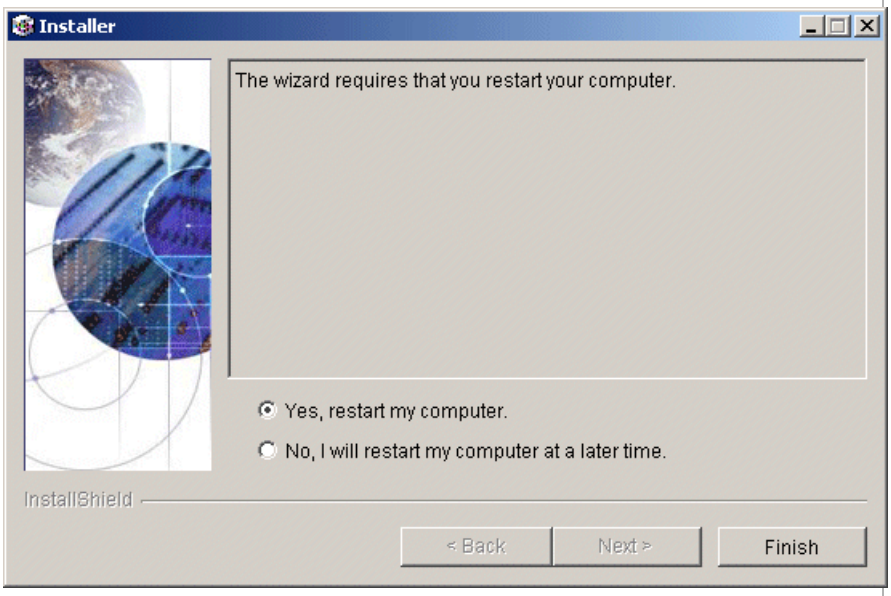
If you want to...	Then...
Start remote daemons on a UNIX platform	1. Click **Next**. **Result:** The Start Remote Daemons screen opens.  The installation gives you the option to start the remote server daemons, Follow these steps if you want to start the remote server daemon: 2. Select **Start RS Daemons**. A screen opens showing the daemons that are to be started. **Note:** If no *named.conf* file is configured found on the machine, a message opens that states no **`named`** configuration files are found. Depending on how many other VitalQIP components are installed on your system, additional Start Daemon screens can open. Follow the directions on the screen to complete the installation. 3. Click **Next**.
Remove output files	1. Click **Next**. **Result:** The Remove Output Files screen opens. 2. Go to Step 20.

20 In a few moments, the Remove Output Files screen opens.



During the installation, VitalQIP produces output files that are no longer needed for the installation. The installation files can be kept or removed from your system. Alcatel-Lucent recommends you keep the files if the installation had errors. If you want to keep the files, uncheck **Remove output files**.

21 Choose one of the following..

If you want to…	Then…
Complete the installation on a UNIX platform	1. Click **Next**. **Result:** The Installation complete screen opens. 2. Click **Finish**.
Complete the installation on a Windows platform	1. Click **Next**. **Result:** The Installation complete screen opens.  2. Before you can begin using VitalQIP, you must reboot your computer. Select **Yes** to restart your computer. If you would rather work on other tasks before configuring VitalQIP, click **No**. 3. Click **Finish**.

END OF STEPS

Install the VitalQIP remote server as a secondary server to a non-managed DNS server

Purpose

You can use VitalQIP to manage a secondary server for a domain that is not managed by VitalQIP (for example, the primary DNS server is not managed by VitalQIP, but the secondary server is managed by VitalQIP).

Procedure

Follow these steps:

1. Install the VitalQIP remote server package on the secondary server, as described in this chapter.

2. Run the remote service on the secondary server, and any other services necessary (for example, DNS, DHCP, and/or BOOTP). For instructions, refer to the *VitalQIP User's Guide*.

3. If you want to execute the remote services automatically when your system boots, set them to Automatic in the Windows Services panel or the VitalQIP Service Controller. For instructions, refer to the *VitalQIP User's Guide*.

4. Define the secondary DNS server via the **Infrastructure|Non-Managed DNS Server** function in VitalQIP. For details, refer to the *VitalQIP User's Guide.*

END OF STEPS

16 Install VitalQIP web client interface

Overview

Purpose

This chapter covers installing VitalQIP web client on supported platforms.

Contents

This chapter covers these topics.

Web client installation overview	16-2
Web client pre-installation checklist	16-2
Install the VitalQIP web client interface	16-5

Web client installation overview

What is installed

The VitalQIP web client interface installation installs the following:

- VitalQIP web client interface files
- Apache Tomcat web server
- VitalQIP Message Service
- VitalQIP SSL Tunnel Service
- Command Line Interface

Upgrade from previous versions

IIf VitalQIP is being upgraded from a previous version, refer to Part IV: "Upgrade VitalQIP" for instructions on upgrading to VitalQIP 7.2.

Web client pre-installation checklist

Purpose

Use the checklist to determine what needs to be done before beginning the installation:

Table 16-1 Web client pre-installation checklist

Task	Description	Status
Determine the configuration	Determine how and where the components are to be installed. Also, consider if this is an upgrade or are additional components are being installed. Refer to Part I of the *Administrator Reference Manual* for more information on configurations.	

Task	Description	Status
Determine if secure socket layer is deployed	Find out if secure socket layer will be used in the VitalQIP deployment. If it is, the *qipkeystore* and *vitalqip.cer* files are required to be located on the machine. These files are created during the VitalQIP enterprise server installation. The files are located in the directory where VitalQIP is installed. The encyrpted password needs to be obtained also. For general information on secure message routing, refer to the Secure Message Routes chapter in the *Administrator Reference Manual*.	
Determine if HTTPS versus HTTP messaging is deployed	Find out if HTTPS or HTTP messages will be used when communicating with the Apache Tomcat web server. You need to know the port on which HTTPS or HTTP messages are sent and received. By default, 80 is the default port for HTTP and 743 is the default port for HTTPS. It is recommended that the you write down the type of messages you are using, the port used, and the IP address of the Apache Tomcat web server. These items are needed for other VitalQIP component installations.	
Back up prior version Apache web server	The VitalQIP 7.x installation installs a new version of the Apache web server: the Apache Tomcat web server. Alcatel-Lucent does not recommend that the version of the Apache web server that was installed with VitalQIP 6.x releases be used. Unpredictable results will occur in the web client interface. However, it is recommended that you back up and rename the directory where the prior version of the Apache files are stored. (Apache web server files are stored in the *apache* directory under *QIPHOME*.) It can be useful if you need to revert to the previous version of VitalQIP that uses an earlier version of the Apache web server. Alternatively, the Apache directory can be deleted.	

Task	Description	Status
Meet pre-installation requirements	The pre-installation requirements must be met before installing VitalQIP. Read the *VitalQIP 7.2 Release Notes* to ensure your system meets the pre-installation requirements for installing VitalQIP.	
Install the database client	If the web client interface is being installed on a separate machine from the enterprise server, an Oracle client must be installed. Your Oracle database administrator is responsible for ensuring the Oracle client is correctly in place.	
Stop all VitalQIP-related processes	If VitalQIP is installed, ensure all VitalQIP-related processes are stopped.	
Gather information about the database	The following information needs to be gathered about the database server: • The name of the database. If VitalQIP is already installed, the value is set in the **`QIPDATASERVER`** environment variable • The IP address of the server where the database is running. • The full path to the directory where the database is running. • Password for qipadmin.	
UNIX only: Find the IP address of the machine	Find the IP addresses of the machines where the component is being installed and of the VitalQIP enterprise server.	

Install the VitalQIP web client interface

Purpose

This section explains how to install the VitalQIP web client interface on supported platforms. If you have problems installing the software, contact technical support.

Before you begin

- Ensure your database is running.

Windows

- Ensure you are logged into your system as a user with administrative privileges.
- Ensure you exit all programs you are currently running.
- If an Apache Tomcat web server is running, the daemon is not stopped. You must manually stop the web server.

UNIX

- Log into your system as the root user. If the installation is not done as the root user the **`qping`** utility does not work. The utility must have root permission with the **`SUID`** bit set for the administrator. This is an operating system limitation. To work around this limitation:
  a. Log into the system as the root user:
  b. Change the mode and permissions on the **`qping`** utility to be:

```
root:sys & 4755
```

Procedure

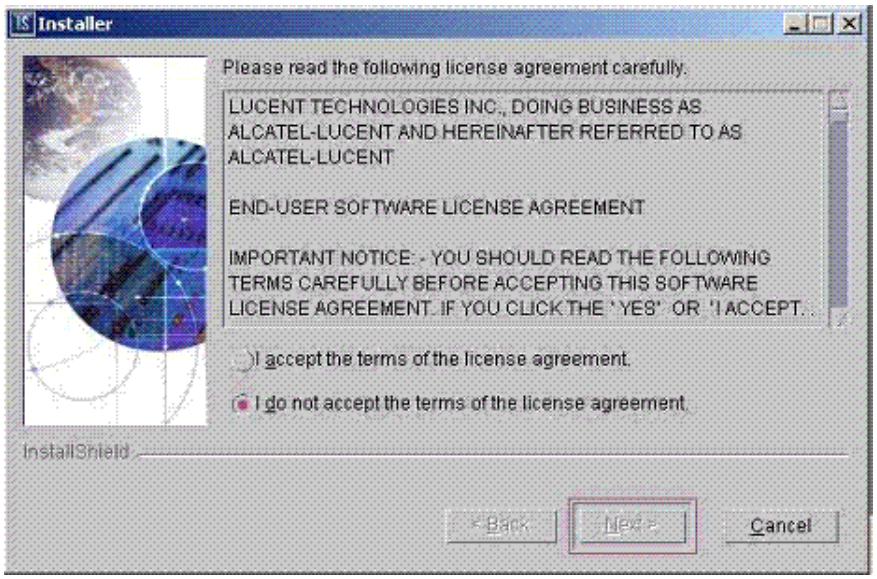
1 Choose one of the following:

If you want to…	Then…
Install on a Linux platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72setupLinuxgccr<#>.bin`**
Install on a Solaris platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72setupSolarisr<#>.bin`**

If you want to…	Then…
Install on a Windows platform	1. Open a command window and change directory to the installation file location. This is the location you selected when you downloaded the Windows installation executable from the Alcatel-Lucent Electronic Download site (*c:\temp* is the default location). 2. Enter: **`qip72setupwin32r<#>.exe`**

For all executables, the **#** denotes the repackaging number of the executable.

2 The Software License Agreement screen opens.

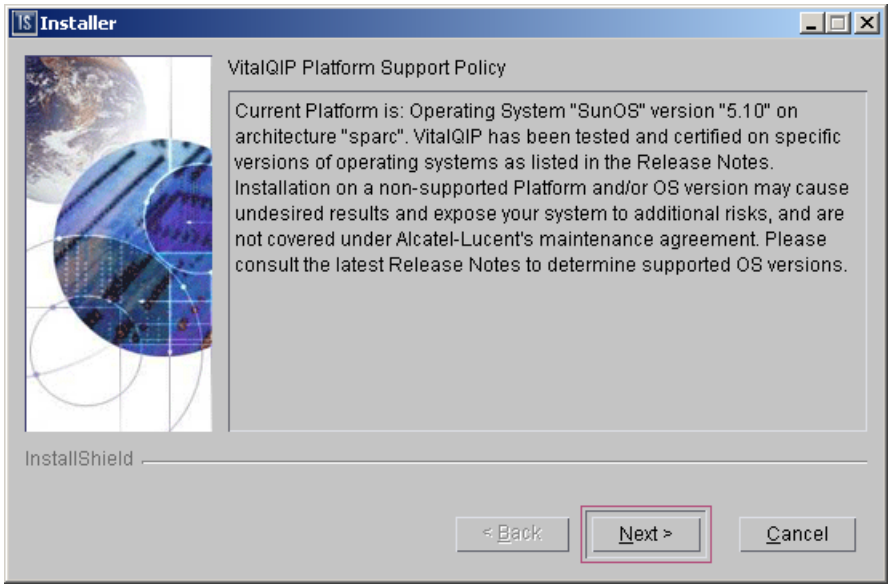


Read the software license agreement and:

- Select **I accept the terms of the license agreement** to accept the license agreement.
- Select **I do not accept the terms of the license agreement** if you do not accept the license agreement. The installation is canceled.

3 Click **Next**. The installation checks that the operating system is a supported version. If the operating system is supported, the Welcome screen opens.

If it is not a supported operating system, a screen opens with the Platform Support Policy.



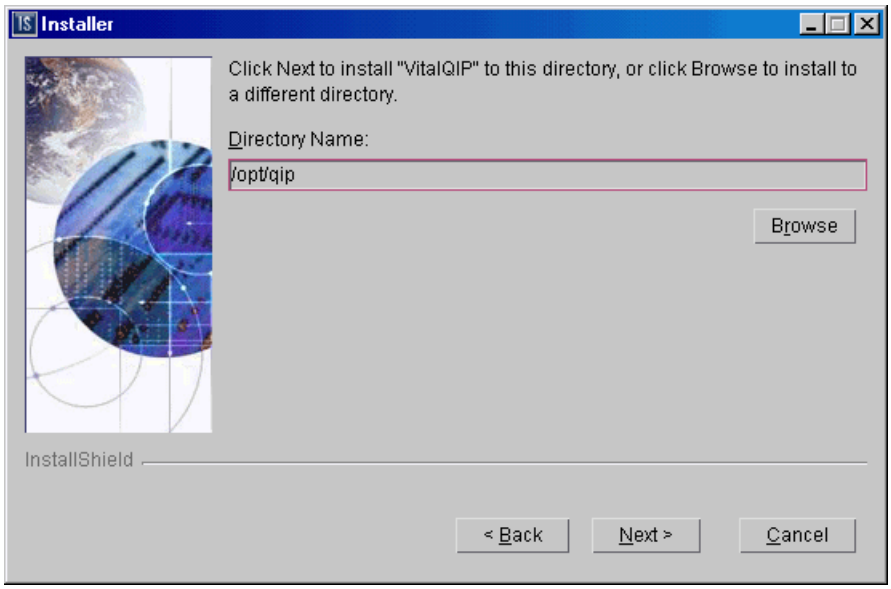
Click **Cancel** to exit the installation and upgrade the operating system to one of the supported versions listed in the *VitalQIP 7.2 Release Notes* before you install VitalQIP.

4 Click **Next**. Choose one of the following.

If you want to…	Then…
Install web client on a UNIX platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, a screen opens showing the VitalQIP-related daemons that are running. 1. Choose one of the following options: • Click **yes, kill processes automatically** and have the installation stop the processes. • Click **no, they will be killed manually** and stop the processes manually. 2. Click **Next**.
Install web client on a Windows platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, the processes are stopped by the installation.

Important! If an Apache Tomcat web server is running, the daemon is not stopped. The web server needs to be stopped manually.

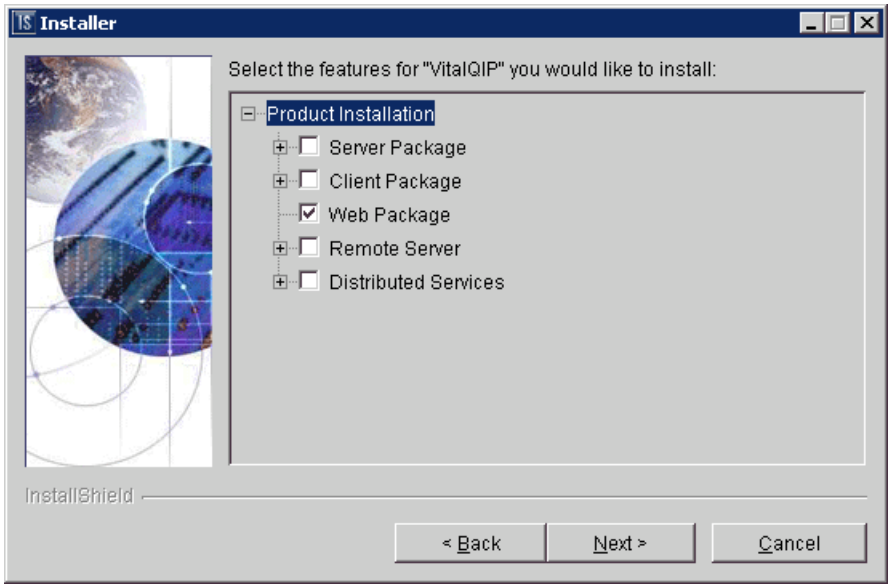
5 The VitalQIP Home Directory screen opens.



The default destination directory for the VitalQIP software is shown. By default, the directory is */opt/qip* on UNIX and *c:\qip* on Windows.

Do not install the web client in a directory other than the *QIPHOME* directory.

6 Click **Next**. The Features screen opens.

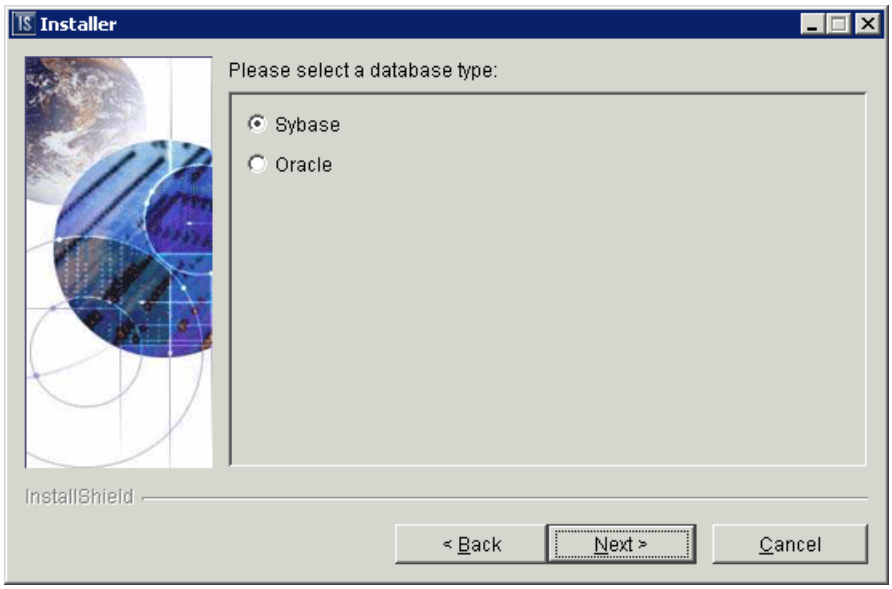


To install the Web package only, uncheck all components except the **Web Package**.

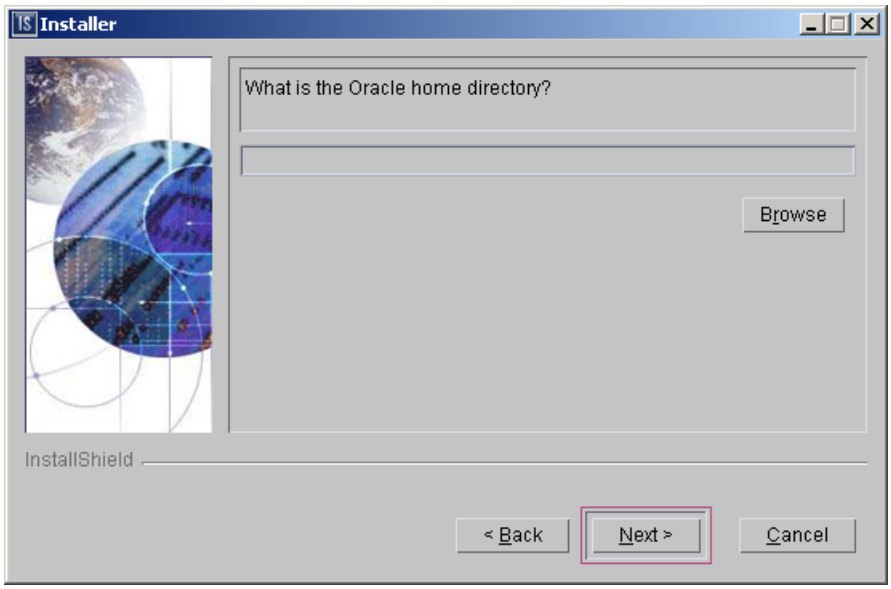
Important! If any VitalQIP component is already installed, "`installed`" is shown next to it. If you want to keep that component, do ***not*** uncheck the checkbox: InstallShield will reinstall that component at the same time that it installs the component that you are now selecting.

7 Click **Next**. The installation shows an information message. Read the message and follow any instructions that are shown in the message.

8 Click **Next**. The Database Type screen opens.



9 Select **Oracle** and click **Next**. The Database Home Directory screen opens.



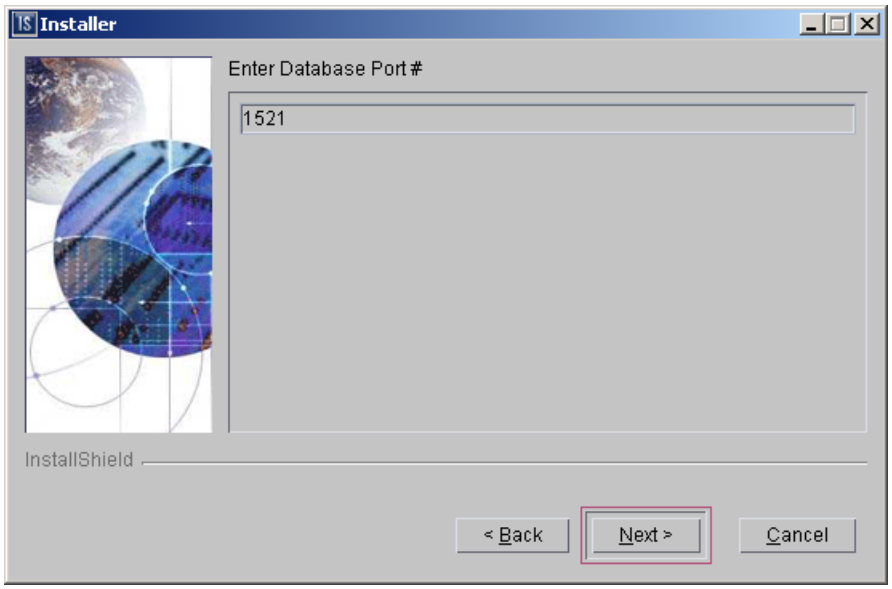
10 If necessary, type the destination directory directly in the **What is the Oracle home directory?** field. Alternatively:

a. Click **Browse**.

b. Navigate to where the directory is located and select the directory.

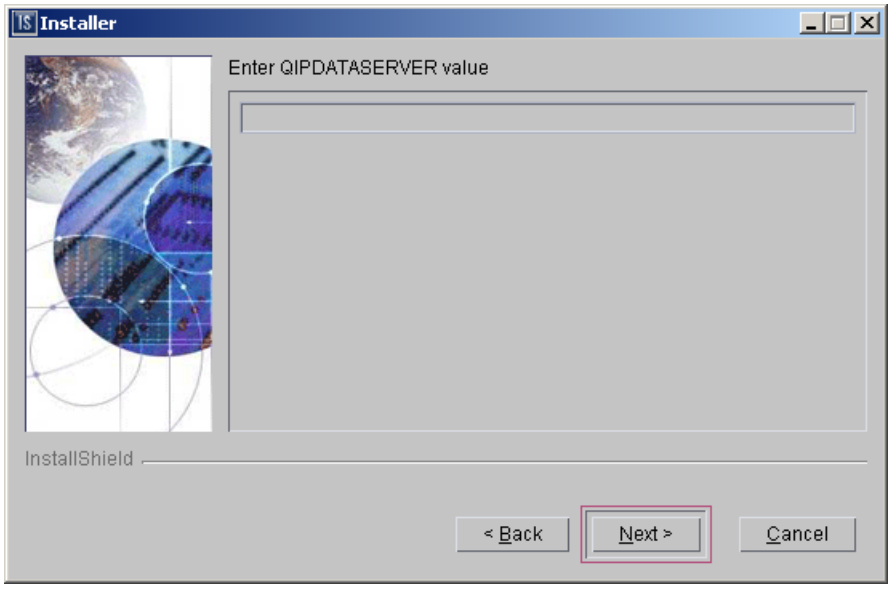
c. Click **Open**. The destination directory is shown in the field.

11 Click **Next**. The Database Port Number screen opens.



By default, the port number for Oracle is 1521. In the **Enter Database Port #** field, change the port number for the database if necessary.

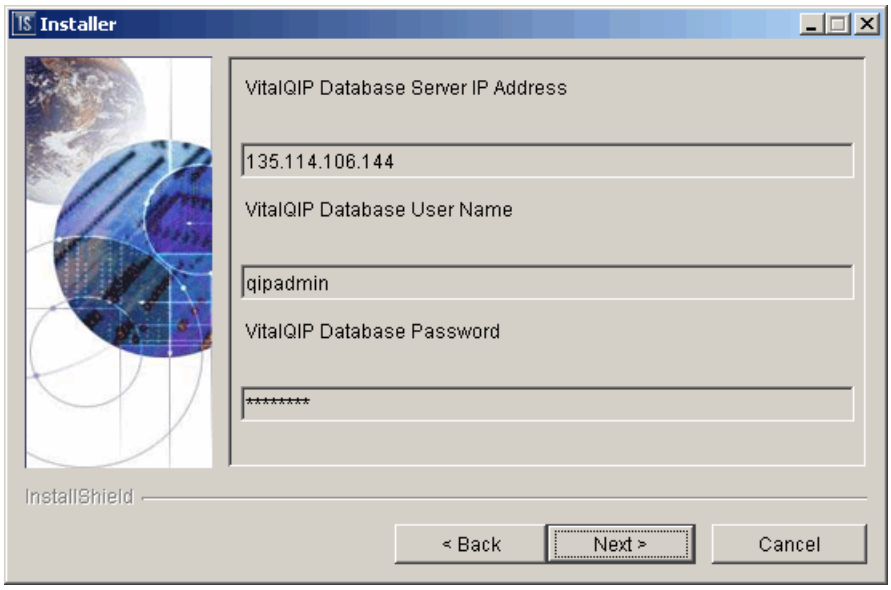
12 Click **Next**. The QIPDATASERVER Value screen opens.



This defines the value of the **`QIPDATASERVER`** environment variable. The **`QIPDATASERVER`** value is the name of the database server.

13 In the **Enter QIPDATASERVER value** field, enter the name of your database.

14 Click **Next**. The Database Information screen opens.

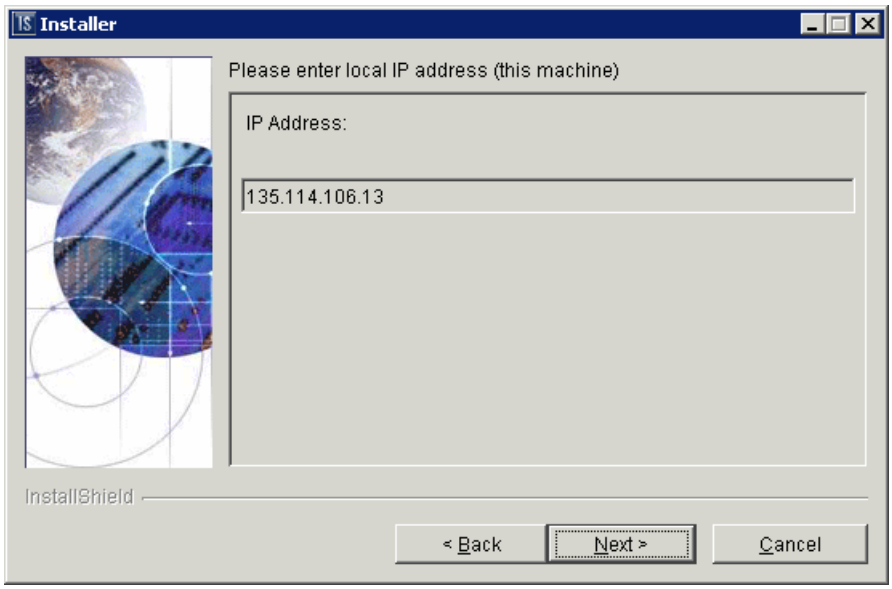


15 Review the following table and fill in the fields.

Table 16-2 Database Information fields

Field	Description
VitalQIP Database Server IP Address	IP address of the database server. Change the IP address of the database server if needed.
VitalQIP Database User Name	By default, the name of the qipadmin user is shown. If the VitalQIP database user name is different than the one displayed, change the database user name.
VitalQIP Database Password	By default, the password for the qipadmin user is **qipadmin**. If the database password is different, change the password.

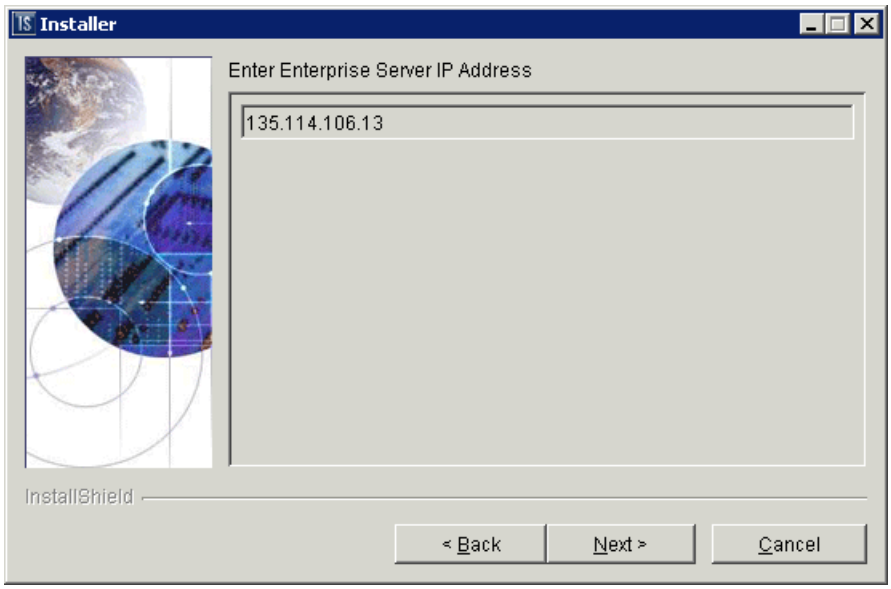
16 Click **Next**. The Local IP Address screen opens.



The IP address of the local machine is displayed.

17 In the **IP Address** field, change the IP address of the local machine on which VitalQIP is being installed if needed.

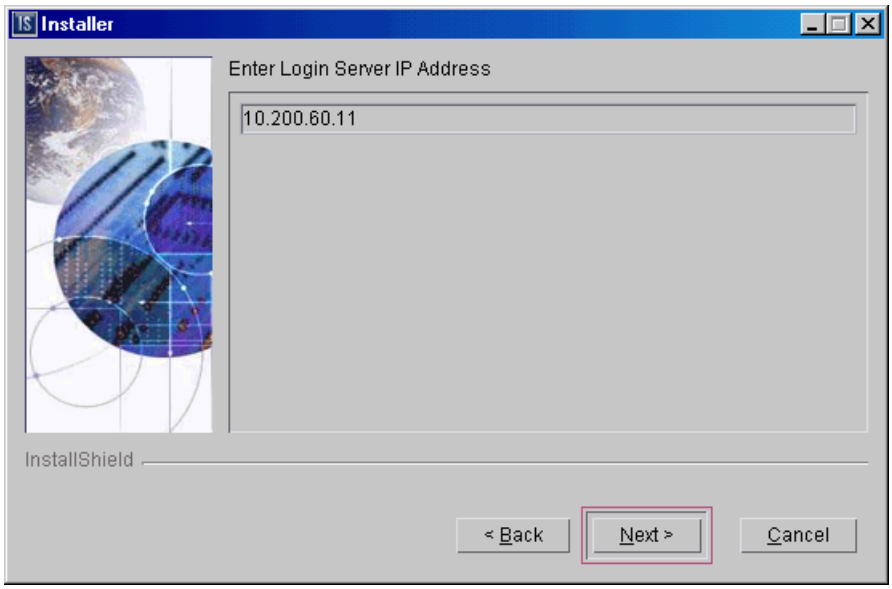
18 Click **Next**. The Enterprise Server IP Address screen opens.



The IP address of the local machine is displayed.

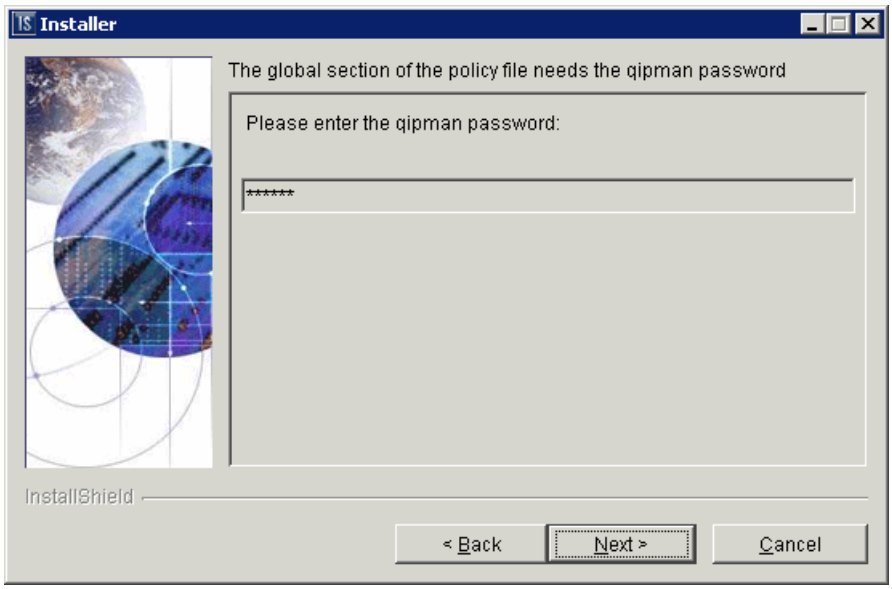
19 In the **Enter Enterprise Server IP Address** field, change the IP address to the machine where the VitalQIP enterprise server is installed.

20 Click **Next**. The Login Server IP Address screen opens.



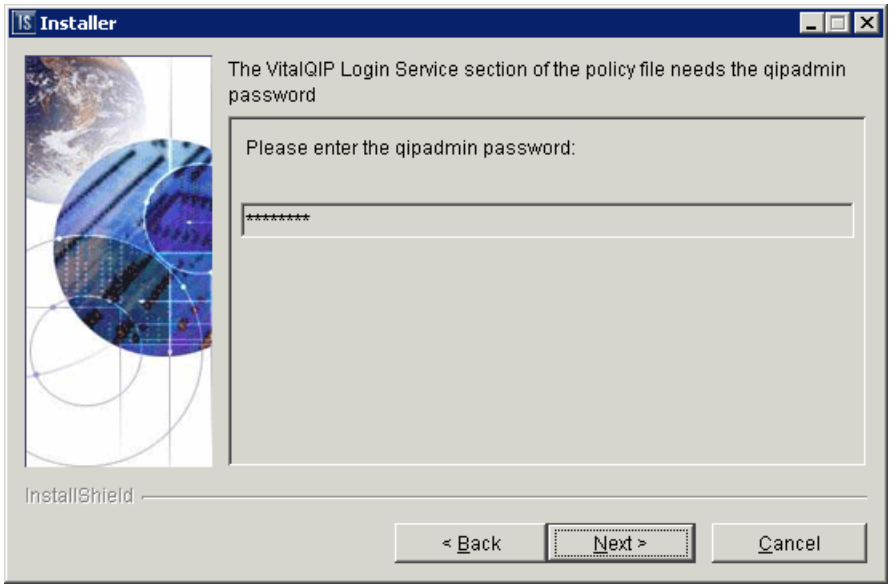
21 In the **Enter Login Server IP Address** field, change the IP address for the Login Server if needed. The value is stored in the *qip.pcy* file.

22 Click **Next**. The qipman Password screen opens.



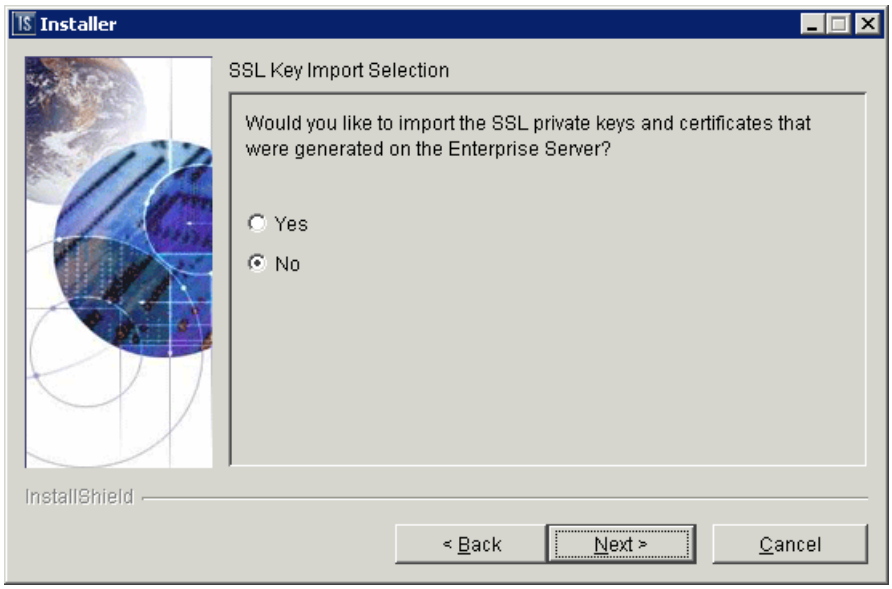
By default, the password for qipman is **`qipman`**. You should use the default and change the password later. The qipman password is stored in the Global policy section of the *qip.pcy* file.

23 Click **Next**. The qipadmin Password screen opens.



By default, the password for qipadmin is **`qipadmin`**. You should use the default and change the password later. The qipadmin password is stored in the VitalQIP Login Service section of the *qip.pcy* file.

24 Click **Next**. The Import SSL Public/Private Keys screen opens.

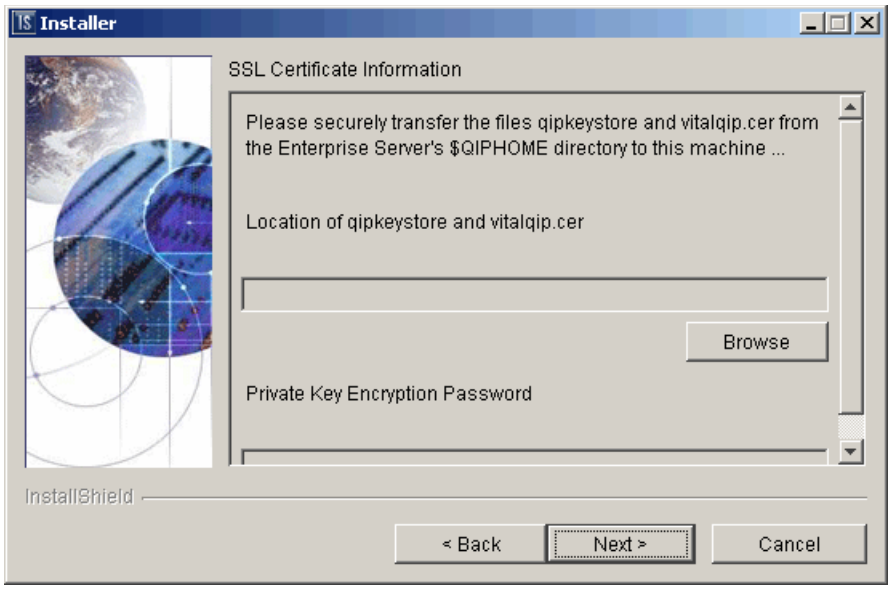


Select one of the following:

- **Yes** if you are using the SSL Tunnel Service
- **No** if you are not using the SSL Tunnel Service

SSL security

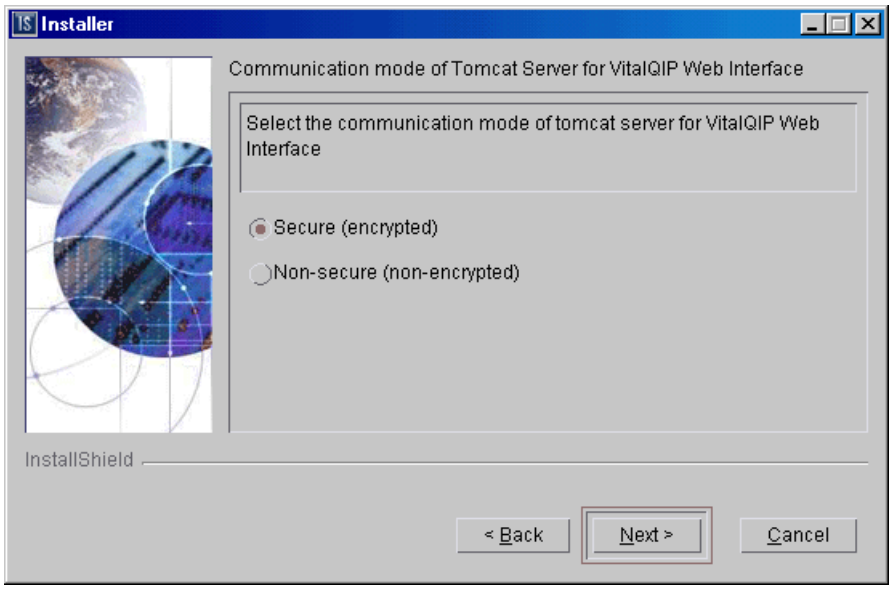
25 Click **Next**. If you selected **Yes** in the previous screen, the SSL Certificate Information screen opens. Skip this step if you selected **No**.



26 Do the following:

- In the **Location of qipkeystore and vitalqip.cert files** field type the location of the *qipkeystore* and *vitalqip.cert* files.The files are located in the directory where VitalQIP is installed on the enterprise server. Alternatively:
  a. Click **Browse**.
  b. Navigate to where the directory is located and select the directory.
  c. Click **Open**. The destination directory is shown in the field.
- In the **Private Key Encryption Password** field, enter the SSL private key password.

27 Click **Next**. The Tomcat Server Communication Mode opens.

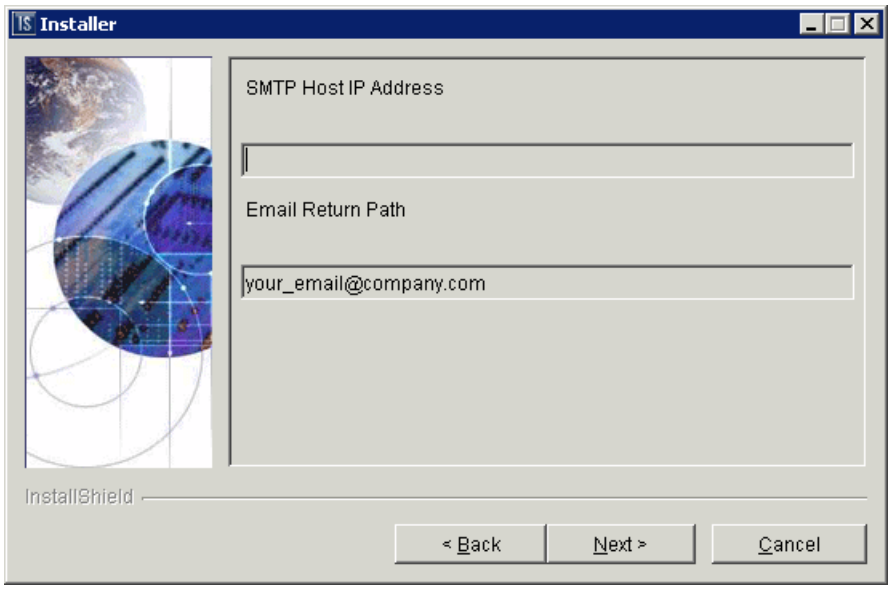


The installation needs to know what mode of communication the Apache Tomcat web server will use. This information is written to the VitalQIP Service Layer section of the *qip.pcy* file.

