HP QuickTest Professional

Software Version: 10.00

Installation Guide

Manufacturing Part Number: T6513-90038 Document Release Date: January 2009

Software Release Date: January 2009



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This guide's title page contains the following identifying information:

- Software Version number, which indicates the software version.
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- Enter into discussions with other software customers
- Research and register for software training

Most of the support areas require that you register as an HP Passport user and sign in. Many also require a support contract.

To find more information about access levels, go to:

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To register for an HP Passport ID, go to:

http://h20229.www2.hp.com/passport-registration.html

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Welcome to This Guide

Welcome to the *HP QuickTest Professional Installation Guide*. This guide describes how to install and set up QuickTest Professional on a standalone computer.

This chapter includes:

- ➤ How This Guide Is Organized on page 7
- ➤ Who Should Read This Guide on page 8
- ➤ QuickTest Professional Online Documentation on page 8
- ➤ Additional Online Resources on page 10

How This Guide Is Organized

This guide contains the following chapters:

Chapter 1 Before You Install

Lists the system requirements and access permissions required to install and run QuickTest Professional.

Chapter 2 Setting Up QuickTest Professional

Describes how to install QuickTest on a local computer, and how to set up and run a silent installation procedure.

Chapter 3 Working with QuickTest Professional Licenses

Describes the different license types and how to install them. It also describes how to use the commuter license mechanism.

Chapter 4 Maintaining and Uninstalling QuickTest Professional

Describes how to uninstall QuickTest, how to uninstall and install specific QuickTest features, and how to repair an existing installation.

Who Should Read This Guide

This guide is intended for users who need to install and set up QuickTest Professional.

Readers of this guide should have some knowledge of system administration.

QuickTest Professional Online Documentation

QuickTest Professional includes the following online documentation:

Readme provides the latest news and information about QuickTest. Select **Start > Programs > QuickTest Professional > Readme**.

HP QuickTest Professional Installation Guide explains how to install and set up QuickTest. Select **Help > Printer-Friendly Documentation > HP QuickTest Professional Installation Guide**.

HP QuickTest Professional Tutorial teaches you basic QuickTest skills and shows you how to design tests for your applications. Select **Help > QuickTest Professional Tutorial**.

Product Feature Movies provide an overview and step-by-step instructions describing how to use selected QuickTest features. Select **Help > Product Feature Movies**.

Printer-Friendly Documentation displays the complete documentation set in Adobe portable document format (PDF). Online books can be viewed and printed using Adobe Reader, which can be downloaded from the Adobe Web site (http://www.adobe.com). Select **Help > Printer-Friendly Documentation**.

QuickTest Professional Help includes:

- ➤ What's New in QuickTest Professional describes the newest features, enhancements, and supported environments in the latest version of QuickTest.
- ➤ **HP QuickTest Professional User Guide** describes how to use QuickTest to test your application.
- ➤ HP QuickTest Professional for Business Process Testing User Guide provides step-by-step instructions for using QuickTest to create and manage assets for use with Business Process Testing.
- ➤ HP QuickTest Professional Add-ins Guide describes how to work with supported environments using QuickTest add-ins, and provides environment-specific information for each add-in.
- ➤ HP QuickTest Professional Object Model Reference describes QuickTest test objects, lists the methods and properties associated with each object, and provides syntax information and examples for each method and property.
- ➤ HP QuickTest Professional Advanced References contains documentation for the following QuickTest COM and XML references:
 - ➤ HP QuickTest Professional Automation Object Model provides syntax, descriptive information, and examples for the automation objects, methods, and properties. It also contains a detailed overview to help you get started writing QuickTest automation scripts. The automation object model assists you in automating test management, by providing objects, methods and properties that enable you to control virtually every QuickTest feature and capability.
 - ➤ HP QuickTest Professional Test Results Schema documents the test results XML schema, which provides the information you need to customize your test results.
 - ➤ HP QuickTest Professional Test Object Schema documents the test object XML schema, which provides the information you need to extend test object support in different environments.
 - ➤ HP QuickTest Professional Object Repository Schema documents the object repository XML schema, which provides the information you need to edit an object repository file that was exported to XML.

- ➤ HP QuickTest Professional Object Repository Automation documents the Object Repository automation object model, which provides the information you need to manipulate QuickTest object repositories and their contents from outside of QuickTest.
- ➤ VBScript Reference contains Microsoft VBScript documentation, including VBScript, Script Runtime, and Windows Script Host.

To access the QuickTest Professional Help, select **Help > QuickTest Professional Help**. You can also access the QuickTest Professional Help by clicking in selected QuickTest windows and dialog boxes and pressing F1. Additionally, you can view a description, syntax, and examples for a QuickTest test object, method, or property by placing the cursor on it and pressing F1.

Additional Online Resources

Mercury Tours sample Web site is the basis for many examples in this guide. The URL for this Web site is <u>newtours.demoaut.com</u>.

The **HP Software Web site** provides you with the most up-to-date information on HP Software products. This includes new software releases, seminars and trade shows, customer support, and more. The URL for this Web site is www.hp.com/go/software.

The following additional online resources are available from the QuickTest Professional **Help** menu:

Troubleshooting & Knowledge Base accesses the Troubleshooting page on the HP Software Support Web site where you can search the Self-solve knowledge base. Choose **Help > Troubleshooting & Knowledge Base**. The URL for this Web site is http://h20230.www2.hp.com/troubleshooting.isp.

HP Software Support accesses the HP Software Support Web site. This site enables you to browse the Self-solve knowledge base. You can also post to and search user discussion forums, submit support requests, download patches and updated documentation, and more. Choose **Help > HP Software Support**. The URL for this Web site is www.hp.com/go/hpsoftwaresupport.

Most of the support areas require that you register as an HP Passport user and sign in. Many also require a support contract.

To find more information about access levels, go to:

http://h20230.www2.hp.com/new_access_levels.jsp

To register for an HP Passport user ID, go to:

http://h20229.www2.hp.com/passport-registration.html

Welcome to This Guide

Before You Install

Welcome to HP QuickTest Professional, the advanced keyword-driven testing solution for functional test and regression test automation. QuickTest Professional is part of HP Quality Center. This guide describes everything you need to know to install QuickTest Professional on a standalone computer.

Before you install QuickTest Professional, confirm that your computer meets all system requirements. For details, see the *HP QuickTest Professional Readme*. For the most updated listing of supported system configurations, visit www.hp.com/go/QTP_SysReq.

You can upgrade to QuickTest Professional 10.00 only from QuickTest version 9.5. If you are using a version earlier than QuickTest 9.5, you must first uninstall your current QuickTest version and the QuickTest Add-in for Quality Center. For more information, see "Considerations When Upgrading from an Earlier Version of QuickTest" on page 15.

