



QADirector

Installation Guide

Release 6.0

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CHAPTER 1

Introduction

How to Use This Guide

The QADirector Installation Guide includes system requirements and instructions for installing the QADirector application.

Who Should Read This Guide

The QADirector Installation Guide is intended for administrators who are installing QADirector. For reference and usage information, refer to the online help. 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. For information about the integrated products, refer to the documentation shipped with the products.

Related Publications

The QADirector documentation set includes the following:

- The *QADirector Installation Guide* includes system requirements and instructions for installing QADirector. This guide is provided in PDF format.
- The *QADirector Online Help* provides descriptions of the QADirector centers, tools, procedures, and reference information.
- The *QADirector Integration and SDK Reference* contains information about how to use the QADirector SDK/API and integration components.
- *Distributed License Management Installation Guide* provides instructions for installing and configuring a license for QADirector. This guide is provided in PDF format.

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.

Go to <http://frontline.compuware.com> to access online customer support for Compuware products. You can read or download documentation, frequently asked questions, and product fixes, or e-mail your questions or comments. In the **Log In** section, enter your login ID and password and click **Login**. If you are a first-time visitor, click **Register** to receive your free password to access FrontLine. After completing the registration form, your login ID and password are e-mailed to you and your account is activated.

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 product. The name and release are 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 standalone or network installation, and 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 specifications, and the names and releases of other applications that were running.
- The location of the problem in the 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 2

Getting Started

QADirector Overview

QADirector enables teams to deliver a repeatable functional testing process that helps realize significant gains in productivity and efficiency, from planning requirements and executing tests to analyzing results. QADirector is part of the Compuware Quality Management solution and integrates with the following products:

File-AID/CS

Helps developers efficiently manage and prepare data for testing. It allows developers to copy, convert, transform, compare, and edit data, validate test data results, and restore test data to its baseline state.

Hiperstation

Tests host-based applications directly from your Microsoft Windows desktop. This integrated, workstation-based interface tool uses 32-bit code that provides improved performance and better stability on 32-bit Windows platforms.

Optimal Trace

Enables the structured capture of requirements. Optimal Trace facilitates all aspects of requirements capture from drafting initial notes at a customer site through generation of final requirements documents.

QALoad

Load tests enterprise systems and associated networks. QALoad can stress-test your system by simulating thousands of users simultaneously performing different operations. It creates and runs test scripts that can simulate application transactions on the system without involving end users or their equipment.

Quality Manager

Provides Complete IT management and governance that enables organizations to maximize the business value of the entire IT portfolio including projects, applications, and infrastructure.

TestPartner

Tests Web- and Microsoft Windows-based applications that use Microsoft technologies. TestPartner records user actions to quickly produce powerful tests. Each recorded test displays as a series of actions in clear, concise steps that can be easily understood by all testers, from novice to expert. You can record user sessions with the application, add validation functions, and replay the sessions later to ensure that the application works as expected.

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.

Before Installing

Before installing QADirector, carefully review the following information:

System Requirements

Review the system requirements to ensure that the system meets the prerequisites for the successful installation and operation of the product. System requirements are listed in the Release Notes as well as in this book.

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 the product documentation.

Release Notes can be viewed from the installation media or on FrontLine (<http://frontline.compuware.com>), Compuware's product support web site. The Release Notes on FrontLine are periodically updated as new information becomes available.

Installing the License

A trial license is supplied with your product. You can install a permanent license at any time during the evaluation period. When the evaluation period expires, you must install a license to successfully run this product. After successfully installing QADirector, you can access the *Distributed License Management Installation Guide*, by clicking **Start>All Programs>Compuware>QADirector>Documentation**.

NOTE

Node locked licenses are not permitted in this release of QADirector. A license server must be installed. Refer to the *Distributed License Management Installation Guide* for additional information.

System Requirements

QADirector components can be installed on one machine or on separate machines. Users must have administrator permissions to install QADirector. The minimum system requirements for each component are as follows:

