

QADirector - QA Center Portal

Installation and Configuration Guide

Release 05.00



Technical support is available from our Technical Support Hotline or via our FrontLine Support Web site.

Technical Support Hotline:
1-800-538-7822

FrontLine Support Web Site:
<http://frontline.compuware.com>

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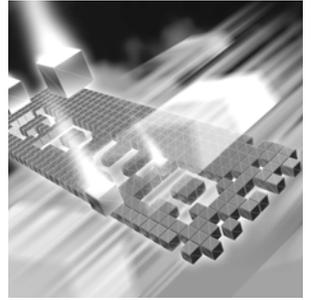


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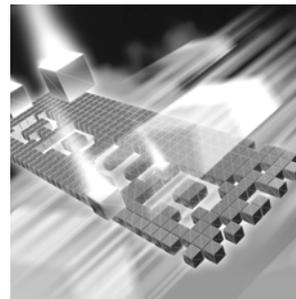
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Introduction



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- ◆ Related Publications
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- ◆ Getting Help

Who Should Read This Guide

This guide is intended for administrators who are installing or configuring QACenter products; it does not contain reference or usage information. You can find that information in the online Help for your product.

Compuware assumes that you are familiar with basic Microsoft Windows navigation. If this is not the case, familiarize yourself with the documentation for Microsoft Windows before reading this guide.

Related Publications

The *Distributed License Management Installation Guide*, which contains instructions for licensing your QACenter product, is available in PDF format. Access this guide from the Compuware FrontLine Customer Support Web site at <http://frontline.compuware.com>. See “World Wide Web Information” on page 8 for specific details.

Because PDF is based on PostScript, a PostScript printer is the most reliable way to print online books. In most cases, you can also print PDF files to PCL printers. If you cannot print the PDF files to your printer, refer to Adobe’s Web site at <http://www.adobe.com> for troubleshooting information.

World Wide Web Information

To access Compuware Corporation's site on the World Wide Web, point your browser at <http://www.compuware.com>. The Compuware site provides a variety of product and support information.

FrontLine Support Web Site: You can access online customer support for Compuware products via the FrontLine support Web site. FrontLine provides fast access to critical information about your QACenter product. You can read or download documentation, frequently asked questions, and product fixes, or e-mail your questions or comments. To access FrontLine, follow these steps:

- 1 Open a Web browser and go to: <http://frontline.compuware.com>
The **Welcome to FrontLine** page appears.
- 2 On the right side of the page, enter your login ID and password and click **Login**.

Note: If you are a first-time visitor, click **Register** to receive your free password to access FrontLine. After you complete the registration form, your login ID and password will be e-mailed to you and your account will be activated.

- 3 From the list in the center of the page, select a product and click **Go**. You will see the product's FrontLine home page, where you can access documentation, technical information, fixes, and other support items.

Getting Help

At Compuware, we strive to make our products and documentation the best in the industry. Feedback from our customers helps us maintain our quality standards. If you need support services, please obtain the following information before calling Compuware's 24-hour product support hotline:

- ◆ The name, release (version), and build number of the QACenter product. This information is displayed when you select the About command from your product's Help menu. The name and release are also on the covers of the product documentation.
- ◆ Installation information, including installed options, whether the product uses local or network databases, whether it is installed in the default directories, whether it is a client or server installation.
- ◆ Environment information, such as the operating system and release on which the product is installed, memory, hardware/network speci-

fications, and the names and releases of other applications that were running.

- ◆ The location of the problem in the QACenter product software, and the actions taken before the problem occurred.
- ◆ The exact product error message, if any.
- ◆ The exact application, licensing, or operating system error messages, if any.
- ◆ Your Compuware client, office, or site number, if available.

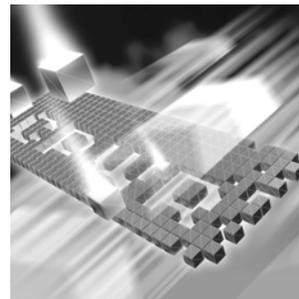


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Chapter 1

Getting Started



- ◆ Overview
- ◆ Before You Install
- ◆ System Requirements
- ◆ Integrated Products Requirements
- ◆ Deploying QADirector and QACenter Portal

Overview

QACenter is a suite of automated software quality products for enterprise and e-business applications. QACenter offers a comprehensive solution for IT organizations concerned with assuring quality and performance, while keeping pace with faster development cycles. QACenter includes:

QADirector: Coordinates the entire testing process by organizing, tracking, and executing automated and manual tests. QADirector integrates with Compuware's testing, program analysis, defect tracking, and requirements management tools.

QACenter Portal: Provides a comprehensive reporting facility that is consistent among the QACenter point products. It enables users, with various roles and responsibilities, to create and view detail, summary, and cross-product reports. QACenter Portal ties together requirements planning, test planning, test execution, and defect tracking to provide users with a centralized view of application quality. Integrates with Reconcile and QADirector.

QAHiperstation+: Works with mainframe QAHiperstation to test host-based applications directly from your Windows desktop. This integrated, workstation-based interface tool uses 32-bit code that provides improved performance and better stability on 32-bit Windows platforms.

QARun: Tests enterprise client/server applications. QARun creates and runs test scripts that support a wide variety of development tools and the diverse components of today's corporate environments. QARun couples advanced verification facilities with error-recovery mechanisms to reliably test local and remote applications.

Reconcile: Helps create and control project requirements. It stores the project requirements in a relational database. You can view the requirements through Microsoft Word, a reporting view (grid), and the Web. Reconcile integrates with QADirector and TrackRecord. Working together, these products help you manage project development from conception through delivery.

TestPartner: Tests Web- and Windows-based applications that use Microsoft technologies. You can record user sessions with the application, add validation functions, and replay the sessions later to ensure that the application works as expected. TestPartner's scripting language is Visual Basic for Applications (VBA); it supports testing of Java, Visual Basic, and Visual C++ applications; browser-based Web applications; and COM components including both ActiveX controls and automation objects.

TrackRecord: Records and reports information about products being developed or supported. Information on team members, testers, schedules, and defect reports is recorded in an object-oriented database; it can be retrieved using TrackRecord's query and reporting features.

WebCheck: Checks the quality of even the largest Web sites. WebCheck automatically scans a Web site for more than 50 potential types of problems and provides 19 HTML reports. WebCheck is integrated with QARun and QADirector and can be used as a stand-alone product.

In addition to the QADirector suite of products, the QACenter CD includes Adobe Acrobat Reader, Microsoft Internet Explorer, Java 2 Development Kit, and Microsoft Virtual Machine installation programs. To install one or more of these products from the QACenter CD, click **Install 3rd Party Software**, then click on the product installation you would like to perform.

Before You Install

Review this section before you install QADirector or QACenter Portal.

Installation Types

The following installation options are available when you install QADirector and QACenter Portal:

Initial Installation: An initial installation is the first-time installation of a product on your computer.

Modify: A modification of the product installation occurs when you add or remove one or more of a product's components, but not all of them. See [“Modifying an Installation”](#) on page 56 for instructions.

Repair: A repair installation may be necessary due to the corruption of a program or the inadvertent deletion of the product. See [“Repairing an Installation”](#) on page 56 for instructions.

Remove: This option uninstalls all product components. See [“Uninstalling QADirector”](#) on page 56 or [“Uninstalling QACenter Portal”](#) on page 57 for instructions.

Release Notes

Review the Release Notes for information about new features, technical notes, and known issues that may enhance or impact your product's performance. Release Notes contain recent changes that may not be included in your QACenter product documentation.

View Release Notes from the QACenter product CD or on FrontLine, Compuware's product support Web site. The Release Notes on FrontLine are periodically updated as new information becomes available.

Accessing the Release Notes from the QACenter CD

- 1 Insert the QACenter CD into the CD-ROM drive. If the CD browser does not start automatically, navigate to the CD's root directory and run `setup.exe`.
- 2 Click **View QACenter Release Notes**. The Release Notes open in your default Web browser.
- 3 Read the Release Notes online, or print the document.
- 4 After reading or printing the Release Notes, close the document to return to the CD browser.

Accessing the Release Notes on FrontLine

- 1 Open a Web browser and go to <http://frontline.compuware.com> where the **Welcome to FrontLine** page appears.
 - 2 On the right side of the page, enter your login ID and password and click **Login**.
- Note:** If you are a first-time visitor, click **Register** to receive your free password to access FrontLine. After you complete the registration form, your login ID and password will be e-mailed to you and your account will be activated.
- 3 From the list in the center of the page, select a product and click **Go**. You will see the product's FrontLine home page, where you can access documentation, technical information, fixes, and other support items.

System Requirements

QACenter has system requirements for each component. Those requirements are listed below.