You must not run any other installation at the same time as you run the QuickTest Professional installation. In addition, you should ensure before you install QuickTest that your computer is not in a state that requires a restart. If this is the case, the installation will not run.

This chapter includes:

- ➤ Setting Required Access Permissions on page 14
- ➤ Considerations When Upgrading from an Earlier Version of QuickTest on page 15

Setting Required Access Permissions

You must make sure the following access permissions are set to install and run QuickTest Professional.

Permissions Required to Install QuickTest Professional

You must have administrator permissions on the computer on which you are installing QuickTest. You also need administrator rights for any other installation tasks, for example, uninstalling QuickTest, repairing or modifying the installation, or installing a patch.

In some circumstances, the installation may require a system restart. If a computer restart is required, your administrator permissions must include the part of the installation that occurs after the restart.

Permissions Required to Run QuickTest Professional

You must have the following file system permissions:

- ➤ Full read and write permissions for all the files and folders under the folder in which QuickTest is installed
- ➤ Full read and write permissions to the Temp folder
- ➤ Read permissions to the Windows folder and to the System folder

You must have the following registry key permissions:

- ➤ Full read and write permissions to all the keys under HKEY_CURRENT_USER\Software\Mercury Interactive
- ➤ Read and Query Value permissions to all the HKEY_LOCAL_MACHINE and HKEY_CLASSES_ROOT keys

Permissions Required When Working with Quality Center

You must have the following permissions to use QuickTest with Quality Center:

- ➤ Full read and write permissions to the Quality Center cache folder
- ➤ Full read and write permissions to the QuickTest Add-in for Quality Center installation folder

Considerations When Upgrading from an Earlier Version of QuickTest

- ➤ You can upgrade to QuickTest Professional 10.00 only from QuickTest version 9.5. The previous version of QuickTest is automatically uninstalled.
- ➤ If you are upgrading to QuickTest Professional 10.00 from a version earlier than QuickTest 9.5, you must first uninstall your current QuickTest version and the QuickTest Add-in for Quality Center. Otherwise, the installation process will not run. At the end of the uninstall process, restart your computer and install the new version and add-in.

Note: The Save and Restore Settings utility enables you to save existing customization settings and registry keys before you uninstall an old QuickTest version, and then restore them after you install the new version. For more information, see "Saving and Restoring Your QuickTest Settings" on page 105.

- ➤ License data is retained when upgrading from QuickTest Professional version 9.5. However, if you have not installed a license before the upgrade, you must run the QuickTest Professional License Wizard as part of the installation. For more information, see step 11 on page 32.
- ➤ All add-ins that were installed in version 9.5 are identified during the upgrade and checked by default in the feature selection page of the installation. You can add or remove add-ins during the installation.
- ➤ The layout of the main QuickTest user interface, such as the size and position of various panes, is retained.
- ➤ All settings defined in **Tools** > **Options** are retained.
- ➤ Recent tests opened by QuickTest before the upgrade are displayed in the File menu.
- ➤ Connection settings to Quality Center are not retained by the upgrade process. If required, you must reconnect to Quality Center after the installation. To install the latest version of the Quality Center Add-in, you must manually uninstall the previous version of the Add-in before installing the latest version.

Chapter 1 • Before You Install

Setting Up QuickTest Professional

When you install QuickTest Professional, you must know which features and add-ins to you want to use. The installation process automatically installs QuickTest and the Web, Visual Basic, and ActiveX Add-ins, and also enables you to select which additional features and add-ins to install. For more information on add-ins, see the *HP QuickTest Professional Add-ins Guide*.

You must also know which type of license you want to install. A **Seat** license is a permanent license that is specific to the computer on which it is installed, and a **Concurrent** license is a per session license that is available only if your company has an HP Functional Testing Concurrent License Server. For more information, see "Understanding the QuickTest Professional Setup for Different License Types" on page 18.

Your QuickTest Professional 10.00 license enables all QuickTest features, including the use of all QuickTest add-ins. You can use the latest released version of all QuickTest add-ins with QuickTest Professional. If upgrading from a previous version, only previously licensed add-ins will be available.

You can also set up QuickTest to install silently (in the background), and on remote computers.

Note: When you open QuickTest Professional, a silent check for updates to the application is performed in the background. You can check online at any time for available updates to QuickTest by choosing **Start** > **Programs** > **QuickTest Professional** > **Check for Updates**. You can then choose which updates you want to download and (optionally) install.

This chapter includes:

- ➤ Understanding the QuickTest Professional Setup for Different License Types on page 18
- ➤ Installing QuickTest Professional on page 20
- ➤ Working with the Additional Installation Requirements Utility on page 37
- ➤ Browsing the QuickTest Professional Program Folder on page 46
- ➤ Setting Up a Silent Installation on page 47

Understanding the QuickTest Professional Setup for Different License Types

The general procedures for installing QuickTest Professional and activating a license differ for the various license types: **Seat**, and **Concurrent**. This section summarizes the procedures required for the different license types and directs you to the detailed information for each step.

Setting Up QuickTest Professional with a Seat License

This section summarizes the procedure for setting up QuickTest Professional with a seat license. A seat license is a permanent license that is specific to the computer on which it is installed. The seat license includes a 14-day demo period during which you must contact HP to obtain a permanent seat license key.

Note: Seat licenses are not available for Windows 2000 server, Windows 2003, and Windows 2008 server.

To set up QuickTest Professional with a seat license:

- **1** Run the QuickTest Professional setup program. Select **Run License Installation Wizard** in the Additional Installation Requirements screen. Then, in the License Type screen, select **Seat**. For more information, see step 13 of "Installing QuickTest Professional" on page 33.
- **2** Run QuickTest Professional. Click **Install License** on the displayed warning message and request a seat license key from HP, as described in "Requesting a Seat License Key" on page 58.
- **3** After you receive the license key from HP, run the license installation wizard to install your license key. For more information, see "Installing a Seat License Key" on page 61.

Setting Up QuickTest Professional with a Concurrent License

This section summarizes the procedure for setting up QuickTest Professional with a concurrent license. A concurrent license is a per session license that is available only if your company has an HP Functional Testing Concurrent License Server, your computer has access to that server, and a free concurrent license is available for your use.

To set up QuickTest Professional with a concurrent license:

- 1 Install the HP Functional Testing Concurrent License Server on a network computer and activate the HP Functional Testing Concurrent License Server license. For more information, see the HP Functional Testing Concurrent License Server Installation Guide. This guide is installed on the computer where the HP Functional Testing Concurrent License Server is installed, and is called MerLicSvr.pdf.
- **2** Run the QuickTest Professional setup program on each client computer. In the License Type screen, select **Concurrent License**. For more information, see step 13 of "Installing QuickTest Professional" on page 33.