28 Select:

- **Secure (encrypted)** - uses HTTPS to send encrypted messages to and from the server
- **Non-secure (not-encrypted)** - messages to and from the server are not encrypted

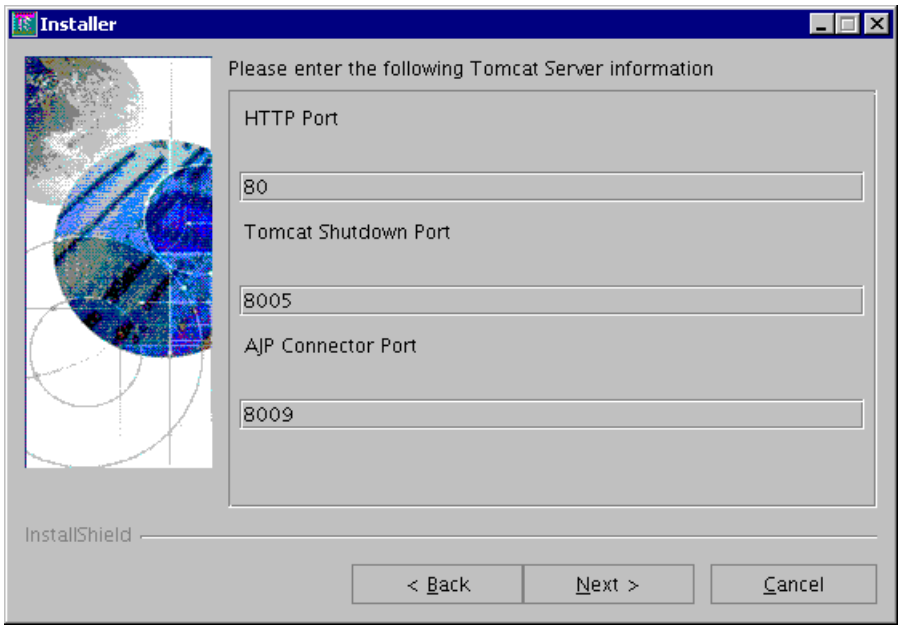
29 Click **Next**. The SMTP IP Address screen opens.



30 In the **SMTP Host IP Address** field, enter the IP address of the SMTP (email) server.

31 In the **Email Return Path** field, enter the email address of the administrator who will receive email alerts.

32 Click **Next**. The Tomcat Server Information screen opens.



Note: Either **HTTP Port** or **HTTPS Port** field is displayed in this screen. The field that is displayed is determined by your selection in Step 28.

33 Review the following table and fill in the fields.

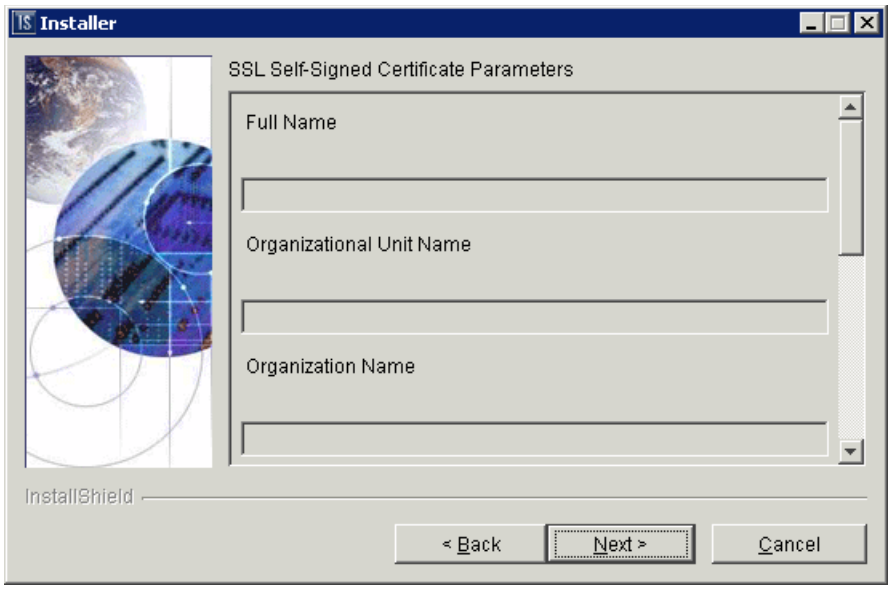
Table 16-3 Tomcat Server Information fields

Field	Description
HTTP Port	***Displayed when Non-secure (not-encrypted) is selected in Step 28.*** The port used by the web client to connect to the Apache Tomcat web server. By default, the port is 80.
HTTPS Port	***Displayed when Secure (encrypted) is selected in Step 28.*** The SSL port used by the web client to connect to the Apache Tomcat web server. By default, the port is 743.
Tomcat Shutdown Port	A local administrative port used to shutdown the Apache Tomcat web server. By default, the port is 8005.
AJP Connect Port	The port used to connect the Apache Tomcat web server. By default, the port is 8009.

Secure (encrypted) communication for the Tomcat server

34 If secure (encrypted) communication was selected in Step 28, the SSL Self Signed Certificate Parameters screen opens. Skip this step if you selected non-secure (not encrypted).

Note: This screen does not display if secure communications was selected in Step 24 (import secure info).



Note: You need to scroll down to view the remaining fields in the screen.

Review the following table as you enter values in the fields.

Table 16-4 SSL Self Signed Certificate Parameters fields

Field	Description
Full Name	Your full name.
Organizational Unit Name	The name of the organization unit.
Organization Name	The name of the organization.
City or Locality	The city or locality where your organization is located.
State or Province	The state or province where your organization is located.
Two-Letter Country Code	The two letter country code your organization is located in. For a list of country codes, refer to **www.digicert.com/ssl-certificate-country-codes.htm**

Field	Description
Private Key Encryption Password	***Required***. The private key password. Enter a password that adheres to the following rules (and be sure to make a note of it since you will need it again when installing other VitalQIP components): • Can be any length except null • All characters must match the pattern: [a-zA-Z0-9~!@#$%^&*()|_+={}?] • Cannot contain the space character

Important! If you did not enter a password in the **Private Key Encryption Password** field, a message opens after you click **Next**:

```
SSL Private Key Encryption Password must be set.
```

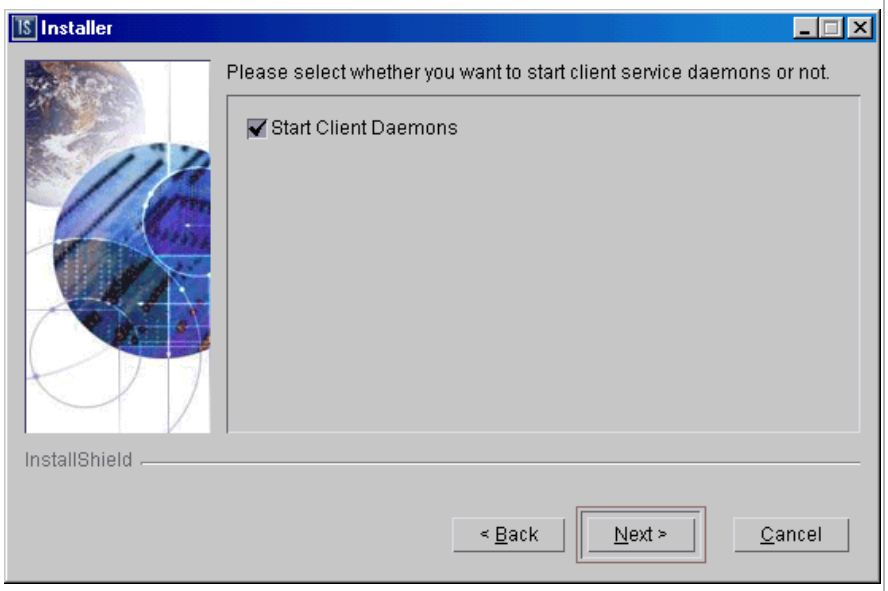
Click **Back** and enter a password in the **Private Key Encryption Password** field. After you have entered a password, continue with the installation.

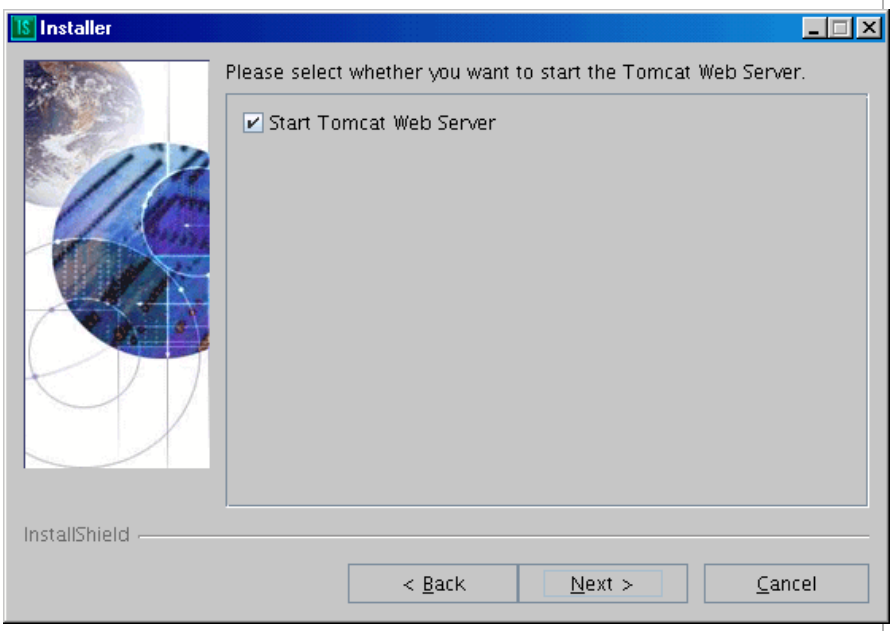
35 Click **Next**. After a few moments, the Summary screen opens. Examine the features to be installed. If changes are necessary, click **Back** to make changes to the installation. If everything looks correct, click **Next**.

The installer commences extracting files and installing VitalQIP. After a few minutes, the Successful Install screen opens.

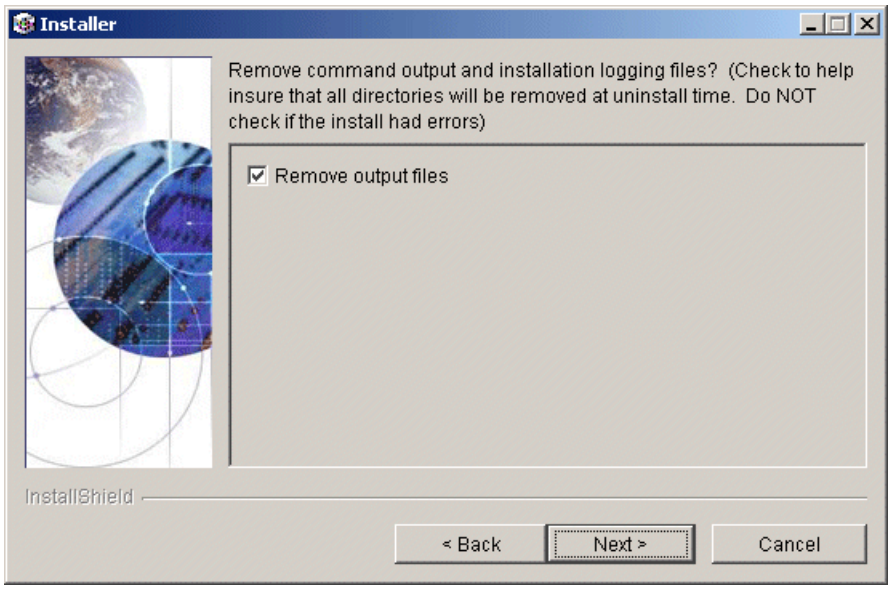
Note: On Windows, a message may open asking if you want to overwrite *mfc42.dll.* Click **No** to continue.

36 Choose one of the following:.

If you want to…	Then…
Start the web client daemons on a UNIX platform	1. Click **Next**. **Result:** The Start Client Daemons screen opens.  The installation gives you the option to start the web client daemons. Follow these steps if you want to start the web client daemons: 2. Select **Start Client Daemons**. A screen opens showing the daemons that are to be started. 3. Click **Next**.

If you want to...	Then...
Start the Tomcat Server on a UNIX platform	The Start Tomcat Web Server screen opens.  Follow these steps if you want to start the daemons: a. Select the Start Tomcat Web Server. A screen opens showing the daemons that are to be started. b. Go to the next step. **Note:** Depending on how many other VitalQIP components are installed on your system, additional Start Daemon screens can open. Follow the directions on the screen to continue complete the installation.
Remove output files	1. Click **Next**. **Result:** The Remove Output Files screen opens. 2. Go to Step 37.

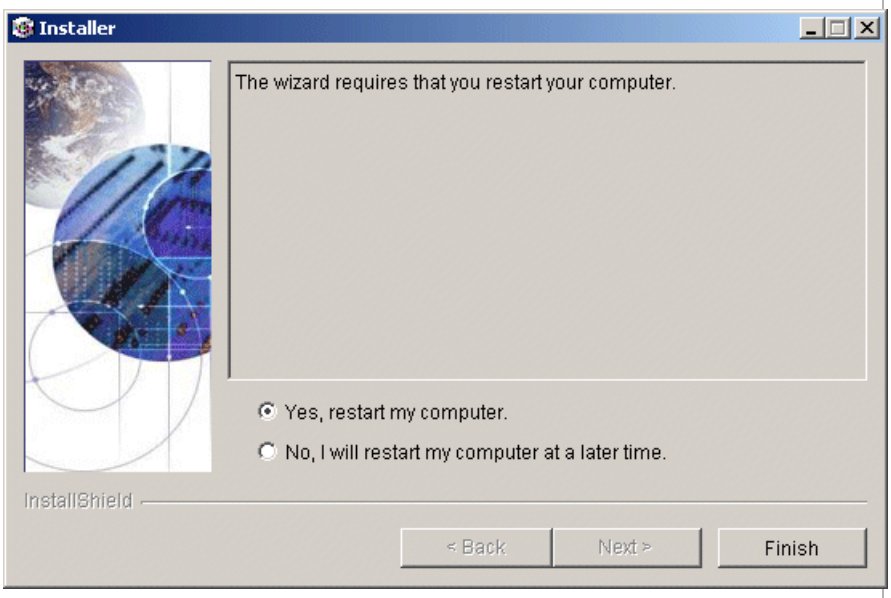
37 The Remove Output Files screen opens.



During the installation, VitalQIP produces output files that are no longer needed for the installation. The installation files can be kept or removed from your system. It is recommended that you keep the files if the install had errors. If you want to keep the files, uncheck **Remove output files**.

38 Choose one of the following..

If you want to…	Then…
Complete the installation on a UNIX platform	1. Click **Next**. **Result:** The Installation complete screen opens. 2. Click **Finish**.

If you want to…	Then…
Complete the installation on a Windows platform	1. Click **Next**. **Result:** The Installation complete screen opens.  2. Before you can begin using VitalQIP, you must reboot your computer. Select **Yes** to restart your computer. If you would rather work on other tasks before configuring VitalQIP, click **No**. 3. Click **Finish**.

39 If your VitalQIP system is supporting multiple languages and characters other than English, additional configuration is needed to ensure your language and characters are supported properly by VitalQIP. Refer to Chapter 17, “Web client configuration” in the *VitalQIP Administrator Reference Manual* for more information on how to set up your system for multiple language and character support.

END OF STEPS

Windows only: set environment variables after installing web interface

After installation of the VitalQIP web interface, ensure these environment variables are set. To ensure environment variables are set, follow these steps:

1 From your desktop, select **Settings | Control Panel** from the **Start** menu.

2 In the Control Panel screen**,** click the **System** icon.

3 In the System Properties screen, click the **Advanced** tab.

4 In the **Advanced** tab, click the **Environment Variables** button.

5 Ensure the variables and values in the following table are set correctly.

Table 16-5 Web client environment variables and values

Variable	Value
PATH	**%PATH%;C:\ORACLE\BIN;C:\ORACLE\DLL**
ORACLE	Path to Oracle directory (*C:\ORACLE* is the default).
QIPDBASE	ORACLE
QIPDATASERVER	The name of your VitalQIP Oracle server (**QIP_ORACLE** is the default.).
QIPHOME	The path to the *QIP* directory.

END OF STEPS

17 Install VitalQIP GUI client

Overview

Purpose

This chapter covers installing the VitalQIP GUI client on supported platforms.

Contents

This chapter covers these topics.

VitalQIP GUI client installation overview	17-2
VitalQIP GUI client pre-installation checklist	17-2
Install the VitalQIP GUI client	17-5

VitalQIP GUI client installation overview

What is installed

The VitalQIP GUI client installation installs the following:

- VitalQIP GUI client
- VitalQIP Command Line Interface
- VitalQIP Message Service
- VitalQIP SSL Tunnel Service

Upgrade from previous versions

If VitalQIP is being upgraded from a previous version, refer to Part IV: "Upgrade VitalQIP" for instructions on upgrading to VitalQIP 7.2.

VitalQIP GUI client pre-installation checklist

Purpose

Use the following checklist to determine what needs to be done before beginning the installation:

Table 17-1 GUI client pre-installation checklist

Task	Description	Status
Determine the configuration	Determine how and where the components are to be installed. Also consider if this is an upgrade or are additional components being installed. Refer to Part I of the *Administrator Reference Manual* for more information about configurations.	

Task	Description	Status
Determine if secure socket layer is deployed	Find out if secure socket layer will be used in the VitalQIP deployment. If it is, the *qipkeystore* and *vitalqip.cer* files are required to be located on the machine. These files are created during the VitalQIP enterprise server installation and are located in the directory where VitalQIP is installed. You also need to obtain the encrypted password. For general information on secure message routing, refer to the Secure Message Routes chapter in the *Administrator Reference Manual*.	
Meet pre-installation requirements	The pre-installation requirements must be met before installing VitalQIP. Read the *VitalQIP 7.2 Release Notes* to ensure your system meets the pre-installation requirements for installing VitalQIP.	
Install the database client	If the GUI client is being installed on a separate machine from the enterprise server, a Oracle must be installed. Your Oracle database administrator is responsible for ensuring the Oracle client is correctly in place.	
Stop all VitalQIP-related processes	If VitalQIP is installed, ensure all VitalQIP-related processes are stopped.	
Gather information about the database	The following information needs to be gathered about the database server: • The name of the database. If VitalQIP is already installed, the value is set in the **`QIPDATASERVER`** environment variable. • The IP address of the server where the database is running. • The full path to the directory where the database is running.	
Find the IP address of the machine	Find the IP addresses of the machines where the component is being installed and of the VitalQIP enterprise server.	
Find IP address of services	Find the address of the machine or machines where these services are to be installed: • VitalQIP QIP Update Service • VitalQIP Login Service	

Task	Description	Status
Gather information about the Apache Tomcat web server	Gather the following information about the Apache Tomcat web server: • Find out if your web server is using standard HTTP or HTTPS messaging • Find the port your web server is using • Find the IP address of the machine where the web server is running	

Install the VitalQIP GUI client

Purpose

This section explains how to install the VitalQIP GUI interface on supported platforms. If you have problems installing the software, contact technical support.

Before you begin

- Ensure your database is running.

Windows

- Ensure you are logged into your system as a user with administrative privileges.
- Ensure you exit all programs you are currently running.

UNIX

- Log into your system as the root user. If the installation is not done as the root user the **`qping`** utility does not work. The utility must have root permission with the **`SUID`** bit set for the administrator. This is an operating system limitation.

  To work around this limitation:

  a. Log into the system as the root user:

  b. Change the mode and permissions on the **`qping`** utility to be:

  `root:sys & 4755`

Procedure

To install the VitalQIP GUI client, follow these steps:

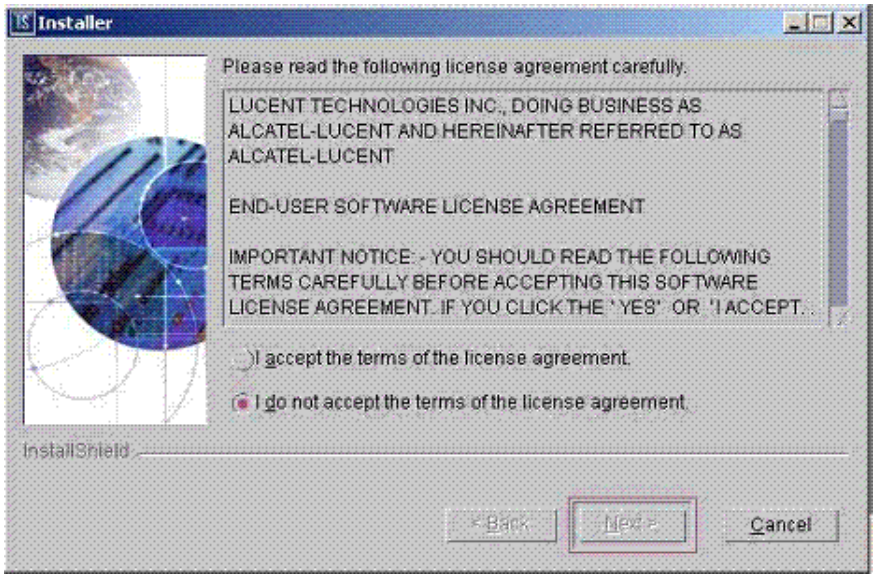
1 Choose one of the following:

If you want to…	Then…
Install on a Linux platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72setupLinuxgccr<#>.bin`**
Install on a Solaris platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72setupSolarisr<#>.bin`**

If you want to…	Then…
Install on a Windows platform	1. Open a command window and change directory to the installation file location. This is the location you selected when you downloaded the Windows installation executable from the Alcatel-Lucent Electronic Download site (*c:\temp* is the default location). 2. Enter: **`qip72setupwin32r<#>.exe`**

For all executables, the **#** denotes the repackaging number of the executable.

2 The Software License Agreement screen opens.

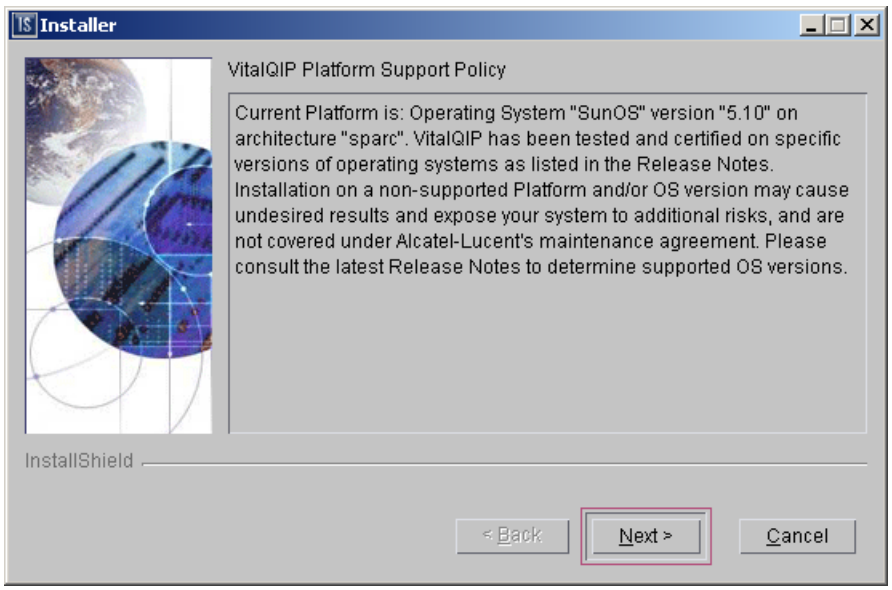


Read the software license agreement and:

- Select **I accept the terms of the license agreement** to accept the license agreement.
- Select **I do not accept the terms of the license agreement** if you do not accept the license agreement. The installation is canceled.

3 Click **Next**. The Welcome screen opens.

Click **Next**. If it is not a supported operating system, a screen opens with the Platform Support Policy.

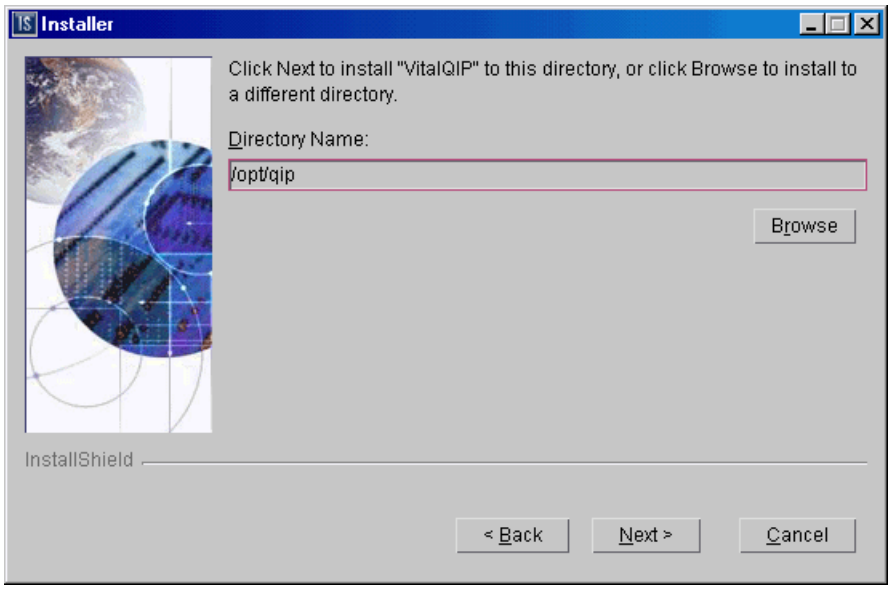


Click **Cancel** to exit the installation and upgrade the operating system to one of the supported versions listed in the *VitalQIP 7.2 Release Notes* before you install VitalQIP.

4 Click **Next**. Choose one of the following.

If you want to…	Then…
Install GUI client on a UNIX platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, a screen opens showing the VitalQIP-related daemons that are running. 1. Choose one of the following options: • Click **yes, kill processes automatically** and have the installation stop the processes. • Click **no, they will be killed manually** and stop the processes manually. 2. Click **Next**.
Install GUI client on a Windows platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, the processes are stopped by the installation.

5 The VitalQIP Home Directory screen opens.



The default destination directory for the VitalQIP software is shown. By default, the directory is */opt/qip* on UNIX and *c:\qip* on Windows. If a version of VitalQIP exists on the machine, the installation reads the **`QIPHOME`** environment variable and displays the value.

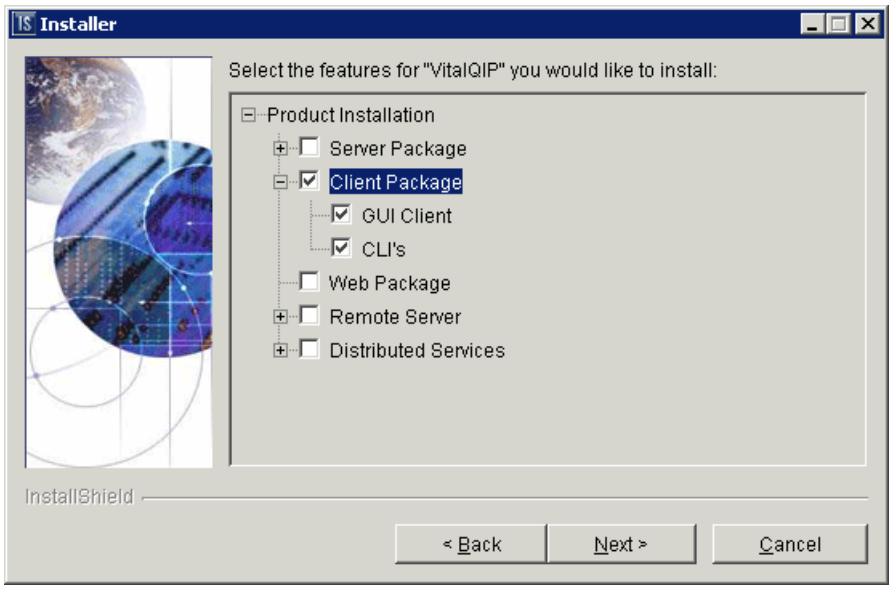
If necessary, type the destination directory directly in the **Directory Name** field. Alternatively:

a. Click **Browse**.

b. Navigate to where the directory is located and select the directory.

c. Click **Open**. The destination directory is shown in the field.

6 Click **Next.** The Features screen opens.



To install the VitalQIP client only, uncheck all components except the **Client Package** and its sub-components.

> **Important!** If any VitalQIP component is already installed, "`installed`" is shown next to it. If you want to keep that component, do ***not*** uncheck the checkbox: InstallShield will reinstall that component at the same time that it installs the components that you are now selecting.

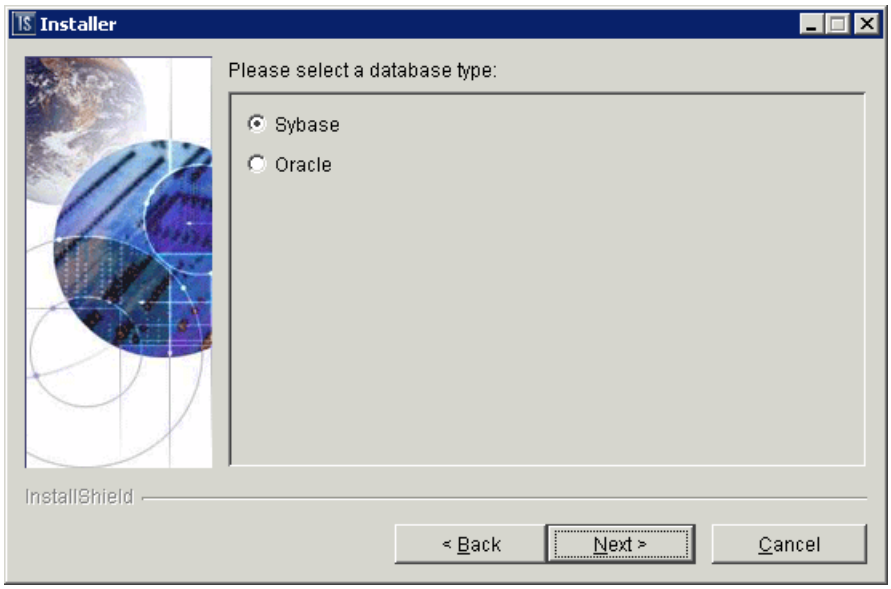
The following table describes the sub-components of the Client package. After reading the table, ensure **Client Package** is checked. Check or uncheck the sub-components you want to install.

Table 17-2 Client installation sub-components

Sub-component	Description
GUI Client	Installs the user interface of VitalQIP.
CLI	Installs the Command Line Interface.

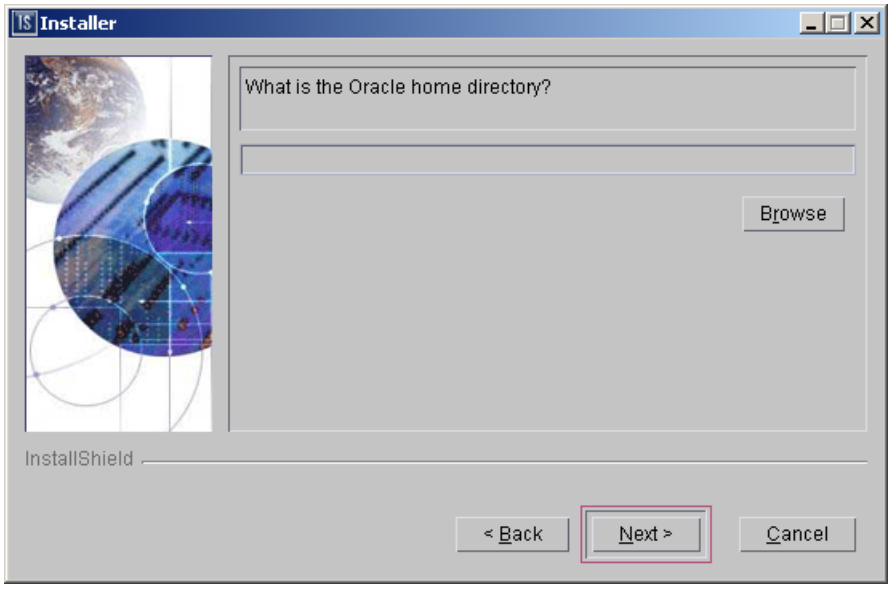
7 Click **Next**. The installation shows an information message. Read the message and follow any instructions that are shown.

8 Click **Next**. The Database Type screen opens.



Select **Oracle**.

9 Click **Next**. The Database Home Directory screen opens.



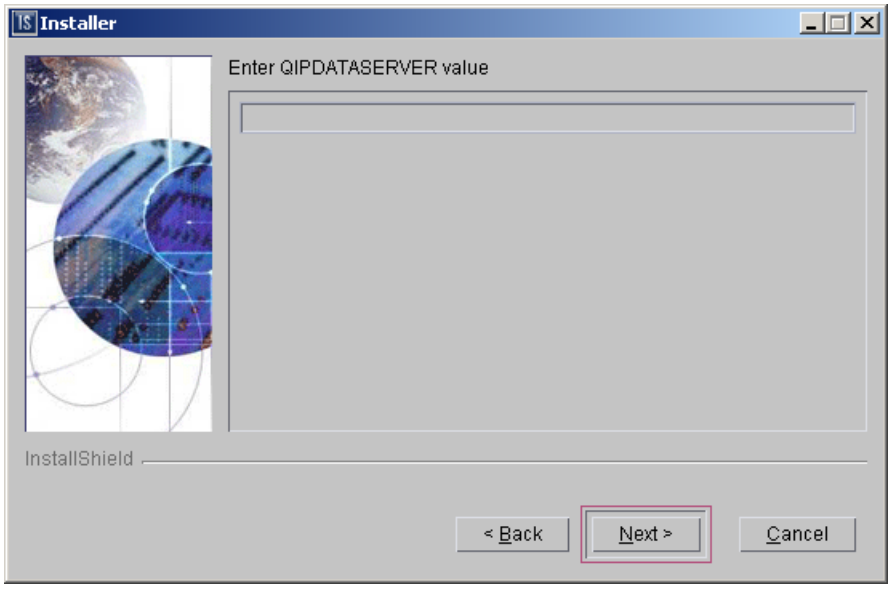
If necessary, type the destination directory directly in the **What is the Oracle home directory?** field. Alternatively:

a. Click **Browse**.

b. Navigate to where the directory is located and select the directory.

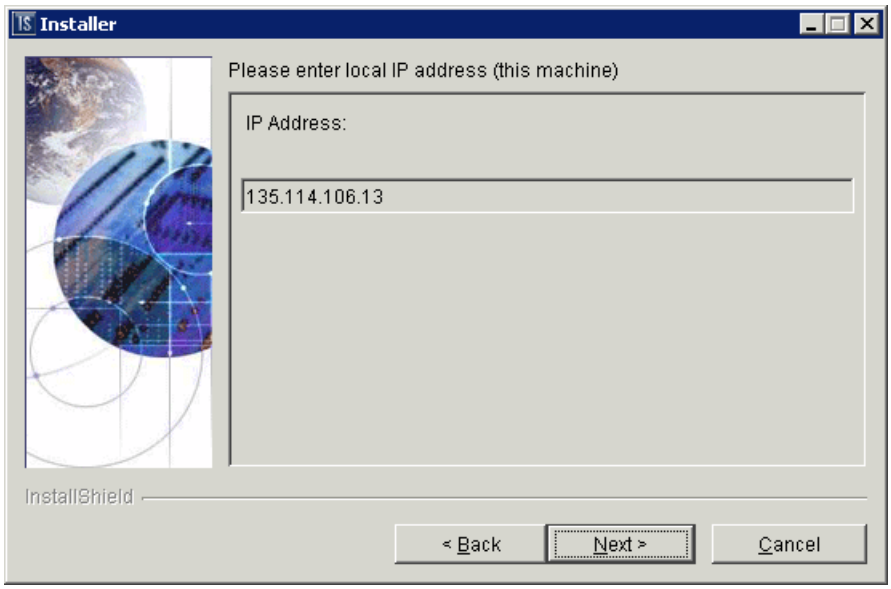
c. Click **Open**. The destination directory is shown in the field.

10 Click **Next**. The QIPDATASERVER Value screen opens.



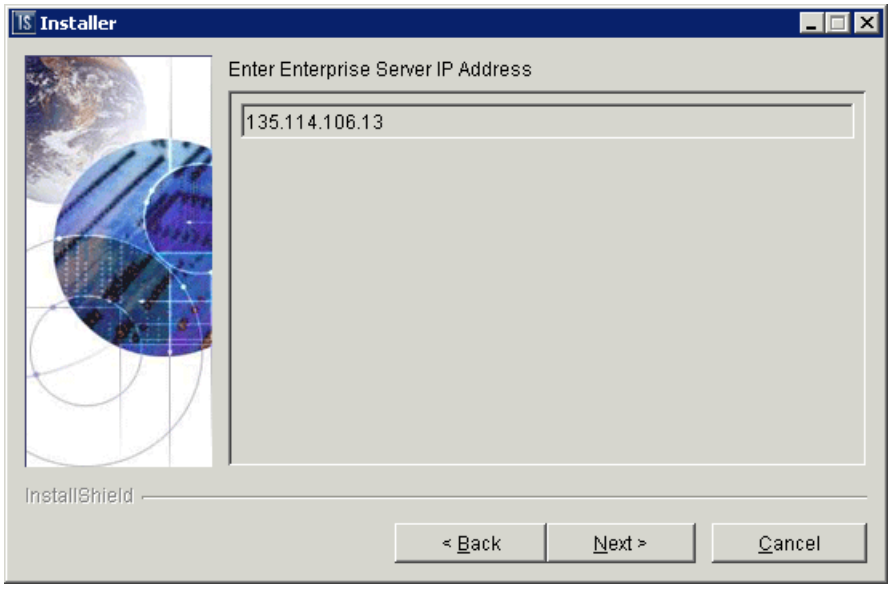
This defines the value of the **`QIPDATASERVER`** environment variable. The **`QIPDATASERVER`** value is the name of the database server. In the **Enter QIPDATASERVER value** field, enter the database server name if necessary.

11 Click **Next**. The Local IP Address screen opens.



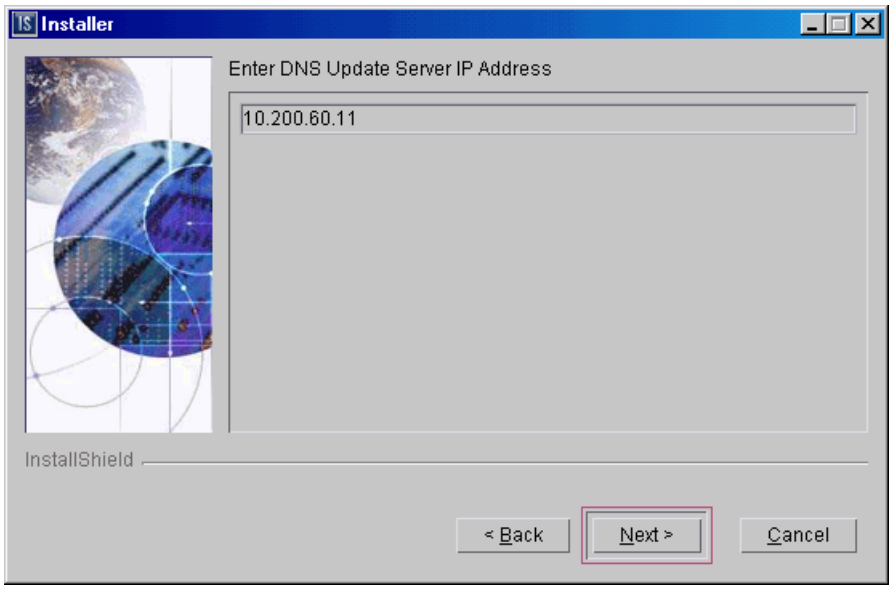
The IP address of the local machine is displayed. This screen sets the QIPMESSAGESERVICE variable. In the **IP Address** field, change the IP address of the machine on which VitalQIP is being installed if needed. If you are installing the Client on an enterprise server, the local IP address will be the enterprise server IP address.

12 Click **Next**. The Enterprise Server IP Address screen opens.



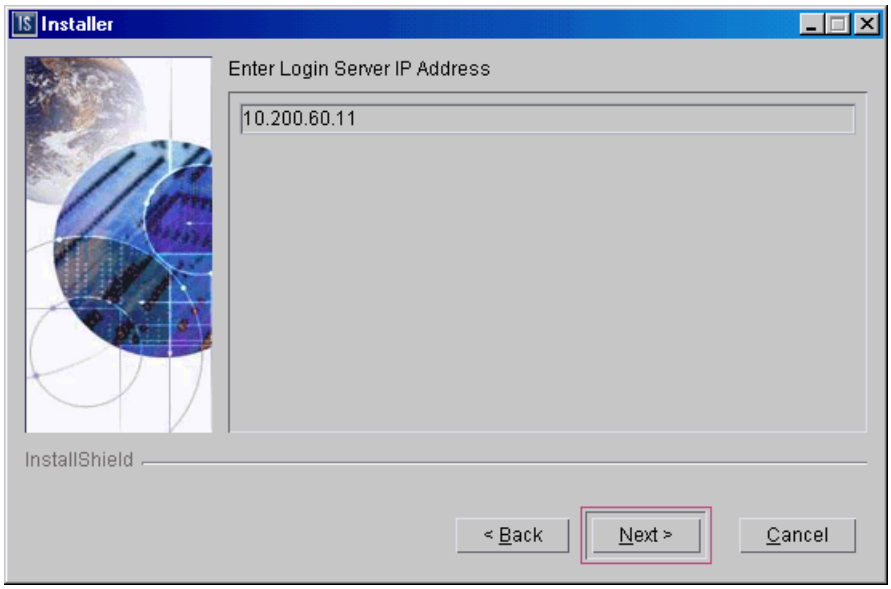
The IP address of the local machine is displayed. In the **Enter Enterprise Server IP Address** field, change the IP address of the machine on which the Enterprise Server is installed.

13 Click **Next**. The DNS Update Service IP Address screen opens.



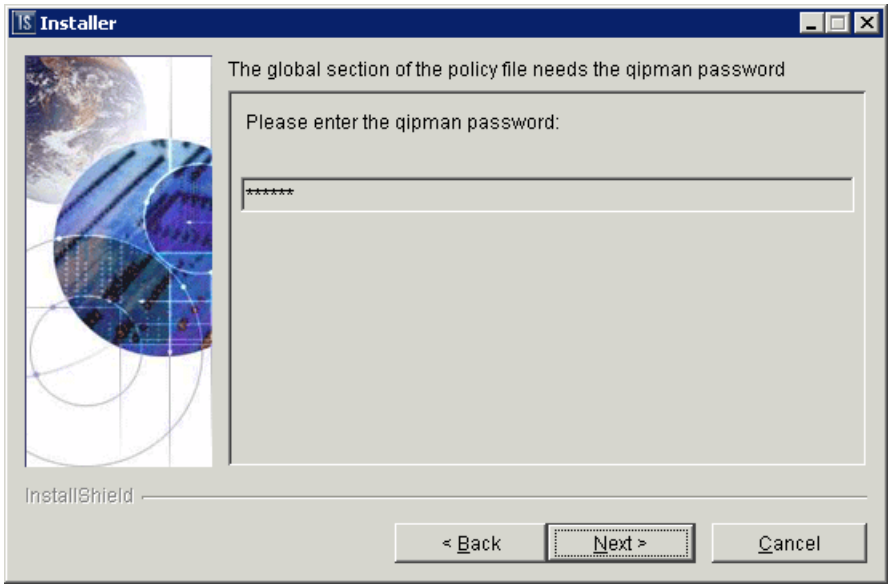
In the **Enter DNS Server IP Address** field, change the IP address of the DNS Update Service. The value is stored in the *qip.pcy* file.

14 Click **Next**. The Login Server IP Address screen opens.



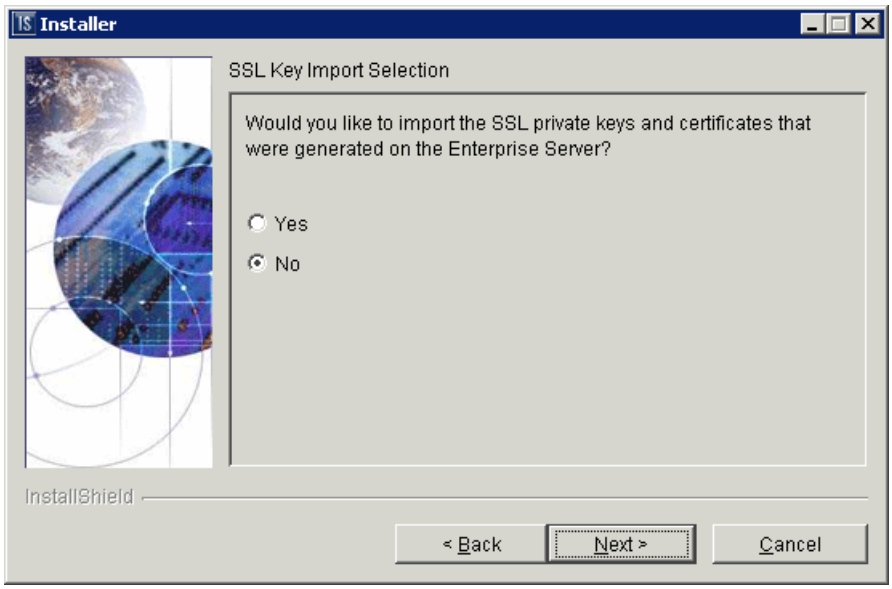
In the **Enter Login Server IP Address** field, change the IP address for the Login Server if needed. The value is stored in the *qip.pcy* file.