QADirector Client Machine

Hardware

- ◆ Mid-level Pentium III PC with 512 MB of RAM (minimum)
- ◆ Minimum 450 MB of free disk space*

Software

- ◆ Microsoft Windows 2000 Professional with Service Pack 4, Windows 2000 Server, Windows XP Professional with Service Packs 1, 1a, or 2, or Windows Server 2003
- ◆ TCP/IP protocol installed on all computers
- ◆ Microsoft Internet Explorer 6.0 with Service Pack 1. You can install Internet Explorer from the QACenter CD, or allow QADirector to install a minimal version.
- ◆ Adobe Acrobat 6.0 or Acrobat Reader (provided on the QACenter CD) to view the online books in PDF format

Additional Requirements

- ◆ Static IP address or access to a DNS server to resolve workstation addresses
- ◆ For the manual Web testing feature and reports capabilities, install QACenter Portal
- ◆ Additional resources may be required for testing tools and the application under test

QACenter Portal Client Machine

- ◆ Microsoft Internet Explorer 6.0 with Service Pack 1

QADirector/QACenter Portal Database Server

- ◆ Microsoft Windows 2000 Server with Service Pack 4, Microsoft Windows 2000 Advanced Server, Microsoft Windows 2000 Professional, Microsoft Windows XP Professional with Service Pack 1, 1a, or 2, or Microsoft Windows Server 2003 Enterprise, Microsoft Windows 2003 Standard

One of the following databases:

- ◆ Microsoft SQL Server 7.0 with Service Pack 3 or 2000 with Service Pack 3
- ◆ Oracle 8.1.7 or 9i

QACenter Portal Web Server

Hardware

- ◆ 1 GHz processor with 512 MB RAM (2 GHz with 1 GB RAM recommended)
- ◆ Minimum 450 MB of free disk space

Software

- ◆ Microsoft Windows 2000 Server with Service Pack 4, Microsoft Windows XP Professional with Service Pack 1, 1a or 2, Microsoft Windows Server 2003 Web, Microsoft Windows Server 2003 Enterprise, Microsoft Windows 2003 Standard
- ◆ Microsoft Internet Information Server (IIS) 5.0, 5.1, or 6.0
- ◆ Microsoft Internet Explorer 6.0 with Service Pack 1

- ◆ Adobe Acrobat 6.0 or Acrobat Reader (provided on the QACenter product CDs) to view the online books in PDF format

Configuring a QADirector Team Environment

If responsible for configuring QADirector for use in a team environment, follow this process for best results:

Note: Ensure that each team member has read/write access to the database.

- 1 Install QADirector on each team member's computer.
- 2 In order to use QADirector in a Windows environment, users must have specific permission and rights. Ensure that the users have update access to the following registry keys:
 - ◇ HKEY_CURRENT_USER\Software\
 - ◇ HKEY_LOCAL_MACHINE\SOFTWARE\Users must also have update access to the following directories:
 - ◇ QADirector install directory
 - ◇ \Program Files\Common Files\Compuware
 - ◇ System32
- 3 Choose the database that the team will use to store test suites and job results. The database can reside on any computer. Compuware recommends using SQL Server or Oracle in multi-user environments. See [“Installing the QACenter Database”](#) on page 21.
- 4 On each team member's computer, shut down the Test Management Server and the Test Execution Server if they are running. From the **Login** dialog box click the **Configure** button. See [“Installing the QACenter Database”](#) on page 21.
- 5 Choose the QADirector machine that will run the Test Management Server. This computer will function as the server for test management purposes; all other computers are clients. Ensure the server machine is connected to the team database via a valid DSN; then, start the Test Management Server on the server machine. See QADirector online Help for more information.
- 6 On each computer, start the Test Execution Server so that jobs can be executed on the computer. See QADirector online Help for more information.

Note: It is possible to set up several Test Management Servers with different priorities. The prioritized Test Management Server list appears in the TM Server List panel. These Test Management Servers will start according to priority and only run on one machine at a time. For example, if a Test Management Server with the priority of 1 fails to start, the Test Management Server with the priority of 2 will start in its place.

Integrated Products Requirements

QADirector and QACenter Portal integrate with many Compuware automated testing, analysis, defect tracking, and requirements management tools. If you intend to use QADirector or QACenter Portal with any of these tools, please note the minimum version requirements:

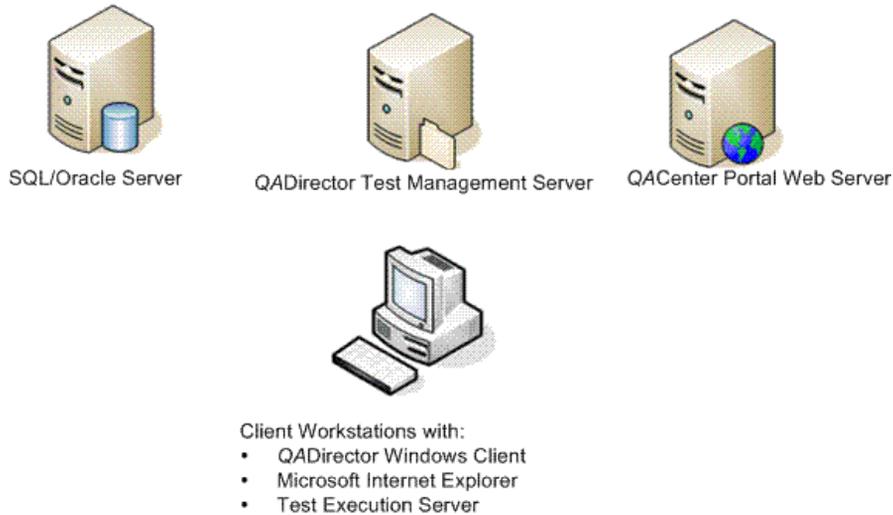
- ◆ File-AID/CS (Compare, Converter) Release 03.00.02 or later
- ◆ QAHiperstation Release 07.03 or later
- ◆ QAHiperstation+ Release 01.00.01 or later (Release 2.0 recommended)
- ◆ QALoad Release 05.01 or later
- ◆ QARun Release 04.09.01 or later
- ◆ Reconcile 01.00.03 or later
- ◆ TestPartner 05.02.01 or later
- ◆ TrackRecord Release 06.02 or later

Required: QACenter Portal and QADirector versions must remain on compatible versions. For example, run QADirector 5.0.0 with QACenter Portal 5.0.0, or QADirector 5.0.1 with QACenter Portal 5.0.1.

Deploying QADirector and QACenter Portal

The following diagram illustrates the recommended configuration for QADirector and QACenter Portal.

Recommended Enterprise Installation



Basic Installation

The following example provides the installation sequence for QACenter Portal and QADirector using the default database (MSDE) on one machine.

These instructions describe a basic installation and should not be used in place of the complete installation instructions provided in “Installing QACenter Portal/QADirector” on page 27. The following instructions assume that you have DBA privileges.

Required: If you are working in an enterprise environment, Compuware recommends using a separate machine for the Web server and a separate machine for the database server.

Basic Installation



Machine with:

- QADirector Windows Client
- QACenter Portal Web Server
- MSDE Database
- Test Management Server (installed with QADirector)
- Test Execution Server (installed with QADirector)

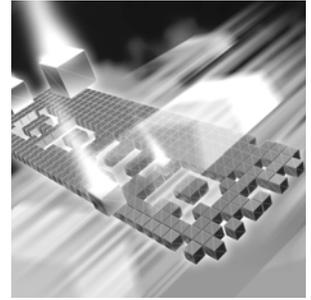
- 1 Install QACenter Portal with MSDE. Refer to [“Installing QACenter Portal”](#) on page 27.
- 2 Install QADirector without database. Refer to [“Installing QADirector”](#) on page 30.
- 3 Configure QADirector. Refer to [“Configuring QACenter Portal/QADirector”](#) on page 35.
- 4 Create an ODBC data source name that points to the MSDE database. Refer to [“Setting Up an ODBC DataSource”](#) on page 65.

To verify the installation:

- 1 Open QADirector using `admin` as the user name and `admin` as the password.
- 2 Create a project called `Test1`.
- 3 Open QACenter Portal using `admin` as the user name and `admin` as the password and verify that the project called `Test1` exists.

Chapter 2

Installing and Creating the QADirector/QACenter Portal Database on the DB Server



- ◆ About the QADirector/QACenter Portal Database
- ◆ Installing the QACenter Database

About the QADirector/QACenter Portal Database

QADirector and QACenter Portal share the same database. A default MSDE instance named **QACenter** is installed with QADirector's and QACenter Portal's Database Server component, if you select that option.

If you do not install the default MSDE database instance, you must install and create a SQL Server, or Oracle database. If you and your colleagues need to share test data, keep in mind the following:

- ◆ Designate one copy of the database instance to use as the team database. Each team member must create an ODBC data source name that points to the team database and then connect to the database. See the QADirector online Help for more information.
- ◆ Create a new Oracle or SQL Server database to use as the team database. The following sections in this chapter describe the requirements and procedures for creating a new database.

Installing the QACenter Database

There are two different ways to create the database: with the installation CD or manually. Manually creating and configuring a database consists of a series of procedures. To simplify this process, Compuware provides an installation directly from the product CD.

This section provides information about installing a QACenter SQL Server or Oracle database. To manually create and configure the database, refer to “[Manually Creating and Configuring a Database](#)” on page 59.

Note: Use the database installation from the CD if you have no database administration experience.

SQL Server Requirements

- ◆ An existing database server that runs a supported version of SQL Server. Refer to “[System Requirements](#)” on page 14 for details.
- ◆ A database instance on the SQL Server database server to hold QADirector data. Use the following specifics to configure the database instance:
 - ◇ SQL Server must be case insensitive at the time of the SQL Server installation.
 - ◇ If the database instance is defined, you must specify code page 1252 and sort order 52 (also known as ISO 8859-1).
 - ◇ If you are using SQL Server 2000, specify the `SQL_Latin1_General_CP1_CI_AS` collation.
- ◆ A SQL Server user ID and password to allow the QADirector administrator to set up the database server.

Installing the QACenter SQL Server Database

To install the QACenter SQL Server database:

- 1 Refer to “[SQL Server Requirements](#)” on page 22 for SQL Server requirements.
- 2 Log on as a user with administrator permissions.
- 3 Insert the QACenter CD into the CD-ROM drive. The QACenter CD browser should automatically appear. If it does not, navigate to the root directory and run the `setup.exe` file.
- 4 Click **Install QACenter Products**.
- 5 Click **Run QACenter Database Installation**. The **Welcome** dialog box appears.
- 6 Read the welcome screen and click **Next**. The **License Agreement** dialog box appears.