3 Begin using QuickTest Professional. When QuickTest Professional opens, it automatically searches for the specified license server and connects to it.

Note: If your computer cannot find and connect to the license server, you may need to set the LSHOST or LSFORCEHOST variable. For more information, see "Setting the LSHOST or LSFORCEHOST Variable" on page 74.

Installing QuickTest Professional

Your QuickTest Professional DVD includes an installation program that guides you through the installation process.

You must be logged on with Administrator privileges to install QuickTest Professional. In addition, you must install QuickTest Professional on a local drive and not on a network drive.

Considerations for Installing QuickTest Professional 10.00

- ➤ If you are upgrading to QuickTest Professional 10.00 from QuickTest Professional version 9.2 or earlier, you need to first uninstall your current QuickTest version and the QuickTest Add-in for Quality Center. Otherwise, the installation process will not run. At the end of the uninstall process, restart your computer and install the new version and add-in. The Save and Restore Settings utility enables you to save existing customization settings and registry keys before you uninstall an old QuickTest version, and then restore them after you install the new version. For more information, see "Saving and Restoring Your QuickTest Settings" on page 105.
- ➤ If you are upgrading to QuickTest Professional 10.00 from version 9.5, the installation wizard automatically upgrades your previous version of QuickTest and installs QuickTest Professional 10.00. The upgrade retains your existing configuration settings and preferences, such as your Options settings and window layout, as well as all your tests.

- ➤ If you have Astra QuickTest and/or Astra LoadTest installed, you must uninstall them before installing QuickTest Professional. After you install QuickTest Professional, you can then reinstall your other HP products.
- ➤ If the HP QuickTest Professional 10.00 Files in Use dialog box is displayed during the installation process:
 - ➤ Close the applications listed in the dialog box and click **Try Again**.
 - ➤ If the HP QuickTest Professional 10.00 Files in Use dialog box is displayed again, click the **Exit Installation** button and restart your computer. After the restart is complete, do not open any applications. Run the QuickTest Professional Setup program again.
 - ➤ If after restarting, the HP QuickTest Professional 10.00 Files in Use dialog box lists Explorer as the open application, click **Continue**. If prompted, restart your computer at the end of the installation.

To install QuickTest Professional:

- **1** Close any instances of QuickTest Professional. It is also recommended to close all other open applications.
- **2** Insert the QuickTest Professional installation DVD into the DVD drive. If the DVD drive is on your local computer, the QuickTest Professional Setup window opens.

If you are installing from a network drive, double-click **setup.exe** in the root folder of the DVD. The Setup window opens.



- ➤ To open a PDF copy of the *HP QuickTest Professional Installation Guide*, which is suitable for printing, click **Installation Guide**. To download Adobe Reader click **Download Adobe Reader**.
- ➤ To view the Readme file, click **Readme**. To download Adobe Reader click **Download Adobe Reader**.
- ➤ If you do not install the **QuickTest Add-in for Quality Center**, you can perform only the following QuickTest operations in Quality Center:
 - ➤ Running tests remotely.
 - ➤ Configuring test execution parameters.

To perform any other operations on QuickTest assets in Quality Center, you must install the **QuickTest Add-in for Quality Center**. For example, the add-in enables you to:

- ➤ View test and component scripts from Quality Center.
- ➤ View run results in the Test Results window from Quality Center.
- ➤ Create new tests and components from Quality Center.
- ➤ Perform other operations in Quality Center that involve QuickTest user interface elements.

To enable these features in the Quality Center client installed on your computer, click **QuickTest Add-in for Quality Center**.

For additional information on the QuickTest Add-in for Quality Center, or to download the latest version of the add-in, see the QuickTest Professional Add-in screen in Quality Center (Help > Add-ins Page > More HP Quality Center Add-ins > QuickTest Professional Add-in).

Note: QuickTest Professional 10.00 supports integration with Quality Center 9.0 or later. For Business Process Testing, QuickTest Professional 10.00 supports integration only with Quality Center 10.00. You can install the Quality Center Add-in with all currently supported versions of Quality Center. See the *HP QuickTest Professional Readme* for more information about supported versions.

➤ To install Add-in Extensibility SDK support for Web, Java, or .NET Windows Forms, click QuickTest Add-in Extensibility SDKs and select the required option.

- ➤ The utilities, features, and information that were available in the **QuickTest Plus Toolkit** in previous versions of QuickTest have been incorporated into the main QuickTest Professional application. These include:
 - ➤ Code and SDK samples, which can now be installed by selecting **Samples** in the Select Features screen during the QuickTest custom installation. For more information, see step 8 on page 29.
 - ➤ Object repository merge functionality, which is now available in the QuickTest Object Repository Merge Tool.
 - ➤ External Action Call Modification utility, which is now handled by the QuickTest Missing Resources pane.
 - ➤ The Register Browser Control utility.
 - ➤ The License Validation utility.

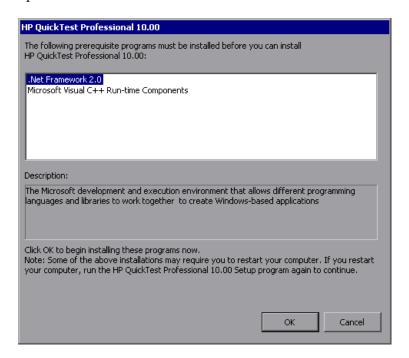
For more information about these utilities and features, and answers to frequently asked questions, see the *HP QuickTest Professional User Guide* and the *HP Software Self-solve knowledge base* (http://www.hp.com/go/hpsoftwaresupport).

- ➤ To install the HP Functional Testing Concurrent License Server, or to install a concurrent license on the server, click Functional Testing License Server Setup and select the required option. From the dialog box that opens you can also open the HP Functional Testing Concurrent License Server Installation Guide.
- ➤ To download Adobe Reader click **Download Adobe Reader**.
- ➤ To open the contact information page on the HP Web site (http://welcome.hp.com/country/us/en/prodserv/software.html), click Contact HP in the upper left corner.

- ➤ To open the HP Software Support Web site (http://www.hp.com/go/hpsoftwaresupport), click **Support**.
- ➤ To view the contents of the QuickTest Professional DVD, click Browse DVD.
- ➤ To exit the QuickTest Professional Setup window, click **Exit**.
- **3** Click **QuickTest Professional Setup** to start the QuickTest Professional Setup program.