15 Click **Next**. The qipman Password screen opens.



By default, the password for qipman is **`qipman`**. You should use the default and change it later if you wish. The qipman password is stored in the Global policy section of the *qip.pcy* file.

16 Click **Next**. The Import SSL Public/Private Keys screen opens.

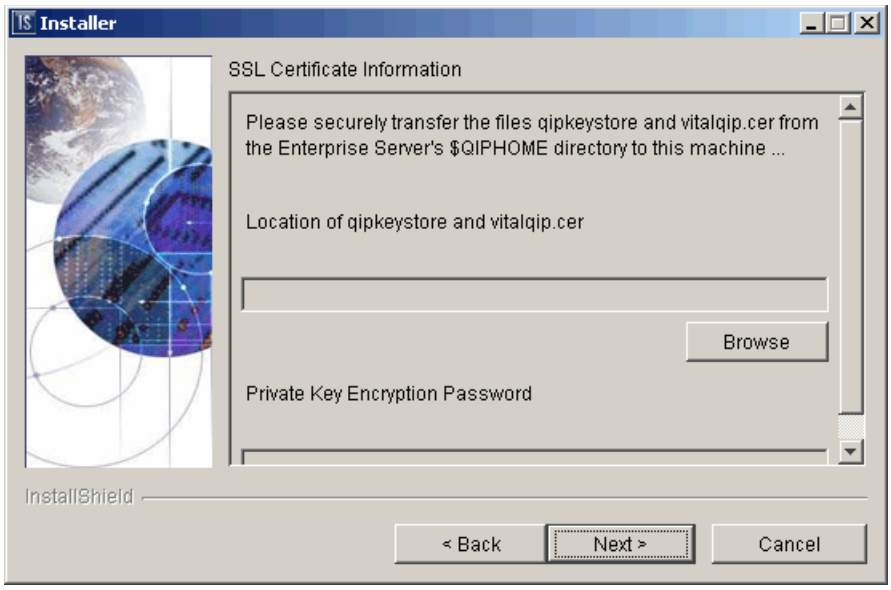


Select one of the following:

- **Yes** if you are planning on using the SSL Tunnel Service
- **No** if you are not using the SSL Tunnel Service

SSL security

17 Click **Next**. If you selected Yes in the previous screen, the SSL Certificate Information screen opens.

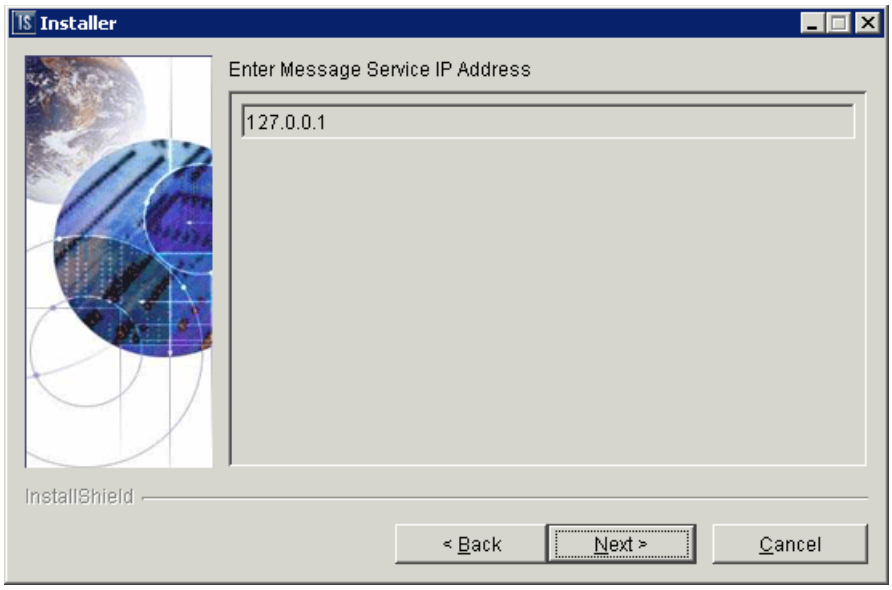


Do the following:

- In the **Location of qipkeystore and vitalqip.cert files** field type the location of the *qipkeystore* and *vitalqip.cert* files. Alternatively:
  a. Click **Browse**.
  b. Navigate to where the directory is located and select the directory.
  c. Click **Open**. The destination directory is shown in the field.
- In the **Private Key Encryption Password** field, enter the SSL private key password.

Without SSL security

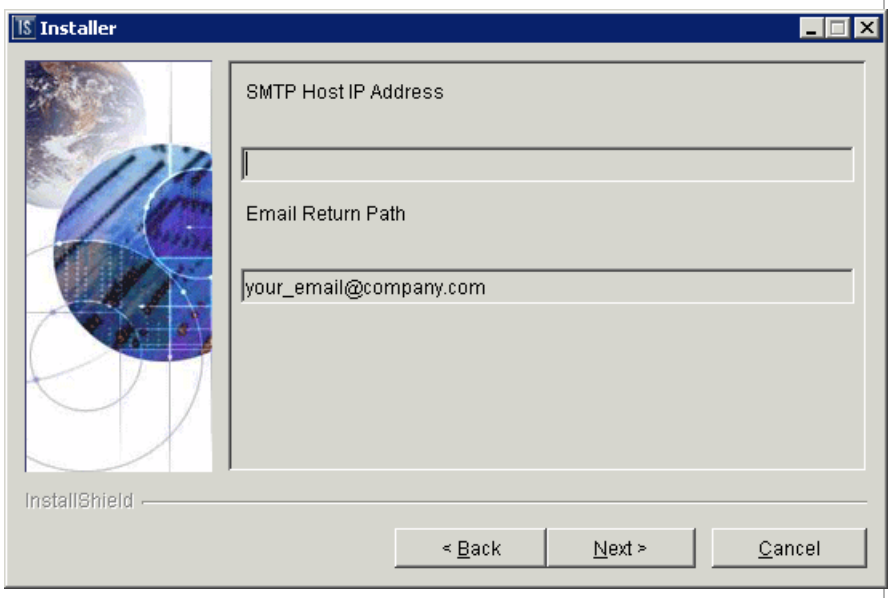
18 Click **Next**. If SSL is set to No, the installation prompts for the IP address of the VitalQIP Message Service.



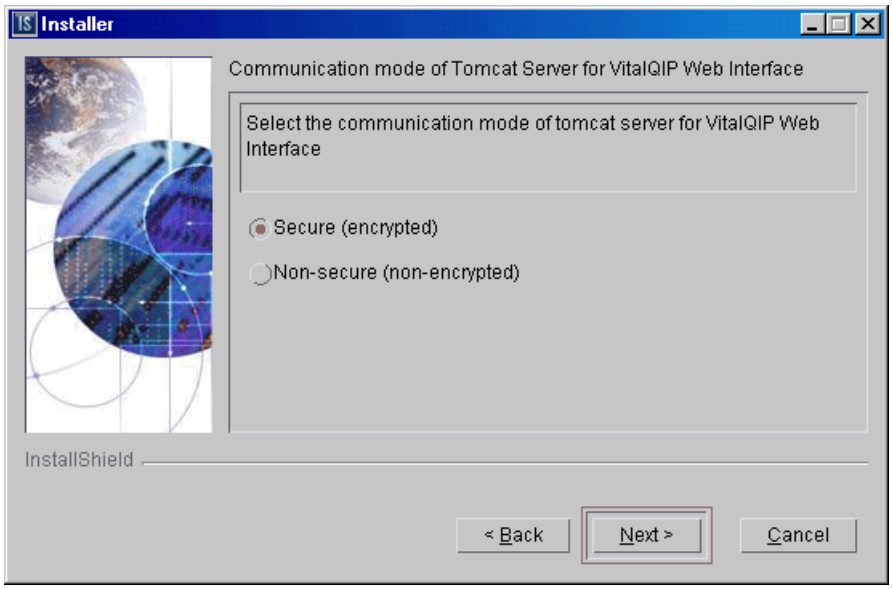
The default is 127.0.0.1. Change the IP address if the VitalQIP Message Service is not installed on a local machine.

19 Choose one of the following.

If you want to...	Then...
Install GUI client on a UNIX platform	1. Click **Next**. **Result:** The Tomcat Server Communication Mode opens. 2. Proceed to Step 20.

If you want to...	Then...
Install GUI client on a Windows platform	1. Click **Next**. **Result:** The SMTP Host Information screen opens.  VitalQIP requires information about the Email server. This information is used to send email alerts to defined administrators. 2. In the **SMTP Host IP Address** field, enter the IP address of the SMTP (email) server. 3. In the **Email Return Path** field, enter the email address of the administrator who will receive email alerts. 4. Click **Next**.

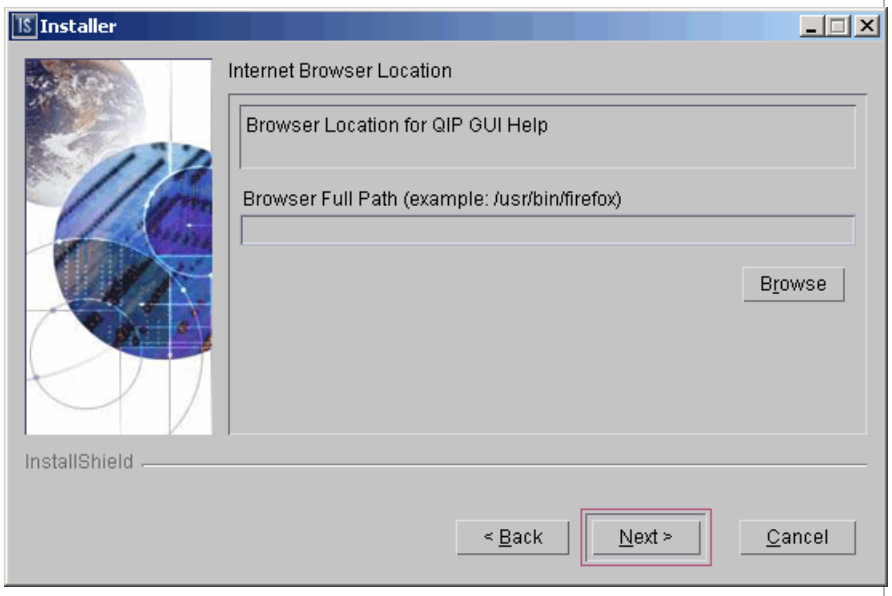
20 Click **Next**. The Tomcat Server Communication Mode opens.



The installation needs to know what mode of communication the Apache Tomcat web server will use. This information is written to the VitalQIP Service Layer section of the *qip.pcy* file. Select:

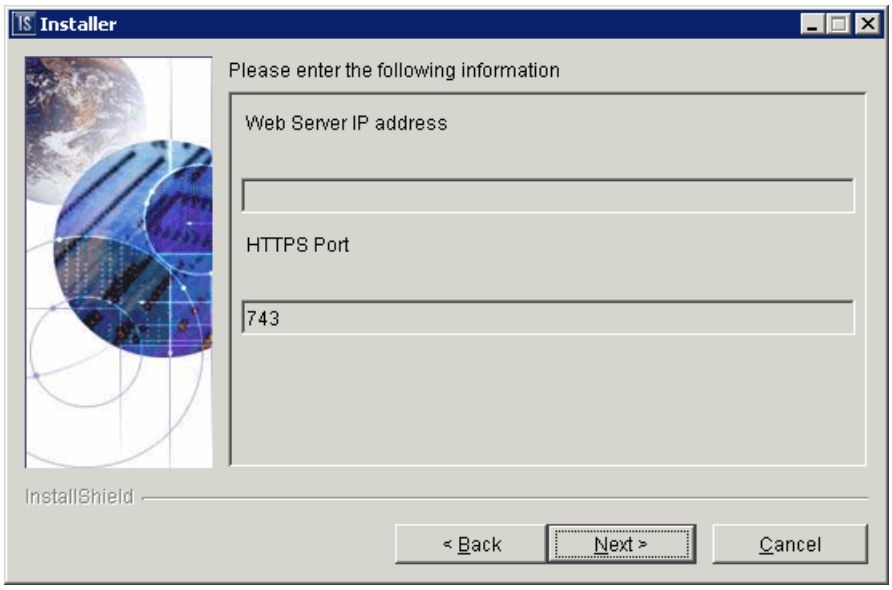
- **Secure (encrypted)** - uses HTTPS to send encrypted messages to and from the server
- **Non-secure (not-encrypted)** - messages to and from the server are not encrypted

21 Choose one of the following..

If you want to…	Then…
Select a browser location on a UNIX platform	1. Click **Next**. **Result:** The Internet Browser Location screen opens.  To access the VitalQIP GUI help screens on a UNIX server, the installation program needs to locate a browser such as Mozilla Firefox on the enterprise server. 2. Enter the full path to the browser, or click **Browse** and select a file in the Select a file dialog box. 3. Click **Next**. **Result:** If the browser is found, the Tomcat Server Information screen opens (Step 22). If no browser path was entered or it was invalid, an information window opens with the message: `The "Browser Full Path" was either not entered or is not a valid file full path. Please select "Back" and correct. If you wish to proceed without a valid entry, note that help files will not be available unless the QIPHELP environment variable is set to the full path of a valid internet browser in the QIP user's environment.` Click **Back** to enter the correct browser path, or click **Next** to continue.

If you want to...	Then...
Continue to the Tomcat Server Information screen on a Windows platform	Click **Next**. **Result:** The Tomcat Server Information screen opens (Step 22).

22 The Tomcat Server Information screen opens.



Note: Either **HTTP Port** or **HTTPS Port** field is displayed in this screen. The field that is displayed is determined by your selection in Step 20.

Review the following table and fill in the fields.

Table 17-3 Tomcat Server Information fields

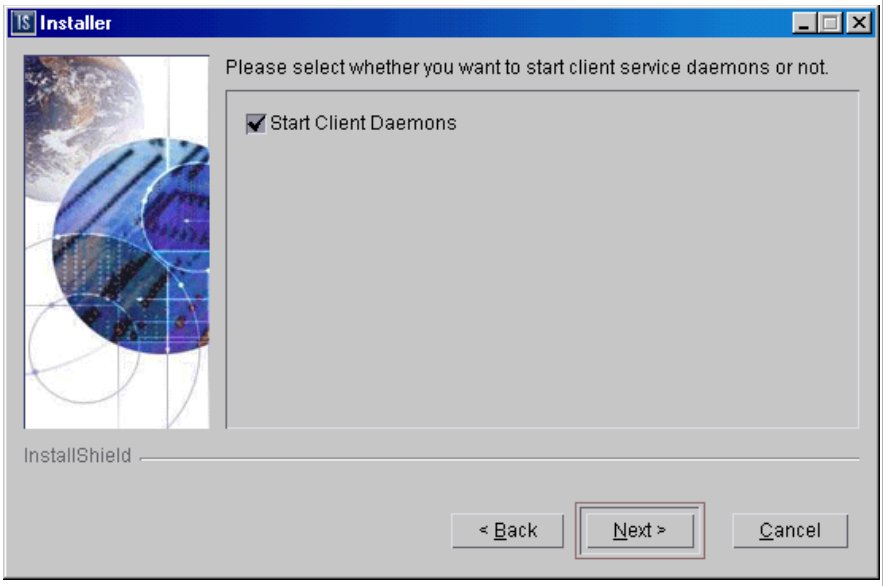
Field	Description
Web Server IP address	The IP address where the Apache Tomcat web server resides.
HTTP Port	***Displayed when Non-secure (not-encrypted) is selected in Step 20.*** The port used by the web client to connect to the Apache Tomcat web server. By default, the port is 80.
HTTPS Port	***Displayed when Secure (encrypted) is selected in Step 20.*** The SSL port used by the web client to connect to the Apache Tomcat web server. By default, the port is 743.

23 Click **Next**. After a few moments, the Summary screen opens. Examine the features to be installed. If changes are necessary, click **Back** to make changes to the installation. If everything looks correct, click **Next**.

The installer commences extracting files and installing VitalQIP. After a few moments, the Successful Install screen opens.

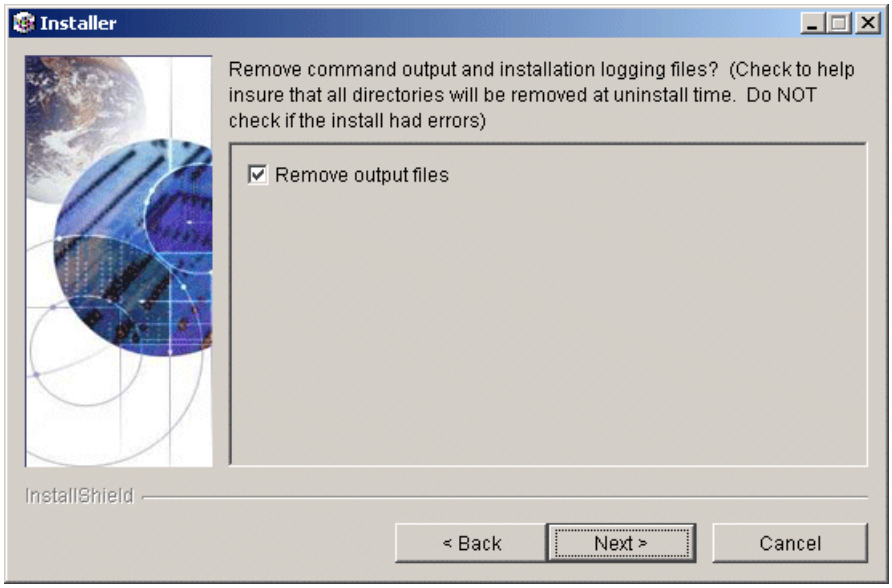
Note: On Windows, a message may open asking if you want to overwrite *mfc42.dll*. Click **No** to continue.

24 Choose one of the following.

If you want to...	Then...
Start client daemons on a UNIX platform	1. Click **Next**. **Result:** The Start Client Daemons screen opens.  The installation gives you the option to start the client daemons. 2. Select **Start Client Daemons**. A screen opens showing the daemons that are to be started. Depending on how many other VitalQIP components are installed on your system, additional Start Daemon screens can open. Follow the directions on the screen to complete the installation. 3. Click **Next**.

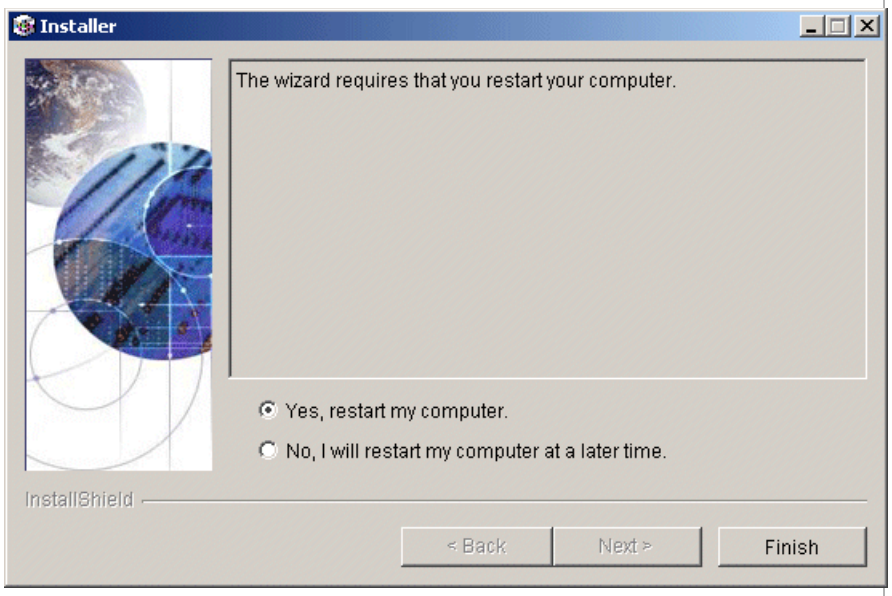
If you want to...	Then...
Install remote server on a Windows platform	1. Click **Next**. **Result:** The Remove Output Files screen opens. 2. Go to Step 25.

25 The Remove Output Files screen opens.



During the installation, VitalQIP produces output files that are no longer needed for the installation. The installation files can be kept or removed from your system. It is recommended that you keep the files if the install had errors. If you want to keep the files, uncheck **Remove output files**.

26 Choose one of the following..

If you want to…	Then…
Complete the installation on a UNIX platform	1. Click **Next**. **Result:** The Installation complete screen opens. 2. Click **Finish**.
Complete the installation on a Windows platform	1. Click **Next**. **Result:** The Installation complete screen opens.  2. Before you can begin using VitalQIP, you must reboot your computer. Select **Yes** to restart your computer. If you would rather work on other tasks before configuring VitalQIP, click **No**. 3. Click **Finish**.

END OF STEPS

18 Install VitalQIP Distributed Services

Overview

Purpose

This chapter covers installing VitalQIP Distributed Services on a supported platforms.

Contents

This chapter covers these topics.

VitalQIP Distributed Services installation overview	18-2
VitalQIP Distributed Services pre-installation checklist	18-2
Install the VitalQIP Distributed Services	18-5

VitalQIP Distributed Services installation overview

What is installed

The VitalQIP Distributed Services installation installs the following:

- VitalQIP Login Service
- VitalQIP File Generation Service
- VitalQIP DNS Update Service
- VitalQIP QIP Update Service
- VitalQIP Message Service
- VitalQIP Schedule Service
- VitalQIP SSL Tunnel Service

Note: If you are installing the DNS Update Service, and plan to perform DNS pushes from this server (qip-genddns), you must also have either a remote server, the CLIs, or a client GUI installed on this server.

Upgrade from previous versions

If VitalQIP is being upgraded from a previous version, refer to Part IV: "Upgrade VitalQIP" for instructions on upgrading to VitalQIP 7.2.

VitalQIP Distributed Services pre-installation checklist

Purpose

Use the following checklist to determine what needs to be done before beginning the Distributed Services installation:

Table 18-1 Distributed Services pre-installation checklist

Task	Description	Status
Determine the configuration	Determine how and where the components are to be installed. Also, consider if this is an upgrade or if additional components are being installed. Refer to Part I of the *Administrator Reference Manual* for more information.	

Task	Description	Status
Determine if secure socket layer is deployed	Find out if secure socket layer will be used in the VitalQIP deployment. If it is, the *qipkeystore* and *vitalqip.cer* files are required to be located on the machine. These files are created during the VitalQIP enterprise server installation. The files are located in the directory where VitalQIP is installed. The encyrpted password needs to be obtained also.	
Meet pre-installation requirements	The pre-installation requirements must be met before installing VitalQIP. Read the *VitalQIP 7.2 Release Notes* to ensure your system meets the pre-installation requirements for installing VitalQIP.	
Install the database client	If the Distributed Services are being installed on a separate machine from the enterprise server, an Oracle client must be installed. Your Oracle database administrator is responsible for ensuring the Oracle client is correctly in place.	
Stop all VitalQIP-related processes	If VitalQIP is installed, ensure all VitalQIP-related processes are stopped.	
Gather information about the database	The following information needs to be gathered about the database server: • The name of the database. If VitalQIP is already installed, the value set in the **`QIPDATASERVER`** environment variable • The IP address of the server where the database is running. • The the full path to the directory where the database is running.	
Gather the IP address of the machine	Gather the IP addresses of the machines where the component is being installed and of the VitalQIP enterprise server.	

Task	Description	Status
Gather the IP address of services	Gather the address of the machine or machines where these services are to be installed: • VitalQIP Login Service • VitalQIP File Generation Service • VitalQIP DNS Update Service • VitalQIP QIP Update Service • VitalQIP Message Service • VitalQIP Schedule Service	
Gather information about the Apache Tomcat web server	Gather the following information about the Apache Tomcat web server: • Find out if your web server is using standard HTTP or HTTPS messaging • Find the port your web server is using • Find the IP address of the machine where the web server is running • If installing a scheduler, obtain a license key.	

Install the VitalQIP Distributed Services

Purpose

This section explains how to install the VitalQIP Distributed Services on supported platforms. If you have problems installing the software, contact technical support.

Before you begin

- Ensure your database is running.

Windows

- Ensure you are logged into your system as a user with administrative privileges.
- Ensure you exit all programs you are currently running.

UNIX

- Log into your system as the root user. If the installation is not done as the root user the **`qping`** utility does not work. The utility must have root permission with the **`SUID`** bit set for the administrator. This is an operating system limitation.

  To work around this limitation:

  a. Log into the system as the root user:

  b. Change the mode and permissions on the **`qping`** utility to be:

  `root:sys & 4755`

Procedure

To install VitalQIP Distributed Services, follow these steps:

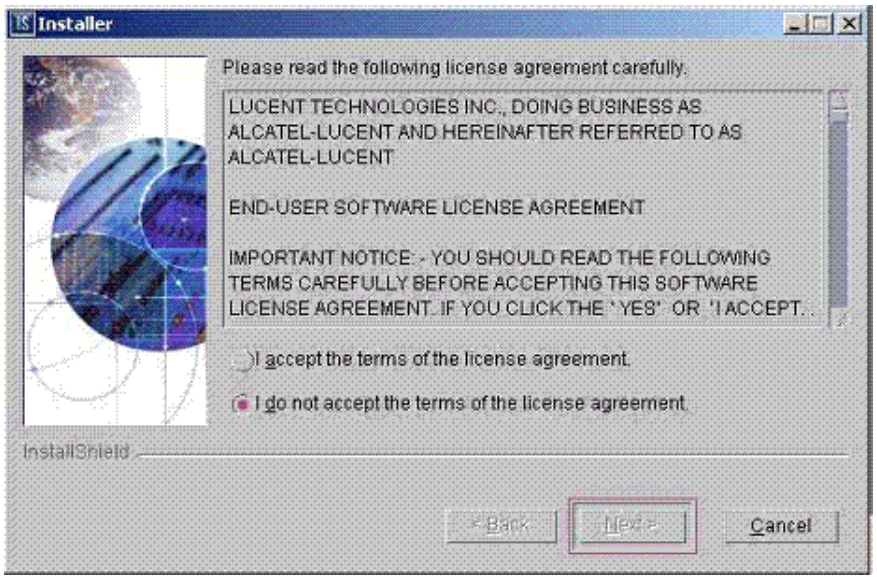
1 Choose one of the following:

If you want to…	Then…
Install on a Linux platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72setupLinuxgccr<#>.bin`**
Install on a Solaris platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72setupSolarisr<#>.bin`**

If you want to...	Then...
Install on a Windows platform	1. Open a command window and change directory to the installation file location. This is the location you selected when you downloaded the Windows installation executable from the Alcatel-Lucent Electronic Download site (*c:\temp* is the default location). 2. Enter: **`qip72setupwin32r<#>.exe`**

For all executables, the **#** denotes the repackaging number of the executable.

2 The Software License Agreement screen opens.

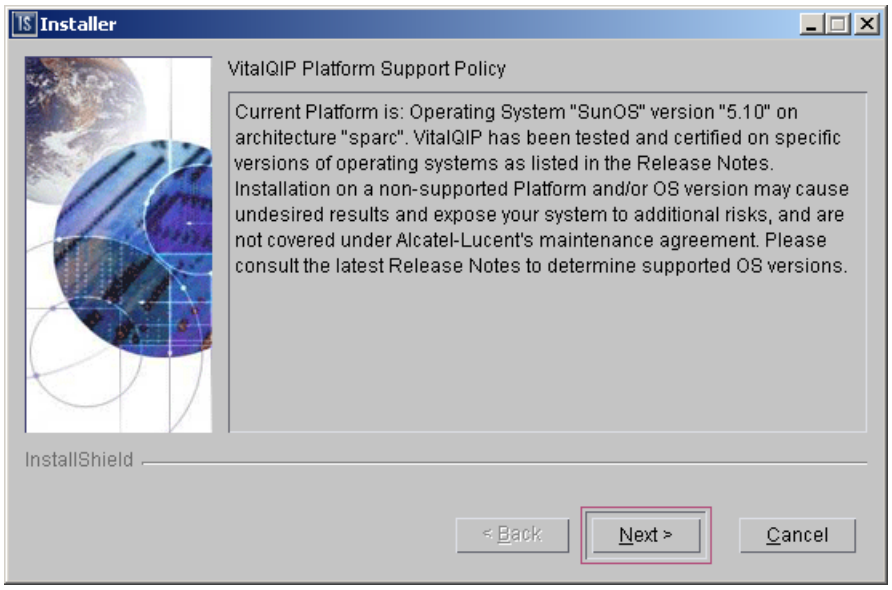


Read the software license agreement and:

- Select **I accept the terms of the license agreement.** to accept the license agreement.
- Select **I do not accept the terms of the license agreement.** if you do not accept the license agreement. The installation is canceled.

3 Click **Next**. The Welcome screen opens.

4 Click **Next**. The installation checks that the operating system is a supported version. If it is not a supported operating system, a screen opens with the Platform Support Policy.

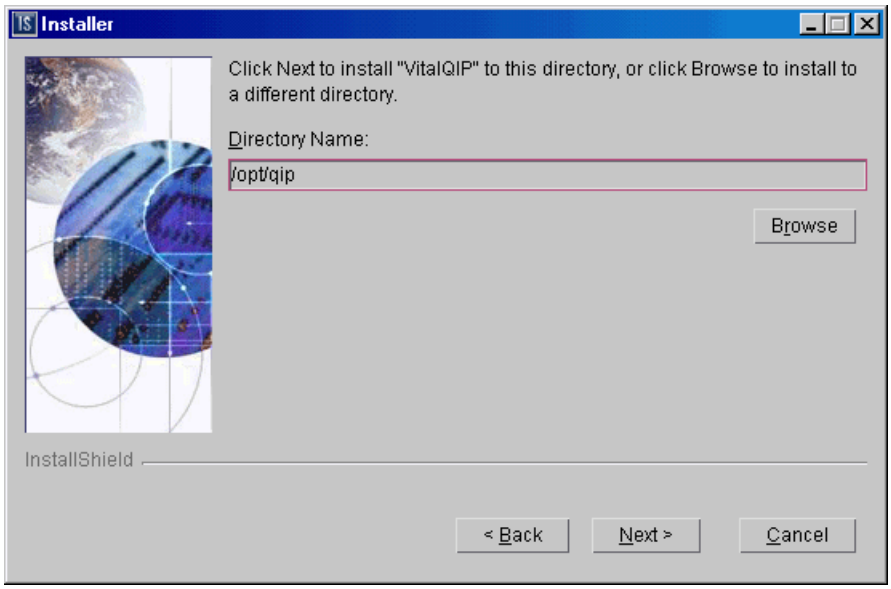


Click **Cancel** to exit the installation and upgrade the operating system to one of the supported versions listed in the *VitalQIP 7.2 Release Notes* before you install VitalQIP.

5 Click **Next**. Choose one of the following.

If you want to…	Then…
Install Distributed Services on a UNIX platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, a screen opens showing the VitalQIP-related daemons that are running. 1. Choose one of the following options: • Click **yes, kill processes automatically** and have the installation stop the processes. • Click **no, they will be killed manually** and stop the processes manually. 2. Click **Next**.
Install Distributed Services on a Windows platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, the processes are stopped by the installation.

6 The VitalQIP Home Directory screen opens.



The default destination directory for the VitalQIP software is shown. By default, the directory is */opt/qip* on UNIX and *c:\qip* on Windows. If a version of VitalQIP exists on the machine, the installation reads the **`QIPHOME`** environment variable and displays the value.

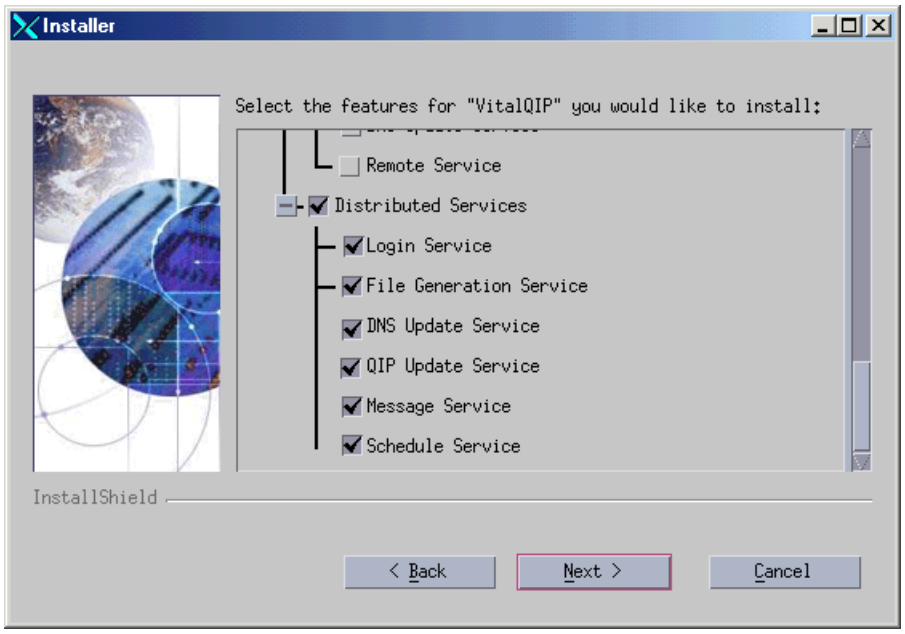
If necessary, type the destination directory into the **Directory Name** field. Alternatively:

a. Click **Browse**.

b. Navigate to where the directory is located and select the directory.

c. Click **Open**. The destination directory is shown in the field.

7 Click **Next**. In a few moments, the Features screen opens.



To install the VitalQIP Distributed Services only, uncheck all components except **Distributed Services** and its sub-components.

> **Important!** If any VitalQIP component is already installed, "`installed`" is shown next to it. If you want to keep that component, do ***not*** uncheck the checkbox: InstallShield will reinstall that component at the same time that it installs the components that you are now selecting.

The following table describes the sub-components of the Distributed Services package. After reading the table, ensure **Distributed Services** is checked. Check or uncheck the sub-components you want to install.

> **Note:** If you select at least one service, the Message Service option is automatically checked. The Message Service is required to communicate with VitalQIP.

> **Note:** If only the Login Service and Message Service are being installed, you are not prompted for database information.

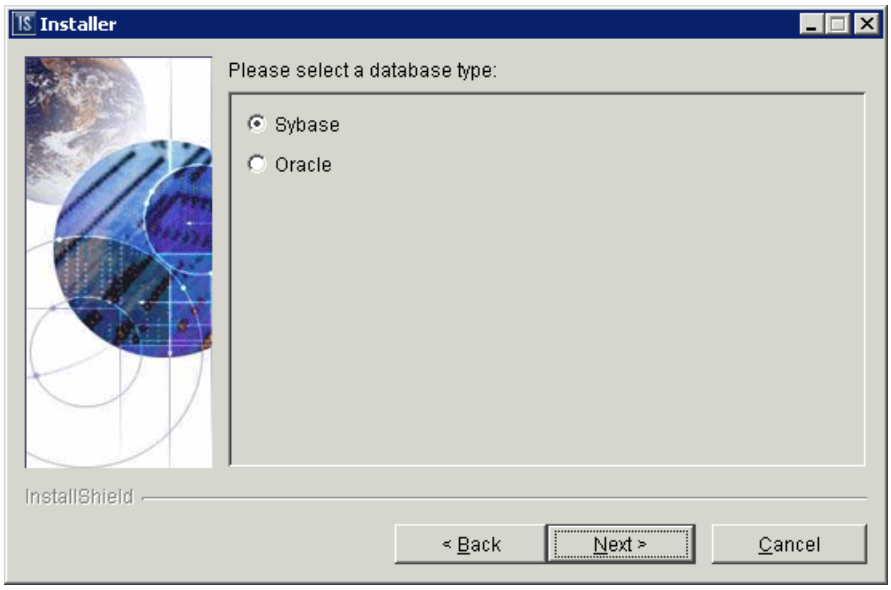
Table 18-2 Distributed Services installation sub-components

Sub-components	Description
Login Service	Handles VitalQIP database logins. This service is required to connect to the VitalQIP database.

Sub-components	Description
File Generation Service	Generates, optionally encrypts, and compresses remote service configuration files in order to transfer configuration files to remote servers.
DNS Update Service	Handles updates to DNS from DHCP servers, manages dynamic updates between DNS servers, and optionally sends DNS updates from administrative clients.
QIP Update Service	Handles updates to the VitalQIP enterprise server.
Message Service	Handles message routing from VitalQIP clients, DHCP, DNS, and VitalQIP services.
Schedule Service	Handles all scheduled events managed by VitalQIP enterprise server: • Scheduled moves • Scheduled reclaims • Auto updates of DNS, Bootp table, and NIS/Local operating system files

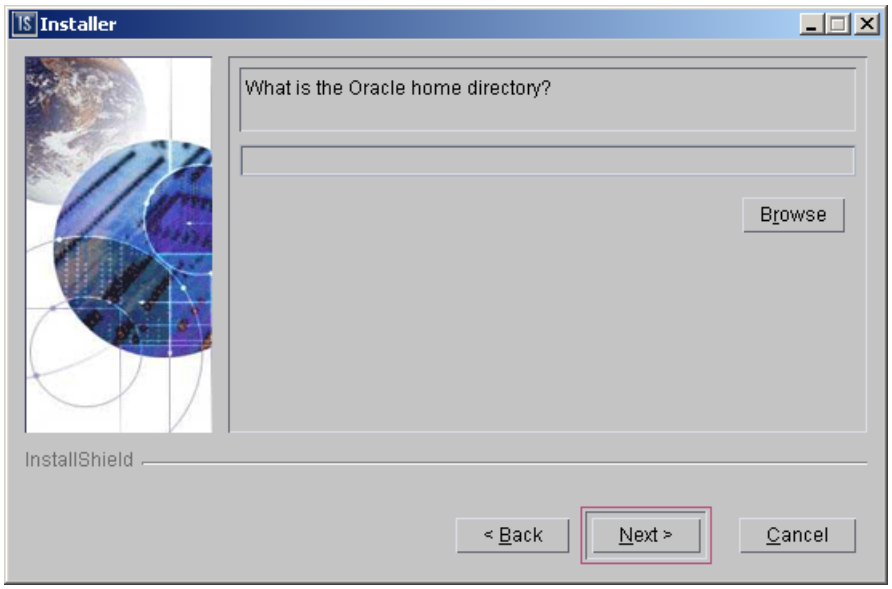
8 Click **Next**. The installation shows an information message. Read the message and follow any instructions that are shown in the message.

9 Click **Next**. The Database Type screen opens.



Select **Oracle**.

10 Click **Next**. The Database Home Directory screen opens.



If necessary, type the destination directory directly in the **What is the Oracle home directory?** field. Alternatively:

a. Click **Browse**.

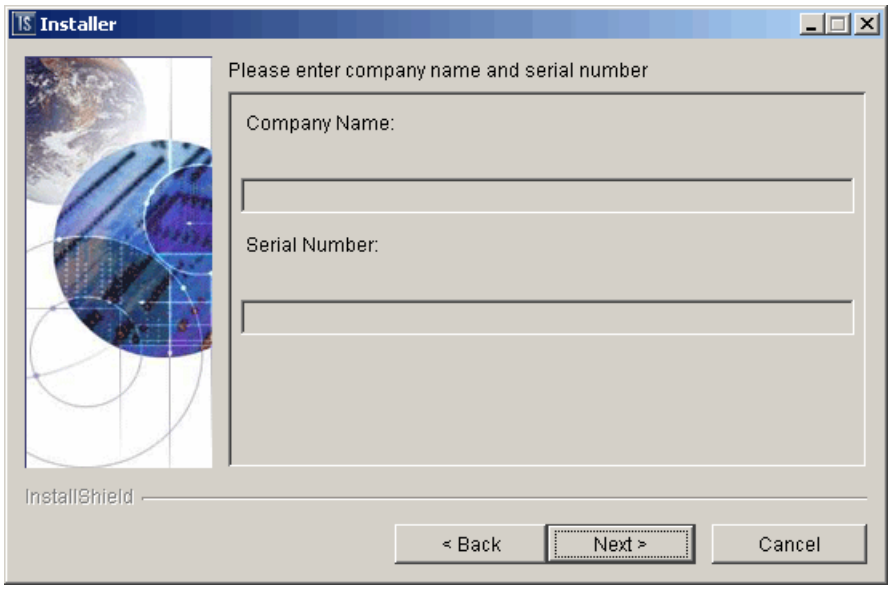
b. Navigate to where the directory is located and select the directory.

c. Click **Open**. The destination directory is shown in the field.

Schedule Service

11 If the Schedule Service is selected in Step 7, two additional screens are displayed. To continue with the installation, follow these steps:

a. Click **Next**. The Company Name & Serial Number screen opens.

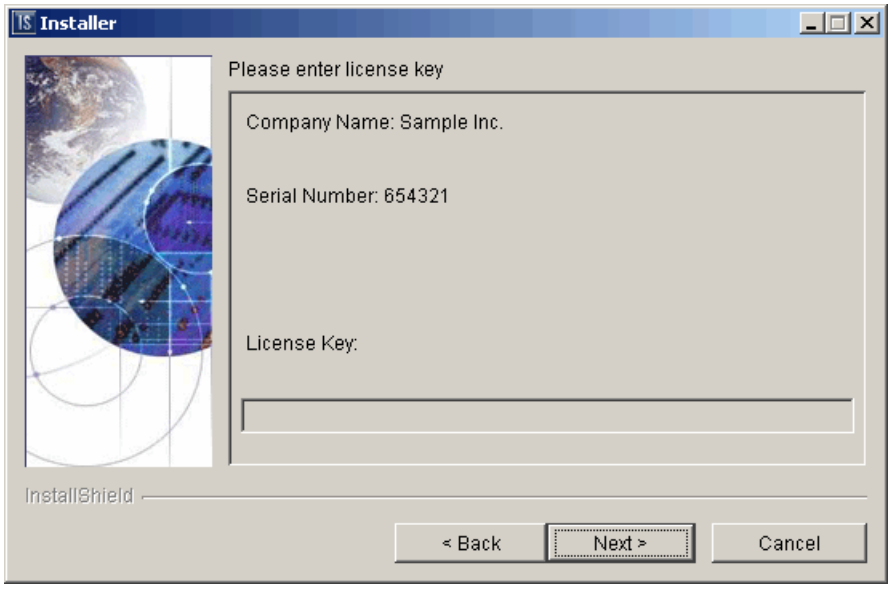


Do the following:

– In the **Company Name** field, enter the name of your company name.

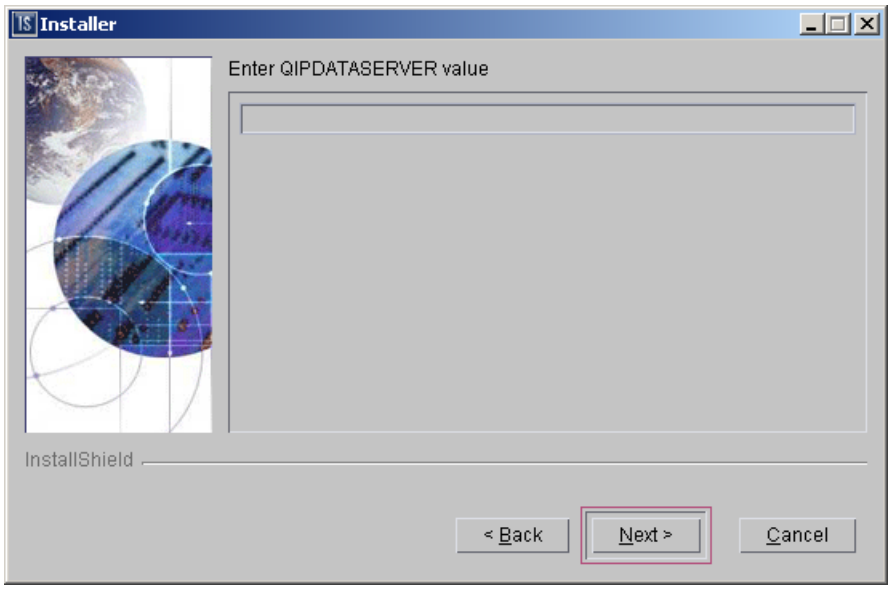
– In the **Serial Number** field, enter the serial number supplied by Alcatel-Lucent.

b. Click **Next**. The License Key screen opens.