	Hardware	Operating System	Software
Database Server	2 GHz processor with 2 GB RAM (4 GB RAM recommended) Minimum 20 GB of free disk space (40 GB recommended)	Microsoft Windows 2000 SP 6 (32-bit)	Microsoft SQL Server 2000 SP 4 (32-bit), or 2005 SP 2 (32-bit) with patch version 3050
		Microsoft Windows 2003 Server SP 2 (32-bit)	Oracle 9i or 10g Release 2
Web Server	2 GHz processor with 2 GB RAM (4 GB RAM recommended) Minimum 20 GB of free disk space (40 GB recommended)	Microsoft Windows 2000 SP 6 (32-bit)	IIS 5.0 (32-bit), Microsoft Windows 2000
		Microsoft Windows Server 2003 SP 2 (32-bit or 64-bit)	IIS 5.1 (32-bit), Microsoft Windows XP Professional
		Microsoft Windows XP Professional SP 2/3 (32-bit or 64-bit)	IIS 6.0 (32-bit), Microsoft Windows Server 2003 and Microsoft Windows XP Professional x64 Edition
		Microsoft Windows Vista Business SP 1 (32-bit)	IIS 7.0 (32-bit), Microsoft Windows Vista
Test Management Server	2 GHz processor with 2 GB RAM (4 GB RAM recommended) Minimum 10 GB of free disk space	Microsoft Windows 2000 SP 6 (32-bit)	
		Microsoft Windows Server 2003 SP 2 (32-bit or 64-bit)	
		Microsoft Windows XP Professional SP 2/3 (32-bit or 64-bit)	
		Microsoft Windows Vista Business SP 1 (32-bit)	
Client Machine	2 GHz processor with 1 GB RAM (2 GB RAM recommended) Minimum 10 GB of free disk space	Microsoft Windows 2000 SP 6 (32-bit)	Microsoft Internet Explorer 6.0 SP 2 or 7.0
		Microsoft Windows Server 2003 SP 2 (32-bit or 64-bit)	Firefox 2.x with FFClickOnce Add-on
		Microsoft Windows XP Professional SP 2/3 (32-bit or 64-bit)	
		Microsoft Windows Vista Business SP 1 (32-bit)	

NOTE

Adobe Acrobat Reader is required to view the online books in PDF format.

NOTE

On the client machine, administrator permissions are required to install .NET. If .NET is already installed, administrator permissions are not required to install QADirector.

NOTE

TCP/IP protocol must be installed on all computers

CHAPTER 3

Installing the QADirector Application

QADirector Architecture

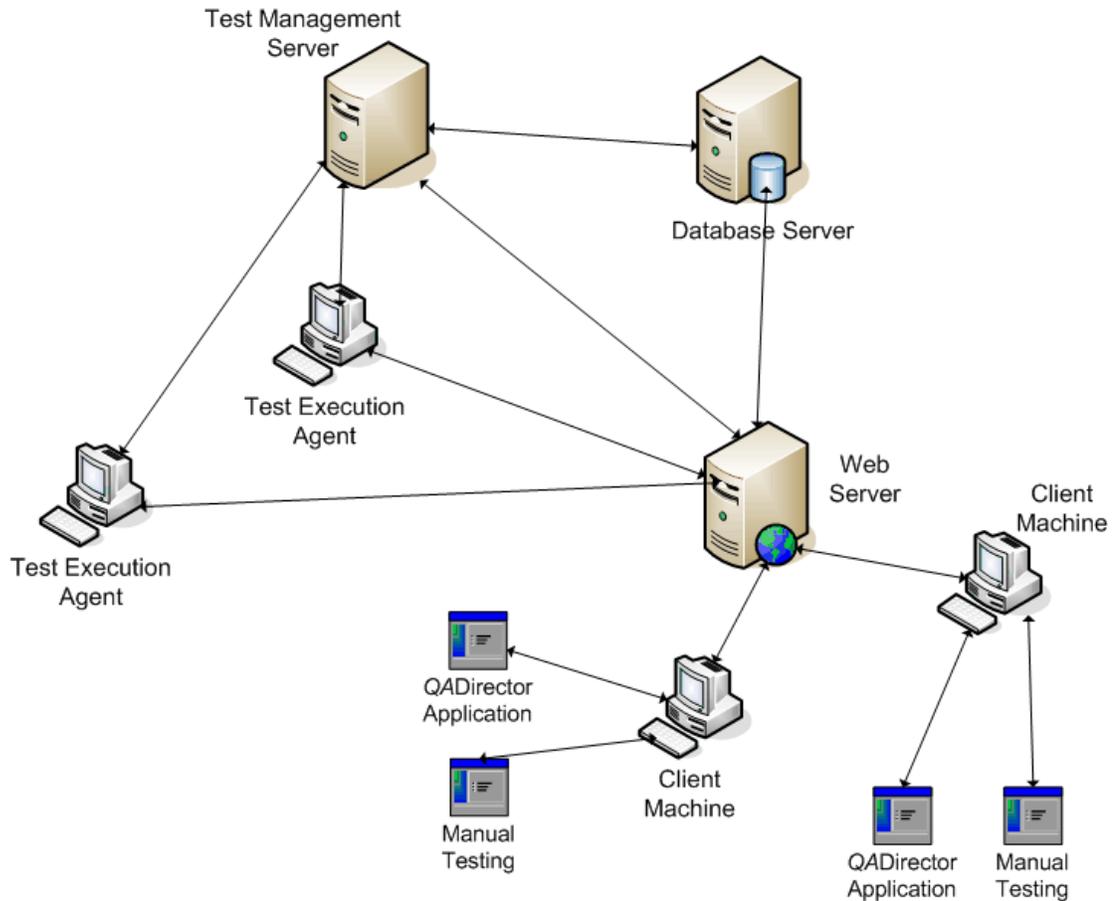
The essential components of QADirector include:

- **Web Server:** hosts the central QADirector application, which is then accessed by a smart client.
- **Database Server:** contains all the essential QADirector information and assets.
- **Test Management Server:** receives requests to schedule and execute tests submitted by the users. This runs as a service and can reside on the same machine as the web server, or on separate machines.
- **Client Machine:** a basic work station that uses an internet browser to access the main QADirector application and Manual Testing on the web server, which then installs the smart client software.
- **Test Execution Agent:** a workstation that receives the test execution requests from the Test Management Server, then runs the tests and submits the results back to the main QADirector application.

In a typical installation, QADirector is installed on a web server, and the QADirector database is installed separately on a database server. During the installation, you can select Microsoft SQL Server Express as the default database, or install the database separately, either Microsoft SQL Server or Oracle. There are several options when installing the QADirector components:

- The Web Server and the Database Server should be on separate machines.
- The Test Management Server can be on the same machine as the Web Server, or the Database Server, or on a separate machine.
- Test Execution Agents can be on the same machine as the Client or on separate machines.
- The QADirector application and Manual Testing run on the Client machines.

The following figure shows the recommended QADirector system configuration.



NOTE

An add-on component that integrates Requirements Management tools with QADirector can also be installed on the client machines.

Installing the QADirector Web Server

This section describes how to install QADirector on the web server machine. Typically a system/database administrator performs this task.

1. From the installation media browser, navigate to the **QADirector** tab.
2. Click **Install QADirector**. The **QADirector InstallShield Wizard** dialog box appears.
3. Click **Next**. The **License Agreement** screen appears.
4. Read the license agreement and click **Yes** to accept the terms of the agreement. The **Customer Information** screen appears.
5. Type your name and company in the **User Name** and **Company Name** fields and click **Next**. The **Choose Destination Location** screen appears.
6. Select a location for the QADirector installation. The default location is: `x:\Program Files\Compuware\QADirector`, where `x` is the drive where Microsoft Windows resides on your computer. To specify a different location, click **Browse** and select an existing

folder or type the path name in the **Path** field. Click **OK**. Click **Next**. The **Select Features** screen appears.

7. Select the features to install, and clear the check boxes next to any feature that is not being installed. These services can be installed separately and on different machines.
 - a) Click the name of each component to view a brief description in the **Description** field.
 - b) If you are installing the QADirector application, the **Application Server** is a required component.
 - c) Installing QADirector creates the following services:

Compuware Open Server (COS)

Compuware's server-side platform for cross-product integration. If COS is already installed, it will be removed, and the current version is installed.

Compuware QADirector Scheduler

This service is used to schedule application events.

Compuware QADirector Subscriber

This service is used to get subscription messages from Compuware Open Server.

Compuware Test Management Service

This service is installed with the **Test Management Server** and is used to schedule QADirector jobs and manage machines available for test execution.

TRSDKService11

Compuware TrackRecord SDK service. This service should be started to view defects and run queries.

- d) Installing QADirector creates the following virtual directories in IIS:
 - `qadirector`: required to run the QADirector application.
 - `tpservices`: required for QADirector to retrieve scripts from TestPartner.
- e) Selecting **Integration Services** installs the required components to integrate with the selected product. This does not install the actual product.

NOTE

If you are migrating from a previous version of QADirector, do not select the database at this step. After this installation is completed, follow the instructions in “Migration” on page 29. If you are using a database server, do not select the database at this step. If you are installing these services on Windows Vista with IIS7, see “Product Integrations” on page 45.

- f) **QADirector Services** include Application Server, Test Management Server and SQL Server 2005 Express Edition.
8. After selecting the features to install, click **Next**. If you did not select a database in the previous step, a message appears stating that a database is required to use QADirector
9. If there is already one or more web sites in IIS, the **Select a Web Site** screen appears. In the **Web Sites** list, select the web site to use to install QADirector, and click **Next**.

10. The **Select Program Folder** dialog appears. Select the `Program Folder` for QADirector. You can accept the default folder, or select a different folder from the list. Click **Next**. The **Start Copying Files** screen appears.
11. Review your settings before starting the installation and click **Next** to begin the installation. To make any changes, click **Back** to return to the previous screen. A progress bar appears and indicates the progress while installing the application. If you are prompted to restart your computer, select the **Restart Your Computer** check box to restart it now.
12. Click **Finish** to complete the QADirector Web Server installation.