- 7 Read the license agreement and click **Yes** to accept the terms of the agreement. The **Database Management System** dialog box appears.
- 8 Select **Microsoft SQL Server 7.0 or 2000** and click **Next**. The **SQL Server Login Information** dialog box appears.
- 9 Type the database server name in the **Server** field.
- 10 Type a database user name in the **Login** field. This user must have sufficient permissions to create a database. Example: sa.
- 11 Type the user password in the **Password** field.
- 12 Click **Next**. The **Database Selection** dialog box appears.
- 13 Select the QADirector database to install and deselect Reconcile.
- 14 Click **Next**. The **Database Information** dialog box appears.
- 15 Type a name for the new database in the **Database** field.
- 16 Optionally, type a user name to be attached to the new database in the **Login** field. The database installation process will create a new user account.
- 17 Optionally, type a password for the new user in the **Password** field.
- 18 Click **Next**. The **Review Settings** dialog box appears.
The **Review Settings** dialog box displays a summary for the information specified in the previous setup screens. To change anything, click **Back**.
- 19 Click **Next** to begin creating the database. The **Command Results** dialog box appears.
At the end of the installation, this dialog box displays a log containing all commands that were executed during the database creation. To save the log, select the text. Then copy and paste this information into a text file.
Note: Compuware recommends saving the log file.
- 20 Click **Finish** to complete the database installation.

Oracle Server Requirements

- ◆ An existing database server that runs the supported versions of Oracle. Refer to “[System Requirements](#)” on page 14 for details.
- ◆ A database instance set up on the Oracle database server to hold QADirector data. Use the following specifics to configure the database instance:

- ◇ When the Oracle database instance is defined, you must specify the Storage Character Set as iso 8859-1 West European.
- ◇ The NLS_LANGUAGE parameter should be set in the parameter file as:

```
NLS_LANGUAGE = 'AMERICAN'
```

If you are using Windows 2000, set the NLS_LANGUAGE parameter to AMERICAN_AMERICA.WE8ISO8859P1 in the following locations:

```
HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE\NLS_LANG
HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE\ALL_HOMES\IDO\NLS_LANG
HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE\HOME-\NLS_LANG
```
- ◇ An Oracle user ID and password to allow the QADirector administrator to set up the Oracle database server.

Installing the QACenter Oracle Database

To install the QACenter Oracle database:

Required: You must have an Oracle Net Service created before installing an Oracle database.

- 1 Refer to “Oracle Server Requirements” on page 23 for Oracle requirements.
- 2 Log on as a user with administrator permissions.
- 3 Insert the QACenter CD into the CD-ROM drive. The QACenter CD browser should automatically appear. If it does not, navigate to the root directory and run the **setup.exe** file.
- 4 Click **Install QACenter Products**.
- 5 Click **Run QACenter Database Installation**. The **Welcome** dialog box appears.
- 6 Read the welcome screen and click **Next**. The **License Agreement** dialog box appears.
- 7 Read the license agreement and click **Yes** to accept the terms of the agreement. The **Database Management System** dialog box appears.
- 8 Select **Oracle 8.1.7 or 9i** and click **Next**. The **Oracle Login Information** dialog box appears.
- 9 Type the service name in the **Service** field.

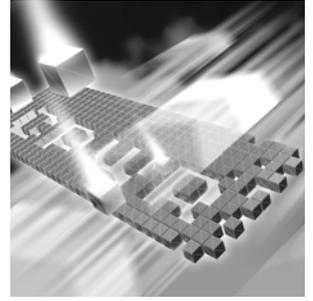
- 10 Type a user/schema name in the **Name** field. This user must have sufficient permissions to create a user/schema. Example: sys.
 - 11 Type the user password in the **Password** field.
 - 12 Click **Next**. The **Database Selection** dialog box appears.
 - 13 Select the QADirector database and deselect Reconcile.
 - 14 Click **Next**. The **Database Information** dialog box appears.
 - 15 Type a user name to be attached to the new database in the **Name** field. The database installation process will create a new user account. A schema with this name is also created.
 - 16 Type a password for the new user name in the **Password** field.
 - 17 Click **Next**. The **Review Settings** dialog box appears.

The **Review Settings** dialog box displays a summary for the information specified in the previous setup screens. To change anything, click **Back**.
 - 18 Click **Next** to begin creating the database. The **Command Results** dialog box appears.

At the end of the installation, this dialog box displays a log containing all commands that were executed during the database creation. To save the log, select the text. Then copy and paste this information into a text file.
- Note:** Compuware recommends saving the log file.
- 19 Click **Finish** to complete the database installation.

Chapter 3

Installing QACenter Portal/ QADirector



- ◆ Installing QACenter Portal
- ◆ Installing TrackRecord on the Web Server
- ◆ Installing QADirector

Installing QACenter Portal

This section explains the installation process for QACenter Portal. Please review the “[System Requirements](#)” on page 14 to ensure that QACenter Portal will install and operate properly on your computer.

Required: Compuware recommends that you exit all non-essential Windows programs before running this setup program. Some Windows programs may interfere with the installation process.

Previous versions of QACenter Portal: If a previous version of QACenter Portal is installed on your computer, Compuware recommends that you uninstall it before installing the new version. Failure to do so may cause problems.

Installing QACenter Portal on the Web Server

If you have a previous version of OptimalView installed, uninstall it using the **Add/Remove Programs** utility.

Installing QACenter Portal on the Web Server

To install the QACenter Portal application on the Web server:

- 1 Read the QACenter Portal Release Notes. Release Notes are available on the QACenter product CD or on FrontLine, Compuware's product support Web site. See "[Accessing the Release Notes on FrontLine](#)" on page 14 for details.
- 2 Log on as a user with administrator permissions.
- 3 Insert the QACenter CD into the CD-ROM drive. The QACenter CD browser should automatically appear. If it does not, navigate to the root directory and run the **setup.exe** file.
- 4 Click **Install QACenter Products**.
- 5 Click **Install QACenter Portal**. The **Welcome** dialog box appears.
- 6 Read the welcome screen and click **Next**. The **License Agreement** dialog box appears.
- 7 Read the license agreement and click **Yes** to accept the terms of the agreement. The **Customer Information** dialog box appears.
- 8 Type your name and company in the **User Name** and **Company Name** fields. Click **Next**. The **Choose Destination Location** dialog box appears.
- 9 Select a location for the QACenter Portal installation.
 - ◇ By default, QACenter Portal installs in the folder **x:\Program Files\Compuware\QACenter Portal** where *x* is the drive where Windows resides on your computer.
 - ◇ To specify a different path, click **Browse** and select an existing folder or type the path name in the **Path** field. Click **OK**.
- 10 A dialog appears asking if you want to install MSDE:
 - ◇ Click **Yes** to install the default QACenter database. The **Choose Database Location** screen appears and includes a default location.
 - ◇ Click **No** if you are working in a team environment and will use a SQL Server or Oracle database.
- 11 Click **Next**. The components will install and dialogs will appear notifying you of each installation.
- 12 Specify a location for the QACenter Portal program shortcuts. You may type a new folder name, or select one from the existing folders list. Click **Next**. The **Start Copying Files** dialog box appears.

- 13 Review the summary of settings that you specified and click **Next** to start copying the program files. The **Setup Status** dialog box displays the progress of the installation.
- 14 After the installation completes, the **Setup Complete** dialog box appears. Depending on the circumstances, you will see one of the following dialog boxes:
 - ◇ **Display Release Notes:** Select this check box to review the information in the Release Notes file. This file contains information about new features, technical notes, and known issues that may enhance or impact QACenter Portal's performance. Release Notes contain recent changes that may not be included in your QACenter Portal product documentation.
 - ◇ **Restart Your Computer:** You may be prompted to restart your computer. If you are prompted to restart your computer, you may choose to restart it now (recommended) or to restart it later.
- 15 Click **Finish** to complete the installation of QACenter Portal.

Configuring Windows Permissions for QACenter Portal on Non-English Operating Systems

Configure the following directories to allow permissions to the Everyone user. In non-English versions of Windows, use the language equivalent of the English "Everyone".

- ◆ \QACenter Portal\UI\qacenterportal\temp\imports
- ◆ \QACenter Portal\UI\qacenterportal\temp\upload\
- ◆ \QACenter Portal\planning\templates

Repeat these steps for each directory:

- 1 Right-click the appropriate directory.
- 2 Select **Properties** from the menu. The Properties dialog box appears.
- 3 Click the **Security** tab.
- 4 Click **Add**. The Select Users dialog box appears.
- 5 Type **Everyone** or the language equivalent in the **Users** field. For example, in the German version of Windows, type **Jeder**.
- 6 Click **OK**.
- 7 Select **Everyone** or the language equivalent from the **Group or User Names** list.
- 8 Check **Full Control** in the **Allow** column of the **Permissions for** list.

- 9 Click **OK**.

Installing TrackRecord on the Web Server

If you purchased TrackRecord and want to install it using the Web server option from the QACenter CD. For more information, please refer to the *TrackRecord Installation and Configuration Guide*.

Installing QADirector

This section explains the installation process for QADirector. Please review “[System Requirements](#)” on page 14 to ensure that QADirector will install and operate properly on your computer.

Required: Exiting programs: Compuware recommends that you exit all non-essential Windows programs before running this setup program. Some Windows programs may interfere with the installation process.

Previous versions of QADirector: If QADirector version 4.5.1 or earlier is installed on your computer, or if you have any beta version installed, Compuware recommends that you back up your data and uninstall QADirector before installing the new version. Failure to do so may cause problems.

Open ports: Ensure that four ports out of ports 1024 through 5000 remain open. QADirector randomly selects four ports to use when executing jobs.

To install QADirector:

- 1 Read the QADirector Release Notes. Release Notes are available on the QACenter product CD or on FrontLine, Compuware’s product support Web site. See “[Accessing the Release Notes on FrontLine](#)” on page 14 for details.
- 2 Log on as a user with administrator permissions.
- 3 Insert the QACenter CD into the CD-ROM drive. The QACenter CD browser should automatically appear. If it does not, navigate to the root directory and run the **setup.exe** file.
- 4 Click **Install QACenter Products**.
- 5 Click **Install QADirector**. The **Welcome** dialog box appears.