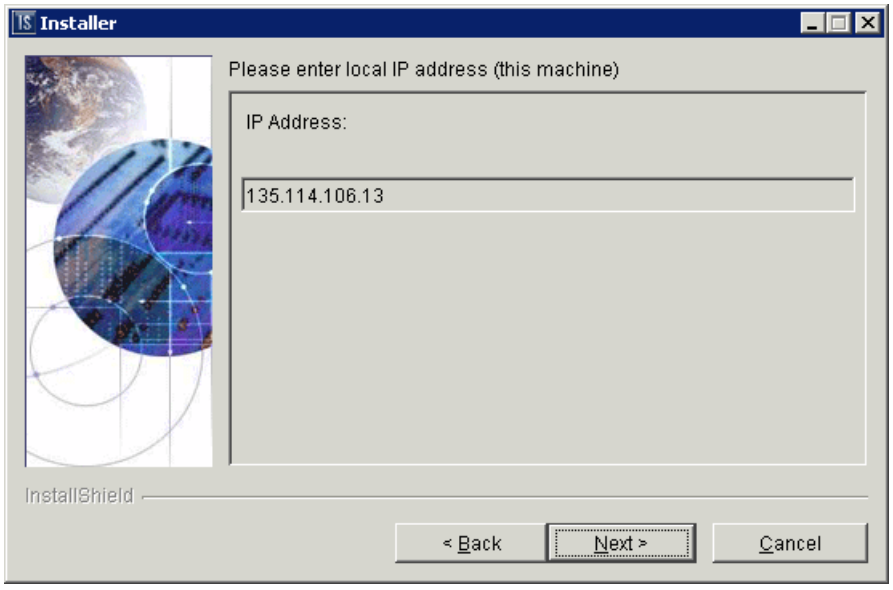
In the **License Key** field, enter the VitalQIP license key supplied by Alcatel-Lucent.

12 Click **Next**. The QIPDATASERVER Value screen opens.



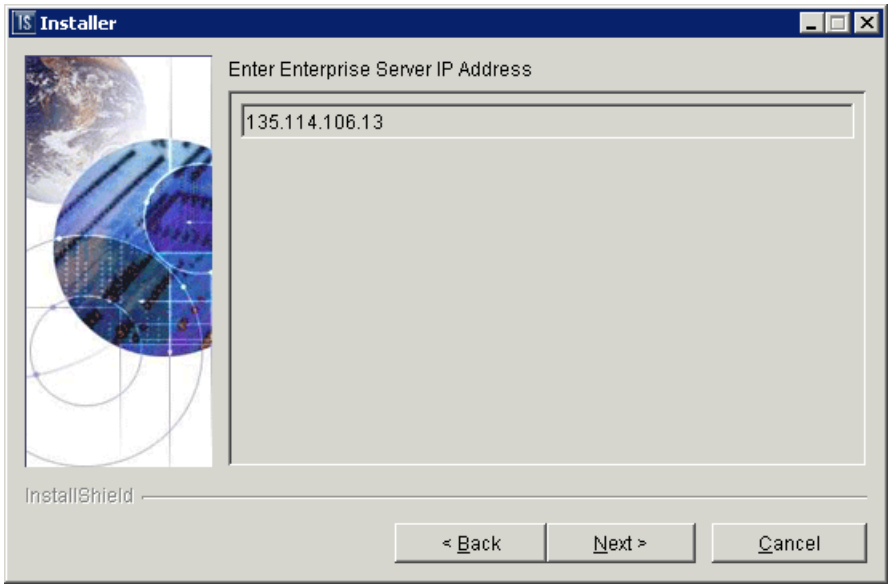
This defines the value of the **`QIPDATASERVER`** environment variable. The **`QIPDATASERVER`** value is the name of the database server. In the **Enter QIPDATASERVER value** field, enter the the name of your database.

13 Click **Next**. The Local IP Address screen opens.



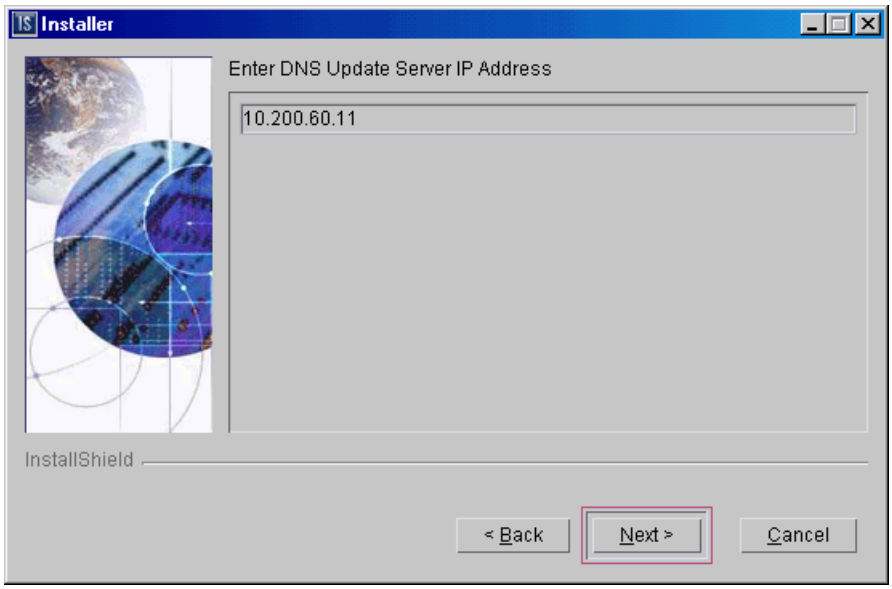
The IP address of the local machine is displayed. In the **IP Address** field, change the IP address of the machine on which the service is being installed if needed.

14 Click **Next**. The Enterprise Server IP Address screen opens.



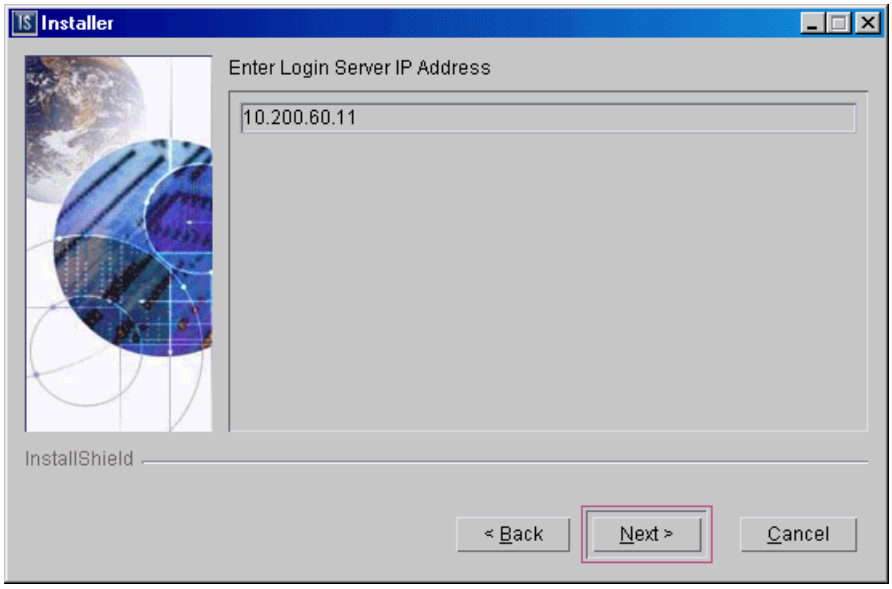
The IP address of the local machine is displayed. In the **Enter Enterprise Server IP Address** field, change the IP address of the machine on which the Enterprise Server was installed.

15 Click **Next**. The DNS Update Server IP Address for the QIP Update Service screen opens.



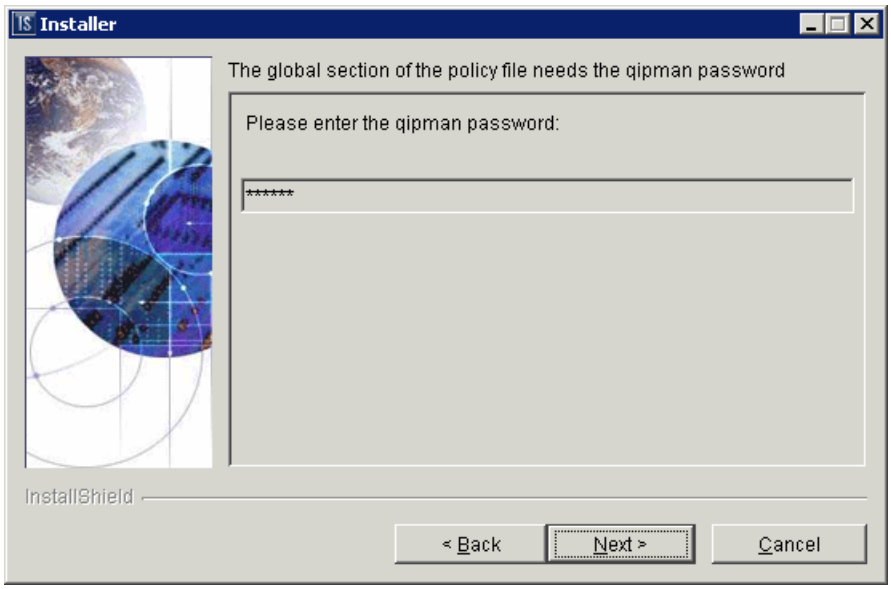
In the **Enter DNS Update Server IP Address** field, change the IP address of the DNS Update Server. The value is stored in the *qip.pcy* file.

16 Click **Next**. The Login Server IP Address screen opens.



In the **Enter Login Server IP Address** field, change the IP address for the Login Server if needed. The value is stored in the *qip.pcy* file.

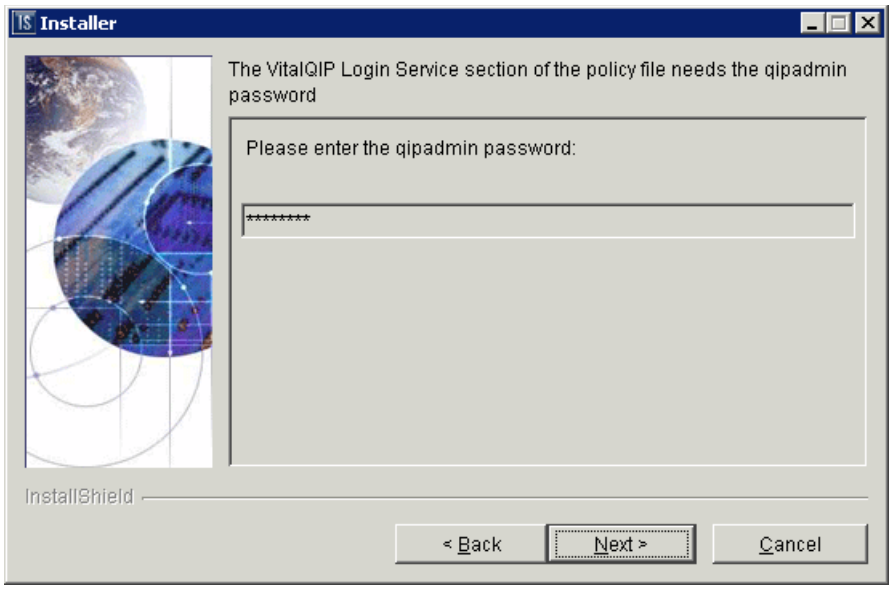
17 Click **Next**. The qipman Password screen opens.



By default, the password for qipman is **`qipman`**. You should use the default and change it later if you wish. The qipman password is stored in the Global policy section of the *qip.pcy* file as an encrypted password.

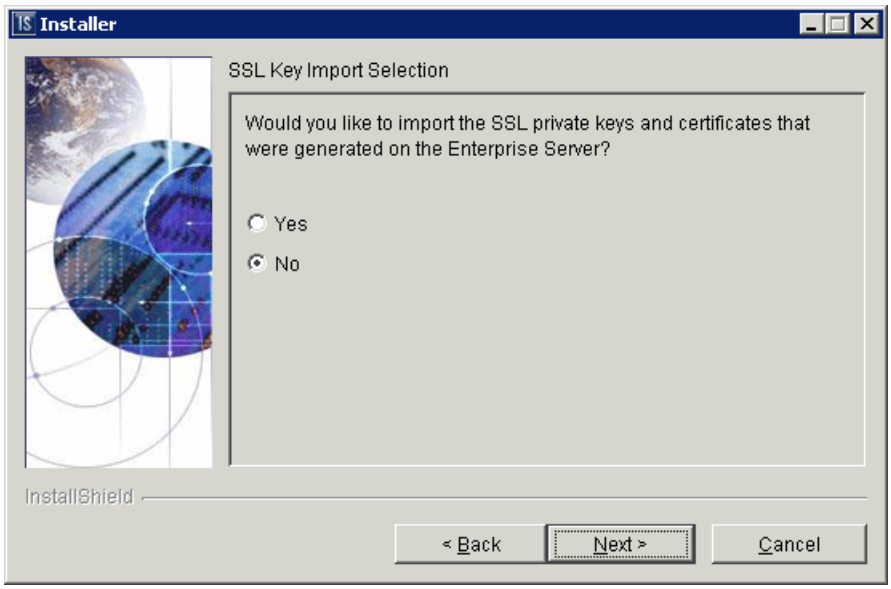
Login Service only

18 Click **Next**. If you selected Login Service in Step 7, the qipadmin Password screen opens. Skip this step if you did not select Login Service.



By default, the password for qipadmin is **`qipadmin`**. You should use the default and change it later if you wish. The qipman password is stored in the VitalQIP Login Service section of the *$QIPHOME/qip.pcy* file.

19 Click **Next**. The Import SSL Public/Private Keys screen opens.

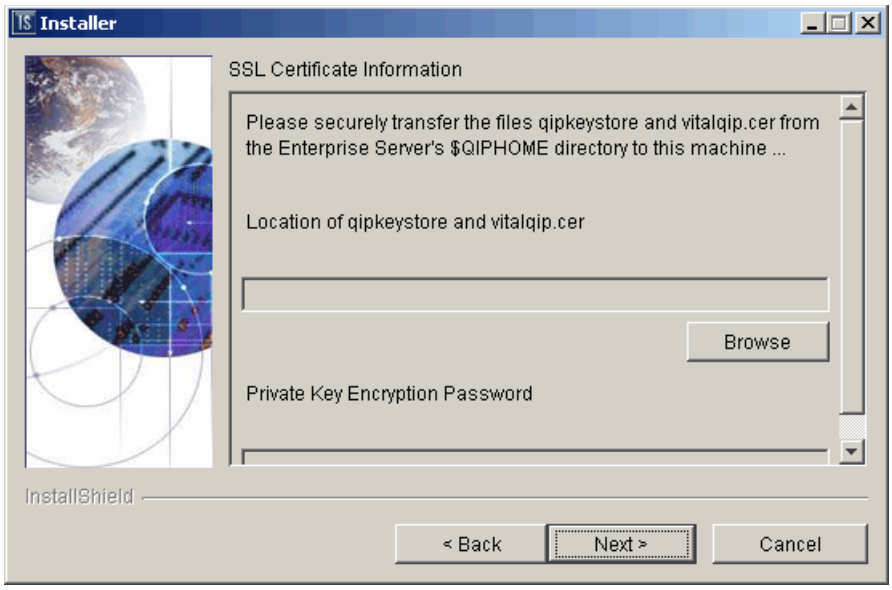


Select one of the following:

- **Yes** if you are planning on using the SSL Tunnel Service
- **No** if you are not using the SSL Tunnel Service

SSL security

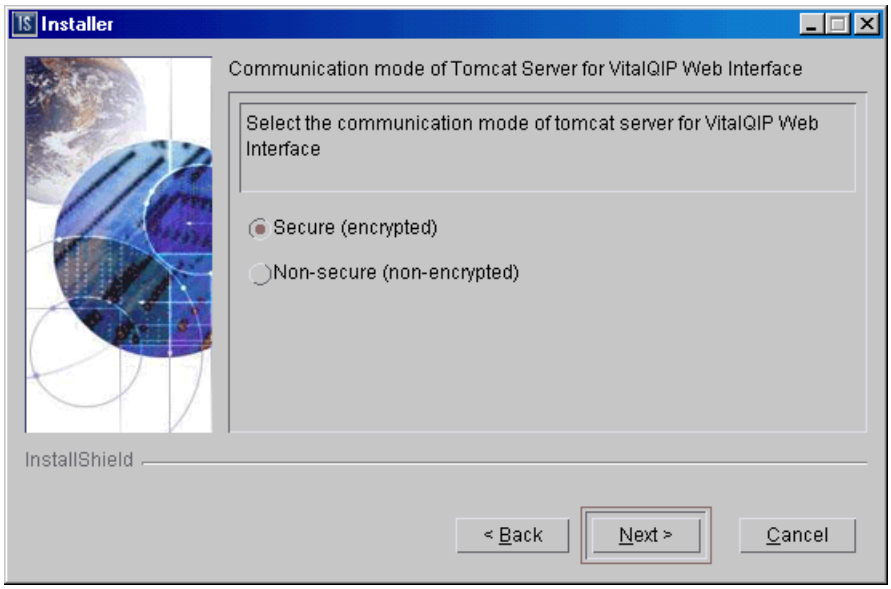
20 Click **Next**. If selected Yes in the previous screen, the SSL Certificate Information screen opens. Skip this step if you selected No.



Do the following:

- In the **Location of qipkeystore and vitalqip.cert files** field type the location of the *qipkeystore* and *vitalqip.cert* files. Alternatively:
  a. Click **Browse**.
  b. Navigate to where the directory is located and select the directory.
  c. Click **Open**. The destination directory is shown in the field.
- In the **Private Key Encryption Password** field, enter the SSL private key password.

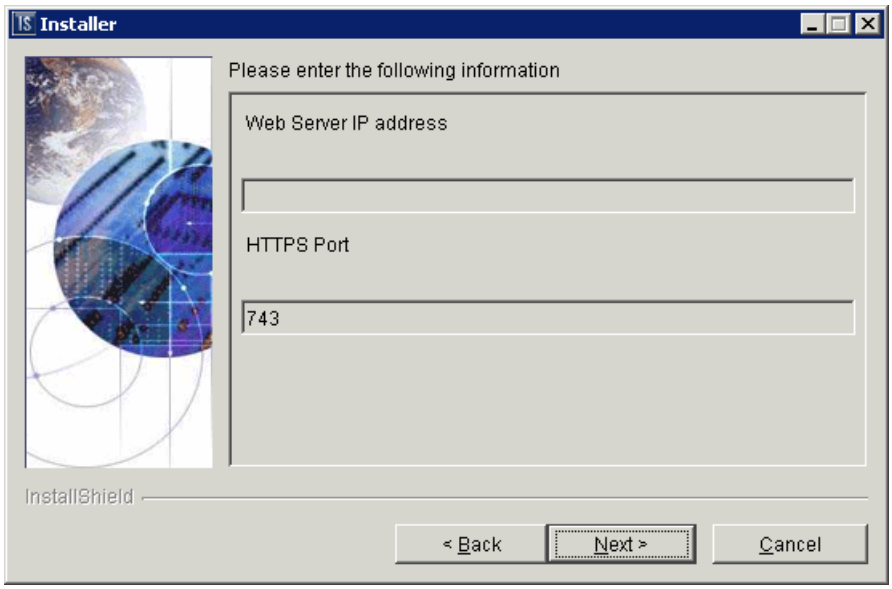
21 Click **Next**. The Tomcat Server Communication Mode opens.



The installation needs to know what mode of communication the Apache Tomcat web server will use. This information is written to the VitalQIP Service Layer section of the *qip.pcy* file. Select:

- **Secure (encrypted)** - uses HTTPS to send encrypted messages to and from the server
- **Non-secure (not-encrypted)** - messages to and from the server are not encrypted

22 Click **Next**. The Tomcat Server Information screen opens.



Note: Either **HTTP Port** or **HTTPS Port** field is displayed in this screen. The field that is displayed is determined by your selection in Step 21.

Review the following table and fill in the fields.

Table 18-3 Tomcat Server Information fields

Field	Description
Web Server IP address	The IP address where the Apache Tomcat web server resides.
HTTP Port	***Displayed when Non-secure (not-encrypted) is selected in Step 21.*** The port used by the web client to connect to the Apache Tomcat web server. By default, the port is 80.
HTTPS Port	***Displayed when Secure (encrypted) is selected in Step 21.*** The SSL port used by the web client to connect to the Apache Tomcat web server. By default, the port is 743.

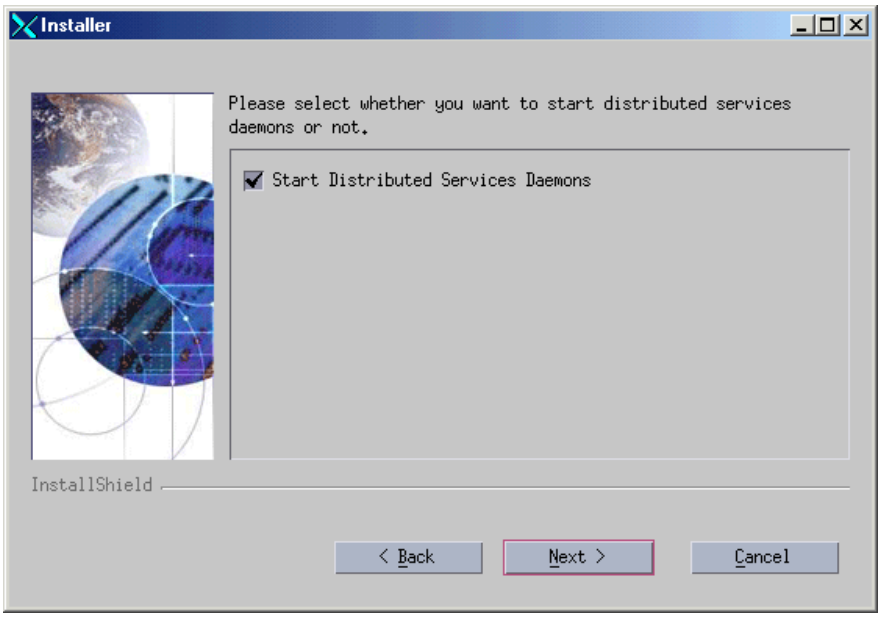
23 Click **Next**. After a few moments, the Summary screen opens. Examine the features to be installed. If changes are necessary, click **Back** to make changes to the installation. If everything looks correct, click **Next**.

The installer commences extracting files and installing VitalQIP.

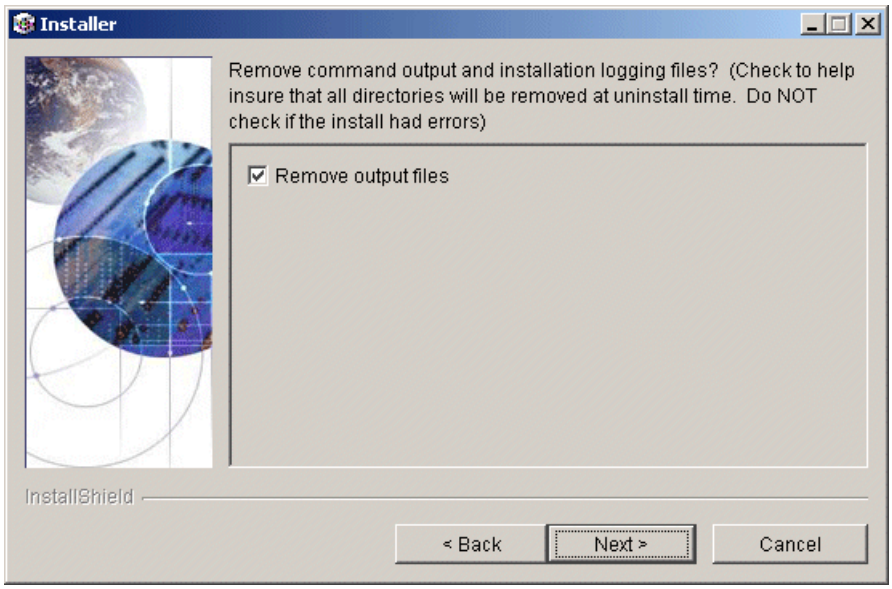
Note: During installation on a Windows platform, a message may open, asking if you want to overwrite *mfc42.dll*. Click **No** to continue.

In a few minutes, the Successful Install screen opens.

24 Choose one of the following.

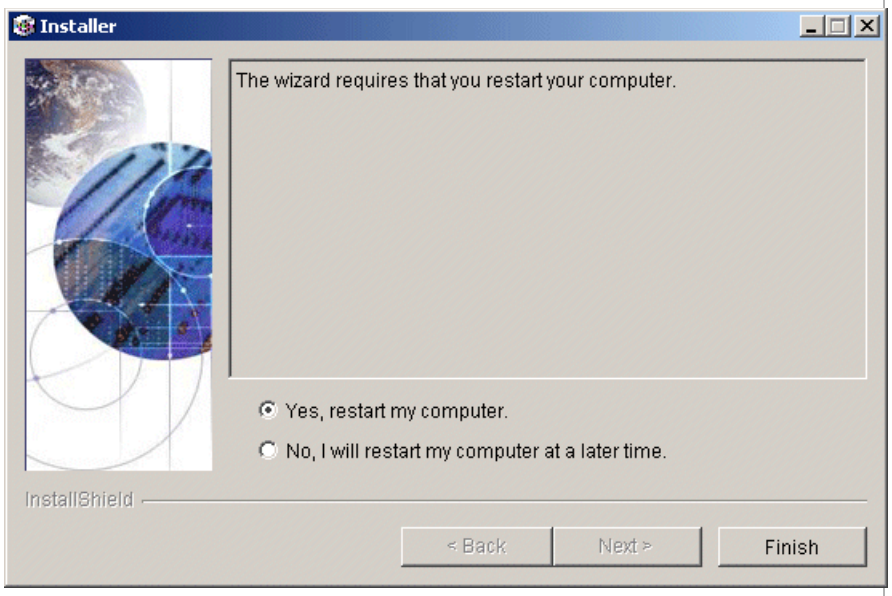
If you want to...	Then...
Start the Distributed Services daemons on a UNIX platform	1. Click **Next**. **Result:** The Start Distributed Services Daemons screen opens.  The installation gives you the option to start the Distributed Services daemons. Follow these steps if you want to start the Distributed Services daemons: 2. Select the **Start Distributed Services Daemons**. A screen opens showing the daemons that are to be started. **Note:** Depending on how many other VitalQIP components are installed on your system, additional Start Daemon screens can open. Follow the directions on the screen to complete the installation. 3. Click **Next**.
Remove output files	1. Click **Next**. **Result:** The Remove Output Files screen opens. 2. Go to Step 25.

25 The Remove Output Files screen opens.



During the installation, VitalQIP produces output files that are no longer needed for the installation. The installation files can be kept or removed from your system. It is recommended that you keep the files if the install had errors. If you want to keep the files, uncheck **Remove output files**.

26 Choose one of the following..

If you want to…	Then…
Complete the installation on a UNIX platform	1. Click **Next**. **Result:** The Installation complete screen opens. 2. Click **Finish**.
Complete the installation on a Windows platform	1. Click **Next**. **Result:** The Installation complete screen opens.  2. Before you can begin using VitalQIP, you must reboot your computer. Select **Yes** to restart your computer. If you would rather work on other tasks before configuring VitalQIP, click **No**. 3. Click **Finish**.

END OF STEPS

19 VitalQIP configuration

Overview

Purpose

Prior to using the VitalQIP Management System, your system must be configured and services started. This chapter provides general instructions for getting your VitalQIP management system running. Instructions are also included for configuring web servers.

> **Note:** Ensure that your Oracle database is started on the machine on which it is located. The VitalQIP Schedule Service must be manually started. In Windows, you are not permitted to set up a dependency for the VitalQIP Schedule Service pointing to the Oracle database.

Contents

This chapter covers these topics.

VitalQIP configuration on a Windows platform	19-2
Modifications after VitalQIP installation	19-2
Enable a blocked Tomcat self-signed certificate	19-5
Increase Tomcat server memory allocation	19-11
VitalQIP configuration on a UNIX platform	19-15
Modifications after VitalQIP installation	19-15

VitalQIP configuration on a Windows platform

Modifications after VitalQIP installation

Introduction

After you have installed VitalQIP, the VitalQIP Management software products should be set up. This section outlines some steps you need to take after VitalQIP is successfully installed on a Windows platform.

Add database service to Service Controller

To add your Oracle database service to the Lucent Service Controller, follow these steps:

1 Select **Start | Programs | VitalQIP | Service Controller**.

Result: The Lucent Service Controller opens.

2 Click **Configure**.

Result: The Configure Services screen opens.

3 Click **Select Services**, and then click **Search**.

4 Select your dataserver from the list on the left, and click **Add**.

5 Click **OK** to get back to the Configure Services screen.

6 Click **OK** to exit.

END OF STEPS

Configure and start web server

1. If you set up the Tomcat server to use secure messages during the installation, you need to configure the self-signed certificate to work with Internet Explorer 7 (this is not required with other browsers or earlier versions of IE). Follow the instructions in "Enable a blocked Tomcat self-signed certificate" (p. 19-5).
2. If you have a large data set, you should follow the instructions in "Increase Tomcat server memory allocation" (p. 19-11) before you import your data into VitalQIP.
3. Configure and start your web server. For instructions on starting the Tomcat web server, refer to Chapter 2 "Manage VitalQIP Services", in the *VitalQIP Administrator Reference Manual*.

Start database

Start your database. See your Oracle database administrator to start the database.

Configure services

Configure and start all services. For information about configuring and starting services, refer to the *VitalQIP Administrator Reference Manual*.

Adjust TCP KeepAlive settings

On most systems, TCP KeepAlive is set to a default of two hours. If network hardware or software (including firewalls) has an idle limit of less than two hours, the KeepAlive time must be lowered to less than this to fit inside the firewall limits.

To lower the KeepAlive timeout setting on Windows systems, adjust the TCP KeepAlive setting at the operating system level, as follows:

1 Open your registry and find the `HKEY_LOCAL_MACHINE\System\CurrentControlSet\Services\Tcpip\Parameters` key.

2 Create a new DWORD value named "KeepAliveTime" and set it to equal the number of milliseconds to wait before sending keep alive packets (the default is 7,200,000 milliseconds).

3 Additionally, create a new DWORD value called "KeepAliveInterval" and set it to equal the time in milliseconds between retransmissions of keep alive packets, once the KeepAliveTime has expired (the default is 1000 milliseconds).

4 Restart Windows for the change to take effect.

END OF STEPS

Enable a blocked Tomcat self-signed certificate

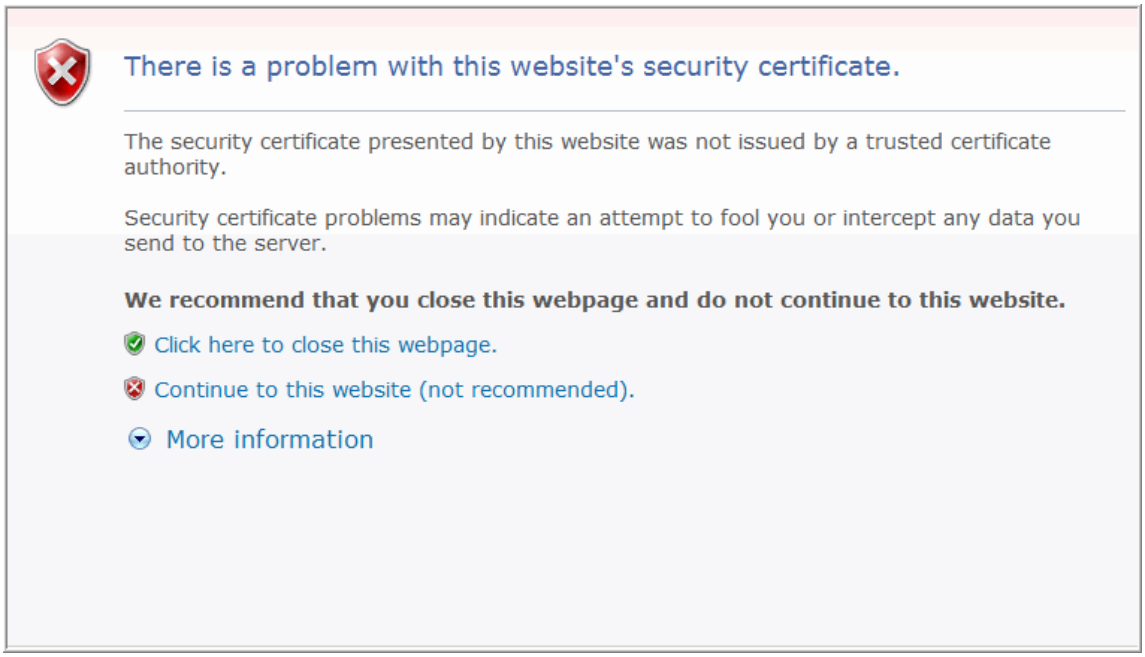
Purpose

To enable a blocked Tomcat self-signed certificate so that direct navigation to Internet Explorer 7 is permitted.

Procedure

To ensure that a Tomcat self-signed certificate works with Internet Explorer 7, follow these steps.

1 If the following window opens,

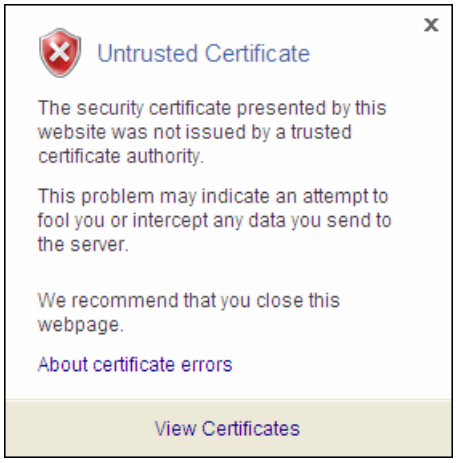


and the log-on URL is blocked by IE7, click **Continue to this website (not recommended)**.

Result: A Certificate Error opens in the browser toolbar.

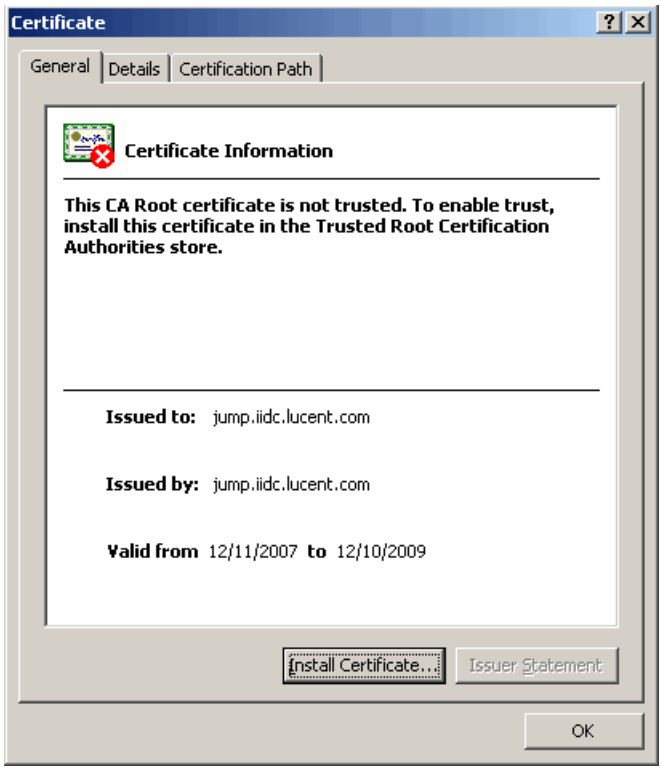
2 Click the **Certificate Error** button.

Result: An Untrusted Certificate dialog box opens.



3 Click **View Certificates**.

Result: The Certificate Information window opens.

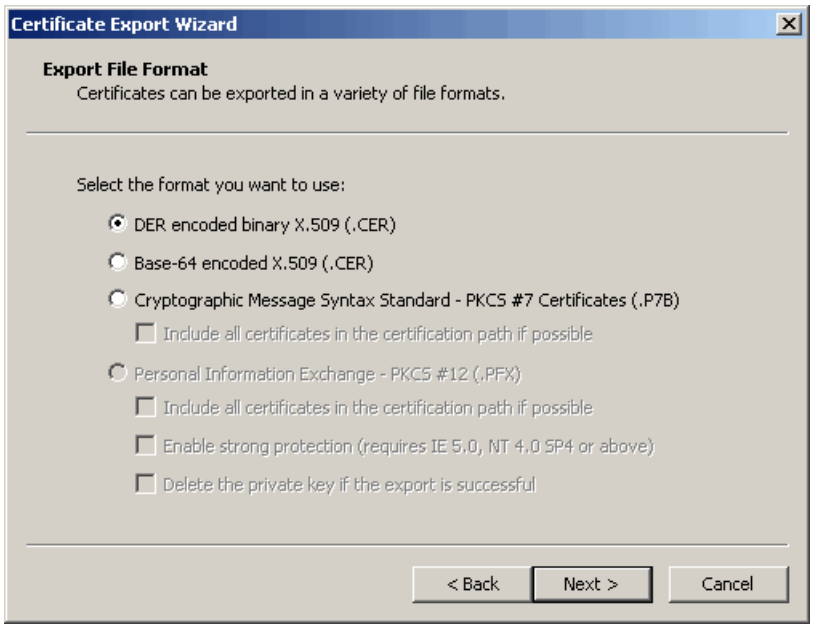


4 Click the **Details** tab, followed by **Copy to File...**

Result: The Certificate Export Wizard opens.

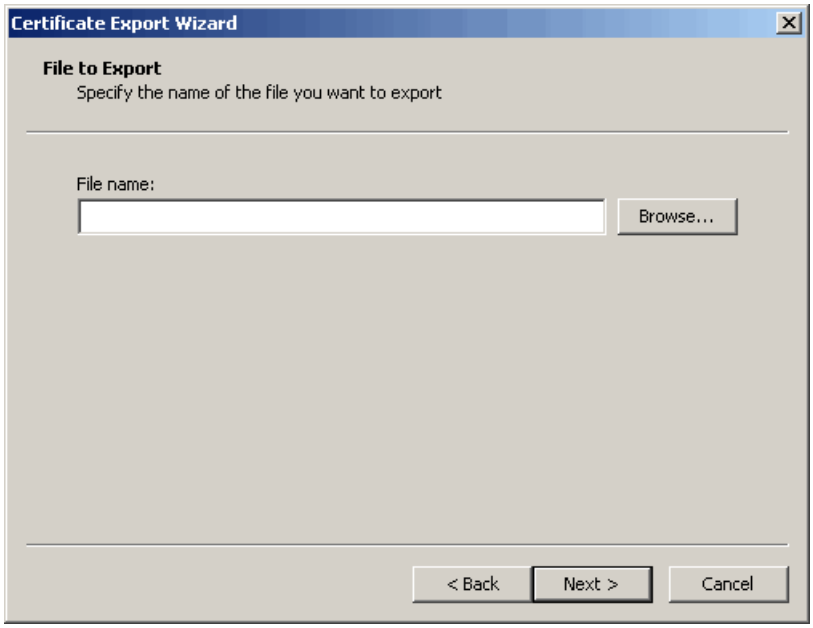
5 Click **Next**.

Result: The Export File Format window opens.



6 Select the **Base 64 encoded binary X.509 (.CER)** option and click **Next**.

Result: The File to Export window opens.



7 In the **File name** field, enter a certificate filename (*.crt* suffix), for example, *jump.crt*. The exported certificate file is saved in the *IE7.0* directory. (If you want to select another location for the certificate file, click **Browse** and navigate to the desired location.)

8 Click **Next**.

Result: The Completing the Certificate Export Wizard window opens.

9 Click **Finish**.

Result: A confirmation dialog box opens with the message **The export was successful**.

10 Click **OK**.

Result: The Certificate Details window opens.

11 To install the certificate you just exported, click the **General** tab.

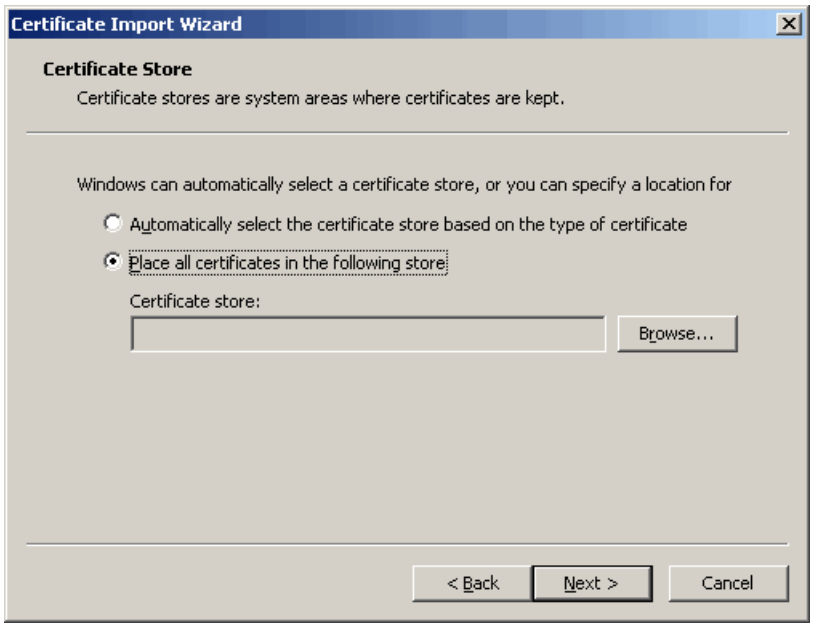
Result: The Certificate Information window opens.

12 Click **Install Certificate...**

Result: The Certificate Import Wizard opens.

13 Click **Next**.

Result: The Certificate Store window opens.



14 Select the **Place all certificates in the following store** option and click **Browse**.

Result: The Select Certificate Store window opens.

15 Select **Trusted Root Certification Authority** and click **OK**.

Result: The **Certificate store** field displays **Trusted Root Certification Authorities**.

16 Click **Next**.

Result: The Completing the Certificate Import Wizard opens.

17 Click **Finish**.

Result: The Security Warning window opens.

18 Click **Yes**.

Result: A confirmation dialog box opens with the message **The import was successful.**

19 Click **OK**.

20 Click **OK** to close the Certificate window and refresh the IE7 browser.

After the certificate is successfully imported, no further Certificate errors should occur.

END OF STEPS

Increase Tomcat server memory allocation

Purpose

To increase memory allocation for the Tomcat server when customers have large data sets (typically over 500,000 records).

Procedure

To increase memory allocation for the Tomcat server, follow these steps.

On UNIX platforms

1 Modify the *startTomcat.sh* file in $QIPHOME and increase the `JAVA_OPTS -Xmx` value. For example, to increase the 256MB size to 512MB, enter the following:

```
if [ "$tmpBuf" = "" ] ; then
    JAVA_OPTS="-Xmx512m -Xms128m -XX:+UseConcMarkSweepGC -
   XX:+CMSPermGenSweepingEnabled -XX:+CMSClassUnloadingEnabled -
   XX:MaxPermSize=96M"
else
    JAVA_OPTS="-Xmx512m -Xms128m -XX:+UseConcMarkSweepGC -
   XX:+CMSPermGenSweepingEnabled -XX:+CMSClassUnloadingEnabled -
   XX:MaxPermSize=96M $JAVA_OPTS"
fi
export JAVA_OPT
```

END OF STEPS

On Windows platforms

1 Click **Start | Run** and enter **`regedit`**.

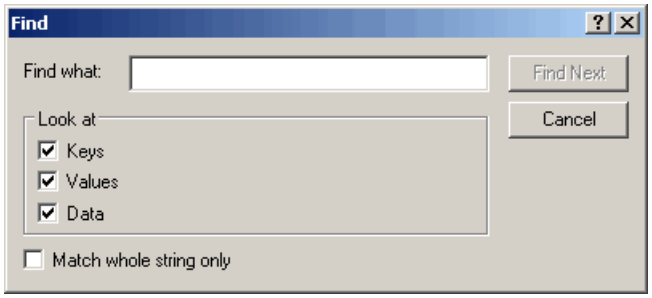
2 Click **OK**.

Result: The Registry Editor opens.

3 Select **Export** from the **File** menu and export your existing registry setting as a backup.

4 Select **Find** from the **Edit** menu.

Result: The Find dialog box opens.