Installing the Test Management Server

The Test Management Server can be installed during the main QADirector application installation on the web server, or separately on a different machine. To install the Test Management Server after installing QADirector:

1. From the installation media browser, navigate to the QADirector tab.
2. Click **Install QADirector**. The **QADirector InstallShield Wizard** dialog box appears.
3. Click **Next**. The **License Agreement** screen appears.
4. Read the license agreement and click **Yes** to accept the terms of the agreement. The **Customer Information** screen appears.
5. Type your name and company in the **User Name** and **Company Name** fields. Click **Next**. The **Choose Destination Location** screen appears.
6. Select a location for the Test Management Server installation. The default location is: `x:\Program Files\Compuware\QADirector`, where `x` is the drive where Microsoft Windows resides on your computer. To specify a different location, click **Browse** and select an existing folder or type the path name in the **Path** field. Click **OK**.
7. Click **Next**. The **Select Features** screen appears.
8. Select **Test Management Server** and click **Next**. If you have not configured a database on this machine, a message appears warning that QADirector will not function properly until a database is configured. Click **Yes** to continue. The **Select Program Folder** screen appears.
9. Select the **Program Folder** for QADirector. You can accept the default folder, or select a different folder from the list. Click **Next**. The **Start Copying Files** screen appears.
10. Review your settings before starting the installation. To make any changes, click **Back** to return to the previous screen.
11. Click **Next** to begin the installation. A progress bar appears and indicates the progress while installing the server. Select the **Display Release Notes** check box to review the information in the Release Notes file. This file contains information about new features, technical notes, and any known issues that may enhance or impact the performance of QADirector. Release Notes contain recent changes that may not be included in your QADirector product documentation.
12. Click **Finish** to complete the Test Management Server installation.

Installing the Requirements Management Add-On Component

Compuware's Requirements Management Integration add-on components provide an automated integration solution between QADirector and Requirements Management applications such as Optimal Trace. The Requirements Manager Add-on component needs to be installed and configured on the client machine for the add-on tools to function. To install the QADirector Plugins:

1. Log on as a user with administrator permissions.
2. From the installation media, navigate to the **QADirector** tab.
3. Click **Install QADirector Integration Plugins**. The **QADirector Integration Plugins** wizard appears.
4. Click **Next**. The **License Agreement** screen appears.
5. Review the license agreement, and click **Yes**. The **Customer Information** screen appears.
6. Type the user name and company name in the appropriate fields and click **Next**. The **Choose Destination Location** screen appears.
7. Select a location for the QADirector Integration Plugin installation. The default location is: x:\Program Files\Compuware\QADirector Integration Plugins, where x is the drive where Microsoft Windows resides on your computer. To specify a different location, click **Browse** and select an existing folder or type the path name in the **Path** field. Click **Next**.
8. The **Select Features** screen appears. Select the plugins to install from the **Requirements Management** tree view and click **Next**. Selecting any Requirements Management tool automatically installs the API.
9. The **Select Program Folder** screen appears. Select the folder to use for the installation, and click **Next**.
10. The **Start Copying Files** screen appears. Review the settings and click **Next** to begin the installation. To make any changes, click **Back** to return to the previous screen.
11. The **Setup Status** screen appears and displays the progress for the installation. If Adobe Reader is not installed on the machine, a message appears stating that Adobe Reader is required for viewing the online books. Click **OK**. When installation is complete, the **Install QADirector Integration Plugins** displays a message that the installation is finished. Click **Finish** to complete the installation.

CHAPTER 4

Installing the QADirector Database

This chapter describes the steps required to manually install a database. If you are migrating or if you installed a database during the QADirector installation, you do not need to manually install a database.

This section explains the installation process for the QADirector database. Before starting the installation:

- Review the system requirements to ensure the database will install and operate properly for each QADirector component product.
- Compuware recommends that you exit all non-essential Microsoft Windows programs before running the setup program. Some Microsoft Windows programs may interfere with the installation process.
- Back up existing databases. If you have previous component product databases installed, Compuware recommends that you back up your data.

There are two different ways to create the database: automatically with the installation media 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 installation media.

NOTE

Use the database installation from the installation media if you do not have database administration experience.

Installing and Configuring Oracle

Oracle Server Requirements

- Existing database server instance that runs a supported version of Oracle.
- You must create an Oracle service prior to installing the QADirector Oracle database. For more information, see [Creating an Oracle Client Service Name](#) [p. 19].