- 6 Read the welcome screen and click **Next**. The **License Agreement** dialog box appears.
 - 7 Read the license agreement and click **Yes** to accept the terms of the agreement. The **Customer Information** dialog box appears.
 - 8 Type your name and company in the **User Name** and **Company Name** fields. Click **Next**. The **Choose Destination Location** dialog box appears.
 - 9 Select a location for the QADirector installation:
 - ◇ By default, QADirector installs in the folder **x:\Program Files\Compuware\QADirector** where *x* is the drive where Windows resides on your computer.
 - ◇ To specify a different path, click **Browse** and select an existing folder or type the path name in the **Path** field. Click **OK**.
 - 10 Click **Next**. The **Select Components** dialog box appears. This dialog box allows you to select or clear components for installation. Highlight a component to view a brief description.
 - 11 Decide which of the components to install:
 - ◇ **Database Server:** Installs an instance of the Microsoft SQL Server Desktop Engine (MSDE) on the local machine. A database is created within this instance. Windows Client is automatically installed.
- Note:** Select this option only if you want to install the default QACenter database. Do not select this option if you are working in a team environment and will use a SQL Server or Oracle database.
- ◇ **Test Management Server:** Installs the Test Management Server on the local machine. The Test Management Server reads job submissions from the database, manages jobs, tracks the machines available for test execution, and manages the licenses used for manual test Web execution. It also reports on the status of jobs in progress. Refer to the online help for more information.
 - ◇ **Test Execution Server:** Installs the Test Execution Server on the local machine. The Test Execution Server allows jobs to run on a computer. Refer to the online help for more information.
 - If installing only the Test Management Server, or the Test Execution Server, configure a database by clicking **Start>Programs>Compuware>QADirector>DB Configuration Utility**. The Select a Database dialog box appears.

- ◇ **Windows Client:** Installs the QADirector application on the local machine.
 - ◇ **IBM S/390 Support:** Includes the QA 3270 Emulator Server, a utility program used to manage communications between your 3270 IBM mainframe emulator and QADirector. The QA 3270 Emulator Server includes the TN3270 Mainframe Emulator, a free emulator you can use for mainframe testing. If you prefer to use your own emulator, refer to the QA 3270 Emulator Server **Readme** file for a list of supported emulators. After installing QADirector, you can view the **Readme** file by clicking **Start>Programs>Compuware>QADirector>QA 3270 Emulator Server>Readme**.
- 12 Choose an option and click **Next**. If the Database Server was selected, the **Choose Database Location** dialog box appears.
 - 13 Specify a location for the database. You may type a new folder name, or select one from the existing folders list. Click **Next**. The **Select Program Folder** dialog box appears.
 - 14 Specify a location for the QADirector program shortcuts. You may type a new folder name, or select one from the existing folders list. Click **Next**. The **Start Copying Files** dialog box appears.
 - 15 Review the summary of settings that you specified and click **Next** to start copying the program files. The **Setup Status** dialog box displays the progress of the installation.
 - 16 After the installation completes, the **Setup Complete** dialog box appears. Depending on the circumstances, you will see one or both of the following dialog boxes:
 - ◇ **Display Release Notes:** Select this check box to review the information in the Release Notes file. This file contains information about new features, technical notes, and known issues that may enhance or impact QADirector's performance. Release Notes contain recent changes that may not be included in your QADirector product documentation.
 - ◇ **Restart Your Computer:** You may be prompted to restart your computer. If you are prompted to restart your computer, you may choose to restart it now (recommended) or to restart it later.
 - 17 Click **Finish** to complete the installation of QADirector.

Where To Go Next

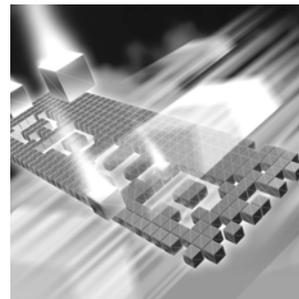
- ◆ The trial license supplied with your QACenter product allows you to install the product and run it for a specific time period without first installing a license. During this trial period, you will be informed of how much evaluation time remains.

At any time during the evaluation period, you can obtain and install a permanent license. When the evaluation period expires, you **must** obtain a license and install it before you can successfully run this product. See the *Distributed License Management Installation Guide* for instructions on installing a license. To access this online book, click **Start>Programs>Compuware>QADirector/QACenter Portal>Documentation**.

- ◆ If you need to configure QADirector for a team environment, proceed to [“Additional Requirements”](#) on page 15.
- ◆ If you installed the optional IBM S/390 Support component, you may need to configure the QA 3270 Emulator Server to work with your mainframe emulator. Refer to the QA 3270 Emulator Server readme file for a list of supported emulators, version requirements, and configuration instructions. To view the readme file, click **Start>Programs>Compuware>QADirector>QA 3270 Emulator Server>Readme**.
- ◆ If you are ready to begin using QADirector, refer to the QADirector online Help.
- ◆ If you intend to complete the QADirector tutorial, you must install QARun. After installing QARun, use QARun’s Database Maintenance Utility to upgrade the tutorial database that was installed with QADirector. The tutorial database is located in **Program Files\Compuware\QADirector\Tutorial\MIBQADB\QAD4.MDB**. For detailed instructions, refer to the *QADirector Tutorial*, which can be accessed through online Help.
- ◆ For information about modifying, repairing, or removing your QADirector installation, see [“Maintaining the Installation”](#) on page 55.

Chapter 4

Configuring QACenter Portal/ QADirector



- ◆ Configuring QACenter Portal on the Web Server
- ◆ Configuring IIS on a Windows 2003 Server
- ◆ Configuring OptimalView for Load Handling on the Web Server (Optional)
- ◆ Configuring QADirector Client
- ◆ Configuring the Windows XP SP2 Firewall for QADirector

Configuring QACenter Portal on the Web Server

Once the QACenter Portal application and database are installed, the portal must be configured to communicate with the database.

Configuring QACenter Portal for Oracle

To configure QACenter Portal for Oracle on the Web server:

- 1 Open Oracle's **Net Configuration Assistant Utility** and create a service entry for the database. Refer to "[Setting Up an ODBC DataSource](#)" on page 65.
- 1 Open the Windows **ODBC Data Source Administrator**. Refer to "[Setting Up an ODBC DataSource](#)" on page 65.
- 2 Create a **System DSN** with exactly the same name as the **Net Service Name** created in [step 1](#).

Note: Compuware recommends that you use the Oracle driver instead of the Microsoft driver when connecting to the QACenter Portal database.

- 3 Run the **Database Configuration Utility** located in **Start>Programs>Compuware >QACenter Portal>Database Configuration Utility**.
- 4 Select **Oracle** from the **Database** options.
- 5 Type the server name in the **Server Name** field.
- 6 Type the database instance in the **Database Name** field.
- 7 Type the DSN created in [step 2](#) in the **DSN/Service Name** field.
- 8 Enter a port value in the **Port** field. The default value is 1521.
- 9 Type the user ID in the **User ID** field.
- 10 Type the user password in the **Password** field.
- 11 Click **Test** to validate the configuration. The **Test Status** dialog box appears.
- 12 If the test is successful click **OK**.
- 13 Click **OK** to exit the configuration utility.
- 14 If using the Oracle 9.2 Client:
 - a Locate Ora92 folder in the Oracle installation directory.
 - b Right-click on Ora92 and select **Properties**. The Properties dialog box appears.
 - c Click **Security**.
 - d Click **Add**. The Select Users or Groups dialog box appears.
 - e Add the following users with full permissions: IWAM_<Machine-Name>, IUSR_<MachineName>, ASPNET, and Everyone.
 - f Click **OK**.
 - g Select the **Allow inheritable permissions from parent to propagate to this object**.
 - h Click **OK**.

Configuring QACenter Portal for SQL Server

To configure QACenter Portal for SQL Server on the Web server:

Note: The port number is used only by the QACenter Portal framework, for example, OptimalView. It is not used in configuring or testing the QACenter Portal database connection.

- 1 Run the Database Configuration Utility located in **Start>Programs>Compuware>QACenter Portal>Database Configuration Utility**.
- 2 Select **SQL Server** from the **Database** options.
Note: The DSN server name defaults to QACenter Portal. This is a fixed value and cannot be changed.
- 3 Type the server name in the **Server Name** field.
- 4 Type the database name in the **Database Name** field.
- 5 Enter a port value in the **Port** field. The default value is 1433.
- 6 Type the user ID in the **User ID** field.
- 7 Type the user password in the **Password** field.
- 8 Click **Test** to validate the configuration. The **Test Status** dialog box appears.
- 9 If the test is successful click **OK**.
- 10 Click **OK** to exit the configuration utility.

Disconnecting from the Database

Only one Web server can access the database at a time. In order to connect to another database or to access an existing database from a different Web server machine, disconnect the Web server from the current database.

To disconnect from a SQL or Oracle database:

- 1 Run the Database Configuration Utility located in **Start>Programs>Compuware>QACenter Portal>Database Configuration Utility**.
- 2 Click **Disconnect**.
- 3 Click **Cancel**.

Testing the Oracle Database Connection

After opening QACenter Portal, test the Oracle connection if you are using an Oracle database.

To test the Oracle database connection:

- 1 Open the project called **Test1** and navigate to the **Requirements Planning** page.
- 2 Click the **Summary** tab.

If you receive an exception, fix the database configuration. One possible cause for the exception is not using the same name for the Windows DSN name and the Oracle Service name.

Configuring IIS on a Windows 2003 Server

Windows 2003 requires additional steps in order to use the Internet Information Service (IIS) Web server with QACenter Portal.