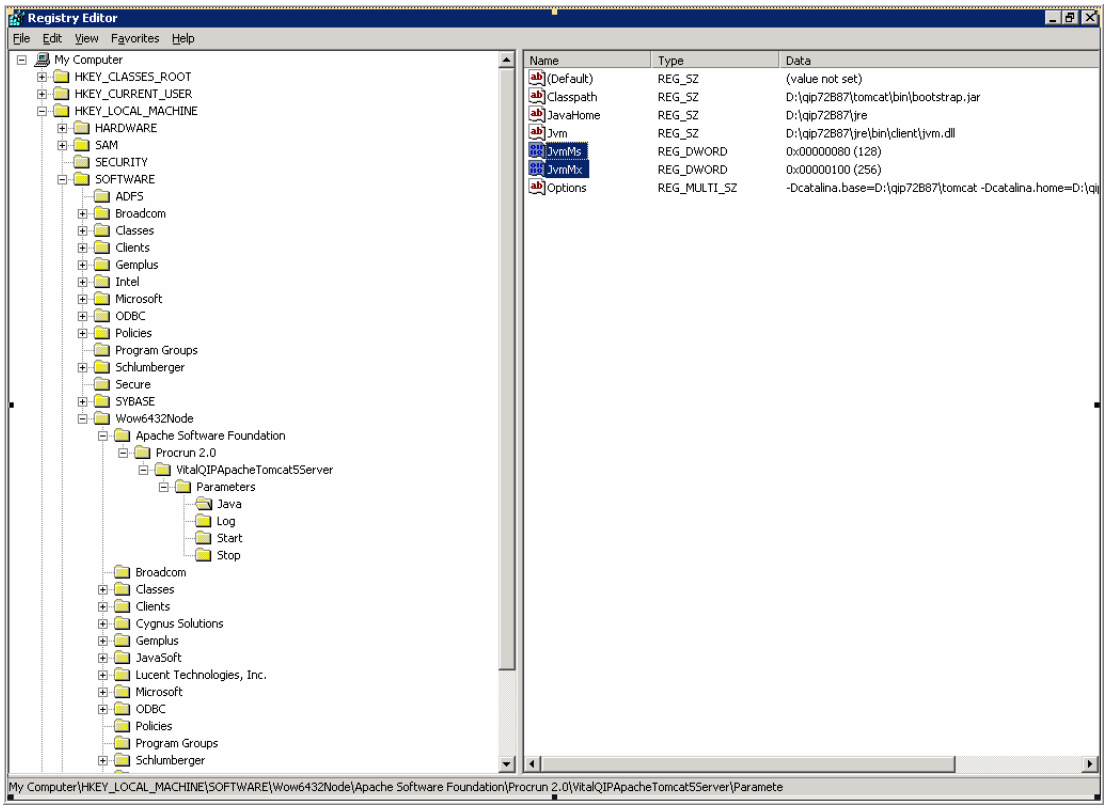
5 Enter **`VitalQIPApacheTomcat5Server`** in the **Find what** field.

6 Uncheck the **Values** and **Data** options.

7 Check the **Match whole string only** option.

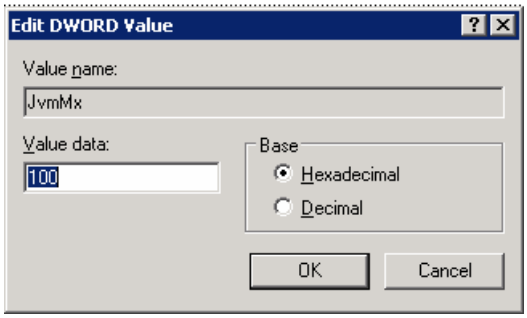
8 Click **Find Next**.

Result: The Java Parameters are displayed.



9 Double-click the **JvmMx** parameter. This is located in *MyComputer\HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Apache Software Foundation\Procrun 2.0\VitalQIPApacheTomcat5Server\Parameters\Java*.

Result: The Edit DWORD Value dialog box opens.



10 Click the **Decimal** option.

Result: The Value data changes.

11 Enter **512** in the **Value data** field and click **OK**.

Result: The maximum heap size is changed to 512MB.

END OF STEPS

VitalQIP configuration on a UNIX platform

Modifications after VitalQIP installation

Introduction

After installing VitalQIP, the VitalQIP Management software products should be set up. ‘This section outlines some steps you need to take after VitalQIP is successfully installed on a supported UNIX platform.

Process

Follow these instructions to begin using the IP Management software. If you have any questions, call technical support.

Note: If the **`qipd`** server daemon is started after the installation, there is no need to perform Step 1 through Step 4. Daemons can only be started by a root user.

1 Ensure you are logged in as the root user.

2 Ensure the environmental variables described in Table 19-1 are set correctly in your *.profile* or *.cshrc* file.

Note: If the environment variables are not set, the installation temporarily sets them based on your menu entries, and then removes them after the installation is finished.

Table 19-1 Set environment variables

Environment variable	Description
ORACLE_HOME	Full path to the Oracle home directory.
ORACLE_SID	Oracle database instance created for VitalQIP.
QIPHOME	The full path to the QIPHOME directory.
PATH	Include **`:/usr/bin/X11`** or the directory where your Motif/x-window binaries are installed (for example, “x-term”). For Oracle, the path should include **`$ORACLE_HOME/bin`**.
QIPDBASE	The type of database that VitalQIP is using. When setting the **`QIPDBASE`** variable, **`ORACLE`** must be entered in all uppercase letters.

Environment variable	Description
QIPDATASERVER	The name of the database server. The **QIPDATSERVER** variable must be the same name as the service name in the Oracle SQL*Net configuration file. (This is the *tnsnames.ora* file if the local name is used in Oracle.) For VitalQIP, the value of the **QIPDATASERVER** environment variable is the first entry displayed in the login screen. The **QIPDATASERVER** value is displayed even if the value is not contained in the SQL*NET configuration file, *tnsnames.ora*. The SQL*NET configuration files are read, and the services name are listed after the **QIPDATASERVER** value.
QIPMESSAGESERVICE	The IP address of the machine where the VitalQIP Message Service is running.
QIPDEFAULTORG	***Optional.*** It is used if no **-o** is used on the command line, you are logging in as "qipman" and there are multiple organizations. Or, you want the default organization to be something other than the default organization supplied at install time - VitalQIP Organization.
LD_LIBRARY_PATH	Solaris and Linux only. Set the library path to: **$QIPHOME/usr/lib:$ORACLE_HOME/lib:$LD_LIBRARY_PATH**

3 (Solaris only). Solaris 9 and Solaris 10 have a file-descriptor limit of only 256 by default, and this is often insufficient for larger VitalQIP customers. To see the current limit of your session, enter the Solaris command **ulimit -a** and refer to the number "nofiles (descriptors)". To increase the file descriptor limit, edit the file *$QIPHOME/etc/shrc* or *cshrc*. At the beginning of this file, add the line:

```
ulimit -n 2048
```

4 VitalQIP is installed using the Bourne shell. When you perform the install, environment variables and their values are automatically stored in *$QIPHOME/etc/shrc* or *cshrc*. Reference this file under *$QIPHOME/etc* after you complete the installation. To set your environmental variables, issue the following commands:

```
#cd <VitalQIP_directory>/etc
#. ./shrc OR source cshrc
```

5 Start your database. See your Oracle database administrator to start the database.

6 If daemons have not been started, follow these steps:

a. Change the directory to *$QIPHOME/etc*.

b. Ensure your environment variables are set up, execute:

`# . ./shrc` OR **`source cshrc`**

c. Execute the following to start the daemons:

- To start the VitalQIP enterprise server:

  `./qip-es-startup`

- To start the VitalQIP remote server:

  `./qip-rs-startup`

- To start Distributed Services:

  `./qip-ds-startup`

Refer to the *VitalQIP Administrator Reference Manual* for information on the usage of the VitalQIP daemons.

d. Execute **`ip-manage`** and press **Enter**. Log into the system with the username "qipman" and password "qipman".

Note: Alcatel-Lucent recommends you change the default qipman password for security reasons.

7 On most systems, TCP KeepAlive is set to a default of two hours. If network hardware or software (including firewalls) has an idle limit of less than two hours, the KeepAlive time must be lowered to less than this to fit inside the firewall limits. To lower the KeepAlive timeout setting on Solaris systems, adjust the TCP KeepAlive setting at the operating system level, as follows:

`ndd -set /dev/tcp tcp_keepalive_interval <value>`

where **`value`** is the number of milliseconds to keep the connection alive.

8 Configure and start your web server if you installed the web client interface. Refer to Chapter 2 "Manage VitalQIP Services", in the *VitalQIP Administrator Reference Manual*.

9 Start the web client. Refer to the *VitalQIP Web Client User's Guide* for information starting the web client.

10 Import your current VitalQIP data (refer to the *VitalQIP Administrator Reference Manual*).

11 After you import your VitalQIP data, have your Oracle database administrator backup the database. Without a complete backup now, there is no way you can recover your system with the log device.

It is also a good idea to have a current export of your VitalQIP data as a secondary precaution. Refer to the *VitalQIP Command Line Interface User's Guide* for information on how to execute the **`qip-export`** command.

12 If your VitalQIP system uses remote Bootp and/or DHCP servers, you must install and run the VitalQIP remote server software on them.

13 If your VitalQIP system is managing secondary servers in non-VitalQIP-managed domains, you must deploy the **`qip-rmtd`** (Remote Service) daemon on the secondary servers. Refer to the *VitalQIP Administrator Reference Manual* for details.

Note: It is your responsibility to back up the transaction log daily and to back up the entire data device weekly. It is critical that you perform a complete Oracle backup of the VitalQIP transaction log and database. A file system backup is not sufficient.

END OF STEPS

Part III: Console and template installations

Overview

Purpose

This part of the manual contains information on other forms of installation of the VitalQIP software.

Contents

This part includes these chapters.

Chapter 20, “Console and template installations”	20-1

20 Console and template installations

Overview

Purpose

This chapter covers the VitalQIP console and template installation.

Contents

This chapter covers these topics.

Console installation	20-2
Overview	20-2
Install VitalQIP with console installation	20-3
Template installation	20-5
Overview	20-5
Install VitalQIP using a template	20-6

Console installation

Overview

How a console installation differs from the standard installation

The console installation is a text based installation. Since the console installation is not GUI based, it is much faster. All the information that is collected in the regular VitalQIP installation appears as prompts in the console installation. The console installation is not dependent upon platforms.

Install VitalQIP with console installation

Purpose

You can also install VitalQIP by using InstallShield's console option. The console opens a separate screen, and displays the text mode of the install package, and thus is much faster.

The console installation can be used when you are unable to use the GUI installation. For instance, the console installation can be used when an X display cannot be exported or when you are installing over a slow WAN.

Start the installation

Follow these steps:

1 Table 20-1 shows the commands to run to start a console installation.

Table 20-1 Start the installation

If you are installing on...	Then...
Windows	1. Exit all Windows programs that you are currently running. 2. From your desktop, click **Start** and select **Run**. The Run screen opens. 3. Type: `cmd` 4. From the command prompt, change to the directory where the VitalQIP installation file is located: **`cd <drive>:\<path to directory>`** 5. Type: **`x:\qip72setupwin32.exe -console`** Where x: is the location of the copied installation binary.
Linux or Solaris	1. If VitalQIP daemons are running from an already installed version, stop all VitalQIP processes. 2. Change to the directory where the VitalQIP installation file is located: **`cd <path to directory>`** 3. Execute: – For Linux: **`./qip72setupLinuxgccr<#>.bin -console`** – For Solaris: **`./qip72setupSolarisr<#>.bin -console`**

For all executables, the **#** denotes the repackaging number of the executable.

2 You will follow the same steps, and answer at the same prompts as you do for the standard installation of VitalQIP.

Note: The Enterprise Server package may not display with the other installation choices, but it is selected as a default. You must scroll up to Enterprise Server and deselect it if you do not wish to install that component.

END OF STEPS

Template installation

Overview

How template installation differs from the standard installation

The template installation runs the standard installation and creates a template. The template can then be transported from one machine to another and used to install VitalQIP on multiple machines.

Template installation steps

The template installation is performed in two steps:

1. The template is recorded and created during an installation.
2. The template is used to install on additional servers.

Install VitalQIP using a template

Purpose

This section provides instructions on how to use a template installation.

Record and create the template

Table 20-2 shows the commands used to create a template file for an installation.

Note: If you do not give a full path to the template file, the template file will be created in the current directory.

Note: There is no space between **`-options`** and **`-record`**. Once an installation has been successfully completed using the install package, the template file will be created upon the reboot of the machine for Windows. No reboot is required for UNIX.

Table 20-2 Start the installation

If you are installing on...	Then...
Windows	1. Exit all Windows programs that you are currently running. 2. From your desktop, click **Start** and select **Run**. The Run screen opens. 3. Type: **`cmd`** 4. From the command prompt, change to the directory where the VitalQIP installation file is located: **`cd <drive>:\<path to directory>`** 5. Type: **`x:\qip72setupwin32.exe -options-record <template_file>`** Where x: is the location of the copied installation binary. **Note:** If you do not specify the path for *<template_file>*, the template file is created in the local directory.

If you are installing on...	Then...
Linux or Solaris	1. If VitalQIP daemons are running from an already installed version, stop all VitalQIP . 2. Change to the directory where the VitalQIP installation file is located: **cd *<path to directory>*** 3. Execute: – For Linux: **./qip72setupLinuxgccr<#>.bin -options-record *<template_file>*** – For Solaris: **./qip72setupSolarisr<#>.bin -options-record *<template_file>*** For all executables, the **#** denotes the repackaging number of the executable.

Use the template to install VitalQIP

If you want to use this template to install VitalQIP on another machine, you must modify some data. Depending upon the type of install, change the appropriate information for the computer using the template. Then type:

- Windows:

qip72setupwin32r<#>.exe -options *<template_file>*

- Linux:

./qip72setupLinuxgccr<#>.bin -options *<template_file>*

- Solaris:

./qip72setupSolarisr<#>.bin -options *<template_file>*

For all executables, the **#** denotes the repackaging number of the executable.

This command starts the installer with the data already populated, according to the template file being used.

> **Important!** If you are using a template to install an enterprise server, you must have a license key for the server. Templates for enterprise server installations do not contain license information.

Silent mode

If you need to use the silent mode (no user input is required for the installer's prompts; installation is run based on the template entries), type:

- Windows:

qip72setupwin32r<#>.exe -options *<template_file>* -silent

- Linux:

./qip72setupLinuxgccr<#>.bin -options *<template_file>* -silent

- Solaris:

./qip72setupSolarisr<#>.bin -options *<template_file>* -silent

For all executables, the **#** denotes the repackaging number of the executable.

Note: On Windows, you must reboot the machine after running an installation in Silent Mode. The installation program will not reboot the machine automatically.

Sample template

Refer to the following for an example containing the remote server, client package and web client features.

```
##############################################################################
# InstallShield Options File
#
# Wizard name: Install
# Wizard source: assembly.dat
# Created on: Fri Jun 23 10:06:10 EDT 2006
# Created by: InstallShield Options File Generator
#
# This file contains values that were specified during a recent execution of
# Install. It can be used to configure Install with the options specified
   below
# when the wizard is run with the "-options" command line option. Read each
# setting's documentation for information on how to change its value.
#
# A common use of an options file is to run the wizard in silent mode. This
   lets
# the options file author specify wizard settings without having to run the
# wizard in graphical or console mode. To use this options file for silent
   mode
# execution, use the following command line arguments when running the
   wizard:
#
#    -options "tempsamp" -silent
#
##############################################################################
##############################################################################
#
# License Agreement State
#
# The initial state of the License Agreement panel. Legal values are:
```

```
#
#    0 - Nothing will be selected
#    1 - "I &accept the terms of the license agreement." will be selected
#    2 - "I &do not accept the terms of the license agreement." will be
#        selected
#
# For example, to configure the panel to initially display "I &do not accept
   the
# terms of the license agreement.", use
#
#    -W bean.selection=2
#

-W bean.selection=1

################################################################################
# VitalQIP Install Location
#
# The install location of the product. Specify a valid directory into which
   the
# product should be installed. If the directory contains spaces, enclose it
   in
# double-quotes. For example, to install the product to C:\Program Files\My
# Product, use
#
#    -P installLocation="C:\Program Files\My Product"
#

-P installLocation="/opt/qip7"

################################################################################
# "Initialization for Install" Feature
#
# The selection state of the "Initialization for Install" feature. Legal
   values
# are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "Initialization for Install" for installation, use
#
#    -P InitializationBean.active=true
#

-P InitializationBean.active=true
```

```
################################################################################
# "Path Package" Feature
#
# The selection state of the "Path Package" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "Path Package" for installation, use
#
#    -P bean7515.active=true
#

-P bean7515.active=false

################################################################################
#
# "General Package" Feature
#
# The selection state of the "General Package" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "General Package" for installation, use
#
#    -P generalPackageBean.active=true
#

-P generalPackageBean.active=false

################################################################################
# "ServerLib Package" Feature
#
# The selection state of the "ServerLib Package" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "ServerLib Package" for installation, use
#
#    -P bean73serverlibpackage.active=true
#
```

```
-P bean73serverlibpackage.active=false

################################################################################
#
# "Server Package" Feature
#
# The selection state of the "Server Package" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "Server Package" for installation, use
#
#    -P serverPackageBean.active=true
#

-P serverPackageBean.active=false

################################################################################
# "GUI" Feature
#
# The selection state of the "GUI" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "GUI" for installation, use
#
#    -P serverGUIBean.active=true
#

-P serverGUIBean.active=false

################################################################################
# "Schedule Service" Feature
#
# The selection state of the "Schedule Service" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "Schedule Service" for installation, use
#
#    -P scheduleServiceBean.active=true
#
```

```
-P scheduleServiceBean.active=false

###############################################################################
#
# "QIP Update Service" Feature
#
# The selection state of the "QIP Update Service" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "QIP Update Service" for installation, use
#
#    -P qipUpdateServiceBean.active=true
#

-P qipUpdateServiceBean.active=false

###############################################################################
#
# "CLI's" Feature
#
# The selection state of the "CLI's" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "CLI's" for installation, use
#
#    -P serverCLIBean.active=true
#

-P serverCLIBean.active=false

###############################################################################
# "DNS Update Service" Feature
#
# The selection state of the "DNS Update Service" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "DNS Update Service" for installation, use
#
```

```
#    -P dnsUpdateServiceBean.active=true
#

-P dnsUpdateServiceBean.active=false

################################################################################
# "File Generation Service" Feature
#
# The selection state of the "File Generation Service" feature. Legal values
# are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "File Generation Service" for installation, use
#
#    -P fgServiceBean.active=true
#

-P fgServiceBean.active=false

################################################################################
# "Initialize Database" Feature
#
# The selection state of the "Initialize Database" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "Initialize Database" for installation, use
#
#    -P initializeDatabaseBean.active=true
#

-P initializeDatabaseBean.active=false

################################################################################
#
# "Login Service" Feature
#
# The selection state of the "Login Service" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
```

```
# For example, to select "Login Service" for installation, use
#
#    -P serverLoginServiceBean.active=true
#

-P serverLoginServiceBean.active=false

##############################################################################
#
# "Schedule Service Package" Feature
#
# The selection state of the "Schedule Service Package" feature. Legal values
# are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "Schedule Service Package" for installation, use
#
#    -P bean10346.active=true
#

-P bean10346.active=false

##############################################################################
#
# "Client Package" Feature
#
# The selection state of the "Client Package" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "Client Package" for installation, use
#
#    -P clientPackageBean.active=true
#

-P clientPackageBean.active=true

##############################################################################
#
# "GUI Client" Feature
#
# The selection state of the "GUI Client" feature. Legal values are:
```

```
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "GUI Client" for installation, use
#
#    -P clientGUIBean.active=true
#

-P clientGUIBean.active=true

##############################################################################
#
# "CLI's" Feature
#
# The selection state of the "CLI's" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "CLI's" for installation, use
#
#    -P clientCLIBean.active=true
#

-P clientCLIBean.active=true

##############################################################################
#
# "Client Script" Feature
#
# The selection state of the "Client Script" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "Client Script" for installation, use
#
#    -P bean9651.active=true
#

-P bean9651.active=false

##############################################################################
#
```

```
# "Help Files" Feature
#
# The selection state of the "Help Files" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "Help Files" for installation, use
#
#    -P serverHelpFilesBean.active=true
#

-P serverHelpFilesBean.active=false

##############################################################################
#
# "Web Package" Feature
#
# The selection state of the "Web Package" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "Web Package" for installation, use
#
#    -P webPackageBean.active=true
#

-P webPackageBean.active=true

##############################################################################
#
# "Web Files" Feature
#
# The selection state of the "Web Files" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "Web Files" for installation, use
#
#    -P webFilesBean.active=true
#

-P webFilesBean.active=true
```

```
################################################################################
#
# "Tomcat Server" Feature
#
# The selection state of the "Tomcat Server" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "Tomcat Server" for installation, use
#
#    -P tomcatBean.active=true
#

-P tomcatBean.active=true

################################################################################
#
# "QIP Entire CLI Package" Feature
#
# The selection state of the "QIP Entire CLI Package" feature. Legal values
   are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "QIP Entire CLI Package" for installation, use
#
#    -P qipCLIsBean.active=true
#

-P qipCLIsBean.active=false

################################################################################
#
# "Java Based CLIs Package" Feature
#
# The selection state of the "Java Based CLIs Package" feature. Legal values
# are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "Java Based CLIs Package" for installation, use
```

```
#
#    -P javaBasedCLIsPackageBean.active=true
#

-P javaBasedCLIsPackageBean.active=false

##############################################################################
#
# "Remote Server" Feature
#
# The selection state of the "Remote Server" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "Remote Server" for installation, use
#
#    -P remoteServerBean.active=true
#

-P remoteServerBean.active=true

##############################################################################
#
# "Lucent DHCP Server" Feature
#
# The selection state of the "Lucent DHCP Server" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "Lucent DHCP Server" for installation, use
#
#    -P lucentDHCPServerBean.active=true
#

-P lucentDHCPServerBean.active=true

##############################################################################
#
# "Lucent DNS" Feature
#
# The selection state of the "Lucent DNS" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
```

```
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "Lucent DNS" for installation, use
#
#    -P lucentDNSServerBean.active=true
#

-P lucentDNSServerBean.active=true

##############################################################################
#
# "DNS Update Service" Feature
#
# The selection state of the "DNS Update Service" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "DNS Update Service" for installation, use
#
#    -P bean4717.active=true
#

-P bean4717.active=false

##############################################################################
#
# "Remote Service" Feature
#
# The selection state of the "Remote Service" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "Remote Service" for installation, use
#
#    -P remoteServiceBean.active=true
#

-P remoteServiceBean.active=true

##############################################################################
#
# "Database Scripts package" Feature
#
```

```
# The selection state of the "Database Scripts package" feature. Legal values
# are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "Database Scripts package" for installation, use
#
#    -P bean61830.active=true
#

-P bean61830.active=false

##############################################################################
#
# "OracleScripts Package" Feature
#
# The selection state of the "OracleScripts Package" feature. Legal values
   are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "OracleScripts Package" for installation, use
#
#    -P oracleScriptsBean.active=true
#

-P oracleScriptsBean.active=true

##############################################################################
#
# "QIPErrors Package" Feature
#
# The selection state of the "QIPErrors Package" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "QIPErrors Package" for installation, use
#
#    -P bean80.active=true
#

-P bean80.active=false
```

```
################################################################################
#
# "Distributed Services" Feature
#
# The selection state of the "Distributed Services" feature. Legal values
   are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "Distributed Services" for installation, use
#
#    -P distributedServicesBean.active=true
#

-P distributedServicesBean.active=false

################################################################################
#
# "Login Service" Feature
#
# The selection state of the "Login Service" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "Login Service" for installation, use
#
#    -P distributedLoginServiceBean.active=true
#

-P distributedLoginServiceBean.active=false

################################################################################
#
# "File Generation Service" Feature
#
# The selection state of the "File Generation Service" feature. Legal values
# are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "File Generation Service" for installation, use
```

```
#
#    -P distFileGenerationServiceBean.active=true
#

-P distFileGenerationServiceBean.active=false

##############################################################################
#
# "DNS Update Service" Feature
#
# The selection state of the "DNS Update Service" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "DNS Update Service" for installation, use
#
#    -P distDNSUpdateServiceBean.active=true
#

-P distDNSUpdateServiceBean.active=false

##############################################################################
#
# "QIP Update Service" Feature
#
# The selection state of the "QIP Update Service" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "QIP Update Service" for installation, use
#
#    -P distQipUpdateServiceBean.active=true
#

-P distQipUpdateServiceBean.active=false

##############################################################################
#
# "Message Service" Feature
#
# The selection state of the "Message Service" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
```

```
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "Message Service" for installation, use
#
#    -P distMessageServiceBean.active=true
#

-P distMessageServiceBean.active=false

##############################################################################
#
# "Schedule Service" Feature
#
# The selection state of the "Schedule Service" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "Schedule Service" for installation, use
#
#    -P distScheduleServiceBean.active=true
#

-P distScheduleServiceBean.active=false

##############################################################################
#
# "SSLTunnelServicePackage" Feature
#
# The selection state of the "SSLTunnelServicePackage" feature. Legal values
# are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "SSLTunnelServicePackage" for installation, use
#
#    -P ssltServicepackageBean.active=true
#

-P ssltServicepackageBean.active=false

##############################################################################
#
# "MessageServicePackage" Feature
```

```
#
# The selection state of the "MessageServicePackage" feature. Legal values
   are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "MessageServicePackage" for installation, use
#
#    -P messageServicepackageBean.active=true
#

-P messageServicepackageBean.active=false

##############################################################################
#
# "QIPUpdateServicePackage" Feature
#
# The selection state of the "QIPUpdateServicePackage" feature. Legal values
# are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "QIPUpdateServicePackage" for installation, use
#
#    -P bean2422.active=true
#

-P bean2422.active=false

##############################################################################
#
# "DNSUpdateServicepackage" Feature
#
# The selection state of the "DNSUpdateServicepackage" feature. Legal values
# are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "DNSUpdateServicepackage" for installation, use
#
#    -P bean15830.active=true
#
```

```
-P bean15830.active=false

################################################################################
#
# "FGSPackage" Feature
#
# The selection state of the "FGSPackage" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "FGSPackage" for installation, use
#
#    -P bean15908.active=true
#

-P bean15908.active=false

################################################################################
#
# "LoginServicePackage" Feature
#
# The selection state of the "LoginServicePackage" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "LoginServicePackage" for installation, use
#
#    -P loginServiceBean.active=true
#

-P loginServiceBean.active=false

################################################################################
#
# "JRE Package" Feature
#
# The selection state of the "JRE Package" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "JRE Package" for installation, use
```

```
#
#    -P jrePackageBean.active=true
#

-P jrePackageBean.active=false

###############################################################################
#
# "JNILib Package" Feature
#
# The selection state of the "JNILib Package" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "JNILib Package" for installation, use
#
#    -P bean553.active=true
#

-P bean553.active=false

###############################################################################
#
# "Java Package" Feature
#
# The selection state of the "Java Package" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "Java Package" for installation, use
#
#    -P bean510.active=true
#

-P bean510.active=false

###############################################################################
#
# "Controller" Feature
#
# The selection state of the "Controller" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
```

```
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "Controller" for installation, use
#
#    -P bean230.active=true
#

-P bean230.active=false

##############################################################################
#
# "QIPUserExits" Feature
#
# The selection state of the "QIPUserExits" feature. Legal values are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "QIPUserExits" for installation, use
#
#    -P bean91.active=true
#

-P bean91.active=false

##############################################################################
#
# "ANT Based Install Package" Feature
#
# The selection state of the "ANT Based Install Package" feature. Legal
   values
# are:
#
#    true  - Indicates that the feature is selected for installation
#    false - Indicates that the feature is not selected for installation
#
# For example, to select "ANT Based Install Package" for installation, use
#
#    -P AntInstallPackageBean.active=true
#

-P AntInstallPackageBean.active=true

##############################################################################
#
```

```
# User Input Field - DBSelection
#
#

-W DBInputBean.DBSelection="OracleSelected"

##############################################################################
#
# User Input Field - OracleHome
#
#

-W OracleHomeBean.OracleHome="/opt/app/oracle/product/10.2.0/db_1"

##############################################################################
#
# User Input Field - DatabasePort
#
# This is the database port number, usually 5000 for Sybase or 1521 for
   Oracle
#

-W DatabasePortbean.DatabasePort="$P(mainBean.DBPortDefault)"

##############################################################################
#
# User Input Field - QIPDATASERVER
#
#

-W QIPDATASERVERbean.QIPDATASERVER="ora642"

##############################################################################
#
# User Input Field - dbUserName
#
# Port number must be integer between 0 - 65535, amd must not be in use
#

-W hibernateDbBean.dbUserName="qipadmin"

##############################################################################
#
# User Input Field - dbPassword
#
```

```
#

-W hibernateDbBean.dbPassword="qipadmin"

###############################################################################
#
# User Input Field - dbServerIP
#
#

-W hibernateDbBean.dbServerIP="$W(localIPBean.LocalIP)"

###############################################################################
#
# User Input Field - LocalIP
#
#

-W localIPBean.LocalIP="$W(customLocalHost.IPAddress)"

###############################################################################
#
# User Input Field - EnterpriseServerIP
#
#

-W EnterpriseServerIPbean.EnterpriseServerIP="$W(localIPBean.LocalIP)"

###############################################################################
#
# User Input Field - FGServerIP
#
#

-W FGServerIPbean.FGServerIP="$W(EnterpriseServerIPbean.EnterpriseServerIP)"

###############################################################################
#
# User Input Field - UpdateServerIP
#
#

-W UpdateServerIPbean.UpdateServerIP="$W(FGServerIPbean.FGServerIP)"

###############################################################################
```

```
#
# User Input Field - DNSUpdateServerIP
#
#

-W
   DNSUpdateServerIPbean.DNSUpdateServerIP="$W(UpdateServerIPbean.UpdateServ
   erIP)"

##############################################################################
#
# User Input Field - LoginServerIP
#
#

-W
   LoginServerIPbean.LoginServerIP="$W(DNSUpdateServerIPbean.DNSUpdateServer
   IP)"

##############################################################################
#
# User Input Field - DHCPConfigurationDirectory
#
#

-W
   DHCPConfigurationDirectorybean.DHCPConfigurationDirectory="$N($P(installL
   ocation)/dhcp)"

##############################################################################
#
# User Input Field - qipmanPassword
#
#

-W qipmanPasswordBean.qipmanPassword="qipman"

##############################################################################
#
# User Input Field - qipadminPassword
#
#

-W qipadminPasswordBean.qipadminPassword="qipadmin"

##############################################################################
```

```
#
# User Input Field - yn
#
#

-W importSSL.yn="No"

##############################################################################
#
# User Input Field - yn
#
#

-W generateTomcatSSL.yn="No"

##############################################################################
#
# User Input Field - ApachePort
#
# Port number must be integer between 0 - 65535, and must not be in use
#

-W ApacheTomcatBean.ApachePort="$P(mainBean.defaultTomcatPort)"

##############################################################################
#
# User Input Field - TSPort
#
# Port number must be integer between 0 - 65535 and must not be in use
#

-W ApacheTomcatBean.TSPort="8005"

##############################################################################
#
# User Input Field - JK2Port
#
# Port number must be integer between 0 - 65535 and must not be in use
#

-W ApacheTomcatBean.JK2Port="8009"

##############################################################################
#
# User Input Field - startCDDaemons
```

```
#
#

-W startCDDaemonsBean.startCDDaemons="true"

################################################################################
#
# User Input Field - startRSDaemons
#
#

-W startRSDaemonsBean.startRSDaemons="true"

################################################################################
#
# User Input Field - startApache
#
#

-W startApacheWebServer.startApache="true"

################################################################################
#
# User Input Field - removeOutputFiles
#
#

-W removeOutputFilesBean.removeOutputFiles="true"

################################################################################
```

Part IV: Upgrade VitalQIP

Overview

Purpose

This part of the manual contains information on how to upgrade VitalQIP software to the current release.

Contents

This part includes these chapters.

Chapter 21, “Upgrade VitalQIP enterprise server”	21-1
Chapter 22, “Upgrade VitalQIP remote server”	22-1
Chapter 23, “Upgrade VitalQIP web client interface”	23-1
Chapter 24, “Upgrade VitalQIP GUI client”	24-1
Chapter 25, “Upgrade VitalQIP Distributed Services”	25-1
Chapter 26, “Upgrade VitalQIP from a pre 7.2 release to the current release”	26-1

21 Upgrade VitalQIP enterprise server

Overview

Purpose

This chapter covers upgrading the VitalQIP enterprise server on supported Windows and UNIX platforms.

Contents

This chapter covers these topics.

Upgrade the VitalQIP enterprise server	21-2

What is installed

The VitalQIP enterprise server upgrade allows you to overlay your existing server components with components from the current release of VitalQIP. The upgrade installation only allows you to upgrade existing components on your machine. It does not allow you to install additional components, or uninstall existing components.

Upgrade from previous versions

If VitalQIP is being upgraded from a version prior to version 7.2, refer to “Upgrade VitalQIP from a pre 7.2 release to the current release” (p. 26-1)

Upgrade the VitalQIP enterprise server

Purpose

This section explains how to upgrade the VitalQIP enterprise server on supported platforms. If you have problems upgrading the software, contact technical support.

This chapter only deals with upgrading from VitalQIP 7.2 or later to the current release. For information on upgrading from a pre 7.2 release to the current release, see "Upgrade VitalQIP from a pre 7.2 release to the current release" (p. 26-1)

Before you begin

Windows

- Ensure you are logged into your system as a user with administrative privileges.
- Check the Event Viewer and ensure your database is running.
- Ensure you exit all programs you are currently running.

Unix

- Ensure you are logged into your system as the root user.
- Ensure your database is running. Enter the following:

```
$SYBASE/ASE-15_0/install/showserver
```

- Alcatel-Lucent recommends that Sybase environment variables be sourced. This eliminates the need to enter Sybase-related values during the upgrade. To source the Sybase environment, execute the following from the Sybase directory:

  Cshell

  ```
  source SYBASE.csh
  ```

  Bourne

  ```
  . ./SYBASE.sh
  ```

- Ensure your environment is sourced. In the *$QIPHOME/opt/etc* directory, enter

  ```
  . ./shrc
  ```

Procedure

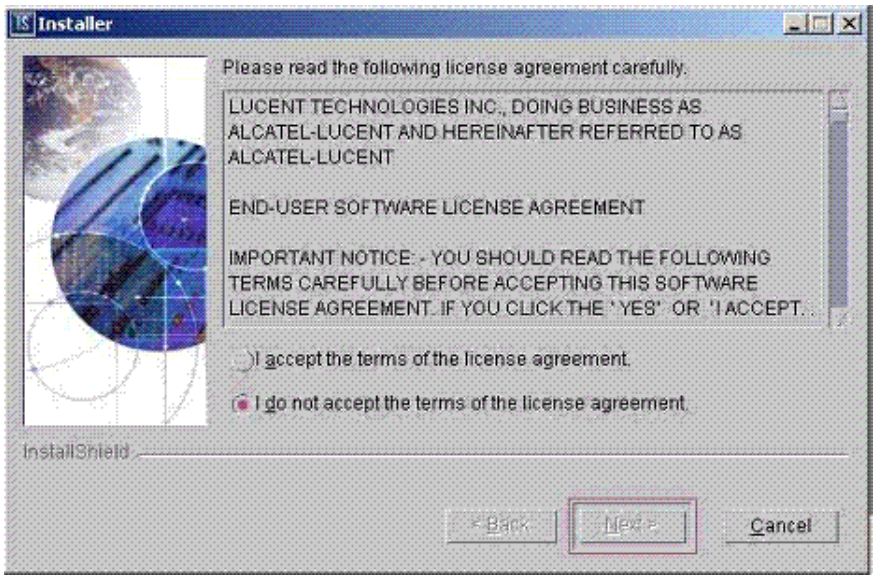
To upgrade the VitalQIP enterprise server, follow these steps:

1 Choose one of the following:

If you want to…	Then…
Upgrade on a Linux platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72SetupLinuxgccr<#>.bin`**
Upgrade on a Solaris platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72setupSolarisr<#>.bin`**
Upgrade on a Windows platform	1. Open a command window and change directory to the installation file location. This is the location you selected when you downloaded the Windows installation executable from the Alcatel-Lucent Electronic Download site (*c:\temp* is the default location). 2. Enter: **`qip72setupwin32r<#>.exe`**

For all executables, the **#** denotes the repackaging number of the executable.

2 The Software License Agreement screen opens.



Read the software license agreement and:

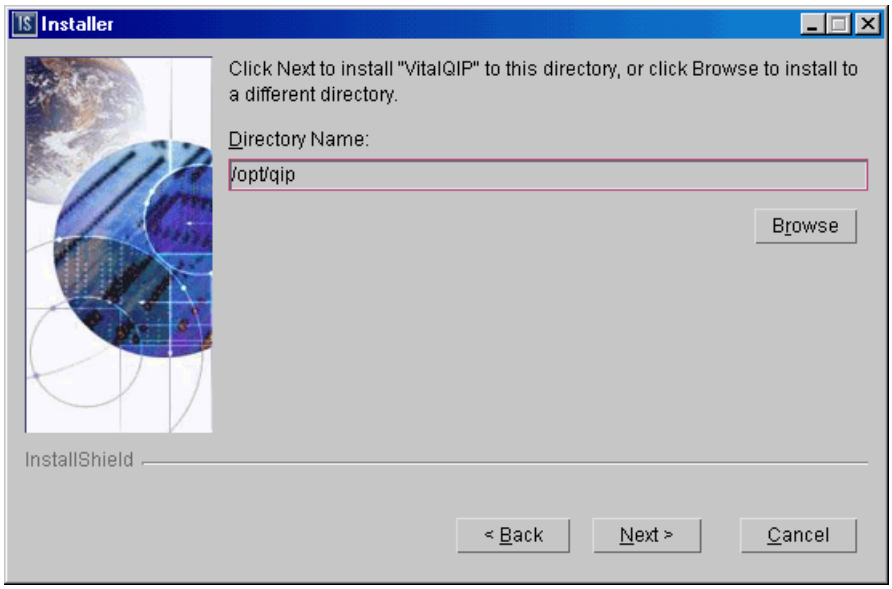
- Select **I accept the terms of the license agreement** to accept the license agreement.
- Select **I do not accept the terms of the license agreement** if you do not accept the license agreement. The installation is canceled.

3 Click **Next**. The installation determines that this is an upgrade, and the Welcome screen opens.

Click **Cancel** if you want to exit the installation.

4 Click **Next**. The installation verifies the current platform.

5 The VitalQIP Home Directory screen opens.

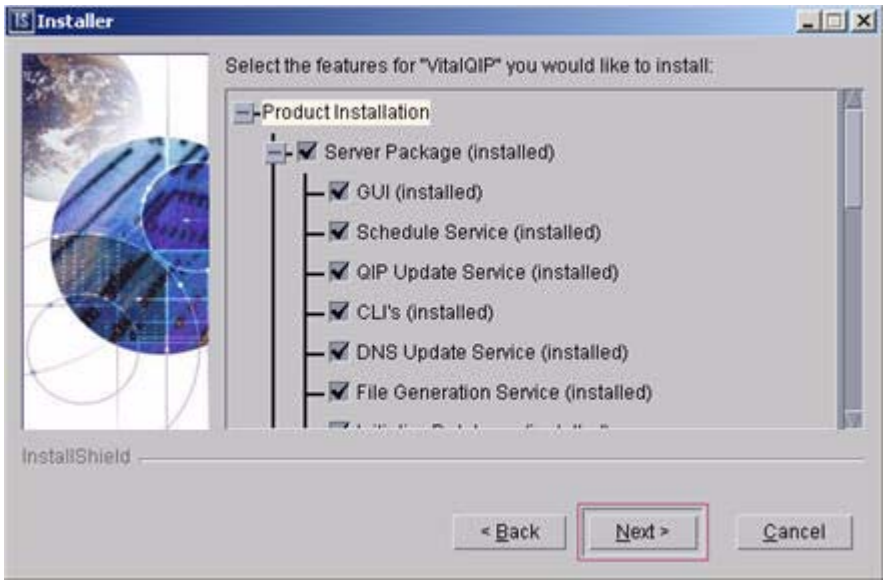


The current destination directory for the VitalQIP software is shown. The installation reads the **QIPHOME** environment variable and displays the value.

6 Click **Next**. Choose one of the following.

If you want to...	Then...
Upgrade enterprise server on a UNIX platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, a screen opens showing the VitalQIP-related daemons that are running. 1. Choose one of the following options: • Click **yes, kill processes automatically** and have the installation stop the processes. • Click **no, they will be killed manually** and stop the processes manually. 2. Click **Next**.
Upgrade enterprise server on a Windows platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, the processes are stopped by the upgrade software.

7 Click **Next**. After a few moments, the Features screen opens.



The features currently installed on the server appear checked. You cannot change these selections when performing an upgrade.

8 Click **Next**. The installation shows an information message. Read the message and follow any instructions that are shown in the message.

9 Click **Next**. After a few moments, the Summary screen opens. Examine the features to be update/installed. If changes are necessary, click **Back** to make changes to the installation. If everything looks correct, click **Next**.

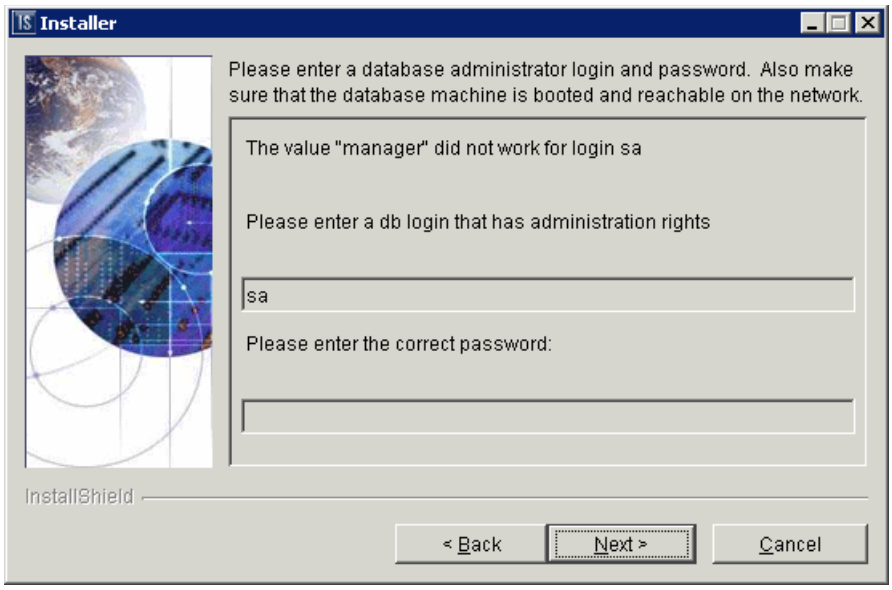
The installer commences extracting files and installing VitalQIP. After a few minutes, the Successful Install screen opens.

> **Note:** During an upgrade, you may receive a prompt indicating that a version of a file being installed is not as current as the already installed file. Click **Yes to All** to overwrite these files.

10 Click **Next** to continue the VitalQIP Wizard.

Cannot connect to the database

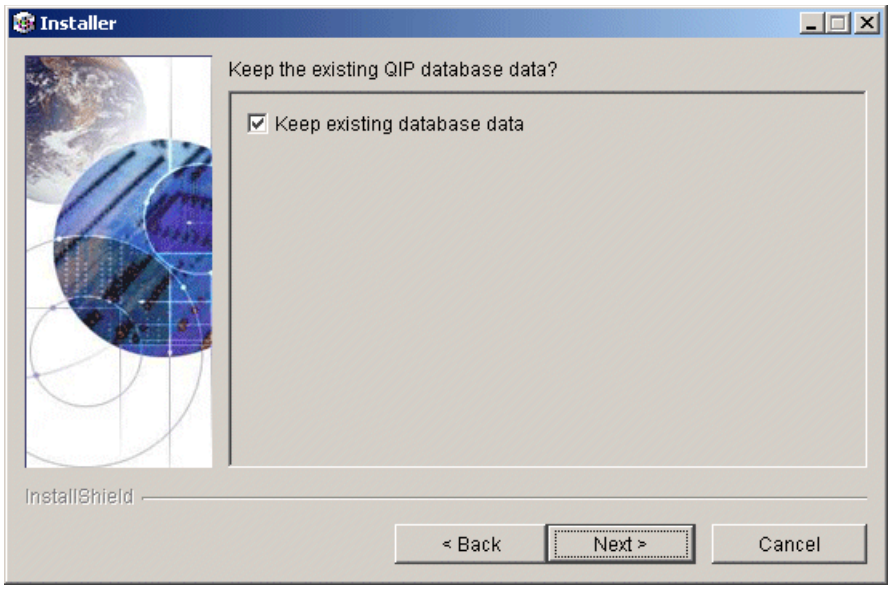
11 If the database cannot be reached, a screen opens prompting for the **sa** password. Skip this step if this screen does not open.



Ensure the database is started or enter the correct database administrator ID or password. If the database is not running, click **Back** to the previous screen. Once the database is started, proceed with the installation.