If you are upgrading from version 9.5, a message is displayed informing you that a previous version of QuickTest exists on your computer and that the setup program will upgrade the previous version, saving all your settings and tests, before continuing with the installation. The upgrade process saves all your settings, including your QuickTest window layout and all your settings in the Options and Settings dialog boxes. In addition, it saves the files and settings that are listed in the section on Saved Files and Setting in "Saving and Restoring Your QuickTest Settings" on page 105. Click **OK** to continue.

4 QuickTest requires specific software, for example, .NET Framework 2.0, to be installed before you install QuickTest. If Setup finds that the prerequisite software is not already installed on your computer, the following screen opens.



Tip: Select an item in the list to display a description of the program.

Click **OK** and follow the on-screen instructions to install the listed software before continuing with the QuickTest installation. If you click **Cancel**, Setup will stop because QuickTest cannot be installed without the prerequisite software.

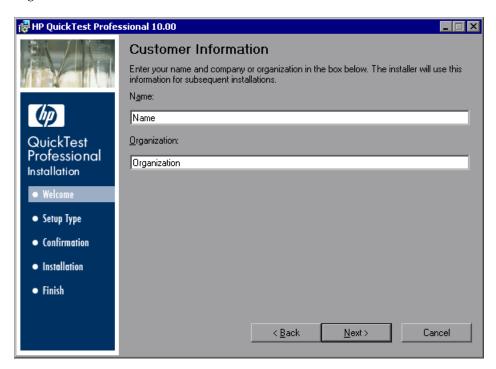
In some situations, you may be prompted to restart your computer after installing the prerequisite software. To continue with the installation after restarting your computer, run the Setup program again.

- **5** The Welcome to the HP QuickTest Professional 10.00 Setup Wizard opens. Click **Next** to proceed.
- **6** The License Agreement screen opens. Read the agreement.



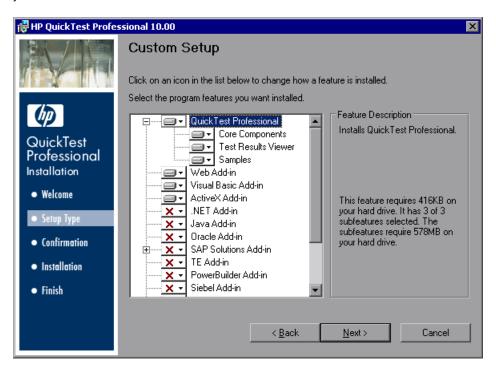
To install QuickTest Professional, you must accept the terms of the license agreement by selecting **I Agree** and clicking **Next**.

7 In the Customer Information screen, type your name and the name of your organization.



Click Next to proceed.

8 In the Custom Setup screen, select the QuickTest components and add-ins you want to install.



Note: Loading QuickTest add-ins enables QuickTest to work with the corresponding environments. You can install the add-ins you require when you install QuickTest Professional, or you can install them at a later time by running the installation again. When QuickTest opens, you can choose which of the installed add-ins you want to load using the QuickTest Professional Add-In Manager dialog box. For more information on the Add-in Manager, see the *HP QuickTest Professional Add-ins Guide*.

Chapter 2 • Setting Up QuickTest Professional

You can select an item in the list to see a description of the feature as well as the space requirement for the feature on your drive.

Click an icon to view a menu and select how that feature is installed on your computer. The following options are available, depending on the feature:

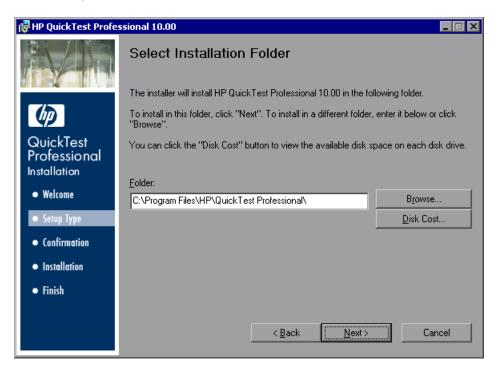
- ➤ Will be installed on local hard drive. Installs the selected feature on your local hard drive. Sub-features of the selected feature are not installed.
 - ➤ Entire feature will be installed on local hard drive. Installs the entire selected feature and its sub-features on your local hard drive.
- ➤ Entire feature will be unavailable. Excludes the feature from the installation and it is not available in QuickTest.

Notes:

- ➤ QuickTest Professional, its Core Components, and the Test Results Viewer option, cannot be deselected.
- ➤ To work with the QuickTest Professional Java Add-in and the WinRunner Java and/or Oracle Add-in 7.6 on the same computer, you must install the Java/Oracle patch for WinRunner 7.6 (WR76Patch.exe, located in the WR76DualAgentPatch folder on the QuickTest Professional installation DVD).

Click **Next**. **If you are upgrading from version 9.5**, the upgrade installation automatically installs QuickTest Professional 10.00 in the same folder in which the previous version of QuickTest was installed. Proceed to step 10.

9 In the Select Installation Folder screen, choose the location where you want to install QuickTest Professional.



- ➤ To select a different location, click **Browse**, choose a folder, and then click **OK**. You must specify a folder on a mapped drive (not a UNC path). If the destination folder does not exist, the setup program asks if you want it to be created.
- ➤ To view the required and available space on each of your mapped drives, click **Disk Cost**.

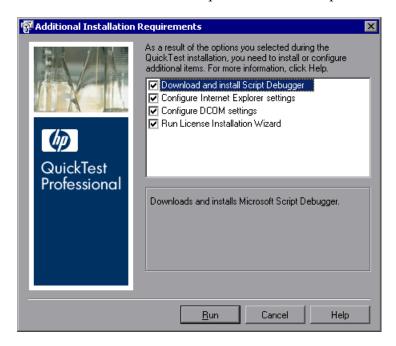
Ensure that you install QuickTest Professional on a drive with a sufficient amount of free disk space. For more information, see the system requirements, as described in the *HP QuickTest Professional Readme*.

Click **Next** to proceed.

10 The Confirm Installation screen opens. Click **Next** to proceed, and the installation process begins. The Installing HP QuickTest Professional 10.00 screen displays the progress of the installation.

11 When the installation is complete, click **Finish**.

The Additional Installation Requirements screen opens.



In addition to options to configure Internet Explorer and DCOM settings, and to run the License Wizard, the Additional Installation Requirements screen displays any prerequisite software that must be installed or configured to work with QuickTest, according to the options selected during installation.

Select the required installation options. For more information on these options, see "Working with the Additional Installation Requirements Utility" on page 37.

Tip: Select an option name to display a description of the feature.