- Use the following information to configure the database instance:
 - When the Oracle database instance is defined, specify the *Storage Character Set* as iso 8859-1 West European.
 - Set the *NLS_LANGUAGE* 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
```
 - Oracle user ID and password to allow the QADirector administrator to set up the database.

Oracle Login

When installing a database, you are prompted to enter Login Information. For any non-DBO user, the user must have the following minimum permissions:

- The user must have permissions to use the objects created by the installer.
- The user must have the *ALTER ANY SEQUENCE* permission.

NOTE

Tip: For assistance with setting permissions, contact your database administrator.

Installing the Oracle Database

To install the Oracle database:

1. Log on to the database server as a user with administrator permissions.
2. From the installation media, click the **QADirector** tab.
3. Click **Install QADirector Database**. The **QADirector Database Installation** wizard appears.
4. Click **Next**. The **License Agreement** screen appears.
5. Read the license agreement and click **Yes**. The **Database Management System** screen appears.
6. Select Oracle 9i or 10g and click **Next**. The **Oracle Server Login Information** screen appears. Type the following information in the appropriate fields:
 - **Service:** Service name. For more information, see [Creating an Oracle Client Service Name](#) [p. 19].
 - **Login:** User/schema name.
 - **Password:** User password.
7. Click **Next**. The **Database Information** screen appears. Type the following information:
 - **Name:** Create a user account by entering user name for the database.

- **Password:** Enter a password for the user account. A schema with this name is also created.
8. Click **Next**. The **Review Settings** screen appears. Review your settings before starting the installation. Click **Back** to go back and change a setting, or click **Next** to begin the installation. A progress bar appears while the database is being created.
 9. At the end of the installation, the **Command Results** screen 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. Save this log file.
 10. Click **Next**. Click **Finish** to complete installation of the QADirector Oracle database.

Configuring the Oracle Database

This section provides information about configuring QADirector to use an Oracle database. The QADirector installation includes the files to execute scripts and create the required tables. To configure the database tables:

1. Create a user account with database administrator privileges for QADirector.
2. Login to Oracle as the user you just created.
3. Navigate to the `Oracle` directory on the installation media:
 - a) Click **Explore this Media**. A Microsoft Windows Explorer window opens.
 - b) Navigate to: `QM Setup\QADirector\Database\sqlscripts\Oracle`
 - c) Execute the following scripts for QADirector in order:
 - i. `1_orcl.sql`
 - ii. `2_orcl.sql`
 - iii. `4_common.sql`
 - iv. `5_orcl.sql`
4. Log out of Oracle.

Creating an Oracle Client Service Name

To create an Oracle client service name:

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

Installing and Configuring Microsoft SQL Server

Microsoft SQL Server Requirements

- Existing database server instance that runs a supported version of Microsoft SQL Server.
- Use the following specifics to configure the database instance:
 - Microsoft SQL Server must be case insensitive at the time of 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 Microsoft SQL Server, specify the SQL_Latin1_General_CP1_CI_AS collation.
- Microsoft SQL Server user ID and password to allow the administrator to set up the database.

Microsoft SQL Server Login

While installing a database, you are prompted to enter Login Information. The database login account must be assigned to `db_owner` or `db_ddladmin` or a user-defined role that has statement permissions (**Create Table, Drop Table, Alter Table, Create Procedure, Drop Procedure, Create View, Drop View,**) and object permissions (**Insert, Select, Delete, Update, Execute, References**).

NOTE

In SQL 2005, be sure to associate the schema to the user, for example:

```
CREATE SCHEMA <YourSchema> AUTHORIZATION <QADUserID>  
ALTER USER <QADUserID> WITH DEFAULT_SCHEMA = <YourSchema>
```

Installing the Microsoft SQL Server Database

To install the SQL database:

1. Log on to the database server as a user with administrator permissions.
2. From the installation media, click the **QADirector** tab.
3. Click **Install QADirector Database**. The **QADirector Database Installation** wizard appears.
4. Click **Next**. The **License Agreement** screen appears.
5. Read the license agreement and click **Yes**. The **Database Management System** screen appears.
6. Select Microsoft SQL Server 2000 or Microsoft SQL Server 2005 and click **Next**. The **Microsoft SQL Server Login Information** screen appears. Type the following information in the appropriate fields:
 - **Server:** Database server name.

- **Login:** Database user name.
 - **Password:** User password.
7. Click **Next**. The **Database Information** screen appears. You can accept the default name or type the database name. Click **Next**.
 8. The **User Account Information** screen appears. Optionally, you can specify a unique login name and password to use with this database, or leave the fields blank. Click **Next**.
 9. Review your settings before starting the installation. Click **Back** to go back and change a setting, or click **Next** to begin the installation. A progress bar appears during database installation. At the end of the installation, the **Command Results** screen 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. Save this log file.
 10. Click **Next** and then **Finish** to complete the database installation.

Configuring the Microsoft SQL Server Database

This section provides information about configuring QADirector to use a Microsoft SQL Server database. The QADirector installation includes the files to execute scripts and create the required tables. To configure the database tables:

1. Log in to SQL Server as a user with administrative privileges.
2. Navigate to the MSSQL directory on the installation media:
 - a) Click **Explore this Media**. A Microsoft Windows Explorer window opens.
 - b) Navigate to: QM Setup\QADirector\Database\sqlscripts\MSSQL.
 - c) Execute the following scripts in this order:
 - i. 1_mssql.sql
 - ii. 2_mssql.sql
 - iii. 4_common.sql
 - iv. 5_mssql.sql
3. Log out of Microsoft SQL Server.

CHAPTER 5

Configuring QADirector

Configuring QADirector to use Microsoft SQL Server

To configure QADirector for Microsoft SQL Server:

1. Click **Start>All Programs>Compuware >QADirector>System Configuration**. The **QADirector - System Configuration** dialog box appears.
2. Enter appropriate values into the following fields:
 - a) Select **Microsoft SQL Server** from **Database type**.
 - b) Type the server name in the **Server** field.
 - c) Type the database name in the **Database** field.
 - d) Type the schema name in the **Schema** field.
 - e) Type the login ID in the **Login** field.
 - f) Type the login password in the **Password** field.
3. Click **Test Connection** to validate the configuration. If the test is successful click **Connect**. A message verifying the connection appears and the service restarts. When you have successfully connected, click **Close** to close.

Configuring QADirector to use Oracle

To configure QADirector for Oracle on the Web server, you must first create an Oracle Net Service name. For more information, see [Creating an Oracle Client Service Name](#) [p. 19].

NOTE

Compuware recommends using the Oracle driver instead of the Microsoft driver when connecting to the QADirector database.

1. Click **Start>All Programs>Compuware >QADirector>System Configuration**. The **QADirector - System Configuration** dialog box appears.
2. Enter appropriate values into the following fields:
 - a) Select **oracle** from **Database type**.

- b) Type the service name in the **Service** field.
 - c) Type the schema name in the **Schema** field.
 - d) Type the login name in the **Username** field.
 - e) Type the password in the **Password** field.
3. Click **Test Connection** to validate the configuration. If the test is successful click **Connect**. A message verifying the connection appears and the service restarts. When you have successfully connected, click **Close**.

Configuring the Oracle 9.2 Client and Above

1. Locate the Oracle Install folder in the Oracle installation directory.
2. Right-click on the folder and choose **Properties**. The **Properties** dialog box appears.
3. Click **Security**. If the Security tab is not visible, navigate to Microsoft Windows Explorer and click **Tools>FolderOptions>View** and clear the **Use Simple File Sharing** option.
4. Click **Add**. The **Select Users or Groups** dialog box appears. Add the following users with full permissions:
 - a) IWAM_<MachineName>
 - b) IUSR_<MachineName>
 - c) ASPNET
 - d) Everyone
5. Click **OK** and then click **Advanced**. Select **Allow inheritable permissions from parent to propagate to this object**.
6. Click **OK** to exit.

Migration

If you have a database from the previous version of QADirector or CARS Workbench 5.3.x, you can migrate it to QADirector Release 6.0.

The following tips are provided to help ease the transition to the current version of QADirector. For additional information on any of the tips, refer to the online help.

Migration Tips

Before Migration

QADirector 6.0 tracks Project health based on design time cycles and actual execution cycles for Tests. To help track accurate data for quality index calculations, Compuware recommends mapping cycles to Result folders prior to migration, as follows:

1. From the **Project properties** screen, select the **Requirement** tab and click **Map Folder Cycles**.
2. Map the design time **Test Cycles** to the appropriate **Result folders**. You may also need to re-arrange Jobs within the Result folders based on the planned execution criterias.

NOTE

Only Public Result folders can be mapped to design time cycles.

3. Repeat these steps for each project.

After Migration

- All tests in a project are listed in the Tests Center. After migration, all tests are placed in the Default Test Folder. You have the option of creating new Test folders, then using Search Folders to sort and organize the tests.
- Jobs can contain either automated or manual scripts. If there are jobs prior to migration that included both types of scripts, the job is separated into two jobs.

To Migrate the Database

NOTE

-
- Use an account with administrator privileges the first time you login to QADirector after migrating the database.
 - For SQL Server, verify that the **Simple Recovery Model** is selected.
-

1. Install the web server portion of QADirector without installing a database. For more information, see [Installing the QADirector Web Server](#) [p. 12].
2. Install the Test Management Server. For more information, see [Installing the Test Management Server](#) [p. 14].
3. Click **Start>All Programs>Compuware>QADirector>System Configuration**. The **System Configuration** dialog box appears. Enter the connection information for the database to upgrade and click **Test Connection**. If the connection succeeds, a message appears saying that “The connection to the database was successful however the database requires an upgrade.” Click **OK** to continue. For more information, see [Configuring QADirector](#) [p. 23].
4. Click **Upgrade** to upgrade the database to the current version of QADirector. A warning appears, reminding you to backup your database. Click **Yes** to continue.
5. Login to QADirector using the admin account. A progress bar appears with a message that the web server is restarting. A progress bar then appears to show progress of the migration.

NOTE

Depending on the size of the existing database, the migration may take a long time to complete.

6. When the migration is completed, a message appears confirming successful completion of the migration. Enter the database password.
7. Close the **System Configuration** dialog box.

NOTE

If you are using Microsoft SQL Server or Microsoft SQL Server Express, reboot Microsoft SQL Server after migrating.

When the migration has completed:

- Compuware recommends creating a backup of the database after migration. **DO NOT** overwrite the pre-migration backup of the database.
- If you changed the **Recovery Model** prior to migration, check with your database administrator for the appropriate setting.

CHAPTER 6

Accessing QADirector

After installing the Web Server, provide users with the URL for the **Application Links** web page so that they can install and run QADirector. From this web page, each user can install and run the QADirector application, Manual Testing application, and Test Execution Agents.

Starting QADirector

To start QADirector, open a browser and type the following in the Address field:

```
http://<servername>/qadirector/default.aspx
```

Licensing

The license for each client is installed on the web server. The evaluation license supplied with your installation allows you to install the product and run it for a specific period of time without first installing a license. 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. For instructions on installing a license, refer to the *Distributed License Management Installation Guide*, located on the installation media.

Client Installation

The web address of the QADirector installation is given to the testers, who then access the URL to complete the QADirector client installation. To install the QADirector Client:

1. Navigate to the QADirector web server:

```
http://<servername>/qadirector/default.aspx
```
2. Click **QADirector**. The **Application Run Security Warning** appears. Click **Run** to start the installation. A progress bar appears during installation.
3. After installation, the **Login** screen appears. Type the user name and password in the appropriate fields, click **OK**. The default administrator account for QADirector is **admin**, and the password is **admin**, all lowercase.
4. If your environment uses more than one client, the **Open Client** dialog box appears. Select the client to use and click **OK**.

5. QADirector opens and displays the **List of Projects Center**.

Manual Testing Installation

If you have already installed the QADirector client, you can access **Manual Testing** from QADirector by clicking **Tools>Manual Testing**.

- The Manual Testing application is installed on the client, and the user currently logged into QADirector is automatically logged into Manual Testing.
- If a project is open in QADirector, the same project is automatically opened in Manual Testing.

To install the Manual Testing application:

1. Navigate to the QADirector web server:
`http://<servername>/qadirector/default.aspx`
2. Click **Manual Testing**. The **Application Run Security Warning** appears. Click **Run** to start the installation. A progress bar appears during installation.
3. After installation, the **Login** screen appears. Type the user name and password in the appropriate fields, click **OK**. The default administrator account for QADirector is **admin**, and the password is **admin**, all lowercase.
4. If your environment uses more than one client, the **Open Client** dialog box appears. Select the client to use and click **OK**.
5. The **Manual Testing** window opens and you can select a project to being testing.

Installing a Test Execution Agent

A **Test Execution Agent** can be installed on any machine, including the machine running the client portion of QADirector. It can also be installed on a separate machine by itself. To install a **Test Execution Agent**:

1. Navigate to the QADirector web server:
`http://<servername>/qadirector/default.aspx`
2. Click **Install Test Execution Agent**. The **Application Install Security Warning** appears.
3. Click **Install** to start the installation. A progress bar appears during installation.
4. When installation is complete, the **Test Execution Agent** starts and the icon appears in the system tray.

NOTE

The **Test Execution Agent** is stopped when a machine is shut down or re-booted. You can automatically start the **Test Execution Agent** by adding it to the Microsoft Windows Startup options.

CHAPTER 7

Maintaining the Installation

Accessing Maintenance Mode

There are two methods for accessing maintenance mode: from the original installation media or from the **Windows Control Panel**.

From the Installation Media Browser

Click **Install product name Products**, where product name is the name of the product suite that you want to maintain.

From the Windows Control Panel

Open the **Windows Control Panel** and choose **Add/Remove Programs**. The **Add/Remove Programs** dialog box appears. Select the product and click **Change/Remove**.

Following either of these methods, the **InstallShield Wizard** appears, and three maintenance mode options are available: modify, repair, and remove. For more information about these options, see the appropriate section in this chapter.

Modifying the Installation

For products with optional components, you can add or remove components. Rather than uninstall and re-install the product, you can modify your installation. To add or remove optional components:

1. Access the **InstallShield Wizard**. For more information, see [Accessing Maintenance Mode](#) [p. 29].
2. Select **Modify** and click **Next**. The **Select Components** screen appears allowing you to add or remove components. Select the check box next to each component to add and clear the check box next to each component to remove. Click **Next**. Setup adds or removes the appropriate components.

3. If you are prompted to restart your computer, you can restart it now (recommended) or to restart it later. You must restart the computer before accessing the program again. Click **Finish** to complete the maintenance.

Repairing the Installation

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

1. Access the InstallShield Wizard. For more information, see [Accessing Maintenance Mode](#) [p. 29].
2. Select **Repair** and click **Next**. Setup repairs the specified product. If you are prompted to restart your computer, you can restart it now (recommended) or to restart it later. You must restart the computer before accessing the program again.
3. Click **Finish** to complete the maintenance.

Removing the Web Server

You have the option of removing the QADirector Web Server. To remove the installation:

1. Access the **InstallShield Wizard**. For more information, see [Accessing Maintenance Mode](#) [p. 29].
2. Select **Remove** and click **Next**. The selected files are removed from the web server.

NOTE

Removing the **Client** or the **Test Execution Agent** affects only the selected computer. Removing other components of QADirector affects the entire installation and all users.

3. If you are prompted to restart your computer, you can restart it now (recommended) or to restart it later. Click **Finish** to complete the maintenance.

Removing Test Execution Agents

The **Test Execution Agent** can be removed using the Add/Remove Programs option in the **Windows Control Panel**. **Test Execution Agents** are installed separately on each machine, and need to be uninstalled on each machine as well.

Removing the Clients

To remove the client from a machine, delete the following directory:

```
C:\Documents and Settings\\Local Settings\Apps\2.0
```

NOTE

Removing this directory deletes all smart client applications currently on the machine. This directory needs to be deleted from each client machine.

APPENDIX A

Additional Installation and Configuration

Installing QADirector on a Foreign OS

Additional permissions are needed to install QADirector on an operating system using a language other than English. The user performing the installation needs full access to the following directories on the web server:

```
<Installation Directory>\Logs  
<Installation Directory>\TMServices\Temp
```

Configuring Microsoft Windows 2003 for QADirector

Microsoft Windows 2003 requires additional steps in order to use the Internet Information Service (IIS) Web server with QADirector. To configure IIS on the Microsoft 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 **Internet Data Connector** exists, select **Allow**.
5. If the **ASP.NET v2.0** option exists, select **Allow**.
6. If **ASP.NET v2.0** option does not exist:
 - a) Open the Microsoft Windows **Add/Remove Programs** utility. Click **Add/Remove Windows Components**. The **Windows Component Wizard** opens.
 - b) Select **Application Servers** from the **Components** list and click **Details**. Select **ASP.NET** from the **Subcomponents** list and click **OK**. Click **Next**.
 - c) Open **Internet Information Service Manager**. Select **Web Service Extensions** option. Select **Allow for ASP.NET v2.0** option.
7. Click **OK**.

Installing the QADirector Application Server

If you are only installing the QADirector Application Server with no other features selected, a message box displays the IIS7 features to enable for QADirector to function properly. The message box displays the necessary features similar to the way the features are listed in the Windows Features dialog box, accessed from the **Windows Control Panel**.

NOTE

Refer to the Microsoft Windows help documentation for information on enabling Windows Features in Windows Vista.

The Windows Features to enable appear in the message box as follows:

```
World Wide Web Services
  Application Development Features:
    - Asp
    - ASP.NET
    - ISAPI Filter
    - ISAPI Extensions
    - Server Side Includes
```

Cancel the installation, close the installation media window, and open the **Windows Control Panel** to enable these Microsoft Windows Features, as explained in the Microsoft Windows Vista help documentation.

File-AID/CS Integration Components

A message box displays the IIS7 features to enable. The message box displays the necessary features similar to the way that the features are listed in the **Windows Features** dialog box, accessed from the **Windows Control Panel**.

NOTE

See Microsoft Windows help documentation for information on enabling Windows Features in Windows Vista.

The **Windows Features** to enable appear in the message box as follows:

```
Web Management Tools:
  - IIS 6 Management Compatibility

World Wide Web Services
  Application Development Features:
    - Asp
    - ASP.NET
    - ISAPI Filter
    - ISAPI Extensions
    - Server Side Includes

Common HTTP Features
  - Directory Browsing
  - HTTP Errors
  - Static Content
```

Cancel the installation, close the installation media window, and open the **Windows Control Panel** to enable these Microsoft Windows Features, as explained in the Microsoft Windows Vista help documentation.

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