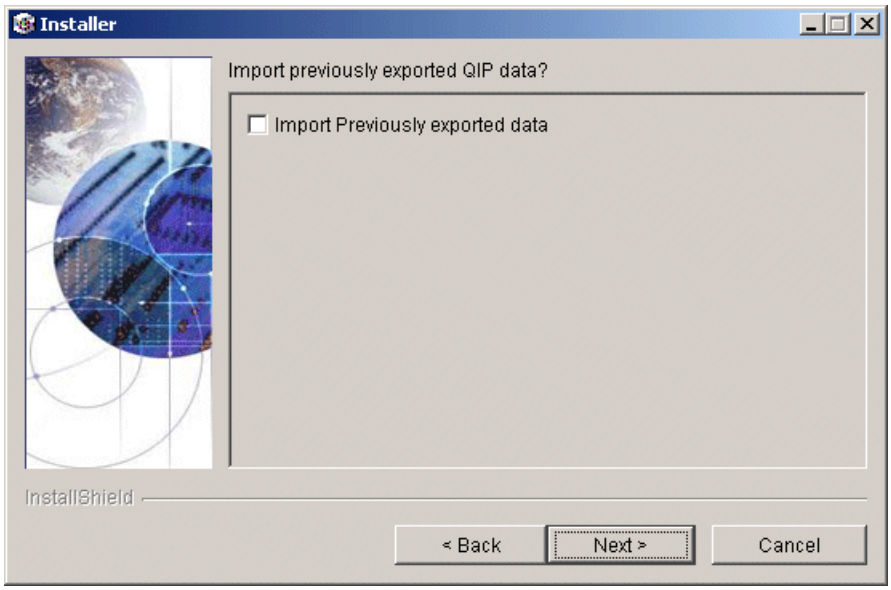
Existing database detected

12 If an existing VitalQIP database is detected, the Keep Existing QIP Data screen opens. Go to the next step if an existing VitalQIP database is not detected.



If you want to keep existing VitalQIP data, select **Keep existing database data**.

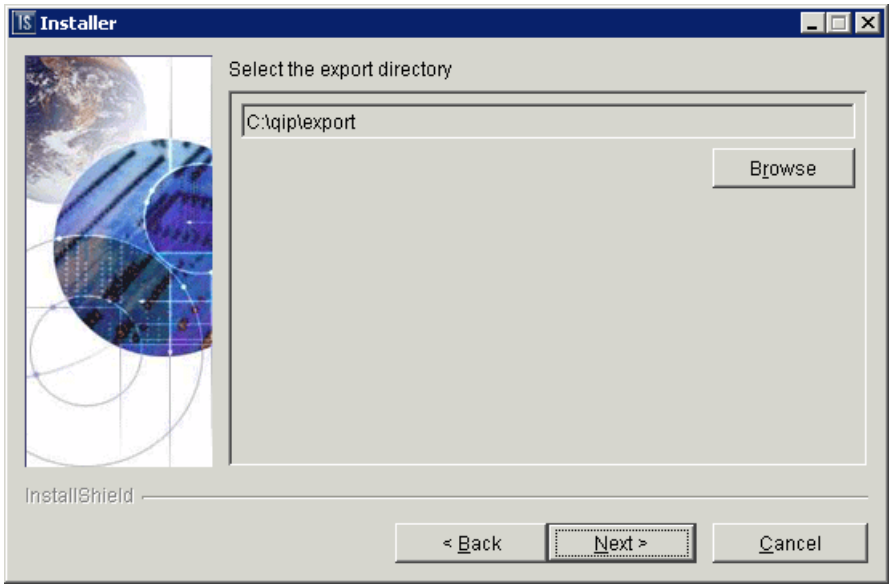
13 Click **Next**. The Import Exported Data screen opens if **Keep existing database data** is not selected or if no QIP devices exist for the Sybase database.



If you want to import exported data, check **Import Previously exported data**.

Import exported data

14 Click **Next**. If **Import previously exported database** was selected or **Keep existing database data** was selected, the Export Data screen opens.

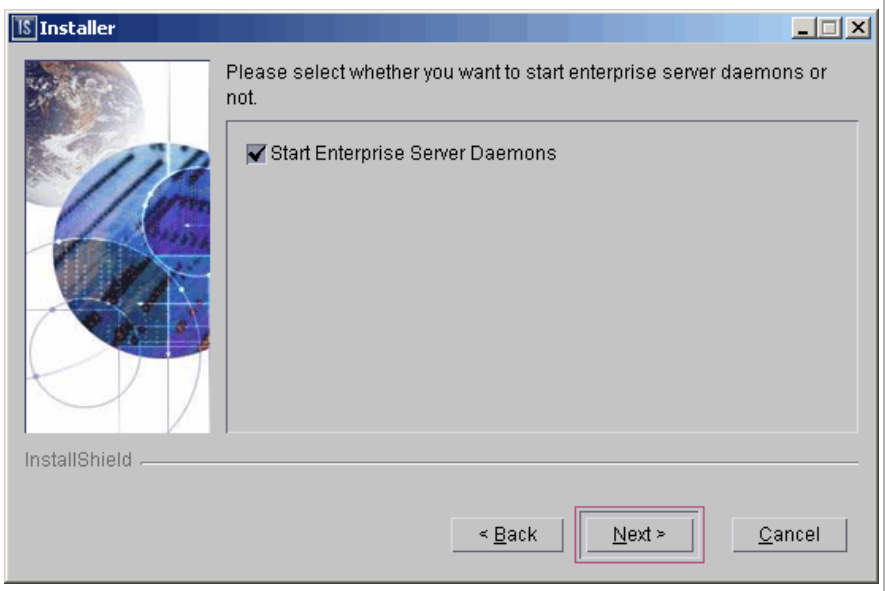


The directory where the data was exported is shown. The default is */opt/qip/export* on UNIX and *%QIPHOME%\data* on Windows. If necessary, type the destination directory directly in the **Select Export Directory** field. In the case where **Import previously exported database** was selected, type the directory where the exported data resides. Alternatively, you can:

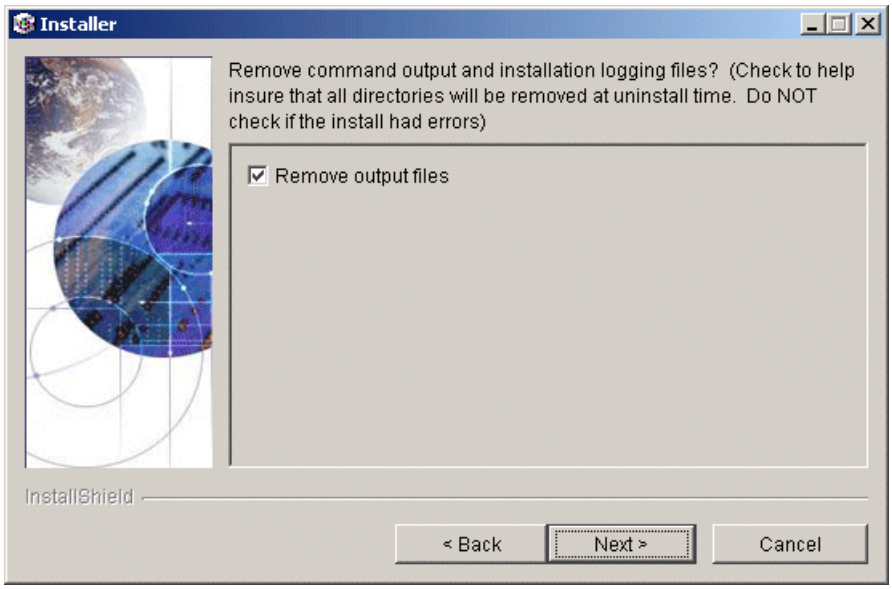
a. Click **Browse**, locate and select the directory.

b. Click **Open**. The destination directory is shown in the field.

15 Click **Next** The installation keeps the existing database or imports the specified one...

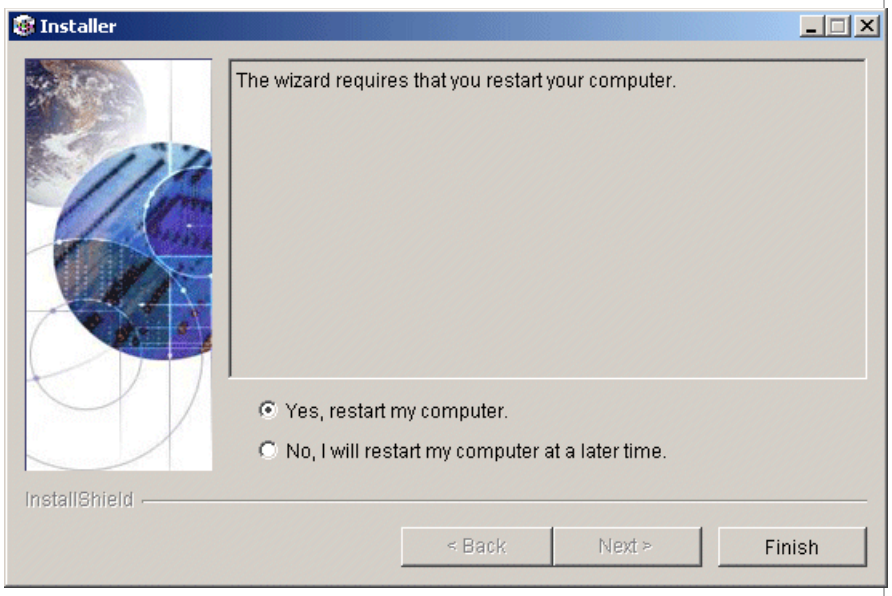
If you want to...	Then...
Start the enterprise daemons on a UNIX platform	1. Click **Next**. **Result:** The Start Enterprise Daemons screen opens.  The installation gives you the option to start the enterprise server daemons. Follow these steps if you want to start the enterprise server daemon: 2. Select **Start Enterprise Server Daemons** and click **Next**. **Result:** A screen opens showing the daemons that are to be started. Depending on how many other VitalQIP components are installed on your system, additional Start Daemon screens can open. Follow the directions on the screen to complete the installation. 3. Click **Next**.
Remove the output files on a Windows platform	Click **Next**. **Result:** The Remove Output Files screen opens (Step 16).

16 The Remove Output Files screen opens.



During the installation, VitalQIP produces output files that are no longer needed for the installation. The installation files can be kept or removed from your system. It is recommended that you keep the files if the install had errors. If you want to keep the files, uncheck **Remove output files**.

17 Choose one of the following..

If you want to…	Then…
Complete the installation on a UNIX platform	1. Click **Next**. **Result:** The Installation complete screen opens. 2. Click **Finish**.
Complete the installation on a Windows platform	1. Click **Next**. **Result:** The Installation complete screen opens.  2. Before you can begin using VitalQIP, you must reboot your computer. Select **Yes** to restart your computer. If you would rather work on other tasks before configuring VitalQIP, click **No**. 3. Click **Finish**.

END OF STEPS

22 Upgrade VitalQIP remote server

Overview

Purpose

This chapter covers upgrading a VitalQIP remote server on supported platforms. To increase the usability of this chapter, portions of the installation steps are labeled. If a label does not apply to a particular installation situation, skip to the next labeled section.

Contents

This chapter covers these topics.

Upgrade the VitalQIP remote server	22-2

What is installed

The VitalQIP remote server upgrade allows you to overlay your existing remote server components with components from the current release of VitalQIP. The upgrade installation default selections are for whatever VitalQIP components are currently installed on the machine. The upgrade installation only allows you to upgrade existing components on your machine. It does not allow you to install additional components, or uninstall existing components.

Upgrade from previous versions

If VitalQIP is being upgraded from a version prior to Release 7.2, refer to "Upgrade VitalQIP from a pre 7.2 release to the current release" (p. 26-1).

Upgrade the VitalQIP remote server

Purpose

This section explains how to upgrade the VitalQIP remote server on supported platforms. If you have problems installing the software, contact technical support.

Before you begin

Windows

- Ensure you are logged into your system as a user with administrative privileges.
- Ensure you exit all programs you are currently running.

UNIX

- Log into your system as the root user. If the installation is not done as the root user the **`qping`** utility does not work. The utility must have root permission with the **`SUID`** bit set for the administrator. This is an operating system limitation.

  To work around this limitation:

  a. Log into the system as the root user:

  b. Change the mode and permissions on the **`qping`** utility to be:

```
root:sys & 4755
```

- Ensure your database is running.
- Ensure your environment is sourced. In the *$QIPHOME/opt/etc* directory, enter

  `. ./shrc`

Procedure

To install the VitalQIP remote server, follow these steps:

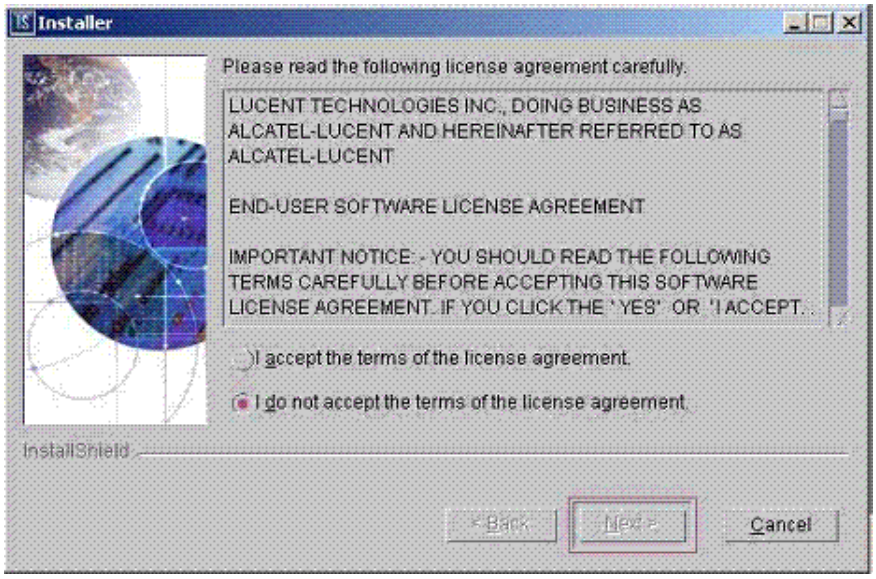
1 Choose one of the following:

If you want to…	Then…
Upgrade on a Linux platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72SetupLinuxgccr<#>.bin`**

If you want to…	Then…
Upgrade on a Solaris platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72setupSolarisr<#>.bin`**
Upgrade on a Windows platform	1. Open a command window and change directory to the installation file location. This is the location you selected when you downloaded the Windows installation executable from the Alcatel-Lucent Electronic Download site (*c:\temp* is the default location). 2. Enter: **`qip72setupwin32r<#>.exe`**

For all executables, the **#** denotes the repackaging number of the executable.

2 The Software License Agreement screen opens.



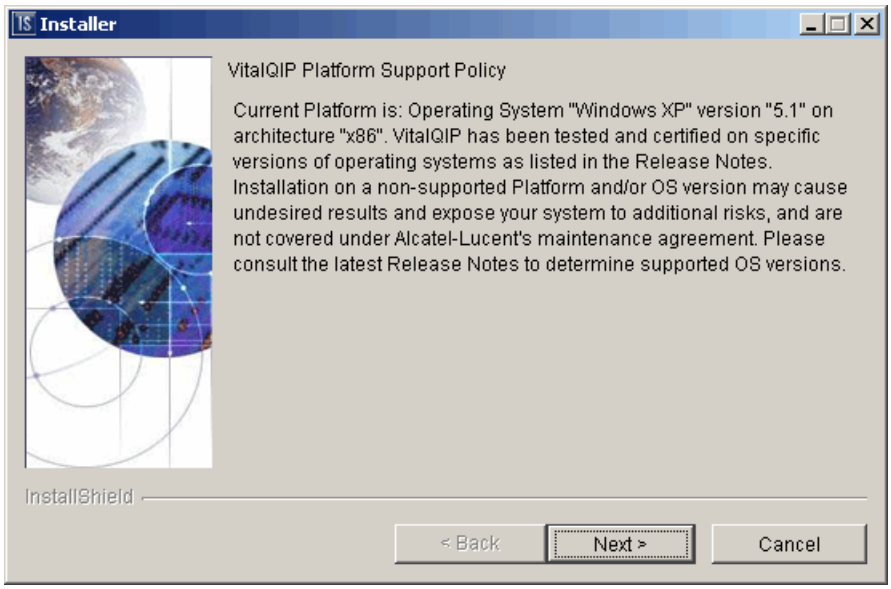
Read the software license agreement and:

- Select **I accept the terms of the license agreement** to accept the license agreement.
- Select **I do not accept the terms of the license agreement** if you do not accept the license agreement. The installation is canceled.

3 Click **Next**. The installation determines that this is an upgrade, and the Welcome screen opens.

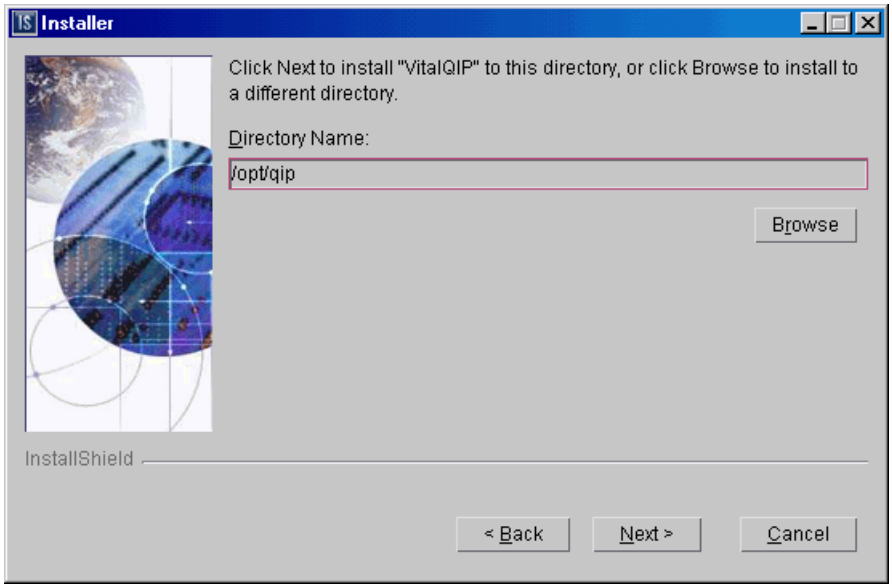
Click **Cancel** if you want to exit the installation.

4 Click **Next**. The installation checks that the operating system is a supported version. If it is not a supported operating system, a screen opens with the Platform Support Policy.



Click **Cancel** to exit the installation and upgrade the operating system to one of the supported versions listed in the *VitalQIP 7.2 Release Notes* before you install VitalQIP.

5 The VitalQIP Home Directory screen opens.



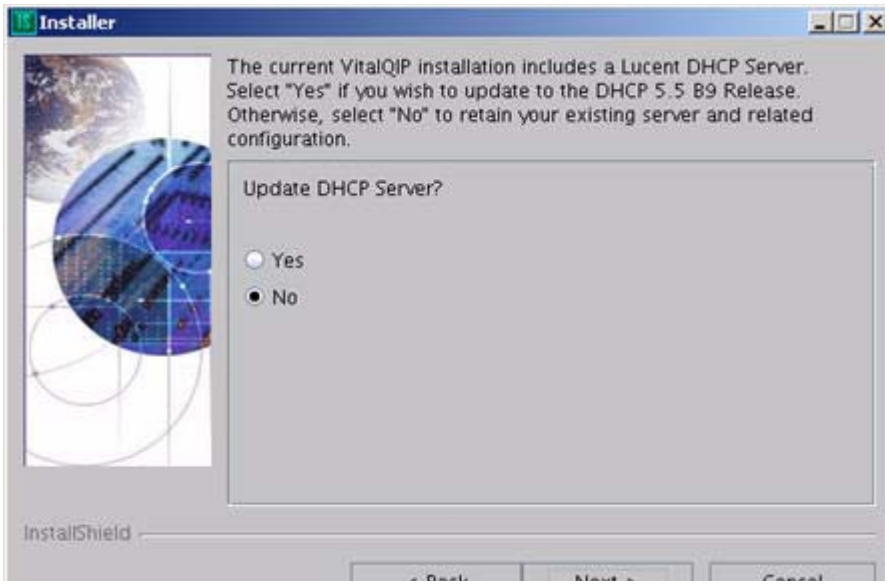
The default destination directory for the VitalQIP software is shown. By default, the directory is */opt/qip* on UNIX and *c:\qip* on Windows. If a version of VitalQIP exists on the machine, the installation reads the **`QIPHOME`** environment variable and displays the value.

6 Click **Next**. Choose one of the following.

If you want to…	Then…
Install remote server on a UNIX platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, a screen opens showing the VitalQIP-related daemons that are running. 1. Choose one of the following options: • Click **yes, kill processes automatically** and have the installation stop the processes. • Click **no, they will be killed manually** and stop the processes manually. 2. Click **Next**.

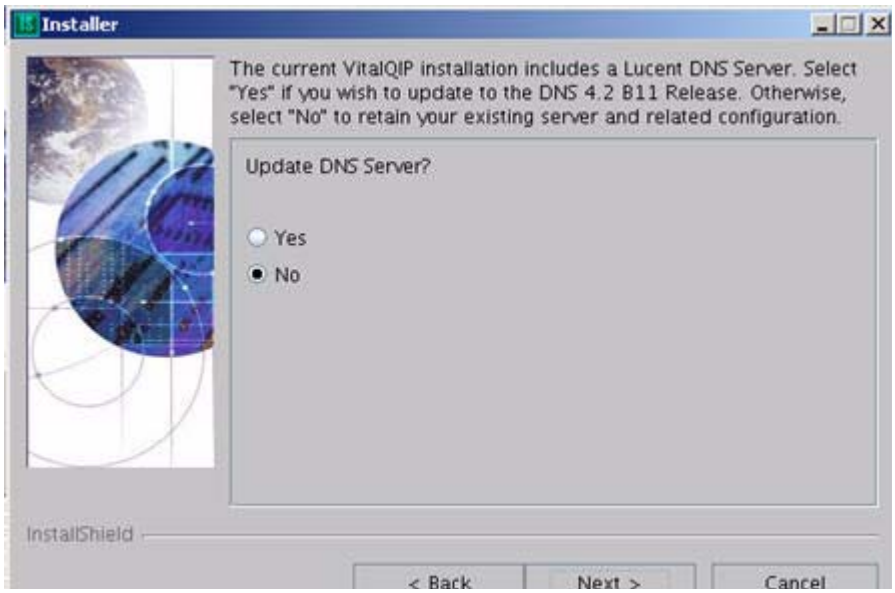
If you want to…	Then…
Install remote server on a Windows platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, the processes are stopped by the installation.

7 Click **Next**. If the DHCP server that is currently installed with VitalQIP is an older version than the one available with this upgrade, you are asked if you want to upgrade the server or retain your current one.



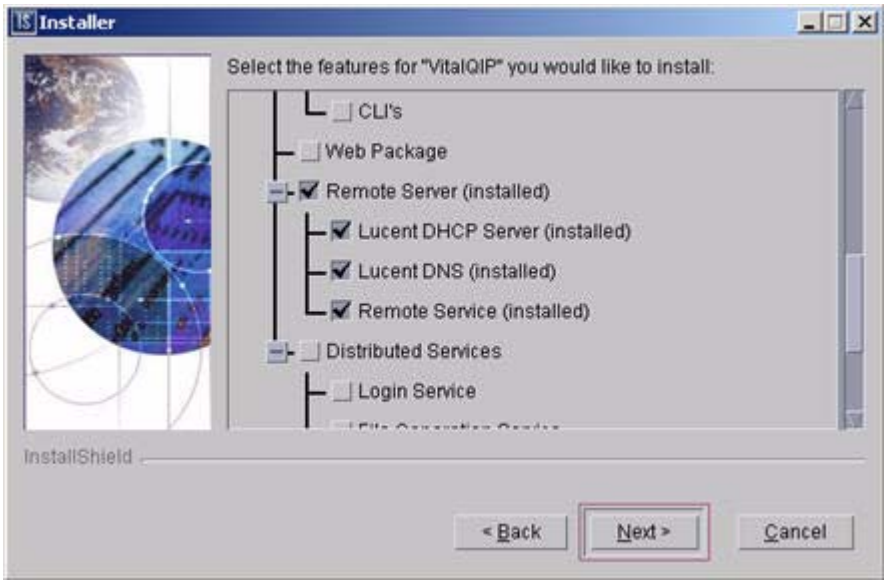
- To upgrade the DHCP server to the newer version, select **Yes.**
- To retain the existing DHCP server configuration, select **No**.

8 Click **Next**. If the DNS server that is currently installed with VitalQIP is an older version than the one available with this upgrade, you are asked if you want to upgrade the server or retain your current one.



- To upgrade the DNS server to the newer version, select **Yes.**
- To retain the existing DNS server configuration, select **No**.

9 Click **Next**. In a few moments, the Features screen opens.

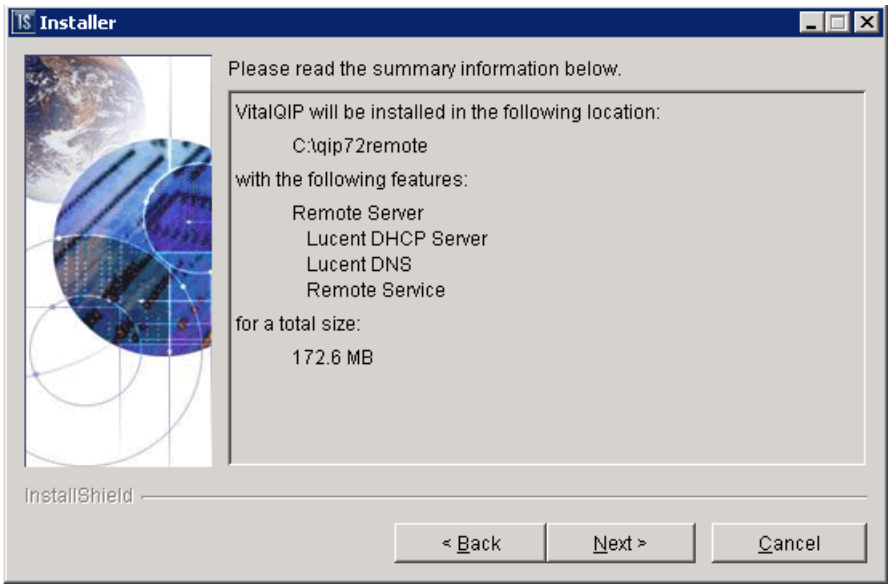


The features currently installed on the server appear checked. You cannot change these selections when performing an upgrade.

Note: Depending on the selections you made for DNS and DHCP servers, the Features screen may display differently than the sample above.

10 Click **Next**. The installation shows an information message. Read the message and follow any instructions that are shown in the message.

11 Click **Next**. In a few moments, the Summary screen opens.



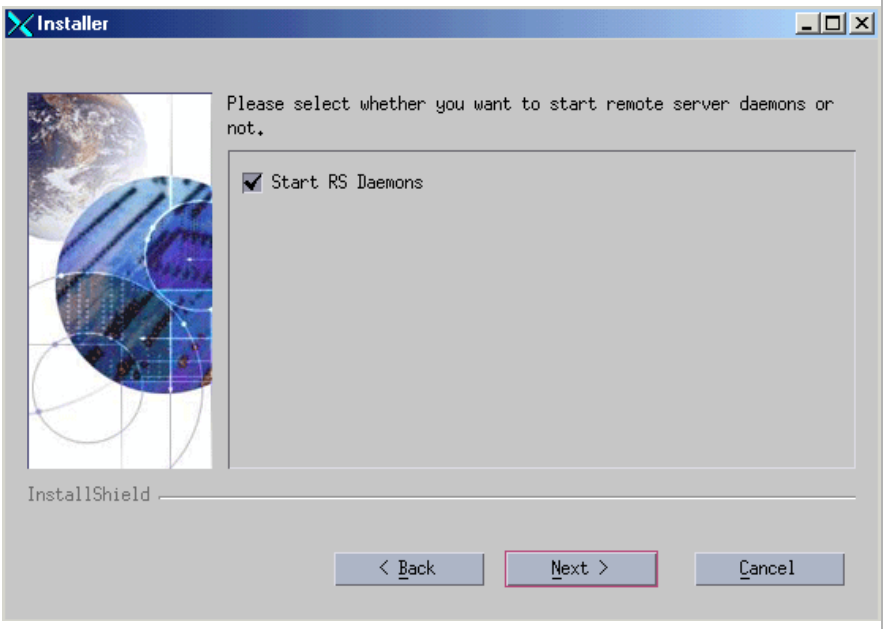
Examine the features to be installed. If changes are necessary, click **Back** to make changes to the installation. If everything looks correct, click **Next**.

The installer commences extracting files and installing VitalQIP.

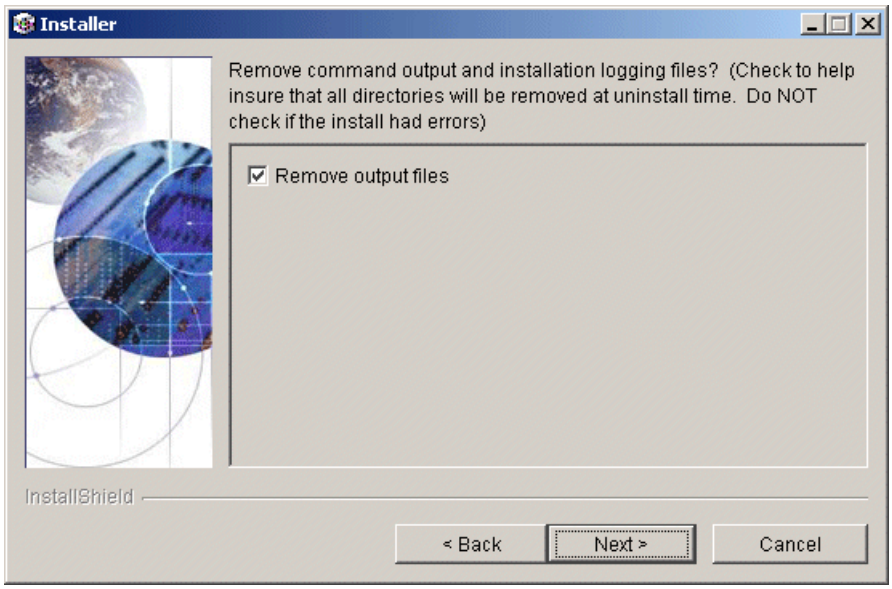
> **Note:** On a Windows platform, a message may open, asking if you want to overwrite *mfc42.dll*. Click **No** to continue.
>
> During an upgrade, you may receive a prompt indicating that a version of a file being installed is not as current as the already installed file. Click **Yes to All** to overwrite these files.

In a few minutes, the Successful Install screen opens.

12 Choose one of the following.

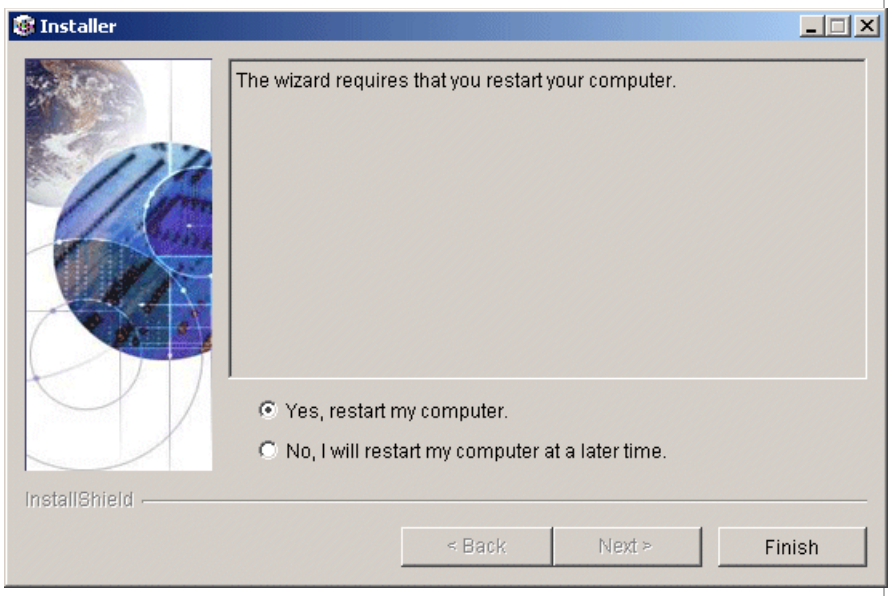
If you want to...	Then...
Start the remote daemons on a UNIX platform	1. Click **Next**. **Result:** The Start Remote Daemons screen opens.  The installation gives you the option to start the remote server daemons, Follow these steps if you want to start the remote server daemon: 2. Select **Start RS Daemons**. A screen opens showing the daemons that are to be started. **Note:** When attempting to start the the DNS Server, if no *named.conf* file is configured found on the machine, a message opens that states no **`named`** configuration files are found. Depending on how many other VitalQIP components are installed on your system, additional Start Daemon screens can open. Follow the directions on the screen to complete the installation. 3. Click **Next**.
Remove output files	1. Click **Next**. **Result:** The Remove Output Files screen opens. 2. Go to Step 13.

13 In a few moments, the Remove Output Files screen opens.



During the installation, VitalQIP produces output files that are no longer needed for the installation. The installation files can be kept or removed from your system. Alcatel-Lucent recommends you keep the files if the installation had errors. If you want to keep the files, uncheck **Remove output files**.

14 Choose one of the following..

If you want to...	Then...
Complete the installation on a UNIX platform	1. Click **Next**. **Result:** The Installation complete screen opens. 2. Click **Finish**.
Complete the installation on a Windows platform	1. Click **Next**. **Result:** The Installation complete screen opens.  2. Before you can begin using VitalQIP, you must reboot your computer. Select **Yes** to restart your computer. If you would rather work on other tasks before configuring VitalQIP, click **No**. 3. Click **Finish**.

END OF STEPS

23 Upgrade VitalQIP web client interface

Overview

Purpose

This chapter covers upgrading the VitalQIP web client on supported platforms.

Contents

This chapter covers these topics.

Install the VitalQIP web client interface	23-2

What is installed

The VitalQIP web client upgrade allows you to overlay your existing server components with components from the current release of VitalQIP. The upgrade installation default selections are for whatever VitalQIP components are currently installed on the machine. The upgrade installation only allows you to upgrade existing components on your machine. It does not allow you to install additional components, or uninstall existing components.

Upgrade from previous versions

If VitalQIP is being upgraded from a previous version older than 7.2, refer to “Upgrade VitalQIP from a pre 7.2 release to the current release” (p. 26-1)

Install the VitalQIP web client interface

Purpose

This section explains how to upgrade the VitalQIP web client interface on supported platforms. If you have problems installing the software, contact technical support.

Before you begin

- Ensure your database is running.

Windows

- Ensure you are logged into your system as a user with administrative privileges.
- Ensure you exit all programs you are currently running.

UNIX

- Log into your system as the root user. If the installation is not done as the root user the **`qping`** utility does not work. The utility must have root permission with the **`SUID`** bit set for the administrator. This is an operating system limitation. To work around this limitation:
  a. Log into the system as the root user:
  b. Change the mode and permissions on the **`qping`** utility to be:

```
root:sys & 4755
```

- For Sybase, it is recommended that Sybase environment variables are sourced. This eliminates the need to enter Sybase related values in during the installation. To do so, execute the following from the Sybase directory:
  – For Cshell:

    `source SYBASE.csh`

  – For Bourne shell:

    `. ./SYBASE.sh`

- Ensure your environment is sourced. In the *$QIPHOME/opt/etc* directory, enter

  `. ./shrc`

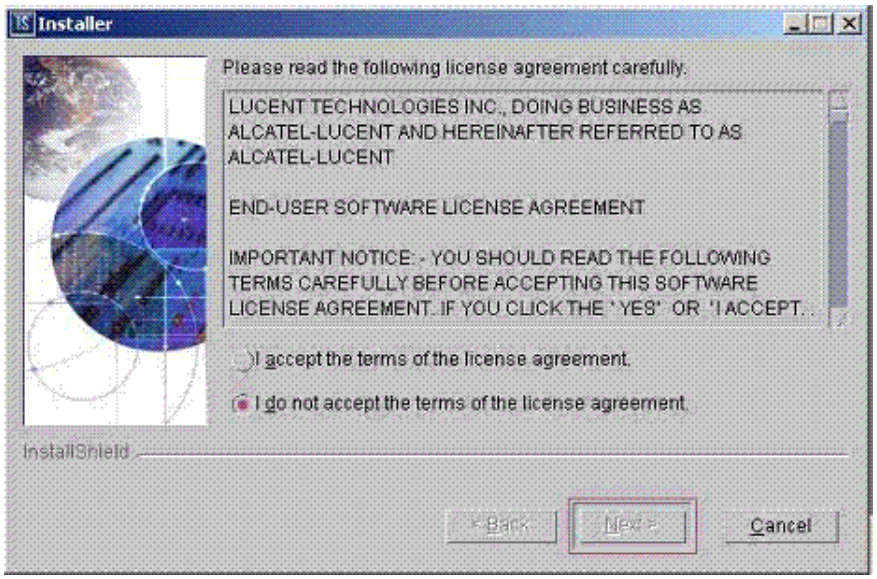
Procedure

1 Choose one of the following:

If you want to…	Then…
Upgrade on a Linux platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72SetupLinuxgccr<#>.bin`**
Upgrade on a Solaris platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72setupSolarisr<#>.bin`**
Upgrade on a Windows platform	1. Open a command window and change directory to the installation file location. This is the location you selected when you downloaded the Windows installation executable from the Alcatel-Lucent Electronic Download site (*c:\temp* is the default location). 2. Enter: **`qip72setupwin32r<#>.exe`**

For all executables, the **#** denotes the repackaging number of the executable.

2 The Software License Agreement screen opens.



Read the software license agreement and:

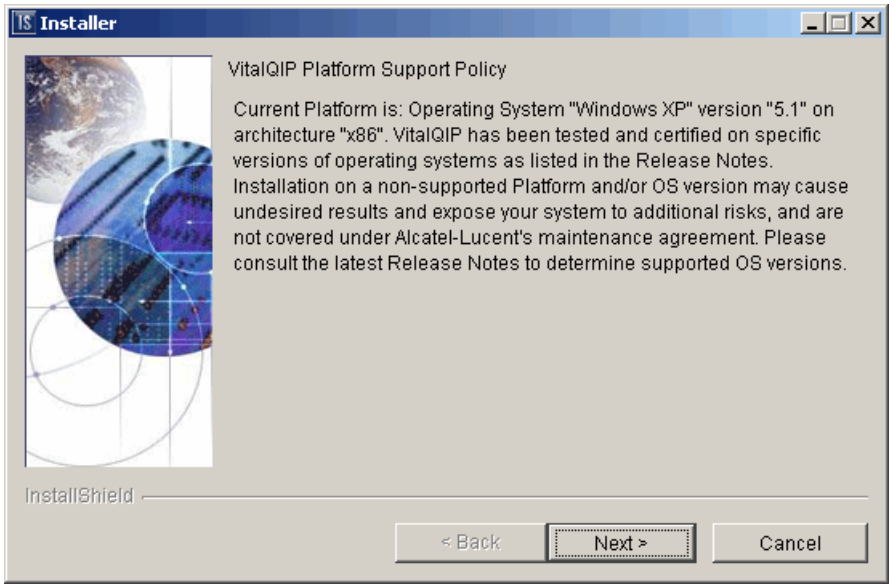
- Select **I accept the terms of the license agreement** to accept the license agreement.
- Select **I do not accept the terms of the license agreement** if you do not accept the license agreement. The installation is canceled.

3 Click **Next**. The installation determines that this is an upgrade, and the Welcome screen opens.

Click **Cancel** if you want to exit the installation.

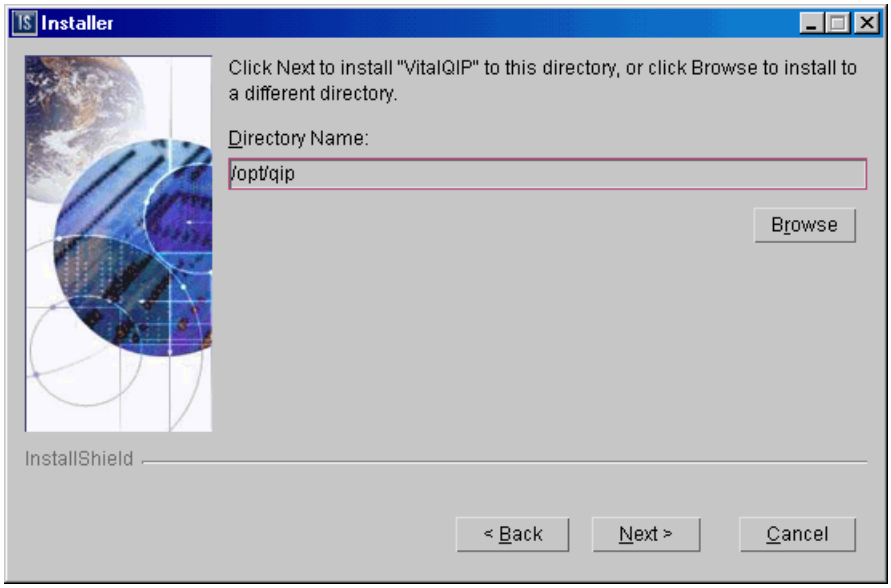
4 Click **Next**. The installation checks that the operating system is a supported version. If the operating system is supported, the Welcome screen opens.

If it is not a supported operating system, a screen opens with the Platform Support Policy.



Click **Cancel** to exit the installation and upgrade the operating system to one of the supported versions listed in the *VitalQIP 7.2 Release Notes* before you install VitalQIP.

5 Click **Next**. The VitalQIP Home Directory screen opens.



The default destination directory for the VitalQIP software is shown. By default, the directory is */opt/qip* on UNIX and *c:\qip* on Windows.

Do not install the web client in a directory other than the *QIPHOME* directory.

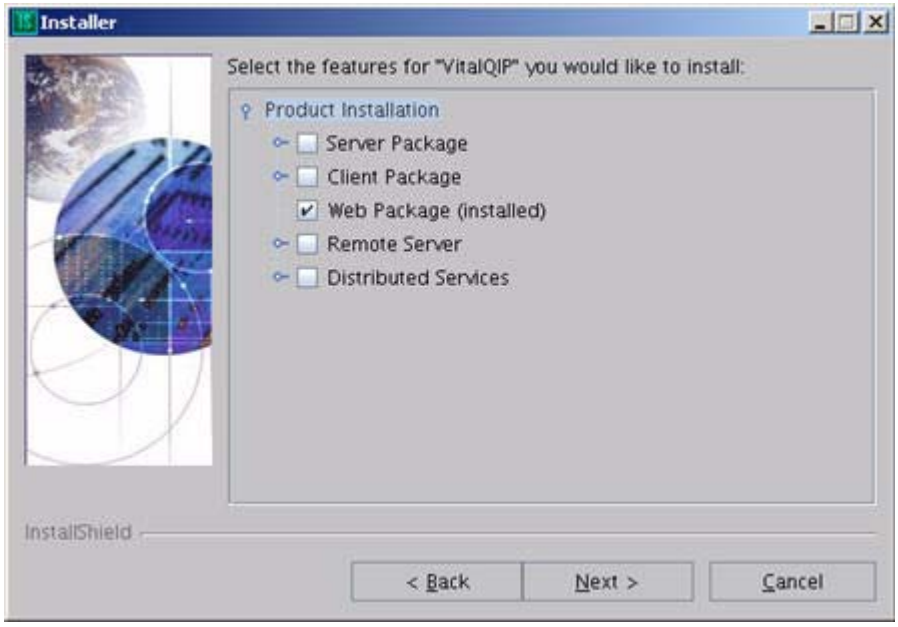
6 Click **Next**. Choose one of the following.

If you want to…	Then…
Upgrade web client on a UNIX platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, a screen opens showing the VitalQIP-related daemons that are running. 1. Choose one of the following options: • Click **yes, kill processes automatically** and have the installation stop the processes. • Click **no, they will be killed manually** and stop the processes manually. 2. Click **Next**.

If you want to…	Then…
Upgrade web client on a Windows platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, the processes are stopped by the installation.

Important! If an Apache Tomcat web server is running, the daemon is not stopped. The web server needs to be stopped manually, using the *stopTomcat.sh* script.

7 Click **Next**. The Features screen opens.



The features currently installed on the server appear checked. You cannot change these selections when performing an upgrade.

8 Click **Next**. The installation shows an information message. Read the message and follow any instructions that are shown in the message.