- Click **Run** in the Additional Installation Requirements screen to install or configure your selections.
- If you selected to run the **License Installation Wizard**, the QuickTest Professional License Installation License Type screen opens.



Chapter 2 • Setting Up QuickTest Professional

Select a license type. (For information on the process required to set up various license types, see "Understanding the QuickTest Professional Setup for Different License Types" on page 18. For information on working with licenses, see "Working with QuickTest Professional Licenses" on page 55.)

➤ **Seat license**. Uses a license created for this computer.

A seat license is a permanent license that is specific to the computer on which it is installed. When you select this option, you also get a 14-day demo period during which you must request a permanent seat license key from the HP Webware License Key Delivery Service. After you receive the seat license key, you can activate it to work with QuickTest Professional permanently. For more information, see "Requesting a Seat License Key" on page 58.

If you select **Seat license**, proceed to step 14 on page 35.

➤ Concurrent license. Uses a network-based license.

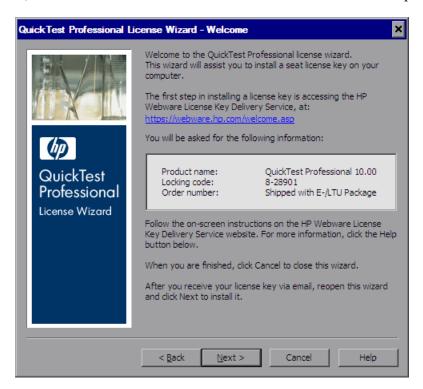
A license server on the network regulates the number of concurrent QuickTest Professional users. You can work with a concurrent license only if a concurrent license server is installed on your local network, and that license server has at least one available license that is not currently in use.

Click **Next** to open the License Installation - Concurrent License Server dialog box and, if you know the name of the concurrent license server to which you want to connect, you can specify it in the text box. You can click **Check Connection** to verify that the license server is accessible from your network.

If you select this option but do not specify a concurrent license server, QuickTest will try to locate one for you when you open QuickTest.

For more information, see the *HP Functional Testing Concurrent License Server Installation Guide*.

14 If you chose to install QuickTest with a seat license, the QuickTest Professional License Installation - Welcome screen opens.

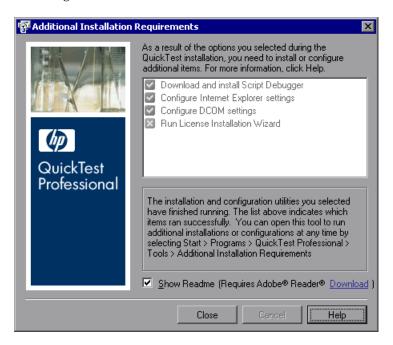


If you have a seat license key, proceed to step 3 on page 64 to install the seat license key.

If you do not have a license key, make a record of the displayed locking code for your computer. You will need it to request your license key. Click the link on the QuickTest Professional License Installation - Welcome screen for the **HP Webware License Key Delivery Service** to request your license key. Follow the instructions as described in "Requesting a License Key via the HP Webware License Key Delivery Service" on page 60 and then click **Cancel**. (You will be prompted to install the seat license when you open QuickTest.)

15 The installation continues with installing the options you selected in the Additional Installation Requirements screen. When these options are installed and configured on your computer, the screen reopens.

A checkmark is displayed next to the options that were successfully installed or configured.



Tip: You can run the Additional Installation Requirements utility at any time by choosing **Start** > **Programs** > **QuickTest Professional** > **Tools** > **Additional Installation Requirements**.

- 16 Click Show Readme if you want the *HP QuickTest Professional Readme* to open at the end of the installation. You must have Adobe Reader installed to view the Readme file. If you have Adobe Reader installed on your computer, this check box is selected by default. Otherwise, the check box is not selected. Click the **Download** link to download Adobe Reader.
- **17** Click **Close**. The Installation Complete screen opens.
- 18 Click Finish.

Note: In some situations, you may be prompted to restart your computer after you have installed QuickTest. It is recommended that you restart your computer as soon as possible if you are prompted to do so. Delaying the system restart may result in unexpected QuickTest behavior.

Working with the Additional Installation Requirements Utility

Several prerequisites for working with QuickTest must be installed and configured after QuickTest is installed. In addition, to take advantage of QuickTest Professional debugging and remote access features, certain Internet Explorer and DCOM settings need to be configured.

The Additional Installation Requirements screen displays any prerequisite software that must be installed or configured to work with QuickTest, according to the options selected when QuickTest is installed or the installation is modified. For more information, see "Additional Installation Prerequisites" on page 38.

Note: If required, you can configure the Internet Explorer and DCOM settings manually.

The Additional Installation Requirements utility enables you to configure the required settings automatically, and to run the License Installation Wizard and Microsoft Debugger installation during the QuickTest installation.

- ➤ Select an option name in the Additional Installation Requirements dialog box to display a description of the feature.
- ➤ Select the check box of one or more required options and click **Run**.

You can run the Additional Installation Requirements utility at any time by choosing Start > Programs > QuickTest Professional > Tools > Additional Installation Requirements. In addition to the options to configure Internet Explorer and DCOM settings, and to run the License Wizard, the dialog box displays any prerequisite software that is still required to be installed to work with QuickTest.

Additional Installation Prerequisites

Additional installation requirements listed in the Additional Installation Requirements dialog box can include the following, according to the options selected when QuickTest is installed or the installation is modified:

- ➤ Microsoft WSE 3.0 Runtime. Provides a foundation for running applications based on published Web services specifications. This item is displayed only when not currently installed, and when the Web Services Add-in is installed.
- ➤ Microsoft SOAP Toolkit 3.0. Provides Web Services capabilities for COM components and applications. This item is displayed only when not currently installed, and when the Web Services Add-in is installed.
- ➤ Microsoft Script Debugger. Provides the debugging environment that QuickTest uses during test runs. This item is displayed only when not currently installed.
- ➤ Terminal Emulator Wizard. Provides a wizard that enables you to configure terminal emulator identifying settings. This item is displayed only when the Terminal Emulator (TE) Add-in is installed.
- ➤ Stingray Wizard. Provides a wizard that enables you configure QuickTest to work with your Stingray application. This item is displayed only when the Stingray Add-in is installed.

In addition, the Additional Installation Requirements utility enables you to perform the following:

➤ Configure Internet Explorer settings. Select this check box to automatically configure the Internet Explorer options that enable QuickTest to use the Microsoft Script Debugger application during test runs.

You can configure these options manually before running QuickTest. In Internet Explorer, select **Tools > Internet Options > Advanced**. Then select **Disable script debugging** and **Enable third-party browser extensions**.