To configure IIS on the Windows 2003 server:

- 1 Open the Internet Information Service Manager. For more information, refer to the Microsoft Windows documentation.
- 2 Select the **Web Service Extensions** option.
- 3 Select **Allow** from the **All Unknown ISAPI extensions** list.
- 4 If the **ASP.NET v1.1.4322** option exists, select **Allow**.
- 5 If **ASP.NET v1.1.4322** option does not exist:
 - a Open the Windows **Add/Remove Programs** utility.
 - b Click **Add/Remove Windows Components**. The **Windows Component Wizard** opens.
 - c Select **Application Servers** from the **Components** list and click **Details**.
 - d Select **ASP.NET** from the **Subcomponents** list and click **OK**.
 - e Click **Next**.
 - f Open Internet Information Service Manager.
 - g Select **Web Service Extensions** option.
 - h Select **Allow for ASP.NET v1.1.4322** option.
- 6 From the Internet Information Service Manager, click **Websites and Properties**.
- 7 Select the **Service** tab.
- 8 Select the **Run WWW Service in IIS 5.0 isolation mode** option.
- 9 Click **OK**.

Configuring OptimalView for Load Handling on the Web Server (Optional)

To improve the performance when there are numerous concurrent users, configure the following settings according to the user load:

- 1 Open `optimalview\tomcat\conf\server.xml`.
- 2 Change the number of the following areas for the `<Connector className="org.apache.coyote.tomcat4.CoyoteConnector"` according to the number of users working concurrently:
 - ◇ **minProcessors**: The minimum number of threads that the server will attempt to maintain.
 - ◇ **maxProcessors**: The maximum number of threads that are available to perform the requested processing. This is also the limit of the maximum number of concurrent clients.
 - ◇ **acceptCount**: The maximum queue length for incoming connections requests when all possible requests processing threads are in use. Any requests received when the queue is full will be refused.

For example:

```
<Connector className="org.apache.coyote.tomcat4.CoyoteConnector"
port="8009" minProcessors="100" maxProcessors="200"
enableLookups="true" redirectPort="8443"
acceptCount="300" debug="0" connectionTimeout="20000"
useURIVValidationHack="false"
protocolHandlerClassName="org.apache.jk.server.JkCoyoteHandler"/>
```

- 3 Save the changes and close the file.
- 4 If using Microsoft SQL Server, open `optimalview\tomcat\webapps\optimalview\WEB-INF\ovMSSQL.properties`. If using Oracle, open `optimalview\tomcat\webapps\optimalview\WEB-INF\ovORACLE.properties`.
- 5 Change the number of the following areas according to the number of users working concurrently on the server:
 - ◇ **JDBCMAXPPOOL**: The maximum number of connections OptimalView will attempt to open. Lowering the maximum connection number will increase the response time of OptimalView when the load is high.
 - ◇ **JDBCMINPOOL**: The minimum number of connections OptimalView will maintain when the load is not high.

For Example:

JDBC_MAXPOOL=120

JDBC_MINPOOL=50

- 6 Save the changes and close the file.
- 7 Restart the OptimalView service named **OptimalView Server**.

Configuring QADirector Client

Connecting to the SQL Server Database

You must have the QADirector workstation set up as a SQL Server client. The workstation should be able to connect and communicate with the SQL Server database server. The following SQL Server components must be installed and configured on the workstation:

- ◆ The SQLSRV32.DLL driver provided with the MDAC installation.

To connect to a new or existing ODBC data source on each computer where QADirector is installed, access the **Select a Database** dialog box and enter the appropriate information. Access this dialog box from the **Configure** button on the QADirector **Login** dialog box or from the **System Administration Center** within QADirector. Shut down the Test Management Server and the Test Execution Server if they are running on the computer.

To connect to the database before logging in to QADirector, follow these steps:

- 1 Create an ODBC DSN. See [“Setting up an ODBC Data Source for SQL Server”](#) on page 60.
- 2 At the QADirector login screen click **Configure**. The **Select Database Connection** dialog box appears.
- 3 Select **SQL Server / MSDE**.
- 4 Click the list and select the data source name.
- 5 Enter the database name, schema name, and the SQL Server database user name and password.
- 6 Click **OK**. If you receive an error message, verify that you entered the correct login name and password.

To connect to the database from within QADirector, follow these steps:

- 1 Go to the **System Administration Center**.
- 2 From the **Datasource** panel click **Actions>Change**. The **Select Database Connection** dialog box appears.
- 3 Select **SQL Server / MSDE**.
- 4 Click the list and select the data source name.
- 5 Enter the database name, schema name, and the SQL Server database user name and password.
- 6 Click **OK**. If you receive an error message, verify that you entered the correct login name and password.
- 7 To configure QACenter Portal with the SQL Server database, refer to “[Configuring QACenter Portal for SQL Server](#)” on page 36.

Connecting to the Oracle Database

You must have the QADirector workstation set up as an Oracle client. The workstation should be able to connect and communicate with the Oracle database server. The following components of the Oracle client must be installed and configured on the workstation:

- ◆ Appropriate SQL*Net Client:
- ◆ The SQL*Net connect string alias establishes the connection to the QADirector database instance on the Oracle database server.

To connect to a new or existing ODBC data source on each computer where QADirector is installed, access the **Select a Database** dialog box and enter the appropriate information. Access this dialog box from the **Configure** button on the QADirector **Login** dialog box or from the **System Administration Center** within QADirector. Be sure to shut down the Test Management Server and the Test Execution Server if they are running on the computer.

To connect to the database before logging in to QADirector, follow these steps:

- 1 Create an Oracle Net Service name. Refer to “[Setting Up an ODBC DataSource](#)” on page 65.
- 2 Create an ODBC DSN. Refer to “[Setting Up an ODBC DataSource](#)” on page 65.
- 3 At the QADirector login screen click **Configure**. The **Select a Database** dialog box appears.
- 4 Select **Oracle**.

- 5 Click the list and select the data source name.
- 6 Enter the schema name and the Oracle database user name and password.
- 7 Click **OK**. If you receive an error message, verify that you entered the correct login name and password.

To connect to the database from within QADirector, follow these steps:

- 1 Go to the **System Administration Center**.
- 2 From the **Datasource** panel click **Actions>Change**. The **Select a Database** dialog box appears.
- 3 Select **Oracle**.
- 4 Click the list and select the data source name.
- 5 Enter the schema name and the Oracle database user name and password.
- 6 Click **OK**. If you receive an error message, verify that you entered the correct login name and password.
- 7 To configure QACenter Portal with the Oracle database, refer to [“Configuring QACenter Portal for Oracle”](#) on page 35.

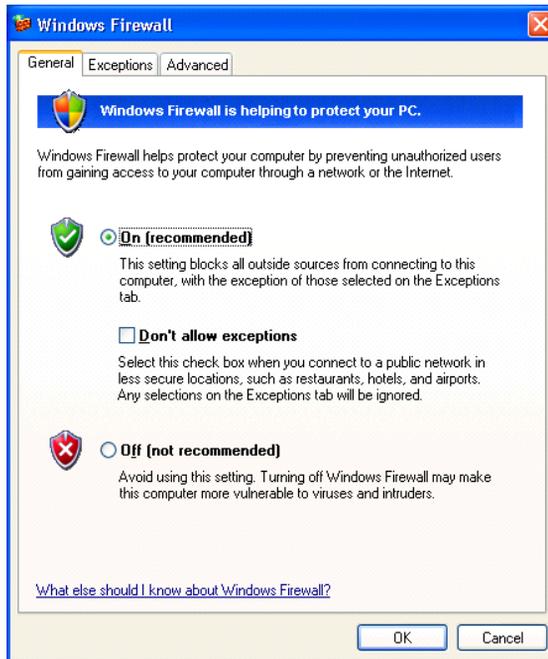
Configuring the Windows XP SP2 Firewall for QADirector

In Windows XP, Microsoft introduced a set of security technologies to improve the ability of Windows XP-based computers to withstand malicious attacks from viruses and worms. The Windows Firewall prevents unsolicited inbound TCP/IP connections. Therefore, the Test Management Server, Test Execution Server and various other test execution components do not communicate with each other while the Windows Firewall is active.

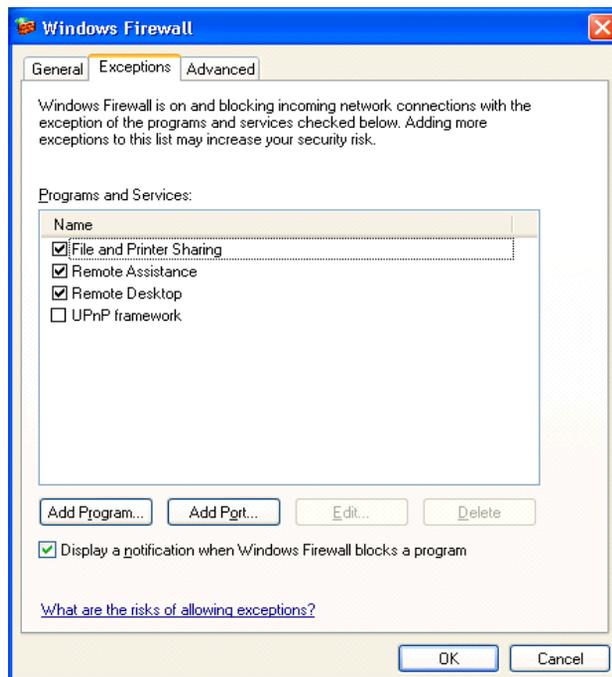
Use this process in conjunction with Microsoft Windows XP Service Pack 2 to ensure that QADirector 05.00 works properly when the Windows Firewall is active:

- 1 Click **Start > Control Panel > Windows Firewall**

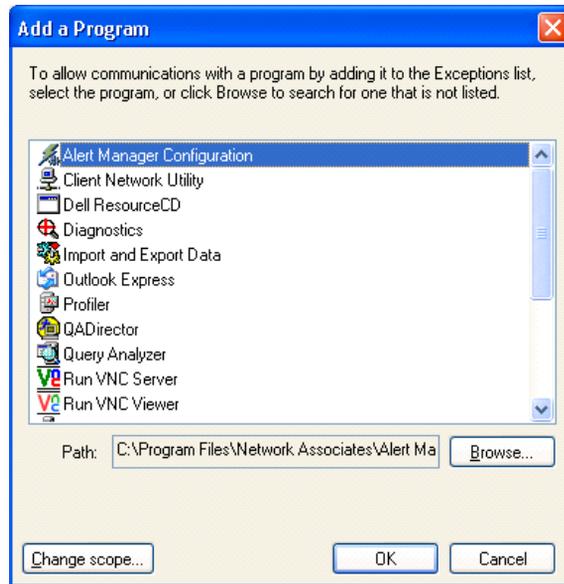
The **Windows Firewall** dialog box appears.