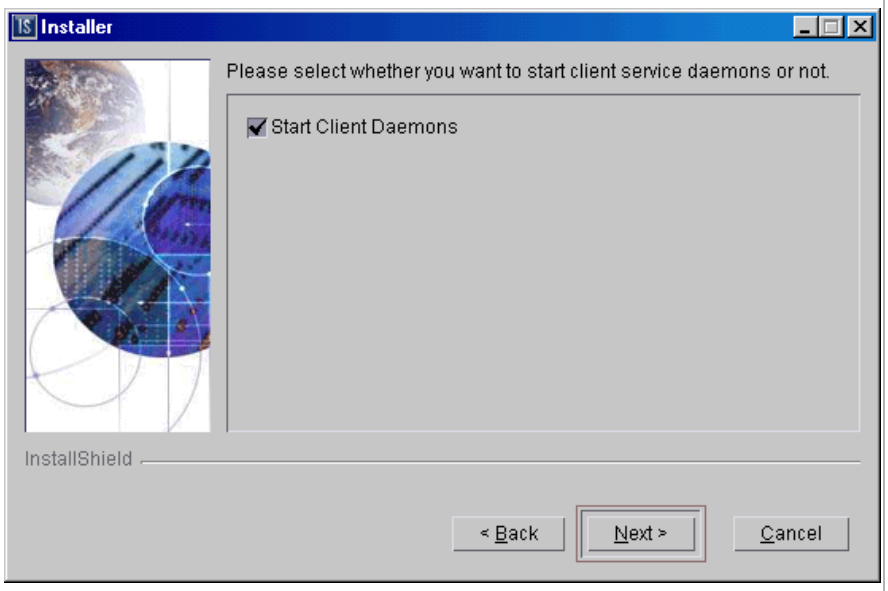
9 Click **Next**. After a few moments, the Summary screen opens. Examine the features to be installed. If changes are necessary, click **Back** to make changes to the installation. If everything looks correct, click **Next**.

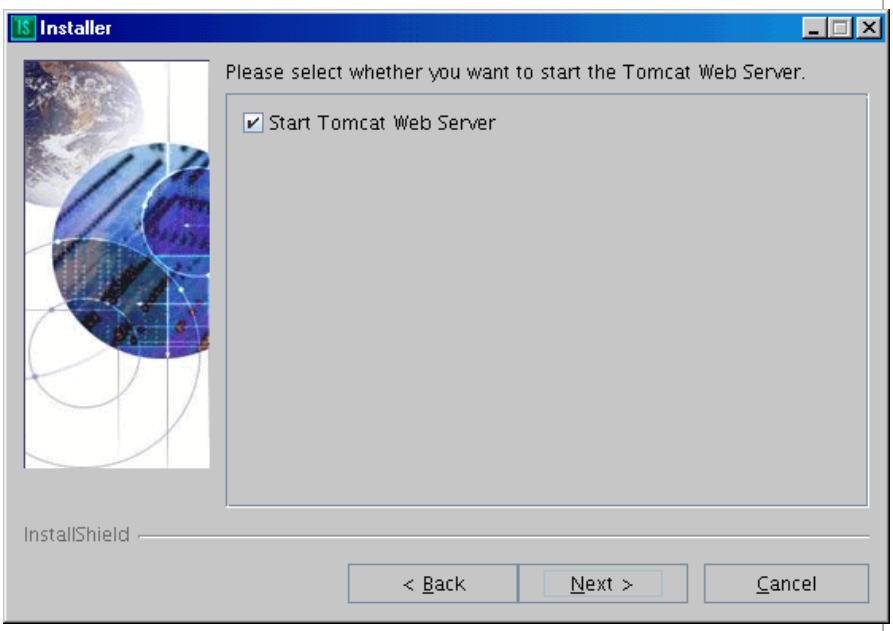
The installer commences extracting files and installing VitalQIP. After a few minutes, the Successful Install screen opens.

Note: On a Windows platform, a message may open, asking if you want to overwrite *mfc42.dll*. Click **No** to continue.

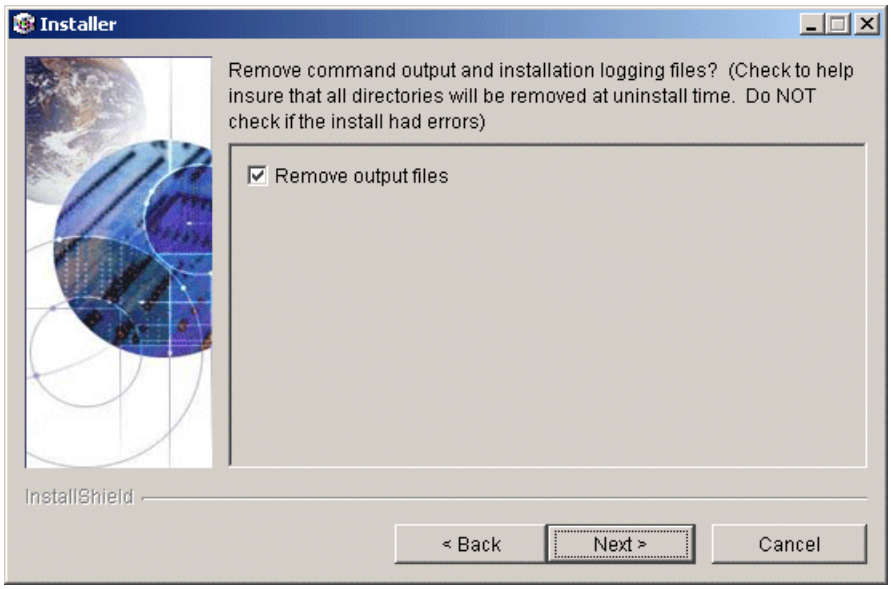
During an upgrade, you may receive a prompt indicating that a version of a file being installed is not as current as the already installed file. Click **Yes to All** to overwrite these files.

10 Choose one of the following:.

If you want to…	Then…
Start the web client on a UNIX platform	1. Click **Next**. **Result:** The Start Client Daemons screen opens.  The installation gives you the option to start the web client daemons. Follow these steps if you want to start the web client daemons: 2. Select **Start Client Daemons**. A screen opens showing the daemons that are to be started. 3. Click **Next**.

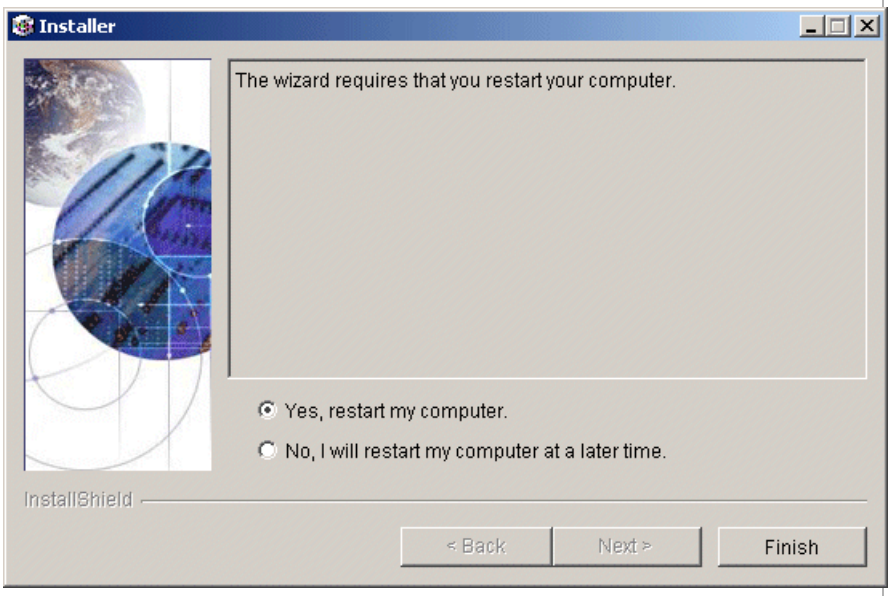
If you want to...	Then...
Start the Tomcat Server on a UNIX platform	The Start Tomcat Web Server screen opens.  Follow these steps if you want to start the daemons: a. Select the Start Tomcat Web Server. A screen opens showing the daemons that are to be started. b. Go to the next step. **Note:** Depending on how many other VitalQIP components are installed on your system, additional Start Daemon screens can open. Follow the directions on the screen to continue complete the installation.
Remove output files	1. Click **Next**. **Result:** The Remove Output Files screen opens. 2. Go to Step 11.

11 The Remove Output Files screen opens.



During the installation, VitalQIP produces output files that are no longer needed for the installation. The installation files can be kept or removed from your system. It is recommended that you keep the files if the install had errors. If you want to keep the files, uncheck **Remove output files**.

12 Choose one of the following..

If you want to…	Then…
Complete the installation on a UNIX platform	1. Click **Next**. **Result:** The Installation complete screen opens. 2. Click **Finish**.
Complete the installation on a Windows platform	1. Click **Next**. **Result:** The Installation complete screen opens.  2. Before you can begin using VitalQIP, you must reboot your computer. Select **Yes** to restart your computer. If you would rather work on other tasks before configuring VitalQIP, click **No**. 3. Click **Finish**.

END OF STEPS

24 Upgrade VitalQIP GUI client

Overview

Purpose

This chapter covers installing VitalQIP GUI on supported platforms.

Contents

This chapter covers these topics.

Install the VitalQIP GUI client	24-2

What is installed

The VitalQIP GUI upgrade allows you to overlay your existing server components with components from the current release of VitalQIP. The upgrade installation default selections are for whatever VitalQIP components are currently installed on the machine. The upgrade installation only allows you to upgrade existing components on your machine. It does not allow you to install additional components, or uninstall existing components.

Upgrade from previous versions

If VitalQIP is being upgraded from a previous version, refer to “Upgrade VitalQIP from a pre 7.2 release to the current release” (p. 26-1).

Install the VitalQIP GUI client

Purpose

This section explains how to install the VitalQIP GUI interface on supported platforms. If you have problems installing the software, contact technical support.

Before you begin

- Ensure your database is running.

Windows

- Ensure you are logged into your system as a user with administrative privileges.
- Ensure you exit all programs you are currently running.

UNIX

- Log into your system as the root user. If the installation is not done as the root user the **`qping`** utility does not work. The utility must have root permission with the **`SUID`** bit set for the administrator. This is an operating system limitation.

  To work around this limitation:

  a. Log into the system as the root user:

  b. Change the mode and permissions on the **`qping`** utility to be:

  ```
  root:sys & 4755
  ```

- For Sybase, Alcatel-Lucent recommends that Sybase environment variables be sourced. This eliminates the need to enter Sybase-related values during the installation. To do so, execute the following from the Sybase directory:

  – For Cshell:

  ```
  source SYBASE.csh
  ```

  – For Bourne shell:

  ```
  . ./SYBASE.sh
  ```

- Ensure your environment is sourced. In the *$QIPHOME/opt/etc* directory, enter

  ```
  . ./shrc
  ```

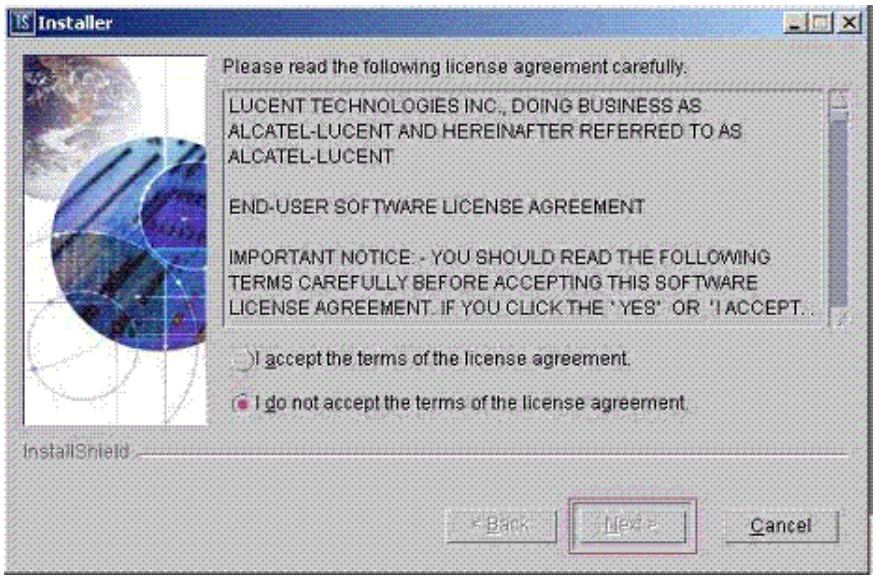
Procedure

To install the VitalQIP GUI client, follow these steps:

1 Choose one of the following:

If you want to…	Then…
Upgrade on a Linux platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72SetupLinuxgccr<#>.bin`**
Upgrade on a Solaris platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72setupSolarisr<#>.bin`**
Upgrade on a Windows platform	1. Open a command window and change directory to the installation file location. This is the location you selected when you downloaded the Windows installation executable from the Alcatel-Lucent Electronic Download site (*c:\temp* is the default location). 2. Enter: **`qip72setupwin32r<#>.exe`**

2 The Software License Agreement screen opens.



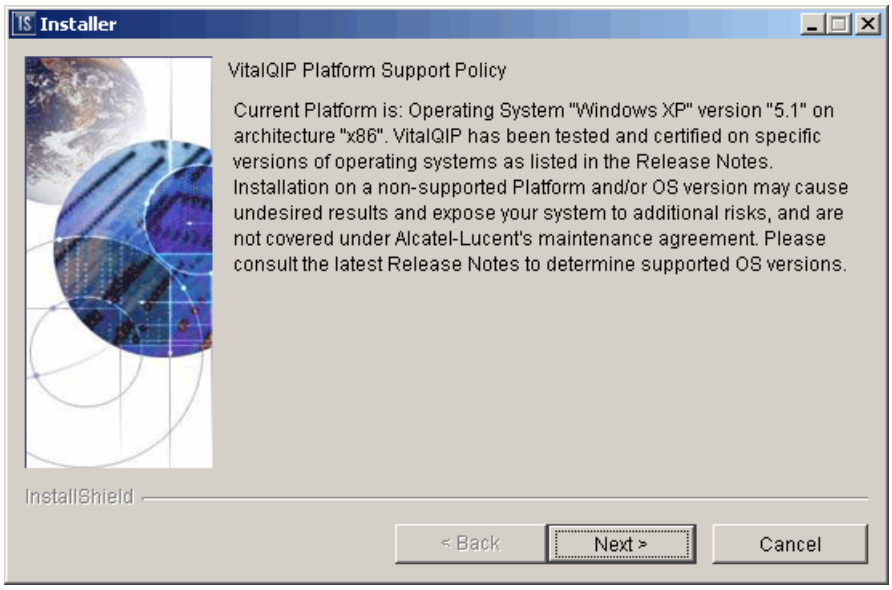
Read the software license agreement and:

- Select **I accept the terms of the license agreement** to accept the license agreement.
- Select **I do not accept the terms of the license agreement** if you do not accept the license agreement. The installation is canceled.

3 Click **Next**. The installation determines that this is an upgrade, and the Welcome screen opens.

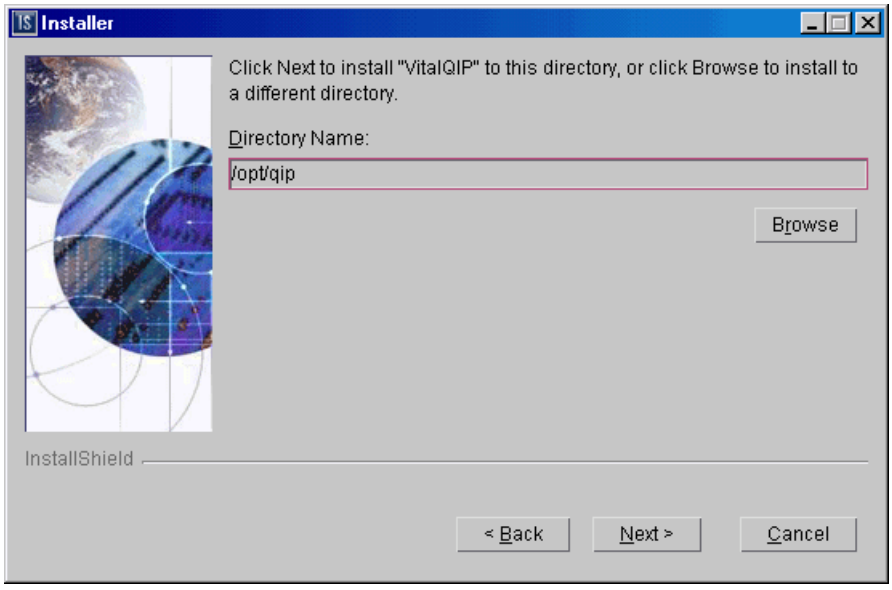
Click **Cancel** if you want to exit the installation.

4 Click **Next**. If it is not a supported operating system, a screen opens with the Platform Support Policy.



Click **Cancel** to exit the installation and upgrade the operating system to one of the supported versions listed in the *VitalQIP 7.2 Release Notes* before you install VitalQIP.

5 The VitalQIP Home Directory screen opens.

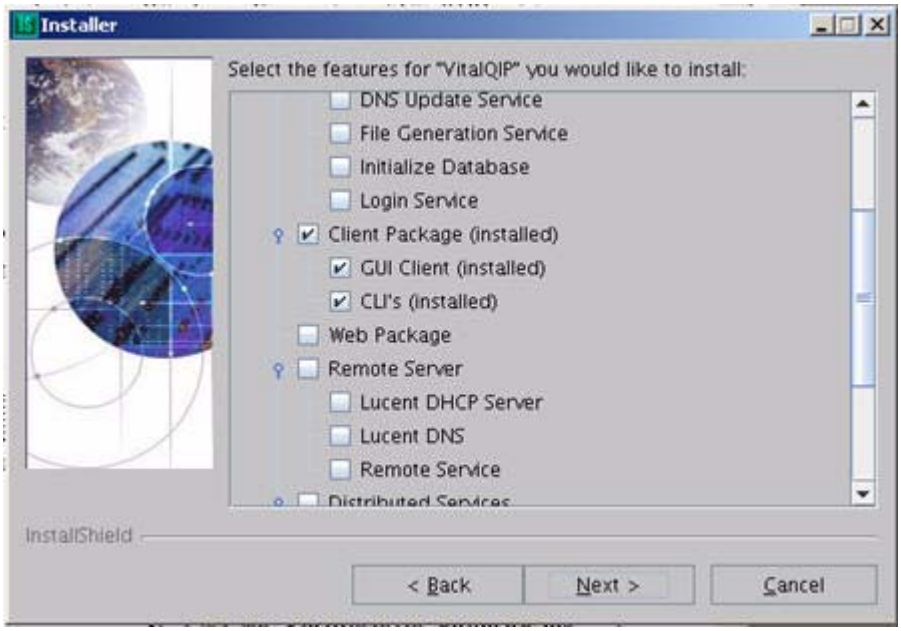


The default destination directory for the VitalQIP software is shown. By default, the directory is */opt/qip* on UNIX and *c:\qip* on Windows. If a version of VitalQIP exists on the machine, the installation reads the **`QIPHOME`** environment variable and displays the value.

6 IClick **Next**. Choose one of the following.

If you want to…	Then…
Upgrade GUI client on a UNIX platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, a screen opens showing the VitalQIP-related daemons that are running. 1. Choose one of the following options: • Click **yes, kill processes automatically** and have the installation stop the processes. • Click **no, they will be killed manually** and stop the processes manually. 2. Click **Next**.
Upgrade GUI client on a Windows platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, the processes are stopped by the installation.

7 Click **Next.** The Features screen opens.



The features currently installed on the server appear checked. You cannot change these selections when performing an upgrade.

8 Click **Next**. The installation shows an information message. Read the message and follow any instructions that are shown.

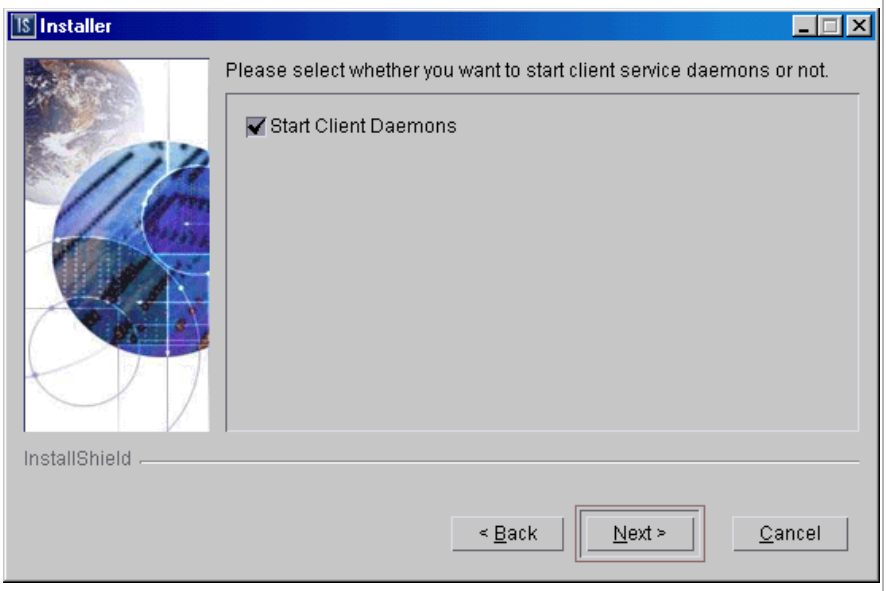
9 Click **Next**. After a few moments, the Summary screen opens. Examine the features to be installed. If changes are necessary, click **Back** to make changes to the installation. If everything looks correct, click **Next**.

The installer commences extracting files and installing VitalQIP. After a few moments, the Successful Install screen opens.

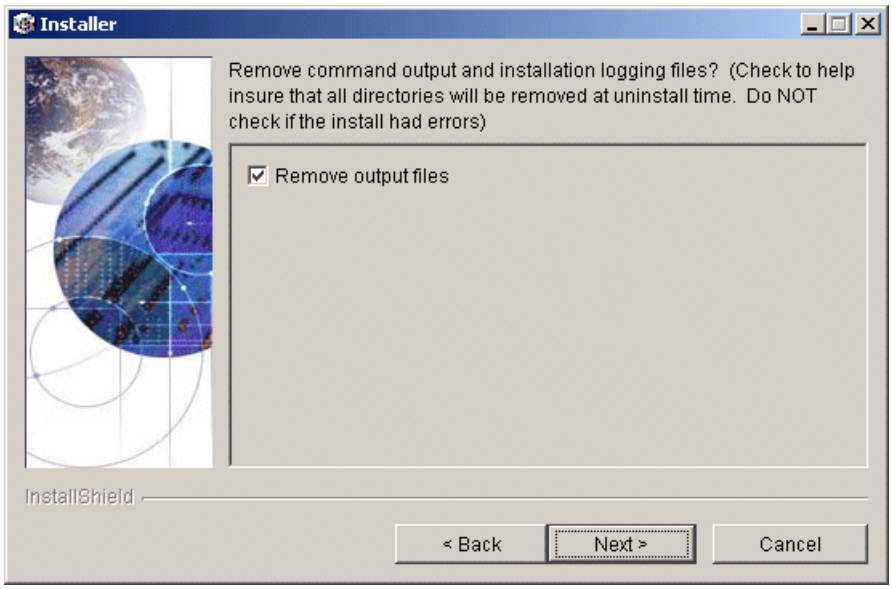
Note: On a Windows platform, a message may open, asking if you want to overwrite *mfc42.dll.* Click **No** to continue.

During an upgrade, you may receive a prompt indicating that a version of a file being installed is not as current as the already installed file. Click **Yes to All** to overwrite these files.

10 Choose one of the following.

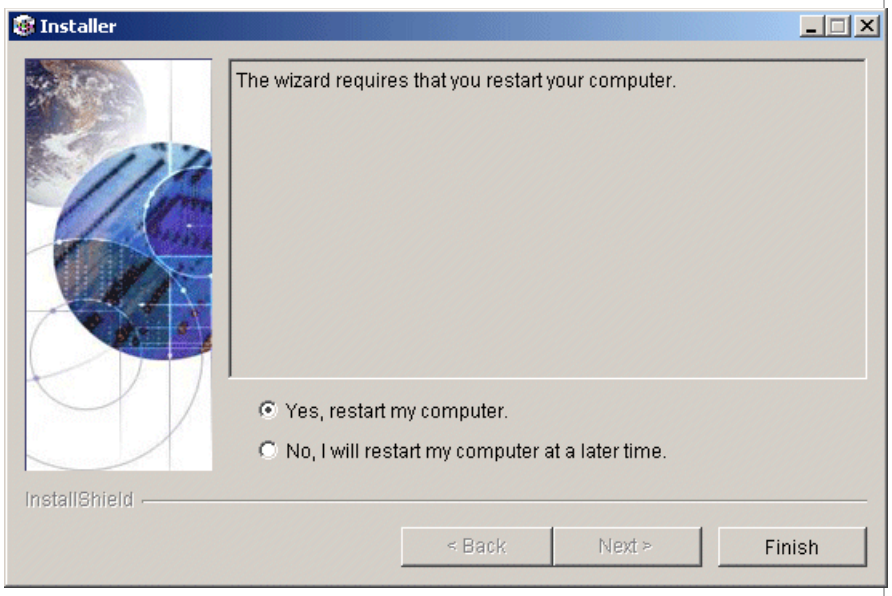
If you want to…	Then…
Start client daemons on a UNIX platform	1. Click **Next**. **Result:** The Start Client Daemons screen opens.  The installation gives you the option to start the client daemons, 2. Select **Start Client Daemons**. A screen opens showing the client daemons that are to be started. Depending on how many other VitalQIP components are installed on your system, additional Start Daemon screens can open. Follow the directions on the screen to complete the installation. 3. Click **Next**.
Remove output files	1. Click **Next**. **Result:** The Remove Output Files screen opens. 2. Go to Step 11.

11 The Remove Output Files screen opens.



During the installation, VitalQIP produces output files that are no longer needed for the installation. The installation files can be kept or removed from your system. It is recommended that you keep the files if the install had errors. If you want to keep the files, uncheck **Remove output files**.

12 Choose one of the following..

If you want to...	Then...
Complete the installation on a UNIX platform	1. Click **Next**. **Result:** The Installation complete screen opens. 2. Click **Finish**.
Complete the installation on a Windows platform	1. Click **Next**. **Result:** The Installation complete screen opens.  2. Before you can begin using VitalQIP, you must reboot your computer. Select **Yes** to restart your computer. If you would rather work on other tasks before configuring VitalQIP, click **No**. 3. Click **Finish**.

END OF STEPS

25 Upgrade VitalQIP Distributed Services

Overview

Purpose

This chapter covers installing VitalQIP Distributed Services on a supported platforms.

Contents

This chapter covers these topics.

Upgrade the VitalQIP Distributed Services	25-2

What is installed

The VitalQIP enterprise server upgrade allows you to overlay your existing server components with components from the current release of VitalQIP. The upgrade installation default selections are for whatever VitalQIP components are currently installed on the machine. The upgrade installation only allows you to upgrade existing components on your machine. It does not allow you to install additional components, or uninstall existing components.

Upgrade from previous versions

If VitalQIP is being upgraded from a previous version, refer to "Upgrade VitalQIP from a pre 7.2 release to the current release" (p. 26-1).

Upgrade the VitalQIP Distributed Services

Purpose

This section explains how to upgrade VitalQIP Distributed Services on supported platforms. If you have problems installing the software, contact technical support.

Before you begin

- Ensure your database is running.

Windows

- Ensure you are logged into your system as a user with administrative privileges.
- Ensure you exit all programs you are currently running.

UNIX

- Log into your system as the root user. If the installation is not done as the root user the **`qping`** utility does not work. The utility must have root permission with the **`SUID`** bit set for the administrator. This is an operating system limitation.

  To work around this limitation:

  a. Log into the system as the root user:

  b. Change the mode and permissions on the **`qping`** utility to be:

  ```
  root:sys & 4755
  ```

- Alcatel-Lucent recommends that Sybase environment variables be sourced, which. eliminates the need to enter Sybase-related values during the installation. To do so, execute the following from the Sybase directory:

  – For Cshell:

  ```
  source SYBASE.csh
  ```

  – For Bourne shell:

  ```
  . ./SYBASE.sh
  ```

- Ensure your environment is sourced. In the *$QIPHOME/opt/etc* directory, enter

  ```
  . ./shrc
  ```

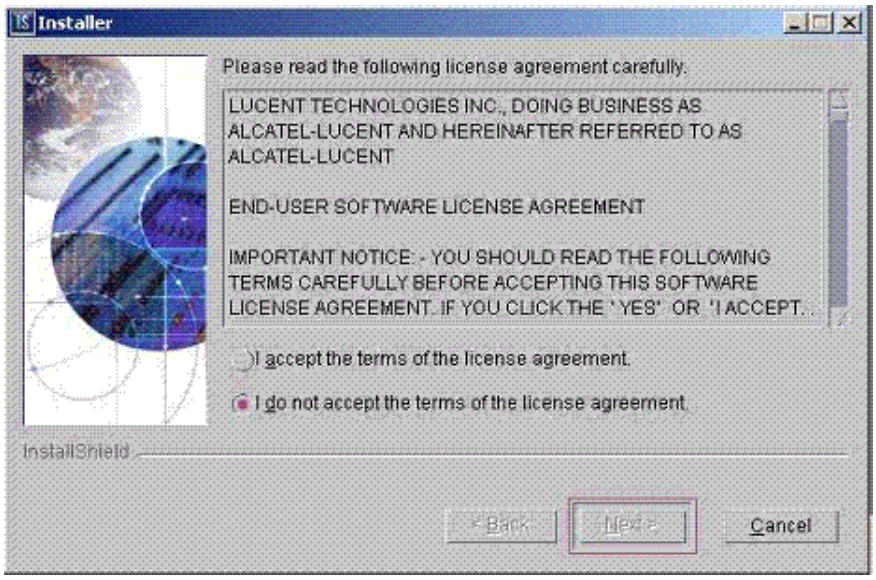
Procedure

To upgrade VitalQIP Distributed Services, follow these steps:

1 Choose one of the following:

If you want to…	Then…
Upgrade on a Linux platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72SetupLinuxgccr<#>.bin`**
Upgrade on a Solaris platform	1. Change directory to the directory where the VitalQIP installation files are located. 2. Enter: **`./qip72setupSolarisr<#>.bin`**
Upgrade on a Windows platform	1. Open a command window and change directory to the installation file location. This is the location you selected when you downloaded the Windows installation executable from the Alcatel-Lucent Electronic Download site (*c:\temp* is the default location). 2. Enter: **`qip72setupwin32r<#>.exe`**

2 The Software License Agreement screen opens.



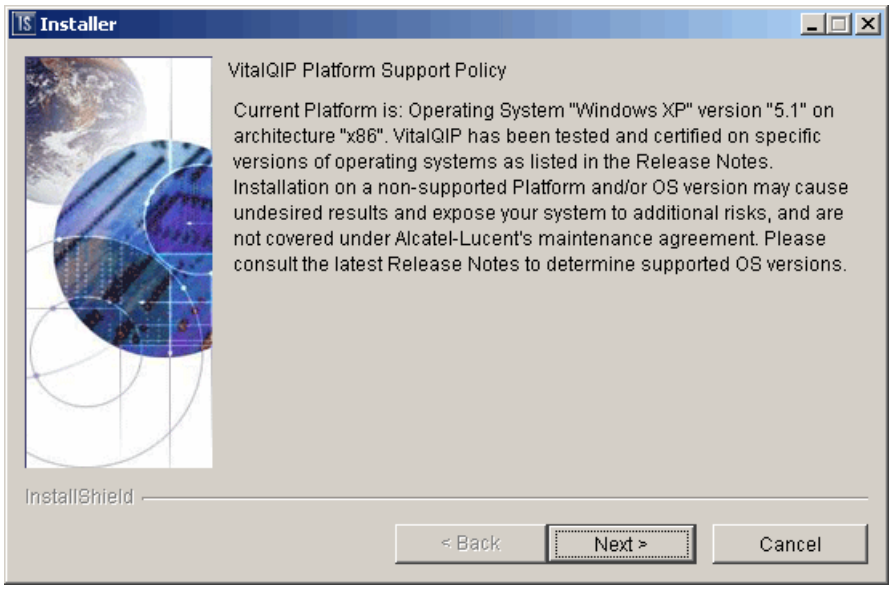
Read the software license agreement and:

- Select **I accept the terms of the license agreement** to accept the license agreement.
- Select **I do not accept the terms of the license agreement** if you do not accept the license agreement. The installation is canceled.

3 Click **Next**. The installation determines that this is an upgrade, and the Welcome screen opens.

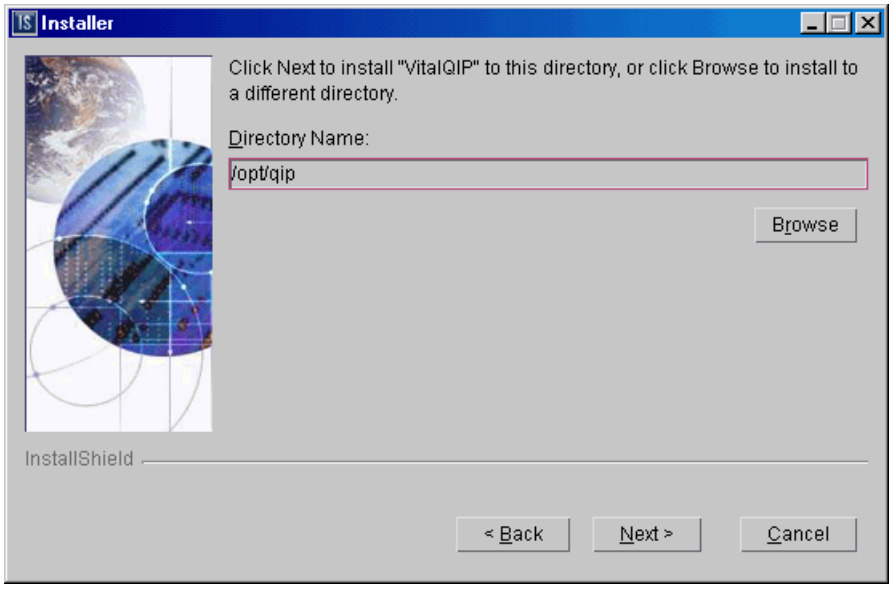
Click **Cancel** if you want to exit the installation.

4 Click **Next**. The installation checks that the operating system is a supported version. If it is not a supported operating system, a screen opens with the Platform Support Policy.



Click **Cancel** to exit the installation and upgrade the operating system to one of the supported versions listed in the *VitalQIP 7.2 Release Notes* before you install VitalQIP.

5 The VitalQIP Home Directory screen opens.

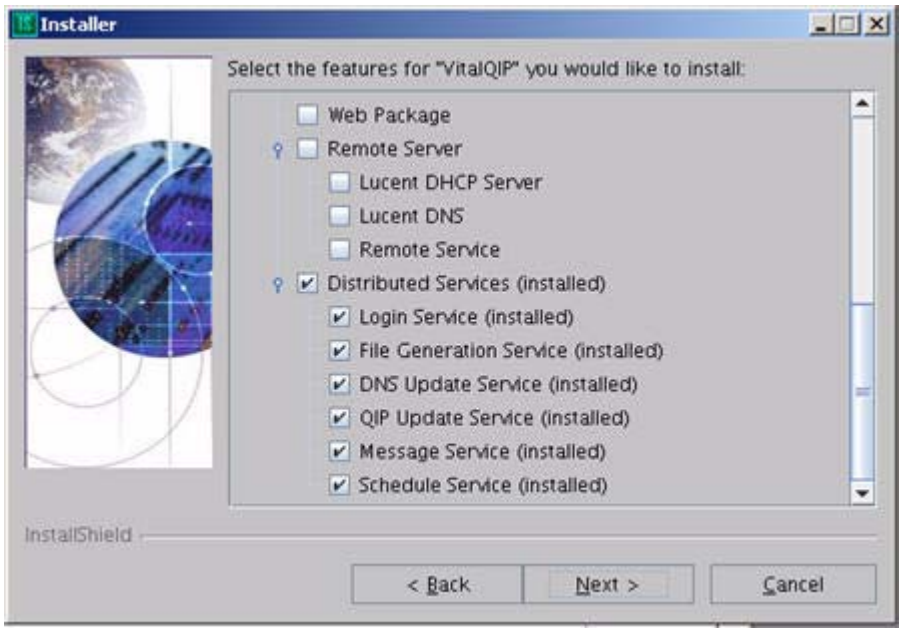


The default destination directory for the VitalQIP software is shown. By default, the directory is */opt/qip* on UNIX and *c:\qip* on Windows. If a version of VitalQIP exists on the machine, the installation reads the **`QIPHOME`** environment variable and displays the value.

6 IClick **Next**. Choose one of the following.

If you want to…	Then…
Upgrade Distributed Services on a UNIX platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, a screen opens showing the VitalQIP-related daemons that are running. 1. Choose one of the following options: • Click **yes, kill processes automatically** and have the installation stop the processes. • Click **no, they will be killed manually** and stop the processes manually. 2. Click **Next**.
Upgrade Distributed Services on a Windows platform	The installation checks to see if any VitalQIP-related processes are running. If VitalQIP-related processes are running, the processes are stopped by the installation.

7 Click **Next**. In a few moments, the Features screen opens.



The features currently installed on the server appear checked. You cannot change these selections when performing an upgrade.

8 Click **Next**. The installation shows an information message. Read the message and follow any instructions that are shown in the message.

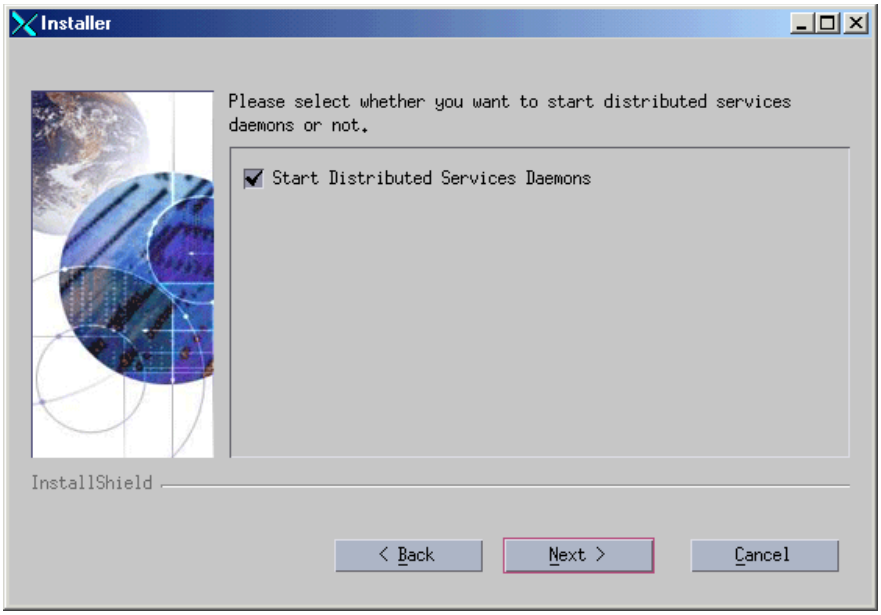
9 Click **Next**. After a few moments, the Summary screen opens. Examine the features to be installed. If changes are necessary, click **Back** to make changes to the installation. If everything looks correct, click **Next**.

The installer commences extracting files and installing VitalQIP.

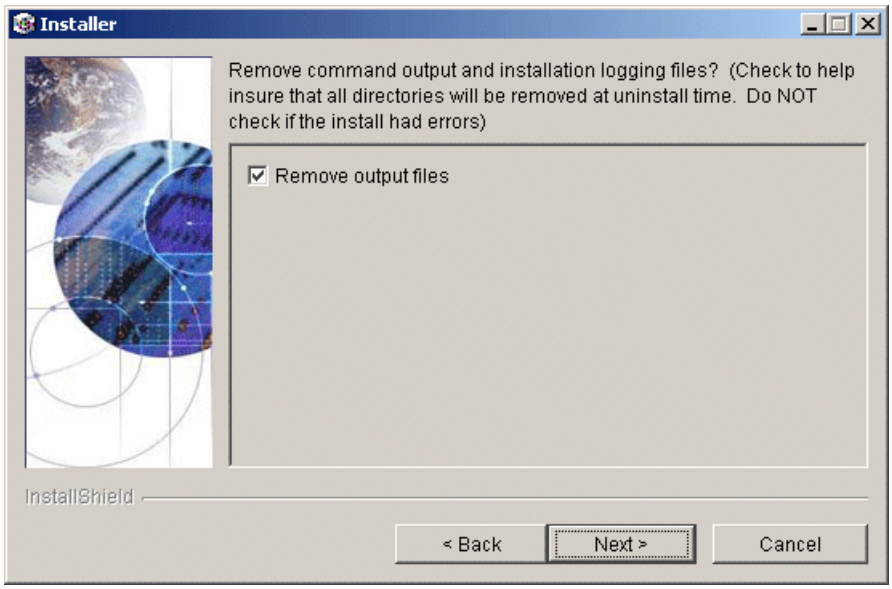
> **Note:** On a Windows platform, a message may open, asking if you want to overwrite *mfc42.dll.* Click **No** to continue.
>
> During an upgrade, you may receive a prompt indicating that a version of a file being installed is not as current as the already installed file. Click **Yes to All** to overwrite these files.

In a few minutes, the Successful Install screen opens.

10 Choose one of the following.

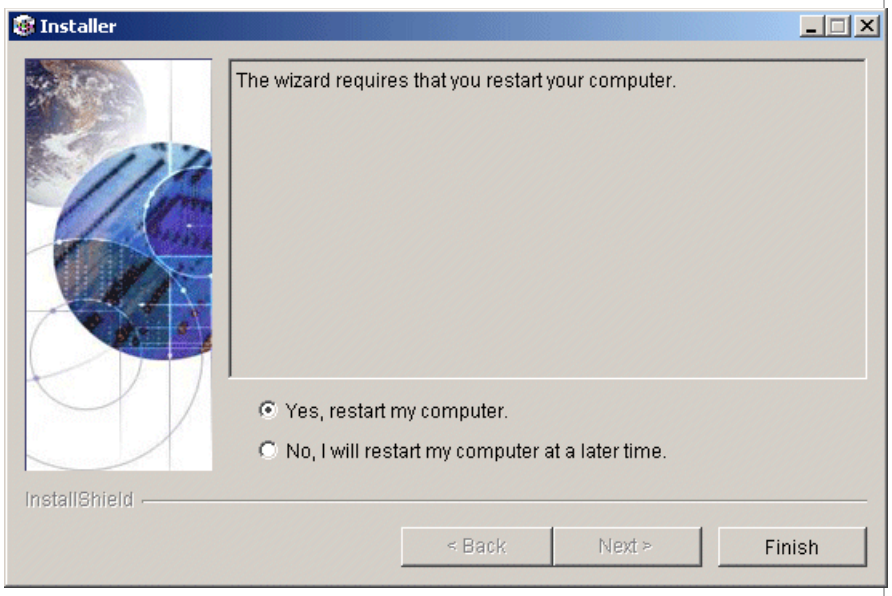
If you want to…	Then…
Start Distributed Services daemons on a UNIX platform	1. Click **Next**. **Result:** The Start Distributed Services Daemons screen opens.  The installation gives you the option to start the Distributed Services daemons. Follow these steps if you want to start the Distributed Services daemons: 2. Select the **Start Distributed Services Daemons**. A screen opens showing the daemons that are to be started. **Note:** Depending on how many other VitalQIP components are installed on your system, additional Start Daemon screens can open. Follow the directions on the screen to complete the installation. 3. Click **Next**.
Remove output files	1. Click **Next**. **Result:** The Remove Output Files screen opens. 2. Go to Step 11.

11 The Remove Output Files screen opens.



During the installation, VitalQIP produces output files that are no longer needed for the installation. The installation files can be kept or removed from your system. It is recommended that you keep the files if the install had errors. If you want to keep the files, uncheck **Remove output files**.

12 Choose one of the following..

If you want to…	Then…
Complete the installation on a UNIX platform	1. Click **Next**. **Result:** The Installation complete screen opens. 2. Click **Finish**.
Complete the installation on a Windows platform	1. Click **Next**. **Result:** The Installation complete screen opens.  2. Before you can begin using VitalQIP, you must reboot your computer. Select **Yes** to restart your computer. If you would rather work on other tasks before configuring VitalQIP, click **No**. 3. Click **Finish**.

END OF STEPS

26 Upgrade VitalQIP from a pre 7.2 release to the current release

Overview

Purpose

This chapter describes the procedures you need to upgrade VitalQIP from a previous release to the current release.

> **Note:** Only upgrade paths from supported releases are described. If you are running an older version of VitalQIP than the ones described in this chapter, contact Alcatel-Lucent Technical Support for assistance.

Contents

This chapter covers these topics.

Upgrading to VitalQIP 7.2	26-2
Upgrading to Sybase 15.0.2	26-4
Overlaying Sybase 15.0.2 over Sybase 15.0.1	26-14
Upgrading to Oracle 10gR2	26-20
Upgrading the VitalQIP enterprise server	26-23

Upgrading to VitalQIP 7.2

Overview

The upgrade to VitalQIP 7.2 is accomplished in the following sequence:

1. Install a 64 bit version of the database software (Sybase 15.0.2 with ESD#6 or Oracle 10gR2). Refer to Table 26-1, “Database upgrade requirements” (p. 26-2) to determine what database upgrade is necessary.
2. Install the VitalQIP 7.2 Enterprise Server.

Purpose

Use this procedure when you want to upgrade to the current version of VitalQIP from a previous version of VitalQIP..