➤ Configure DCOM settings. Select this check box to automatically change DCOM permissions and security settings and open a firewall port on your QuickTest computer.

These changes are only required if you want to run QuickTest tests remotely from Quality Center, and are running QuickTest on Windows XP Service Pack 2 or later, Windows 2003 Server, or Windows Vista.

For more information about the changes that QuickTest makes when you choose to set these options automatically, see the steps described in "Modifying DCOM Permissions Manually to Enable Remote QuickTest Execution" on page 40.

If you choose not to automatically set remote execution options during the QuickTest installation, you can, before attempting to remotely run QuickTest tests from Quality Center:

- ➤ Run the Additional Installation Requirements utility at a later time from Start > Programs > QuickTest Professional > Tools > Additional Installation Requirements.
- ➤ Make the required changes manually. For more information on making these changes manually, see "Modifying DCOM Permissions Manually to Enable Remote QuickTest Execution" on page 40.
- ➤ Make the required changes automatically, by running the Remote Agent <**QuickTest Professional installation**>\bin\AQTRmtAgent.exe at a later time.

Note: Contact Microsoft Support if you have questions regarding changes in DCOM securities on Windows XP Service Pack 2 or later, Windows 2003 Server, or Windows Vista.

➤ Run License Installation Wizard. Select this check box to run the QuickTest Professional License Wizard.

Note: This option is not automatically selected when upgrading from QuickTest Professional version 9.5 or later, because license data is retained. However, if you have not installed a license before the upgrade, select this check box to run the QuickTest Professional License Wizard.

Modifying DCOM Permissions Manually to Enable Remote QuickTest Execution

This section describes how to manually change DCOM permissions and open firewall ports to enable remote execution of QuickTest. These changes are only required if you are running QuickTest on Windows XP Service Pack 2, Windows 2003 Server Service Pack 1 or later, or Windows Vista.

If you chose to automatically make these changes during the QuickTest installation, you do not need to make these manual changes. If you do not intend to execute QuickTest tests remotely from Quality Center, you do not need to make these manual changes.

Note: The security changes described in this section should be performed by your System Administrator. Please contact Microsoft Support if you have questions regarding changes in DCOM securities on Windows XP Service Pack 2, Windows 2003 Server Service Pack 1 or later, or Windows Vista.

Tip: The HP Support Knowledge Base provides utilities to assist you in making these changes. For more information, see the HP Software Self-solve knowledge base (http://h20230.www2.hp.com/selfsolve/document/KM196144) and search for Problem ID 43245. The Knowledge Base area requires that you register as an HP Passport user and sign in.

In addition to following the procedures below, before remotely running a test you must also make sure that the **Allow other HP products to run tests and components** option is selected in the Run tab of the QuickTest Options dialog box. For more information, see the *HP QuickTest Professional User Guide*.

To enable Windows to authenticate the remote user:

- **1** Add both computers to the same domain.
- **2** For domain users logged into both computers, add these domain users to the Local Administrators group on the QuickTest computer. This enables Windows to authenticate the remote user executing the tests against the DCOM objects.

To configure the Windows Firewall to enable port 135 for DCOM:

Note: If you disabled the firewall installed with Windows XP Service Pack 2, Windows 2003 Server, or Windows Vista, you do not need to open port 135 for DCOM, as described in this procedure.

- 1 On the QuickTest computer, select **Start** > **Settings** > **Control Panel** > **Windows Firewall**. The Windows Firewall dialog box opens.
- **2** Select the **Exceptions** tab.
- **3** Click **Add Program**. The Add a Program dialog box opens.
- 4 Select or browse to the Remote Agent (<QuickTest Professional installation>\bin\AQTRmtAgent.exe) and click OK.

Note: If you do not configure the Remote Agent as an exception as described above, a Windows Security Alert message will appear while running a test remotely. Click **Unblock** to solve this problem. The next time you remotely execute an automated test, the warning will not appear.

Click **OK** to close the Windows Firewall dialog box.

Note: For more information, a list of port assignments for commonly-used services can be found at: http://www.microsoft.com/resources/documentation/ Windows/2000/server/reskit/en-us/Default.asp?url=/resources/documentation/windows/2000/server/reskit/en-us/cnet/cnfc_por_SIMW.asp.

To modify DCOM security properties:

- Select **Start** > **Run**, type **dcomcnfg**, and press ENTER. The Component Services window opens.
- 2 Navigate to Console Root > Component Services > Computers > My Computer.

Note: If a Windows Security Alert message opens, click **Ask me later** or **Unblock**.

- Right-click **My Computer** and select **Properties**.
- Select the **Default Properties** tab.
- Make sure the **Default Impersonation Level** is **Identify** and click **Apply**.
- Select the **COM Security** tab.
- In the Access Permissions area, click **Edit Limits**. The Access Permission dialog box opens.
- Click **Add**. The Select Users or Groups dialog box opens.
- Click **Advanced**.
- Click **Locations**. In the displayed dialog box, select your computer name and click **OK**.
- 11 Click Find Now.

- **12** Select the following users and groups from the local computer and click **OK**:
 - ➤ Administrator
 - ➤ Administrators
 - ➤ Authenticated Users
 - ➤ Anonymous Logon
 - ➤ Everyone
 - ➤ Interactive
 - ➤ Network
 - ➤ System
- **13** Add the following users from the domain and click **OK**:
 - <domain user logged into the QuickTest computer>
 - ➤ <domain user logged into the Quality Center computer that is performing the remote execution>
- **14** In the Access Permission dialog box, assign **Local Access** and **Remote Access** permissions to the groups and users in the list and click **OK**.
- **15** In the Launch and Activation Permissions area, click **Edit Limits**. The Launch Permission dialog box opens.
- **16** Repeat steps 8 to 13.
- 17 In the Access Permission dialog box, assign Local Launch, Remote Launch, Local Activation, and Remote Activation permissions to the groups and users in the list and click OK.

To configure security settings for the QuickTest Remote Agent DCOM applications:

- 1 In the Component Services window, navigate to Console Root > Component Services > Computers > My Computer > DCOM Config.
- **2** Right-click the **AQTRmtAgent** item and select **Properties**. The AQTRmtAgent Properties dialog box opens.
- **3** In the Identity tab, select **The interactive user**. This enables the DCOM application to authenticate the process against the logged-in Windows user and run the process in that security context.