2 Click the **Exceptions** tab.



- 3 Click **Add Program**. The **Add a Program** dialog box appears.



- 4 Browse to the directory where QADirector is installed.
- 5 Choose the following programs from the list:
"QC_TESRV.EXE, QC_TMSRV.EXE, TDRV.EXE
"TENG.EXE

If necessary, choose the programs one at a time. It may be necessary to go back to the **Exceptions** tab each time a program is selected. After the files are selected, the following appears on the **Exceptions** tab.

Make sure the checkbox is selected for each of the QADirector programs.

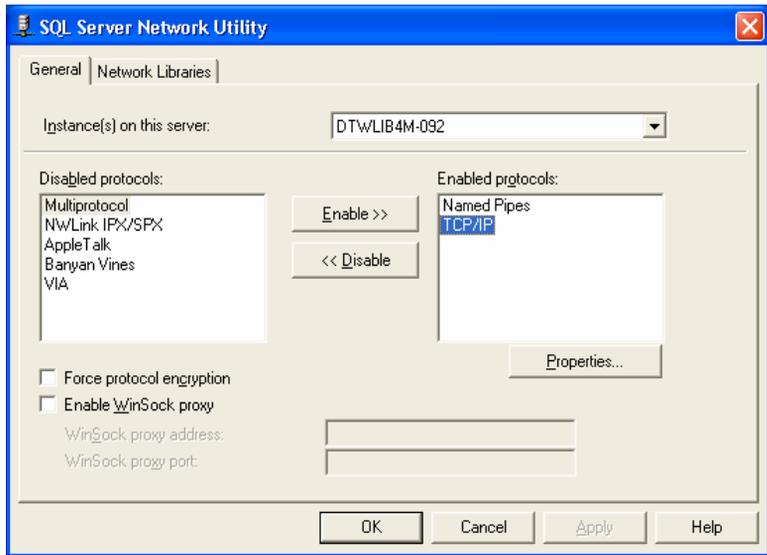
Obtaining the Correct Port Number

The correct port number must be used for SQL Server to properly set up the Firewall. The following explains how to find the correct port number. After the port number is obtained, you will return to the **Exceptions** tab to complete the setup.

To get the port number follow these steps:

- 1 Click **Start > Programs > Microsoft SQL Server > Server Network Utility**.

The **SQL Server Network Utility** dialog box appears:

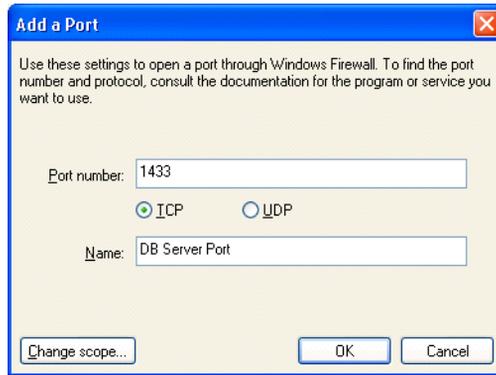


- 2 Choose **TCP/IP** and click **Properties**. The **Properties** dialog box appears.

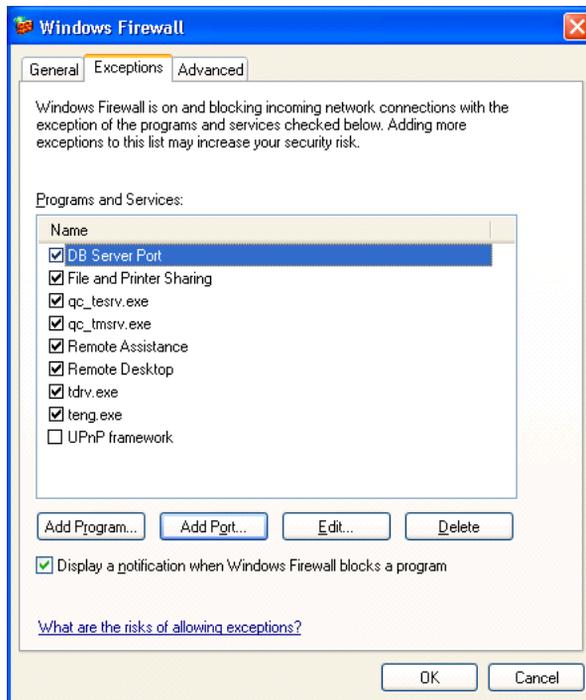


The default port number is displayed in the Default port field.

- 3 Return to the **Firewall** dialog and select the **Exceptions** tab.
- 4 Click **Add Port**. The **Add a Port** dialog box appears.



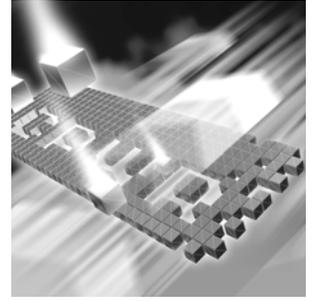
- 5 In the **Port number** field, type the port number from the **SQL Server Network Utility**.
- 6 In the **Name** field, type a meaningful name.
- 7 Choose the **TCP** option.
- 8 Click **OK**. The **Windows Firewall** dialog box appears.



- 9 Click **OK**.

Additional Considerations

- ◆ Configure networking to use the TCP/IP protocol with a static port of 1433.
- ◆ By default, SQL Server allows network connections using port 1433.
- ◆ The SQL Server machine should have the latest MS Data Access Components (MDAC2.71a). This is available with SQL Server Service Pack 3a. Without this version of MDAC, it is not possible to connect to the SQL Server 2000 installed on a Windows XP with Service Pack 2 operating system.
- ◆ By default the Web Server (IIS) Port 80 is blocked. Enable the port using the Windows Firewall dialog box.



Chapter 5

Migrating and Upgrading Previous Versions of QADirector and QACenter Portal

- ◆ Migrating QADirector
- ◆ Migrating from an Access Database to an MSDE Database
- ◆ Migrating QACenter Portal

Migrating QADirector

When upgrading from QADirector 05.00 to QADirector 05.00.01, keep in mind the following:

Configuring Database Connection: When configuring the database connection for QADirector, enter DEFAULT in the Database Name field and in the Schema / Owner Name field. This will ensure a proper database upgrade from QADirector 05.00 to 05.00.01.

When upgrading from QADirector 4.5.1 to QADirector 05.00.01, keep in mind the following:

User Defined Tools: All user-defined tools will be removed when you uninstall QADirector 4.5.1. Manually recreate them in QADirector 05.00.01.

Test Servers: Make sure the Test Management Server and the Test Execution Server are shut down. If necessary, stop or shut them down.

Suites: Each suite from QADirector 4.5.1 will be placed in its own project of the same name in QADirector 05.00.01. QADirector 04.04 suites and earlier must be upgraded to 4.5.1 for use with 05.00.01. All users who have access to a suite will be added as testers to the project.

Permissions and Passwords: All user names over 50 characters will be truncated. Spaces will be replaced with underscores. QADirector 05.00.01

does not allow user names over 50 characters. Passwords with fewer than five characters will be replaced with the word "qadirector."

Scripts: Any user-defined scripts with duplicate names will be renamed with the original name plus the test ID#. This occurs because all user-defined script names must be unique in QADirector 05.00.01. If a different naming convention is preferred, change all user-defined script names, as well as data, before uninstalling QADirector 4.5.1 and upgrading the database.

Databases:

Note: Make a backup of the 4.5.1 database in the relevant DBMS (SQL Server or Oracle) before migrating.

- ◆ Create an ODBC connection to the new database on the machine where the migration will be performed (machine must have the current QADirector 05.00.01 release). Specify the desired database as the default database in the ODBC setup.
- ◆ When migrating from Microsoft Access to MSDE/SQL Server, the 4.5.1 database cannot be used. A new blank MSDE/SQL Server database must be created. Therefore, ODBC connections are needed for both the 4.5.1 Access database and the new 05.00.01 MSDE/SQL Server database. MSDE/SQL Server must be installed on the machine where the new database will be created.
- ◆ The database login/user used during the migration process must have the proper settings. In SQL Server and MSDE, the database login should have privileges for the database being migrated (or for Access>MSDE, for the new MSDE database). This login should have "System Administrators" server role and "public" and "db_owner" database roles. The default database for this login should be the database being migrated. Note that the login may have access to several databases.

Note: The **Test** button on the **Configuration** screen does not work when QADirector is pointing to a 4.5.1 database. However, the migration can still execute successfully in spite of this. The **Test** button works fine when pointing to a 05.00.01 database.

Filters: Filter field names have changed in 05.00.01 and some of the fields from 4.5.1 no longer have a counterpart field in 05.00.01. The fields that do not have a counterpart will remain intact in the Filter definitions. In order for the Filters to function properly in 05.00.01, you may need to update your Filters to remove these fields.

The following is a list of the filter fields in 4.5.1 and their counterpart fields in 05.00.01. These fields will be upgraded to the 05.00.01 format:

Table 5-1. QADirector Filter Fields

4.5.1	05.00.01
QC_SUMMARY	Summary
QC_NAME	Name
QC_DEFECT_ID	DefectIds
QC_EXP_RESULT	ExpectedResult
QC_MANUAL	IsManual
QC_CREATED_BY	CreatedBy
QC_IS_CLASS	IsClass
QC_IS_PROC	IsProc
QC_RUN_IN_PARALLEL	ParallelChildren

Migrating from an Access Database to an MSDE Database

QADirector 05.00 and 05.00.01 do not support Microsoft Access. If Access is the current database, migrate it to an MSDE database with the upgrade utility.