Before you begin

Only 64-bit database servers are supported in VitalQIP 7.2. The Sybase or Oracle database upgrade is only needed for a database on an enterprise server. Although recommended, database clients do not need to be upgraded on your VitalQIP 7.2 clients if they are running Sybase 12.5 or 15.x clients, or Oracle 10.x clients, as VitalQIP 6.x, Sybase or Oracle client software is not required on remote servers.

Table 26-1 Database upgrade requirements

VitalQIP Release	Sybase Version	Sybase Upgrade Requirements	Oracle Version	Oracle Upgrade Requirements
6.1 SP1 and earlier	12.5.X	No direct upgrade path exists to VitalQIP 7.2. Contact Technical support.	9.2.X	No direct upgrade path exists to VitalQIP 7.2. Contact Technical support.
6.2 B49 and earlier	12.5.X	Back up 12.5.x, uninstall 12.5.x, and then install 64 bit 15.0.2 with ESD#6. To uninstall Sybase, refer to the directions in Chapter 2 of the VitalQIP Installation Guide.	9.2.X	Back up 9.2.X and upgrade to 64 bit 10gR2.

VitalQIP Release	Sybase Version	Sybase Upgrade Requirements	Oracle Version	Oracle Upgrade Requirements
7.0 B460 and B502	15.0	Back up 15.0, uninstall 15.0, and then install 15.0.2 with ESD#6. To uninstall Sybase, refer to the directions in Chapter 2 of the VitalQIP Installation Guide.	10gR2	Ensure that 64 bit 10gR2 is installed.
7.0 B520	15.0 and 15.0.1	If version is 15.0: Option 1: Back up 15.0, uninstall 15.0, and then install 15.0.2 with ESD#6. To uninstall Sybase, refer to the directions in Chapter 2 of the VitalQIP Installation Guide. Option 2: Install 64 bit 15.0.2 in a new directory. "If version is 15.0.1: Upgrade to 15.0.2 with ESD#6 is required.	10gR2	Ensure that 64 bit 10gR2 is installed.
7.1	15.0.1	Upgrade to 15.0.2 with ESD#6 is required.	10gR2	Ensure that 64 bit 10gR2 is installed.

Upgrading to Sybase 15.0.2

Purpose

Follow these instructions if you are performing a fresh installation of Sybase 15.0.2 in a new directory, or after uninstalling an older version.

Export VitalQIP data

To export your data, follow these steps:

Steps

1. Run the following from a command line:

   ```
   qip-export -u qipadmin -p <password> -d <export_directory>
   ```

2. Make a copy of the VitalQIP exported data.

3. If you are also using Audit Manager, export the Audit Manager data as well. Run the following command from a command line:

   ```
   lam-export -u lamadmin -p <password> -d <export_directory>
   ```

4. Ensure you save a copy of your Sybase dump to restore your database if necessary.

END OF STEPS

Retain current Sybase settings

If you want to keep your current Sybase settings (device names, paths, and sizes), you need to note your current Sybase database configuration settings. This information is needed during the Sybase 15.0.2 installation. To retain a copy of your current Sybase configurations, follow these steps::

Steps

1. Start the Sybase server.

2. Enter the following commands:

```
isql -U sa -P <sa_password>
1>sp_helpdb QIP
2>go
```

3 Print the returned information.

4 Enter the following commands:

```
1>sp_helpdb master
2>go
```

5 Print the returned information.

6 Enter the following commands:

```
1>sp_helpdevice
2>go
```

7 Print the returned information.

END OF STEPS

Retain configuration file settings

If you want to use new Sybase configuration settings, open your current <*dataserver*>.*cfg* file in a text editor. This file is located in the SYBASE directory. Review the file's content and note all the parameters that have changed from the default. After Sybase 15.0.2 is installed, you can use the same sizes, or you can enter new information for these parameters. For example, you must ensure the lock scheme parameter (in the Lock Manager section) is set to "datarows" in the Sybase 15.0.2 version of the <*dataserver*>.*cfg* file. This parameter allows row level locking.

Stop the Sybase Server and VitalQIP Services

Stop all Sybase server and all VitalQIP services. To stop the Sybase server, submit the following commands:

```
isql -U sa -P <sa_password>
1>shutdown
2>go
```

To stop all VitalQIP services, refer to Chapter 2, "Manage VitalQIP Services" in the *VitalQIP Administrator Reference Manual*.

Fresh Sybase 15.0.2 installation

Obtain the Sybase 15.0.2 installation set from the VitalQIP ALED site. The directions for installing Sybase are located in "Install Sybase database" (p. 2-1) After you have finished the installation, complete the tasks in the following sections.

Post-installation tasks for fresh Sybase 15.0.2 installation

After the Sybase 15.0.2 installation, perform the following steps:

1. Edit the <dataserver>.cfg file to make any changes necessary for parameters noted when you were performing the pre-installation task described in "Retain configuration file settings" (p. 26-5). For example, you must ensure the lock scheme parameter (in the Lock Manager section) is set to "datarows".
2. Sybase 15.0.2 alters its server entries in the interfaces file (UNIX) or *sql.ini* file (Windows) using the dsedit utility. The new Sybase 15.0.2 installation places the server name and database server IP address into the interfaces file or sql.ini file (for example, QIPSYBASE, 198.200.138.1). Problems can occur for your Sybase clients since the clients expect the entry in the interfaces file to have the database server's IP address and port number. Alcatel-Lucent recommends editing the interfaces file or sql.ini file on the database server and changing it to the database server's IP address and port number to match your Sybase client interfaces files.

END OF STEPS

Setting the System Administrator password

A user account called "sa" is created for the Sybase System Administrator when you install the Sybase software. A user logged in as "sa" can use any database on Adaptive Server, including master, with full privileges.

Immediately after a new installation, there is no password on the "sa" account. The initial default value for the password is NULL. In a production environment, the Sybase System Administrator should always use a non-default password.

The System Administrator should log in to the new Adaptive Server as "sa" and set a password using **sp_password**:

```
isql -Usa -P
1> sp_password null, <new_password>
2> go
```

where "null" is the default password and **<new_password>** is the password that you are assigning to the "sa" account.

Handling multiple Sybase engines for multi-processor machines

Changing the default value in the Sybase Configuration file for option "number of engines at startup" can cause various VitalQIP services to hang. The VitalQIP log files indicate a hang when it tries to disconnect from the Sybase database. This only affects customers running Sybase on a multiple CPU machine and who have changed this configuration option from DEFAULT to the number of CPUs utilized at Sybase startup.

The default setting for this parameter in the Sybase configuration file is: number of engines at startup = DEFAULT. Alcatel-Lucent recommends keeping this option set to DEFAULT. The DEFAULT value equates to 1. In ASE 15, the support method for dynamically starting and stopping additional Sybase dataserver engines is through the use of the **`sp_engine`** system stored procedure.

The syntax for the execution of the sp_engine command by the sa user is as follows:

```
sp_engine "online | offline | can_offline" [,<engine id>]
```

Example:

```
sp_engine "online"
```

Or:

```
sp_engine "online", 1
```

Also, setting the Sybase configuration parameter "max online engines" (in the Processors section) to the number of CPUs available on the machine, allows the **`sp_engine`** command to dynamically set Sybase dataserver engines online and offline.

> **Note:** Engine numbers start with 0. Therefore, the first engine started by Sybase will have an engine id of 0. Any additional engines will start with the number 1 and move forward from there.

After the parameters are set, Sybase requires a special ASE_JAVA license file, *ASE150_java.lic*, to run multiple Sybase processes. The file is not platform specific, and not 32/64bit specific.

Note: The *ASE150_java.lic* file requirement started with ASE 15.0.

Follow these steps to install the *ASE150_java.lic* file:

1. Download a copy of the *ASE150_java.lic* file from the ALED site:

   ```
   /VitalQIP/7.2/Sybase15.0.2/ASE15.0-JAVA-LIC
   ```

2. Copy the *ASE150_java.lic* file into the $SYBASE/SYSAM-2_0/licenses directory.

3 Stop and restart Sybase.

END OF STEPS

Apply Sybase 15.0.2 ESD#6 patch

Download the Sybase 15.0.2 ESD#6 patch for the OS and unzip or untar it to a temporary directory.

To install, follow these steps:

1 Log into your system as:

- For UNIX, the root user
- For Windows, the user with administrative privileges

2 Exit all programs you are currently running.

3 To start the installation:

If you are . . .	Then . . .
Installing on UNIX	1. Source your Sybase environment variables: a. If needed, change the directory to the Sybase home directory: **`cd /opt/<Sybase directory>`** b. Source the Sybase environment variables: – For Cshell: **`source SYBASE.csh`** – For Bourne shell: **`. ./SYBASE.sh`** 2. Go to the directory where the Sybase EBF#6 installation files are located. 3. Execute: **`./setup`**

If you are . . .	Then . . .
Installing on Windows	1. From your Desktop, select **Run** from the Start menu. 2. Open a command prompt and type: **cmd** 3. Go to the directory where the Sybase installation files are located: **cd <drive>:\<directory>**

Result: The Welcome screen opens:

4 Click **Next**. The End-User License Agreement screen opens.

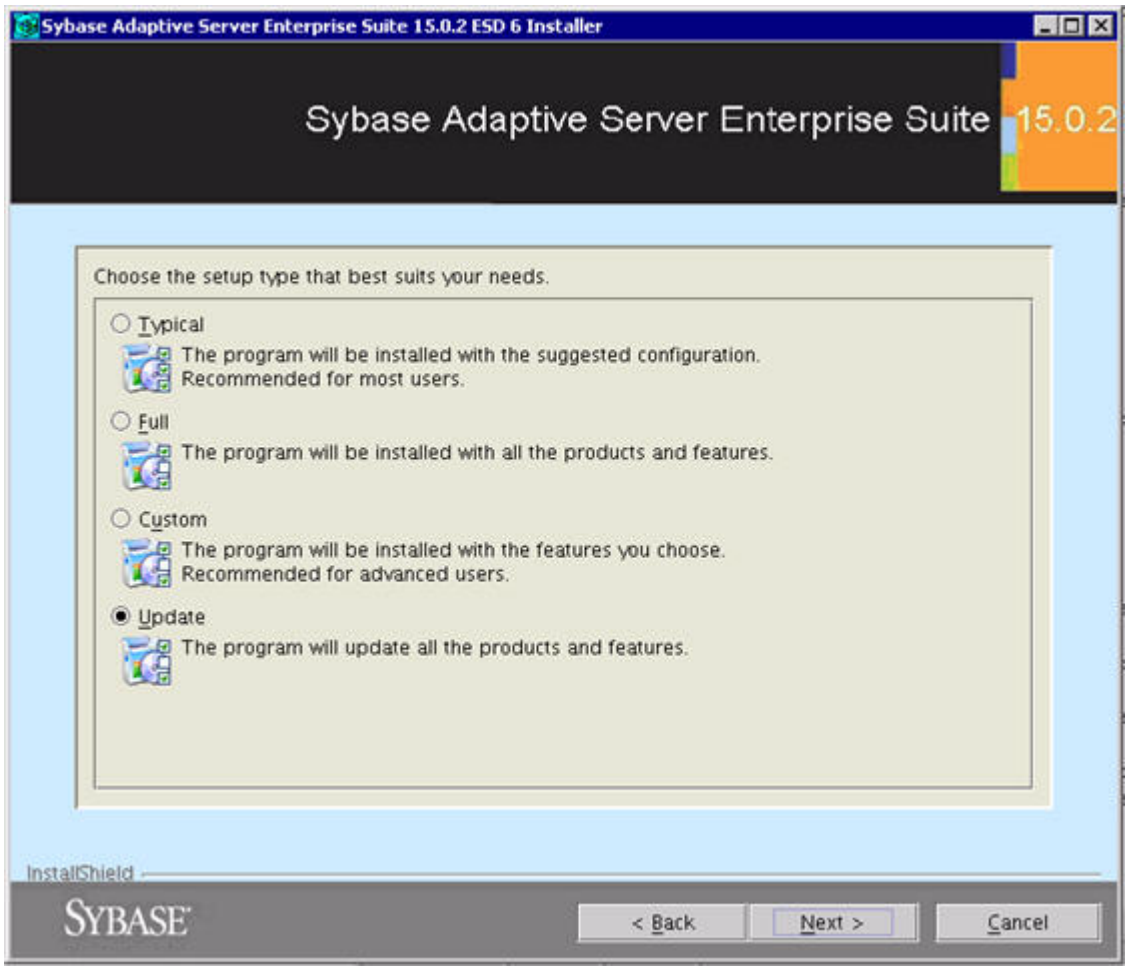
5 In the Select field, select your country to display the license agreement in your language. Read the license agreement and select **I agree to the terms of the Sybase license for the install location specified** option.

6 Click **Next**. The Destination screen opens.

7 Check that the path displayed corresponds to the Sybase home directory you specified when you installed Sybase 15.0.2,

8 Click **Next**. A dialog box opens with the message `You have chosen to install into an existing directory. Any older version of the product you choose to install that are detected in this directory will be replaced. Do you want to continue with installation into this directory?`

9 Click Yes. The Sybase setup type screen opens:



10 Ensure that the Update option is selected and click **Next**.

11 The ASE Installer displays the features that have already been installed and which features will be updated by the ESD#6 patch.

12 Click **Next**. The ASE Installer checks your system information. In some instances, a dialog box opens with the message `Installer ins unable to find a suitable license for one or more of the configured Adaptive Server Enterprise instance(s)... Do you want to continue without the license verification?`

13 Click **Yes**. In a few moments, the summary information screen opens.

14 Click **Next**. The ESD#6 patch install commences.

15 When messages appear informing you that newer files exist on your system, click **Yes to All**.

16 When the patch is successfully installed, click **Next** to continue.

17 In the Configure new Adaptive Server screen, ensure that all checkboxes are deselected and click **Next**.

18 Click **Finish** to close the ASE Installer.

The ESD#6 patch installation is completed.

19 Restart the Adaptive Server:

20 On UNIX, run:

```
$SYBASE/$SYBASE_ASE/install/startserver [-f RUN_server_name file]
```

21 "On Windows, verify that the Adaptive Server has restarted after a reboot. Select **Start => Programs => Administrative Tools => Services**. Right-click on **SYBSQL_<servername>]** and select **Start** if the Adaptive Server status is not displayed.

22 Verify that the new version has been installed. Run the following query from isql:

```
isql -U sa -P <sa_password>
1>select @@version
2>go
```

23 Verify that the new version is at 15.0.2 with ESD#6.

END OF STEPS

Overlaying Sybase 15.0.2 over Sybase 15.0.1

Purpose

Follow these instructions if you are performing an overlay installation of Sybase 15.0.2 on top of an existing Sybase 15.0.1 database.

Pre-installation tasks

Before overlaying Sybase 15.0.1 with Sybase 15.0.2, the following steps must be completed.

Check that the database is error free

Because installing Adaptive Server 15.0.2 overwrites current Adaptive Server software, ensure that your database is error free before you start the overlay.

To ensure that your database is error free, run **`dbcc checkdb`** and **`dbcc checkcatalog`** on the Sybase database.

```
isql -U sa -P <sa_password>
1>use QIP
2>go
1>dbcc checkdb
2>go
```

Check that the output does not contain error messages and then run **`dbcc checkcatalog`**:

```
1>dbcc checkcatalog
2>go
```

If errors are returned by these commands, contact Technical Support before you proceed with the overlay.

Back up database and Sybase directory

If you need to revert to the original version of the Adaptive Server software, you must back up the database, as well as make a copy of the Sybase directory.

To back up the database, refer to the instructions in Chapter 18 of the *VitalQIP Administrator Reference Manual*.

Export VitalQIP data

To export your data, follow these steps:

1. Run the following from a command line:

```
qip-export -u qipadmin -p <password> -d <export_directory>
```

2 Make a copy of the VitalQIP exported data.

3 If you are also using Audit Manager, export the Audit Manager data as well. Run the following command from a command line:

```
qip-export -u lamadmin -p <password> -d <export_directory>
```

4 Ensure you save a copy of your Sybase dump to restore your database if necessary.

END OF STEPS

Stop the Sybase Server

Stop all Sybase server and all VitalQIP services. To stop the Sybase server, enter the following commands:

```
isql -U sa -P <sa_password>
1>shutdown
2>go
```

To stop all VitalQIP services, refer to Chapter 2, "Manage VitalQIP Services" in the *VitalQIP Administrator Reference Manual*.

Overlay installation

Follow these instructions if you are performing an overlay installation of Sybase 15.0.2 on top of Sybase 15.0.1. The directions for installing Sybase as a direct install are the same as for Sybase 15.0.1 and are located in "Install Sybase database" (p. 2-1).

> **Note:** Linux only. Sybase 15.0.2 requires system library */usr/lib/libaio.so.1*. If it does not exist, contact VitalQIP Support for the *libaio-0.3.102-1.i386.rpm* package and install this rpm (which includes the library *libaio.so.1*). For more information, refer to **https://rhn.redhat.com/errata/RHBA-2005-085.html**.

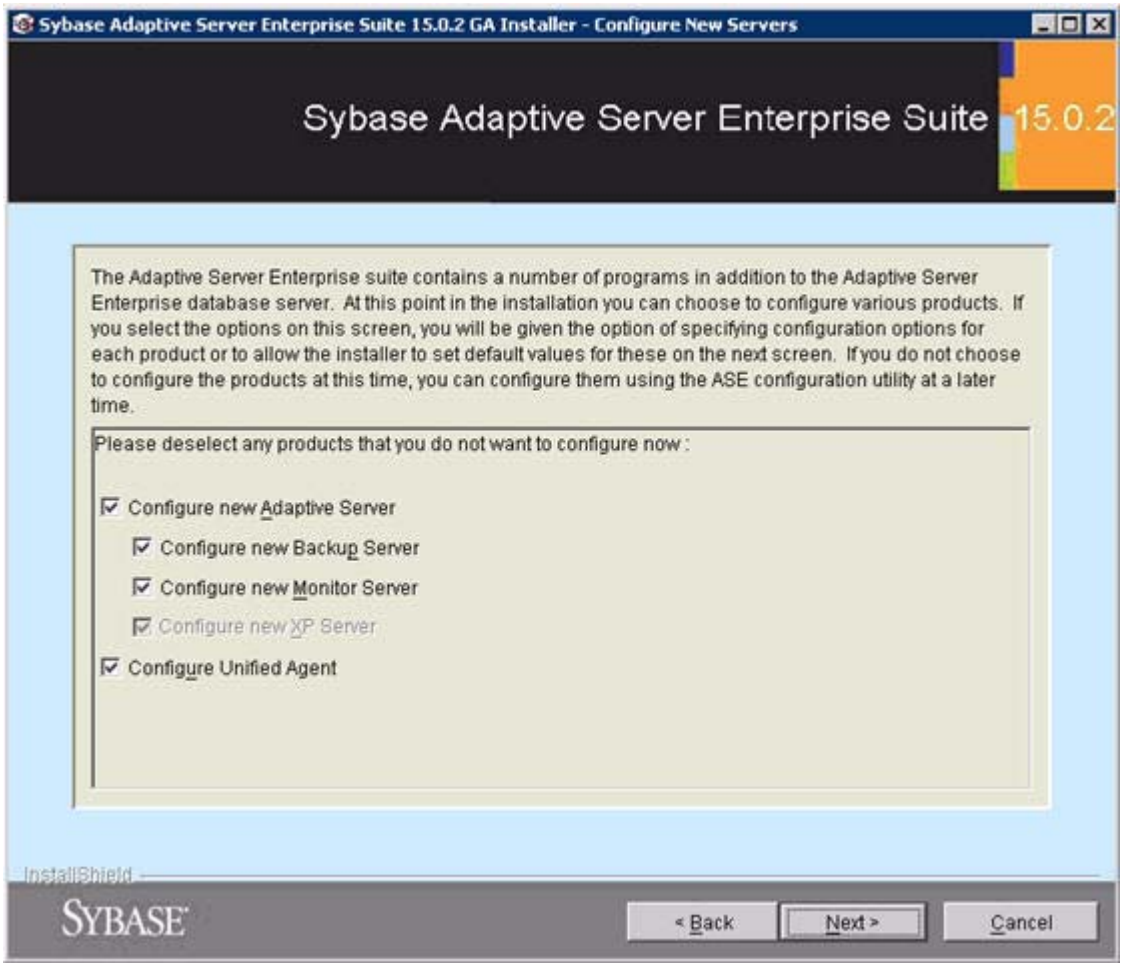
To overlay Sybase 15.0.2 on top of Sybase 15.0.1, follow these steps:

1 Verify that you have shut down Adaptive Server, exported your data, backed up both the database and the SYBASE directory, as specified in the pre-installation tasks section above.

2 Use InstallShield to load the new software from the location where you downloaded from ALED:

- "For Windows installations, execute setup.exe.
- "For UNIX installations, change to the correct directory and enter ./setup.

3 Install Adaptive Server 15.0.2 over the SYBASE installation path, following the instructions in "Install Sybase database" (p. 2-1). Note that after files are loaded into your SYBASE directory, InstallShield asks if you want to configure the new installed server.



4 Deselect all the check boxes and click **Next**. The install commences and displays a successful message when it has finished.

5 Click **Next** to finish the installation. A message opens stating that the wizard requires you restart your computer. Choose from the following.

If you are . . .	Then
Installing on UNIX	The installation is complete. Click **Finish**.
Installing on Windows	The machine must be rebooted before installing VitalQIP. Select one of the following and click **Finish**: • "Yes, restart my computer. • "No, I will restart my computer at a later time.

6 Restart the Adaptive Server:

- "On UNIX, run:

```
$SYBASE/$SYBASE_ASE/install/startserver [-f RUN_server_name file]
```

- "On Windows, verify that the Adaptive Server has restarted after a reboot. Select **Start => Programs => Administrative Tools => Services**. Right-click on **SYBSQL_<servername>** and select **Start** if the Adaptive Server status is not displayed.

7 Verify that the new version has been installed. Run the following query from isql:

```
isql -U sa -P <sa_password>
1>select @@version
2>go
```

8 The server should now be at version 15.0.2.

END OF STEPS

Post-overlay tasks

After you have installed Adaptive Server on top of Sybase 15.0.1, perform the following post-installation tasks.

Apply Sybase 15.0.2 ESD#6 patch

Download the Sybase 15.0.2 ESD#6 patch for the OS and unzip or untar it to a temporary directory.

To install and overwrite the current ASE software with the ESD#6 patch, follow the steps in "Apply Sybase 15.0.2 ESD#6 patch" (p. 26-8).

Run the installmaster script

Run the new *installmaster* (*instmstr* on Windows) script included with the Sybase 15.0.2 release, using the following command:

UNIX instructions

```
isql -U sa -P <sa_password> -S <servername> -n
-i $SYBASE/$SYBASE_ASE/scripts/installmaster -o <output file>
```

Windows instructions

```
isql -U sa -P <sa_password> -S <servername> -n
-i %SYBASE%\%SYBASE_ASE%\scripts\instmstr -o <output file>
```

Run the instmsgs.ebf script

In Adaptive Server version 15.0.2, several changes have been made to the system stored procedures and many new error messages have been added. You must perform this post overlay task to make these changes available. Follow these steps:

1 Safeguard the modified messages in your master device in case you need to restore error messages back to the 15.0.x release from which you are upgrading. Run **`uninstmsgs.ebf`** as follows:

UNIX instructions

```
isql -U sa -P <sa_password>-S <servername> -w 1000 -i
   $SYBASE/$SYBASE_ASE/scripts/uninstmsgs.ebf -o restore_msgs.ebf
```

Windows instructions

```
isql -U sa -P <sa_password> -S <servername> -w 1000 -i
   %SYBASE%\%SYBASE_ASE%\scripts\uninstmsgs.ebf
   -o restore_msgs.ebf
```

1 Run the instmsgs.ebf script after you have completed running the uninstmsgs.ebf script, as follows:

UNIX instructions

```
isql -U sa -P <sa_password> -S <servername> -n
-i $SYBASE/$SYBASE_ASE/scripts/instmsgs.ebf -o <output file>
```

Windows instructions

```
isql -U sa -P <sa_password> -S <servername> -n
-i %SYBASE%\%SYBASE_ASE%\scripts\instmsgs.ebf -o <output file>
```

Note: If you revert to your original version of Adaptive Server, you need to undo the instmsgs.ebf changes by running the following script after you have downgraded:

```
isql -S <servername> -U sa -P <sa_password> -i restore_msgs.ebf
```

END OF STEPS

Upgrading to Oracle 10gR2

Purpose

This section covers upgrading from Oracle 9.2 to Oracle 10gR2. The upgrade process is broken down into three parts: Preparation, Install 64 bit Oracle 10gR2, and Post Oracle 10gR2 Installation Steps. Each part must be successfully completed to upgrade to Oracle 10gR2.

Have an Oracle database administrator and Oracle installation documents present while you upgrade. Alcatel-Lucent does not provide support for Oracle upgrades.

> **Note:** Alcatel-Lucent recommends installing Oracle 10gR2 in a new directory. If you do not have enough disk space to install Oracle 10gR2 in a new directory, export VitalQIP data (and data for any Add-on products, such as Audit Manager), back up your old Oracle, uninstall Oracle, and install Oracle 10gR2. Do not attempt to upgrade previous Oracle versions.

Pre-installation tasks

Before upgrading to Oracle 10gR2, the following steps must be completed:

Configure operating system

You must configure your operating system before upgrading. For instructions on configuring your operating system, refer to **CHAPTER LINK**.

For the VitalQIP 7.2 Enterprise Server (running on a Solaris platform), your operating system must be upgraded to Solaris 9 or 10 before upgrading your Oracle database.

Export VitalQIP data

To export your data, follow these steps:

1. Run the following from a command line:

   ```
   qip-export -u qipadmin -p <password> -d <export_directory>
   ```

2. Make a copy of the VitalQIP exported data.

3. If you are also using Audit Manager, export the Audit Manager data as well. Run the following command from a command line:

   ```
   lam-export -u lamadmin -p <password> -d <export_directory>
   ```

4 Follow any Oracle backup procedures your organization has in place.

END OF STEPS

Stop the Oracle server and VitalQIP services

Stop the Oracle server and all VitalQIP services. If you need assistance with stopping the Oracle server, refer to your Oracle database administrator. For information about stopping VitalQIP services, refer to the *VitalQIP Administrator Reference Manual*.

Uninstall Oracle

For UNIX: Uninstall Oracle. This procedure assumes enough space is available on your machine for a separate installation of Oracle. If there is not enough space, remove the old version of Oracle after backups are made before installing Oracle 10gR2.

Install Oracle 10gR2

Install Oracle 10gR2 according to Oracle's installation guide and release notes. There are several Oracle parameters that need to be modified for your database and operational environment. Increasing these parameters within Oracle can result in better performance within Oracle and VitalQIP. These parameter settings represent minimum requirements for an Oracle and VitalQIP configuration:

- cursor_sharing = exact
- db_file_multiblock_read_count = 16
- shared_pool_size = 234881024
- processes = 150
- dml_locks = 500
- log_buffer = 14306304
- db_block_size = 8192
- pga_aggregate_target = 383778816

Note: It is recommended that the settings for sga_max_size and sga_target parameters be set to the maximum allowed based on available memory to Oracle. Refer to Oracle installation documentation for more details on how to set the sga_max_size and sga_target parameters.

Note: The compatible parameter must be set to at least 9.2.0.0 (for example, compatible=9.2.0.0) to support the MAXEXTENTS UNLIMITED parameter. This storage parameter is used when creating temporary tables, and the indexes are used to move the database design. These tables and indexes are dropped at the end of the

migration. Following the upgrade, export and import data into the Oracle database to defragment the disk space that was fragmented by temporary tables and indexes.

Post-installation Oracle 10gR2 installation steps

After upgrading the Oracle 10gR2 database, follow these steps:

1 You are now ready to proceed with the VitalQIP upgrade. Install VitalQIP 7.2 following the installation instructions in Part II of the VitalQIP Installation Guide.

2 Import your VitalQIP data using VitalQIP's qip-import utility. For more information about qip-import, refer to the VitalQIP Command Line Interface User's Guide.

Note: If VitalQIP ENUM Manager is also being upgraded at this time, qip import must be performed after the new version of ENUM Manager has been installed.

3 Notify your Oracle database administrator to run Oracle's analyze command to gather statistics on the VitalQIP database after it has been imported. This step helps with performance.

END OF STEPS

Upgrading the VitalQIP enterprise server

Purpose

This section covers the upgrade of VitalQIP enterprise server from VitalQIP, version 6.2, 7.0, or 7.1 to VitalQIP 7.2.

Before you begin

Comply with the following before beginning the upgrade:

- Obtain a new license key since the license key structure was modified for VitalQIP 7.2.

  Note: When upgrading VitalQIP on Linux and Solaris servers, you must obtain a new license key. You need to supply the IP address instead of the hostID when requesting a new license key.
- Back up your existing database before upgrading to VitalQIP 7.2. If any problems occur during the upgrade, you will need these backups to restore your current data.
- Back up your existing VitalQIP system including all subdirectories before upgrading. If any problems occur during the upgrade, you will need these backups to restore your current system to its original state.
- Back up your *qip.pcy* file. If your VitalQIP 7.2 installation fails for any reason, you must uninstall VitalQIP 7.2 and reinstall it.
- UNIX only. If you wish to enable access to GUI help screens, ensure that a browser is installed. Make a note of its location so you can enter the full pathname including the browser executable during the VitalQIP enterprise installation.
- It is recommended that a copy of the VitalQIP Installation Guide and the VitalQIP Command Line User's Guide be available before you begin the upgrade process. VitalQIP documentation is located on the ALED site.

Importing VitalQIP data into your VitalQIP database requires temporary disk space. It is important to have the right amount of temporary disk space when running VitalQIP's import utility. Determine the size of the largest VitalQIP export file in your current VitalQIP export directory and add 5% to that file size. The sum is the size of the largest temporary file qip-import (the import utility is called during the upgrade and imports data into the database) creates. Ensure that enough temporary disk space resides in the export directory.

Preparation for upgrading the VitalQIP 7.2 Enterprise Server

Before you begin upgrading to the VitalQIP 7.2 enterprise server, ensure your system meets the prerequisites described in this section.

Back up all data files

Before upgrading, back up all Oracle, and/or VitalQIP data files. Refer to "Upgrading to Oracle " on page 8-17 for backing up Oracle.

Migration prerequisites

All servers defined in VitalQIP must contain a valid domain and a default directory location. If not, the VitalQIP 7.2 data migration fails.

Apply current 6.2 or 7.x patches to Enterprise Server before exporting the data to ensure all database scripts/patches have been applied via the qip-dbinit process. If this step is not performed, the database scripts can also be applied manually (for example. 62_6321sybscript.sql) after the 6.x data has been imported into the VitalQIP 7.2 system via the qip-import CLI.

Before upgrading to VitalQIP 7.2, stop VitalQIP services and connections to the database. Additionally, all web servers should be shut down prior to an import to avoid caching issues.

Resolve migration issues

Ensure you resolve all migration issues before upgrading to VitalQIP 7.2. Alcatel-Lucent recommends testing the migration of data in a 'lab environment' to ensure all migration issues are identified and resolved before upgrading in production. The following migration issues with Network Allocator data have been identified:

- User Classes are not migrated properly into Address Templates. The User Classes need to be set manually after migration.
- Migrated RIR Seed Blocks are not getting RIR report types migrated correctly. All seed blocks that were migrated show as "Do Not Generate Report" Report types and need to be set manually after migration.
- Migrated Address Templates are missing a required domain name (since this did not exist in Network Allocator 3.2 data). This can cause errors when using explicit allocation with these address templates. Edit the templates and add the domain name manually.
- Import of RIPE/APNIC/ARIN email from Network Allocator 3.2 must be manually migrated to the Registration email address.

Copy original export data

During the upgrade process, current export files are converted into VitalQIP 7.2 format. If you want to keep the original exported data, the original export directory must be copied before upgrading to VitalQIP 7.2.

Obtain qipadmin Password

During the installation of VitalQIP 7.2, you are asked to provide the password for qipadmin. You need to obtain qipadmin's password from your VitalQIP system administrator before beginning the VitalQIP enterprise server upgrade.

Upgrading VitalQIP 6.2 or 7.x to VitalQIP 7.2 on Windows

VitalQIP 7.2 cannot be installed over any other versions of VitalQIP. You must first uninstall your current version of VitalQIP, making sure you back up all files as described in ""Preparation for upgrading the VitalQIP 7.2 Enterprise Server" (p. 26-23).

Upgrading from VitalQIP 6.2 or 7.x to VitalQIP 7.2 on Windows

To upgrade the VitalQIP enterprise server from version 6.2/7.x to VitalQIP 7.2, follow these steps:

1. Use the **`qip-export`** CLI to export VitalQIP 6.2 or 7.x data.
2. Install 64 bit Sybase 15.0.2 (followed by the ESD#6 patch) or 64 bit Oracle 10gR2.
3. Install the VitalQIP 7.2 Enterprise Server.
4. Use the qip-import CLI to import data to VitalQIP 7.2.

   Note: If VitalQIP ENUM Manager is also being upgraded at this time, qip import must be performed after the new version of ENUM Manager has been installed.
5. Open VitalQIP Services Controller by accessing **Start=>Programs=>Lucent VitalQIP =>VitalQIP Services Controller**.
6. Start the VitalQIP Login Service, VitalQIP Message Service, and VitalQIP Schedule Service by highlighting the "**VitalQIP Login Service**", "**VitalQIP Message Service**" and "**VitalQIP Schedule Service**" and click **Start**. Depending on the type of installation that is run, the server and service may already be running.

7 Verify that the services have started successfully, and close the VitalQIP Services Controller by clicking **Exit**.

8 Open the VitalQIP application by accessing **Start=>Programs=>Lucent VitalQIP=>VitalQIP**.

9 Log into the VitalQIP interface as qipman.

10 Verify that the data remains the same as prior to the upgrade and is accessible.

11 Access **Help=>About VitalQIP** to verify that the VitalQIP version reads "7.2".

12 Refer to "Pre-installation tasks" (p. 26-20) for a list of things to do after you have completed the VitalQIP 7.2 upgrade.

END OF STEPS

Upgrading VitalQIP 6.2 or 7.x to VitalQIP 7.2 on UNIX

To upgrade VitalQIP 6.2 or 7.x to VitalQIP 7.2 on UNIX, follow these steps:

1 Check the */etc/profile* for the following lines and, if they are present, remove them:

```
# Begin INSTALLSHIELD Environment Variable Section
# Do not edit this section manually.
# var 1 : CLASSPATH=`echo
   $CLASSPATH`:/opt1/qipsrt/classes/cliwrapper.jar:/opt1/qipsrt/c
   lasses/log4j.jar:/opt1/qipsrt/classes/jdom.jar:/opt1/qipsrt/cl
   asses/xalan.jar:/opt1/qipsrt/classes/xerces.jar
if [ -z "`echo $CLASSPATH`" ]
then
CLASSPATH=/opt1/qipsrt/classes/cliwrapper.jar:/opt1/qipsrt/classe
   s/log4j.jar:/opt1/qipsrt/classes/jdom.jar:/opt1/qipsrt/classes
   /xalan.jar:/opt1/qipsrt/classes/xerces.jar
else
```

```
CLASSPATH=`echo
   $CLASSPATH`:/opt1/qipsrt/classes/cliwrapper.jar:/opt1/qipsrt/c
   lasses/log4j.jar:/opt1/qipsrt/classes/jdom.jar:/opt1/qipsrt/cl
   asses/xalan.jar:/opt1/qipsrt/classes/xerces.jar
fi
export CLASSPATH

# var 1 : PATH=`echo
   $PATH`:/opt1/qipsrt/Netalloc/3.2:/opt1/qipsrt/cli
if [ -z "`echo $PATH`" ]
then
PATH=/opt1/qipsrt/Netalloc/3.2:/opt1/qipsrt/cli
else
PATH=`echo $PATH`:/opt1/qipsrt/Netalloc/3.2:/opt1/qipsrt/cli
fi
export PATH

# End INSTALLSHIELD Environment Variable Section
```

2 Use **`qip-export`** to export VitalQIP 6.2 or 7.x data. (You may need to save the data in another machine.)

3 Install or upgrade to Solaris 9 or 10 or Linux 5.2 and apply all the recommended patches.

4 Install 64 bit Sybase 15.0.2 (followed by the ESD#6 patch) or 64 bit Oracle 10gR2 (for Database Server).

5 Install VitalQIP 7.2 Enterprise Server.

6 Use **`qip-import`** to import data to VitalQIP 7.2.

> **Note:** If VitalQIP ENUM Manager is also being upgraded at this time, **`qip import`** must be performed after the new version of ENUM Manager has been installed.

7 Start the enterprise server daemons using the following command:

```
#$QIPHOME/etc/qip-es-startup
```

8 Access the VitalQIP application by executing:

```
ip-manage&
```

9 Log into the VitalQIP interface as qipman.

10 Verify that the data remains the same as prior to the upgrade and is accessible. Access **Help=>About VitalQIP** and verify that the VitalQIP version is "7.2".

11 Refer to "Post-installation tasks" (p. 26-29) for a list of tasks to perform after you have completed the VitalQIP 7.2 upgrade.

END OF STEPS

Troubleshooting the enterprise server upgrade

Installation failure

If the VitalQIP 7.2 installation fails, reference the *$QIPHOME/log/qip-util.log* file for more information. If **`qip-import`** is executed following a VitalQIP 7.2 install, reference the *$QIPHOME/log/qip-import.log* file for more information.

Importation of data failure

There are situations where the importation of data fails during an installation. If this occurs, follow these steps:

1 Obtain the 7.2SP1_convert.sql and 7.2_convert.sql files from the ALED site:

For Oracle: */Vitalqip/7.2/Patches/Sybase_Files/convert-sql*

For Sybase: */Vitalqip/7.2/Patches/Oracle_Files/convert-sql*

2 Copy files to the $QIPHOME/script directory.

3 Run **`qip-import`**.

END OF STEPS

Post-installation tasks

After the upgrade is completed, perform the following:

- Verify that QIP Temp Space is created incorrectly against Sybase 15.0.2 ESD#6. Run the following Sybase script to correct this issue if necessary:

  a. Obtain the *alter_tempdb.sql* file from the ALED site:

```
/VitalQIP/7.2/Sybase15.0.2/alter-tempdb-sql
```

  b. Change the directory:

```
cd $QIPHOME/script
```

  c. Change the directory to and source your environment by running:

```
cd  $QIPHOME/etc
. ./shrc
```

  d. Login to Sybase using isql by entering:

```
isql -Usa -P -S<Servername> -ialter_tempdb.sql
```

  e. Restart Sybase.

- Review the *qip-util.log* file. Information on data that could not be upgraded but was not severe enough to generate an error is located in this file.
- "The VitalQIP 7.2 installation modifies the *qip.pcy* file with a proper password unless the data is imported from a different server. If that is the case, use the **`qip-crypt`** command to create a new encrypted password (for information about the **`qip-crypt`** command, refer to the *VitalQIP Command Line Interface User's Guide*). Edit the *qip.pcy* file with a text editor after the upgrade to insert the new encrypted password.
- If you are on VitalQIP 6.2 and you used an SSL push (DNS or DHCP) before upgrading to VitalQIP 7.2, you must encrypt the password for the RMI QAPI service. To encrypt the password, perform the following steps:

  a. Enter:

```
QAPISSL_Scheduler, PassPhrase
```

This displays the unencrypted RMI QAPI password.

  b. Enter:

```
qip-crypt <unencrypted pass phrase>
```

This displays the encrypted version of the password.

  c. Edit the *qip.pcy* file and replace the unencrypted password with the encrypted one.

  d. Stop and start the RMI Schedule Service.

Move user exits

After the upgrade, you must update the *qip.pcy* file and move user exits. Ensure all user exits are moved to the *QIPHOME/userexits* directory. The File Generation Service looks for user exits in this directory. Remember to use the absolute paths with user exit scripts and set execute permissions on the user exit files.

A Uninstall VitalQIP

Overview

Purpose

This appendix covers the uninstall procedure for VitalQIP.

Contents

This appendix covers these topics.

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Uninstall VitalQIP

Uninstall overview

If you are upgrading from a previous version of VitalQIP, you must uninstall your previous version ***completely*** prior to installing VitalQIP. For further information on upgrading VitalQIP after you have removed your current version, refer to the "Installation and upgrade notes" chapter in the *VitalQIP 7.2 Release Notes*.

Important! The uninstall only removes components it knows about when the VitalQIP installation is installed. If changes occurred to the QIPHOME directory after the installation, the QIPHOME directory is not removed. The QIPHOME directory needs to be manually deleted after running the uninstall.

UNIX: Uninstall VitalQIP

Purpose

This section describes how to uninstall VitalQIP on UNIX. VitalQIP add-ons and Sybase can be uninstalled using these instructions.

Before you begin

- The Apache web server is not detected or killed.
- The uninstall program may not remove the *cgi-bin* folder in the *Inetpub\wwwroot* directory. To avoid complications caused by files left over from previous installations, Alcatel-Lucent recommends that you check if this directory was removed and to delete it if necessary.

Procedure

To uninstall VitalQIP on a UNIX platform, follow these steps:

1 Log in as the root administrator.

2 If VitalQIP is installed, ensure that all VitalQIP-related processes are stopped.

3 Change directory to *$QIPHOME/_uninst*.

4 Type **`./uninstaller.bin`**.

Result: The InstallShield Uninstaller starts. Follow the prompts to uninstall VitalQIP. The uninstall checks for any VitalQIP-related processes that are running. If processes are running, you are prompted to kill the processes.

5 Enter the following commands to clean up the files before you re-install VitalQIP:

```
rm -rf <installation location>
rm -rf /tmp/is*
rm -rf /InstallShield
```

6 Open the *$HOME/vpd.properties* file and, if necessary, remove all VitalQIP-related information.

END OF STEPS

Windows: Uninstall VitalQIP

Purpose

This section describes how to uninstall VitalQIP on Windows. VitalQIP add-ons and Sybase can be uninstalled using these instructions.

Procedure

To uninstall VitalQIP on a Windows platform, follow these steps:

1 Log in as an administrator with administrator privileges.

2 Stop all VitalQIP-related processes.

3 From the Windows desktop, select **Programs | VitalQIP | Uninstall VitalQIP** from the **Start** menu.

4 The InstallShield Uninstaller starts; follow the prompts to uninstall VitalQIP.

Note: You may be prompted that the *mfc42.dll* file exists on this system, and asked if you want to delete it. Select **Yes to All**.

5 Delete the QIPHOME directory.

6 Search for and delete all files beginning with "qip_".

END OF STEPS

B Troubleshooting

Overview

Purpose

This chapter provides information on how to resolve problems that sometimes occur during installation of VitalQIP. Additional troubleshooting information can be found in the *VitalQIP Administrator Reference Manual*.

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This appendix covers these topics.

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Unable to start DNS Service	B-2
Login Service not automatically starting	B-3

Error logging in (as qipman) on a Windows server

Displayed Message

The displayed message is:

```
Failed to connect to the database.
Login Service is not running.
Verify the Server Name, User Name, and Password. Also, make
sure the database is running - Error Code=5.
```

Resolution

Check the following:

- Verify that the specified server name, user name, and password are correct.
- Verify that the database has been started.

- Verify that Schedule Service, Message Service, and Login Service in the VitalQIP Service Controller have been started.

Unable to start VitalQIP Service (other than DNS)

Displayed Message

If you attempted to start the service from **Windows Control Panel | Services**, the message is:

```
Could not start the <servicename> …. Error 1067: The process
terminated unexpectedly.
```

Resolution

Try uninstalling and reinstalling the service:

1. From the directory where the executable resides, uninstall the service:

***<servicename>* -remove**

2. Reinstall the service:

<servicename> -install

3. Start the service.

Example:

Message UpdateService -remove

Message UpdateService -install

Then try starting the service again.

Unable to start DNS Service

Displayed Message

If you attempted to start DNS from **Windows Control Panel | Services**, the message is:

```
Could not start the Lucent DNS Service …. Error 1067: The
process terminated unexpectedly.
```

If you attempted to start DNS from the VitalQIP Service Controller Manager, the message is:

```
Can’t open … named.conf
```

Resolution

This error occurs if the *named.conf* file does not exist:

1. Try creating the file manually or via the GUI through **Network Services | DNS Generation** to create it automatically.
2. Start the service.

If this does not work, try uninstalling and reinstalling the executable:

1. From the directory where it resides, uninstall the service:

```
named -remove
```

2. Reinstall the service:

```
named -install
```

Login Service not automatically starting

Displayed Message

You are waiting for the database to reinitialize.

Resolution

Start the Login Service manually. If you are using Oracle, the Schedule Service is set to manual startup mode. No dependency should be defined.

C Third party software license statements

Overview

Purpose

This appendix contains third-party license agreements statements.

Reason for revision

Text describing the reason the appendix has been revised.

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