- **4** Select the **Security** tab.
- **5** In the Launch and Activation Permissions area, select **Customize** and click **Edit**. The Launch Permission dialog box opens.
- **6** Click **Add**. The Select Users or Groups dialog box opens.
- **7** Click **Advanced**.
- **8** Click **Locations**. In the displayed dialog box, select your computer name and click **OK**.
- **9** Click **Find Now**.
- **10** Select the following users and groups from the local computer and click **OK**:
 - ➤ Administrator
 - ➤ Administrators
 - ➤ Authenticated Users
 - ➤ Anonymous Logon
 - ➤ Everyone
 - ➤ Interactive
 - ➤ Network
 - ➤ System
- **11** Add the following users from the domain and click **OK**:
 - <domain user logged into the QuickTest computer>
 - ➤ <domain user logged into the Quality Center computer that is performing the remote execution>
- **12** In the Launch Permission dialog box, for all the groups and users in the list, select **Allow** for all permissions and click **OK**.
- **13** In the Access Permissions area, select **Customize** and click **Edit**. The Access Permission dialog box opens.
- **14** Repeat steps 6 to 12.
- **15** Click **Apply** to save the changes and click **OK** to close the dialog box.

- **16** Close the Component Services window.
- **17** You can now remotely execute a QuickTest test from Quality Center.

Note: Before remotely running a test, you must also make sure that the **Allow other HP products to run tests and components** option is selected in the Run tab of the QuickTest Options dialog box. For more information, see the *HP QuickTest Professional User Guide*.

Modifying User Account Control Settings to Connect with Quality Center on Windows Vista

If you are running QuickTest on Windows Vista, you must disable User Account Control (UAC) before the first time you connect with Quality Center. After you have connected with Quality Center for the first time, you can enable User Account Control (UAC) again if required.

This change is required only if you are running QuickTest on Windows Vista. If you do not intend to execute QuickTest tests remotely from Quality Center, you do not need to make these changes.

Note: The security changes described in this section should be performed by your System Administrator. Please contact Microsoft Support if you have questions regarding changes in User Account Control (UAC) on Windows Vista.

To disable User Account Control (UAC) on Windows Vista:

- 1 Select Start > Settings > Control Panel > User Accounts.
- **2** Click the **Change Security Settings** option.
- **3** Clear the Use User Account Control (UAC) to help protect your computer check box.
- 4 Click OK.

Browsing the QuickTest Professional Program Folder

After the QuickTest Professional setup process is complete, a number of items are added to your QuickTest Professional program folder (**Start** > **Programs** > **QuickTest Professional**).

For a description of each of these items, see the *HP QuickTest Professional User Guide*.

Note: If you uninstalled a previous version of QuickTest Professional before installing this version, you may have additional (outdated) items in your QuickTest Professional program folder. In addition, if you have QuickTest Professional add-ins installed, you may have items in your program folder that relate specifically to these add-ins.

Setting Up a Silent Installation

A *silent installation* (or *quiet installation*) is an installation that is performed in the background. You can install QuickTest Professional, QuickTest Add-ins, and the Quality Center Add-in silently on your computer, without the need to navigate through setup screens or for user interaction. You can also install QuickTest Professional, QuickTest Add-ins, and the Quality Center Add-in on remote computers.

For more information, see:

- ➤ "Before You Install" on page 47
- ➤ "Installing QuickTest Silently" on page 49
- ➤ "Installing Available QuickTest Features" on page 52
- ➤ "Running a Silent Installation Remotely" on page 54

Before You Install

You must have administrator privileges to install QuickTest Professional and the Quality Center Add-in. (You also need administrator rights for any other installation tasks, for example, uninstalling QuickTest, repairing or modifying the installation, or installing a patch.)

The following sections list the prerequisite software that must be installed on your computer before running a silent installation of QuickTest Professional and QuickTest Add-ins.

Prerequisite Software for QuickTest Professional and the QuickTest Add-ins

The following prerequisite software is required to be installed on your computer before you install QuickTest Professional and QuickTest Add-ins. This software is available on the QuickTest installation DVD, in the selected language folder under the **QuickTest** folder.

- ➤ .Net Framework 2.0
- ➤ Microsoft Visual C++ Run-time Components
- ➤ Microsoft Data Access Components 2.8 SP1
- ➤ Microsoft Windows Script 5.6 for Windows 2000
- ➤ Microsoft MSI 3.1
- ➤ For the Web Services Add-in: MSE 3.0 Runtime
- ➤ In addition, for the .NET Add-in:
 - ➤ Microsoft WSE 3.0 Runtime
 - ➤ Microsoft SOAP Toolkit 3.0

Prerequisite Software for Quality Center

The following prerequisite software is required to be installed on your computer before you install the Quality Center Add-in. This software is available on the QuickTest installation DVD, in the selected language folder under **QuickTest**.

- ➤ .Net Framework 2.0
- ➤ Microsoft Visual C++ Run-time Components

Installing QuickTest Silently

You can install QuickTest Professional and QuickTest Add-ins, and the Quality Center Add-in, silently on your computer.

Note: You can use most standard MSI command line options when installing QuickTest from the command line. For more information about performing a silent, or quiet, MSI installation, see the relevant Microsoft documentation.

To perform a silent installation of QuickTest and QuickTest Add-ins:

- 1 It is recommended to save any open files and close all open applications before running the silent installation.
- **2** Install the prerequisite software for QuickTest Professional. For the full list of prerequisite software, see "Before You Install" on page 47. You can begin the silent installation only after all the required prerequisite software is installed.
- **3** Run the Microsoft MSI installation:
 - ➤ If you are running a new installation (any previous versions of QuickTest have already been uninstalled), use a standard msiexec.exe command from the command line.
 - For example, to install QuickTest silently in the default folder, with default add-ins, use:

 msiexec /i /qn "<DVD MSI Path>\HP QuickTest Professional.msi"
 - ➤ If you are upgrading from version 9.5, run a command similar to the following from the command line:

msiexec /i /qn "<DVD MSI Path>\HP_QuickTest_Professional.msi"
ALLOW_UPGRADE=1 TARGETDIR=<QTP_Folder>

where:

<DVD MSI Path> is the path of the HP_QuickTest_Professional.msi file
from your DVD drive. The QuickTest Professional .msi files are located on
the installation DVD in the QuickTest\MSI folder. There is a different msi
file for each available language.

<QTP_Folder> is the full path string (in quotes) of the folder in which the previous version of QuickTest Professional is currently installed.

Important: If you specify a folder other than the folder in which QuickTest Professional 9.5 is installed, the silent installation will perform a complete uninstallation of the previous version and install QuickTest Professional 10.00. All your settings will not be saved.

When you upgrade from version 9.5, the upgrade process saves all your settings, including your QuickTest window layout and all your settings in the Options and Settings dialog boxes. In addition, it saves the files and settings that are listed in the section on Saved Files and Setting in "Saving and Restoring Your QuickTest Settings" on page 105.