If the schema of the QADirector database is older than the client, the following message appears:

Current version of QADirector has schema version x whereas required schema version is x . Would you like to upgrade QADirector database to the required schema level? Before you upgrade the database please make sure that all the clients are logged out of QADirector database.

If the schema of the QADirector database is newer than the client, the following message appears:

Current version of QADirector has schema version x whereas required schema version is x . Please use appropriate release of QADirector to work with this schema of the database or change datasource.

Note: To perform a migration you must be an Administrator.

To upgrade and migrate from an Access database to an MSDE/SQL Server database:

- 1 Create a blank MSDE database to serve as the destination for the data in the 4.5.1 Access database after the migration is finished. Refer to the MSDE Help system for information.
 - 2 Create an ODBC connection to both the blank MSDE database you just created and to the Access database from which you are migrating.
 - 3 At the **QADirector Log In** screen, click the **Configure...** button to point to the Access database from which you will be migrating. The **Select a Database** dialog appears.
 - 4 From the **Data Source Type** radio buttons, choose **Access**.
 - 5 In the **Data Source Name** field, select the exact name of the Access Database/ODBC connection you created in [step 2](#).
 - 6 Click **OK**. The **QADirector Log In** screen appears.
 - 7 At the **QADirector Log In** screen, enter the **User Name** and **Password**.
 - 8 Click **OK**.
 - 9 If necessary, click **Yes** to upgrade the database schema to the required schema level. The **QADirector Data Migration Information** dialog appears with the **Datasoure Type**, **Datasoure Name**, **Database Name**, and **Schema/User Name** fields filled in by default.
 - 10 In the **User Name** and **Password** fields, enter the user name and password for the blank MSDE database you created in [step 1](#).
 - 11 Click **Test** to verify that the information provided is correct. A test confirmation dialog appears.
 - 12 Click **OK** to acknowledge the successful test. The **QADirector Data Migration Information** dialog appears.
 - 13 Click **Continue...** to continue the upgrade process. The **QADirector/Portal Database Upgrade** screen appears.
 - 14 Click **Begin Upgrade**. The Current Item Progress, Overall Progress, and Upgrade Item indicators will display the ongoing progress of the database migration.
 - 15 When the upgrade is complete, click **Close**.
- Note:** If you plan to use QACenter Portal, refer to [“Installing QACenter Portal on the Web Server”](#) on page 27 for details.

Migrating QACenter Portal

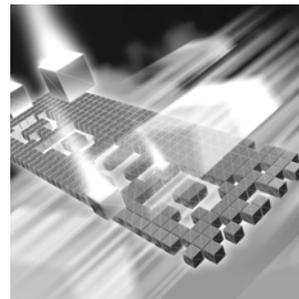
When migrating QACenter Portal 05.00 to QACenter Portal 05.00.01 keep in mind the following:

- 1 Uninstall QACenter Portal 5.0.
- 2 Uninstall OptimalView 3.2
- 3 Install QACenter Portal 5.0.1. See “[Installing QACenter Portal](#)” on page 27.
- 4 Configure QACenter Portal. See “[Configuring QACenter Portal/QADirector](#)” on page 35.
- 5 Configure the database to QACenter Portal. Refer to *Configuring the Database* in the QACenter Portal online help.

Note: If prompted, continue with database upgrade.

Chapter 6

Maintaining the Installation



- ◆ Accessing Maintenance Mode
- ◆ Modifying an Installation
- ◆ Repairing an Installation
- ◆ Uninstalling QADirector
- ◆ Uninstalling QACenter Portal

Accessing Maintenance Mode

To access QACenter products' maintenance mode, Compuware recommends using the Windows Control Panel.

Required: Compuware recommends that you exit all non-essential Windows programs before running this setup program. Some Windows programs may interfere with the installation process.

Accessing Maintenance Mode from the Windows Control Panel

- 1 Click the Windows **Start** button and choose **Settings>Control Panel**. The **Control Panel** dialog box appears.
- 2 Choose the **Add/Remove Programs** icon. The **Add/Remove Programs** dialog box appears. Select the QACenter product to maintain and click **Change/Remove**.

Three maintenance mode options display: modify, repair, and remove. For more information about these options, see the appropriate section in this chapter.

Modifying an Installation

For products with optional components, you may want to add or remove a component.

Rather than uninstall and re-install the product, you can modify your installation.

Modifying Products With Optional Components

- 1 Access maintenance mode described at the beginning of this chapter.
- 2 Select the **Modify** option. Click **Next**. The **Select Components** dialog box appears allowing you to add or remove components.
- 3 Click **Next**. Setup will add or remove the appropriate components.
- 4 After modifying, you may be prompted to restart your computer. If you are prompted to restart your computer, you may choose to restart it now (recommended) or to restart it later.
- 5 Click **Finish** to complete the maintenance.

Repairing an Installation

There may be times when you will need to repair a damaged QACenter product installation. This could be due to an inadvertent deletion or corruption of the program. To repair your QACenter product, follow these steps:

- 1 Access maintenance mode described at the beginning of this chapter.
- 2 Select the **Repair** option. Click **Next**. Setup will repair the specified QACenter product.
- 3 After repairing, you may be prompted to restart your computer. If you are prompted to restart your computer, you may choose to restart it now (recommended) or to restart it later.
- 4 Click **Finish** to complete the maintenance.

Uninstalling QADirector

If you want to remove QADirector, follow these steps:

- 1 Access maintenance mode described at the beginning of this chapter.
- 2 Select the **Remove** option. Click **Next**. The **Confirm File Deletion** dialog box appears.
- 3 Click **OK**. Setup will remove QADirector from your PC.
- 4 After uninstalling, you may be prompted to restart your computer. If you are prompted to restart your computer, you may choose to restart it now (recommended) or to restart it later.
- 5 Click **Finish** to complete the maintenance.

Uninstalling QACenter Portal

Since QACenter Portal uses several different Compuware applications, there are special steps to take when removing the product.

To uninstall QACenter Portal:

Note: To ensure a clean removal of the applications, uninstall the products in the exact order described in these steps.

- 1 Disconnect from the database. Refer to “[Disconnecting from the Database](#)” on page 37.
- 2 Access maintenance mode described at the beginning of this chapter.
- 3 Uninstall OptimalView 3.2.
- 4 Uninstall QACenter Portal 05.00.01.
- 5 Delete the QACenter Portal installation folder on the machine. For example, the folder may be located in x:**Program Files\Compuware\QACenter Portal**\.

Uninstalling the QACenter MSDE Instance

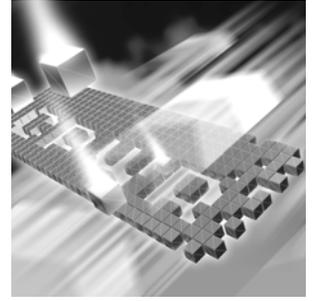
To remove the QACenter MSDE instance, follow these steps:

Caution: All associated data will be lost when you uninstall the MSDE instance.

- 1 Access maintenance mode described at the beginning of this chapter and remove the Microsoft SQL Server Desktop Engine (QACENTER).
- 2 After uninstalling the MSDE database, some associated files may remain. Delete any remaining files from the installation directory.

Appendix A

Manually Creating and Configuring a Database



- ◆ Manually Creating and Configuring an Oracle Database on the Database Server
- ◆ Manually Creating and Configuring a SQL Server Database

Manually Creating and Configuring an Oracle Database on the Database Server

This section provides information about configuring QADirector to use an Oracle database.

Oracle Server Requirements

- ◆ An existing database server that runs the supported versions of Oracle. Refer to “[System Requirements](#)” on page 14 for details.
- ◆ Oracle ODBC drivers for supported versions of Oracle. Refer to “[System Requirements](#)” on page 14 for details.
- ◆ A database instance set up on the Oracle database server to hold QADirector data. Use the following specifics to configure the database instance:
 - ◇ When the Oracle database instance is defined, you must specify the Storage Character Set as iso 8859-1 West European.
 - ◇ The NLS_LANGUAGE parameter should be set in the parameter file as:

```
NLS_LANGUAGE = 'AMERICAN'
```

If you are using Windows 2000, set the NLS_LANGUAGE parameter to AMERICAN_AMERICA.WE8ISO8859P1 in the following locations:

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```
HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE\NLS_LANG  
HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE\ALL_HOMES\IDO\NLS_LAN  
G  
HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE\HOME-\NLS_LANG
```

- ◆ Access to a valid owner names (also known as a *schemas*) on the Oracle database server for QADirector. This owner name is the user ID that will be associated with each of the product databases.

Creating Database Tables

Before any client machines can connect to the Oracle database, you must create the database and the database tables for QADirector. The SQL*Plus utility allows you to create the database tables. To create QADirector tables, perform the following for each database:

- 1 On the Oracle server or client machine, open SQL*Plus Worksheet. Click **Start>Programs>Oracle (Oracle home name)>Database Administration>SQL*Plus Worksheet** menu. In Windows XP, click the **Start** menu and choose **All Programs>Oracle (Oracle home name)>Database Administration>SQL*Plus Worksheet**.
- 2 Select **Connect Directly to a Database**.
- 3 Enter a user name in the **Username** field. This will be the name of the schema where the QADirector tables reside.
- 4 Enter a password in the **Password** field.
- 5 Enter the name of the service running the database in the **Service** field.
- 6 On the database server from within SQL*Plus, click the **Open File** icon on the tool bar. The **Open Local Script File** dialog box appears.
- 7 Click the **Look In** list and browse to **\Compuware\database\sql-scripts\oracle** on the installation CD.
- 8 Execute the following scripts for AQW in order:
 - ◇ 1_orcl_qacenter.sql
 - ◇ 2_orcl_procedures.sql
 - ◇ 3_orcl_delete_procedures.sql
 - ◇ 4_orcl_optimalview.sql
 - ◇ 5_qacenter_appinserts.sql
 - ◇ 6_orcl_qacenter_appupdates.sql
 - ◇ 7_orcl_optimalview_appinserts.sql

Manually Creating and Configuring a SQL Server Database

This section provides information about configuring QADirector to use a SQL Server database.

SQL Server Requirements

- ◆ An existing database server that runs a supported version of SQL Server. Refer to “[System Requirements](#)” on page 14 for details.
- ◆ A database instance on the SQL Server database server to hold QADirector data. Use the following specifics to configure the database instance:
 - ◇ If you are using SQL Server 7.0 and the database instance is defined, you must specify code page 1252 and sort order 52 (also known as ISO 8859-1).
 - ◇ If you are using SQL Server 2000, specify the `SQL_Latin1_General_CP1_CI_AS` collation.
- ◆ A SQL Server user ID and password to allow the QADirector administrator to set up the database server.

Creating Database Tables

Once you have created the database, you can create the QADirector database tables. QADirector includes files that execute scripts and automatically create the tables for you.

- 1 To start the SQL Server Query Analyzer, select **SQL Server Query Analyzer** from the **Tools** menu in the SQL Server Enterprise Manager.
- 2 Select the database from the **DB** drop down list.
- 3 Click **File>Open**. The **Open Query File** dialog box appears.
- 4 Click the **Look In** list and browse to **Compuware\aqw\sql-scripts\mssql** on the installation CD.
- 5 Select one script at a time, click **Open**, and click the **Run** (green arrow) icon on the toolbar to run each script in the following order:
 - ◇ 1_sql_qacenter.sql
 - ◇ 2_sql_procedures.sql
 - ◇ 3_sql_delete_procedures.sql
 - ◇ 4_sql_optimalview.sql
 - ◇ 5_qacenter_appinserts.sql

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- ◇ 6_sql_qacenter_appupdates.sql
- ◇ 7_sql_optimalview_appinserts.sql

Adding User Rights to the Database (optional)

Once the database and tables have been built, add users and give them access rights using SQL Server Enterprise Manager. Using SQL Server authentication login, create a new login ID and password specifically for SQL Server access. Use this option to create one convenient user name and password to access the QADirector database and have each QADirector user use the same user name and password to connect to the database. If preferred, create multiple SQL Server user names and passwords.

Note: The user name and password used to connect to the SQL Server database is not the same user name and password that is used to connect to QADirector.

To create a SQL Server authentication, follow these steps:

- 1 In the left pane of the SQL Server Enterprise Manager, expand the SQL Server Group, and expand the server machine name.
- 2 Expand Security.
- 3 Select the **Add New User** icon from the menu. The **SQL Server Login Properties** dialog box appears.
- 4 On the **General** tab, perform the following:
 - a Type a user name in the **Name** field (for example, QATeam).
 - b Select SQL Server Authentication.
 - c Type the password in the **Password** field.
 - d From the **Database** drop down menu, select the QADirector database.
- 5 From the **Database Access** tab, permit the user to access the created database.
- 6 Set up roles and permissions for the Login account:
 - ◇ Option A: Ensure the Login account has the db_owner role.
 - ◇ Option B: Ensure all privileges on all QACenter database objects are granted to the newly created Login account. The following is a sample script for granting all privileges on all objects to a user.

Note: Compuware does not assume any responsibility for the use of this script.

```
USE <Database Name>
```

```
Go
```

```

DECLARE @ExecSQL varchar(255)
Declare @User varchar(64)
Set @User = <Login Account>
DECLARE curGrants CURSOR FOR
SELECT 'GRANT ALL ON' + NAME + 'TP' + rtrim(@User)
From SYSOBJECTS
    WHERE TYPE = 'U' or TYPE = "P"
OPEN curGrants
FETCH NEXT FROM curGrants INTO @ExecSQL
WHILE @@FETCH_STATUS = 0
BEGIN
    Exec(@ExecSQL)
    FETCH NEXT FROM curGrants INTO @ExecSQL
END
CLOSE curGrants
DEALLOCATE curGrants

```

Installing the TrackRecord database

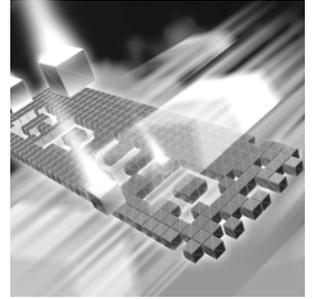
- 1 Install TrackRecord. Refer to the *TrackRecord Installation and Configuration Guide*.
- Note:** The following steps apply to TrackRecord release 06.02.01.
- 2 On the database server, locate the directory where TrackRecord is installed (for example, C:\Program Files\Compuware\TrackRecord).
- 3 Open the \databases directory inside the \TrackRecord directory.
- 4 Inside the \databases directory, create a directory and give it the name you want to call the new TrackRecord database, for example QADirector.
- 5 On the installation CD-ROM for QADirector, locate the directory \cpwr\trdb.
- 6 Locate the file **aqwtrdb.exe** within \cpwr\trdb and double-click it. A dialog box appears so you can extract the files from this archive.
- 7 In the **Unzip to Folder** field, specify the TrackRecord database folder created in [step 4](#) (for example, C:\Program Files\Compuware\TrackRecord\databases\QADirector). If necessary, click **Browse** to locate the folder.
- 8 Click **Unzip** to copy the extracted files into the TrackRecord database folder.

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To access the new TrackRecord database, enter the database name (specified in [step 4](#)) in the **Database** field of the **Login** dialog box when you start TrackRecord. The client installation must be connected to the database server on which you created the TrackRecord database.

Appendix B

Setting Up an ODBC DataSource



- ◆ Setting up an ODBC Data Source for Oracle
- ◆ Setting up an ODBC Data Source for SQL Server

Setting up an ODBC Data Source for Oracle

Creating an Oracle Net 8 Service Name

To create a Net 8 service name:

- 1 Open the Net Configuration Assistant.
- 2 Select **Local Net Service Name Configuration**.
- 3 Click **Next**.
- 4 Select **Add** and click **Next**.
- 5 Select **8i Database or Service**, and click **Next**.
- 6 Type a service name in the **Service Name (Instance Name or Database Name)** field. Click **Next**.
- 7 Select **Communication Protocol (TCP)**, and click **Next**.
- 8 Type a server name in the **Host Name** field.
- 9 Validate the Port number (host: 1521), and click **Next**.
- 10 Select **Yes** to perform a test. Click **Next**.
- 11 Validate the test results. If the Test fails, fix the errors and retest.
- 12 Click **Next**.
- 13 Type a Net service name in the **Net Service Name** field and click **Next**.

14 Click **Finish**.

Creating a Windows DSN

To set up an ODBC data source from the QADirector client machine, follow these steps:

Note: Compuware recommends that you use the Oracle driver instead of the Microsoft driver when connecting to the QADirector database.

- 1 In Windows 2000, click the **Start** menu, and select **Settings>Control Panel>Data Sources (ODBC)**. The ODBC Data Source Administrator opens. Click the **Drivers** tab and select **Oracle ODBC Driver**.
If using Windows XP, select **Control Panel>Administrative Tools>Data Sources (ODBC)**. The ODBC Data Source Administrator opens. Click the **Drivers** tab and select **Oracle ODBC Driver**.
- 2 Click the **System DSN** tab.
- 3 Click **Add**.
- 4 Select **Oracle** from the **Driver** list.
- 5 Click **Finish**. The **Create a New Data Source** dialog box appears.
- 6 Enter a Data Source Name (DSN) in the **Data Source Name** field.
- 7 Enter a description in the **Description** field.
- 8 Enter the database service name in the **Service Name** field.
- 9 Enter the user name in the **UserID** field.
- 10 Keep the default settings in the remaining fields and click **OK**.

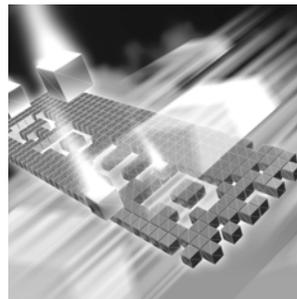
Setting up an ODBC Data Source for SQL Server

To set up an ODBC data source:

- 1 In Windows 2000, click the **Start** menu, and select **Settings>Control Panel**. Double click the **Data Sources (ODBC)** icon. The ODBC Data Source Administrator opens.
In Windows XP, click the **Start** menu and select **Control Panel>Administrative Tools>Data Sources (ODBC)**. Skip to step 3.
- 2 Click the **System DSN** tab.
- 3 Click **Add**.
- 4 Select **SQL Server** from the **Driver** list.

- 5 Click **Finish**. The **Create a New Data Source to SQL Server** dialog box appears.
- 6 Enter an ODBC connection name in the **Name** field.
- 7 Enter a description for the ODBC connection in the **Description** field.
- 8 Enter the server name in the **Server** field.
- 9 Click **Next**.
- 10 Select the **With SQL Server Authentication using a login ID and password entered by a user** option.
- 11 Type a user name in the **Login** field.
- 12 Type a password in the **Password** field.
- 13 Click **Client Configure**.
- 14 Verify that TCP/IP is selected under the network libraries.
- 15 Click **OK**.
- 16 Click **Next**.
- 17 Select the **Change the Default Database to** checkbox.
- 18 Select the default database that you are configuring from the drop down menu.
- 19 Click **Next**.
- 20 Click **Finish**. The **ODBC Microsoft SQL Server Setup** dialog box appears.
- 21 Click **Test Datasource**.
- 22 Click **OK** to exit the **ODBC Microsoft SQL Server Setup** dialog box.
- 23 Click **OK** to exit the ODBC Data Source Administrator.

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