➤ Use the ADDLOCAL command line option to specify the QuickTest features and add-ins that you want to install, separated by commas. For more information and a list of available features, see "Installing Available QuickTest Features" on page 52.

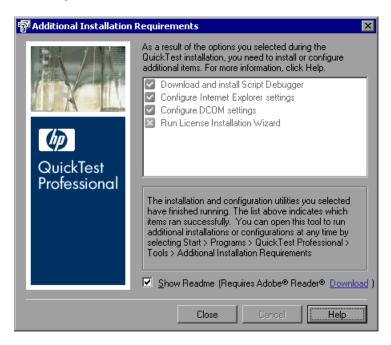
Important: You must include UpdateService, Test_Results_Viewer, Web_Add-in, and Core_Components, in the ADDLOCAL command.

4 After you have installed QuickTest Professional, select **Start > Programs > QuickTest Professional > Tools > Additional Installation Requirements**.

The Additional Installation Requirements utility that opens lists any additional software you need to use QuickTest, and enables you to install and configure them. For example, you can run the License Installation Wizard and install Microsoft Script Debugger. For more information, see "Working with the Additional Installation Requirements Utility" on page 37.

5 Select the required additional installation options in the Additional Installation Requirements dialog box and click **Run**. When the selected options are installed and configured on your computer, the Additional Installation Requirements screen reopens.

A checkmark is displayed next to the options that were successfully installed or configured.



- **6** Click **Show Readme** if you want the *HP QuickTest Professional Readme* to open at the end of the installation. You must have Adobe Reader installed to view the Readme file. If you have Adobe Reader installed on your computer, this check box is selected by default. Otherwise, the check box is not selected. Click the **Download** link to download Adobe Reader.
- 7 Click Close.

Installing Available QuickTest Features

You use the ADDLOCAL option in the silent installation command line to specify the QuickTest features and add-ins that you want to install.

To install QuickTest successfully, the following mandatory options must be included in the ADDLOCAL command:

- ➤ Core_Components (parent: QuickTest_Professional)
- ➤ UpdateService
- ➤ Test_Results_Viewer (parent: QuickTest_Professional)
- ➤ Web Add-in

Notes:

- ➤ **UpdateService** is a hidden feature that enables QuickTest to be updated automatically.
- ➤ When installing a feature using the ADDLOCAL command, its parent always gets installed as well.

In addition to the mandatory options, you can install the following QuickTest features and add-ins:

- ➤ .NET Add-in
- ➤ ActiveX_Add-in
- ➤ Java Add-in
- ➤ Oracle_Add-in
- ➤ PeopleSoft_Add-in
- ➤ PowerBuilder Add-in
- ➤ SAP Solutions Add-in
- ➤ SAP_eCATT_integration (parent: SAP_Solutions_Add-in)
- ➤ Samples (parent: QuickTest_Professional)

- ➤ Siebel Add-in
- ➤ Stingray_Add-in
- ➤ TE Add-in
- ➤ VisualAge_Add-in
- ➤ Visual Basic Add-in
- ➤ Web_Services_Add-in

Setting Up a Silent Installation for the QuickTest Add-in for Quality Center

You can use the silent installation mechanism to install the Quality Center Add-in.

You perform a silent installation of the Quality Center Add-in in much the same way you perform a silent QuickTest Professional core installation.

To perform a silent installation of the Quality Center Add-in:

- 1 It is recommended to save any open files and close all open applications before running the silent installation.
- **2** Run the Microsoft MSI installation using a standard **msiexec.exe** command from the command line.
 - ➤ The Quality Center Add-in .msi files are located on the installation DVD in the QCPlugin\MSI folder. There is a different msi file for each available language.
 - ➤ If you are upgrading from version 9.5, make sure the command line includes: TARGETDIR=<QT4QCAddin_Folder> (where <QT4QCAddin Folder> is the folder where the add-in is installed.)

Running a Silent Installation Remotely

You can run a silent installation of QuickTest remotely. This enables you to install QuickTest on one or more remote computers with the identical installation options and features.

For more information, see Microsoft MSI documentation.

To run a silent installation remotely:

- 1 All the prerequisite software for QuickTest Professional must be installed on the remote computers before you run a silent installation. For the full list of prerequisite software, see "Before You Install" on page 47. You can begin the silent installation only after all the required prerequisite software is installed.
- **2** Run the Microsoft MSI **quiet** installation from the command line.
 - ➤ The QuickTest Professional .msi files are located on the installation DVD in the QuickTest\MSI folder. There is a different msi file for each available language.
 - ➤ Use the ADDLOCAL command line option to specify the QuickTest features and add-ins that you want to install, separated by commas. For more information and a list of available features, see "Installing Available QuickTest Features" on page 52.

Important: You must include UpdateService, Test_Results_Viewer, Web_Add-in, and Core_Components, in the ADDLOCAL command.

➤ The Quality Center Add-in .msi files are located on the installation DVD in the QCPlugin\MSI folder. There is a different .msi file for each available language.

Working with QuickTest Professional Licenses

You can install QuickTest Professional using a *seat* license (formerly known as a local or standalone license) or a *concurrent* license (formerly known as a floating license).

This chapter includes:

- ➤ Understanding QuickTest License Types on page 56
- ➤ Requesting a Seat License Key on page 58
- ➤ Installing a Seat License Key on page 61
- ➤ Working with a Concurrent License on page 67
- ➤ Modifying License Information on page 72
- ➤ Setting the LSHOST or LSFORCEHOST Variable on page 74
- ➤ Working with Commuter Licenses on page 76
- ➤ Validating QuickTest Licenses on page 88
- ➤ Troubleshooting Concurrent Licensing Issues on page 93

Understanding QuickTest License Types

To use QuickTest Professional, you must have a valid license. There are two types of licenses: seat and concurrent. The table below summarizes the differences between the two license types.

Topic	Seat License	Concurrent License
General description	The license is specific to the computer on which it is installed.	Each license entitles the organization to one additional concurrent user.
Number of installations per license key	Each installation of QuickTest Professional requires a distinct license key.	There is no limit to the number of QuickTest Professional installations on the network, but a special concurrent license server regulates the number of computers that can run a copy of QuickTest Professional at any time.

Chapter 3 • Working with QuickTest Professional Licenses

Topic	Seat License	Concurrent License
Other issues	The license key is based partially on the locking code, which is a code that identifies the computer on which QuickTest Professional is installed. The supplied license key works only for the computer on which the locking code was generated. Note: A computer with multiple bootable partitions may generate a different locking code for each partition. If a different locking code is generated for a partition, you will need to request a unique license key for it.	Not supported for Unix networks. It is recommended that the concurrent license server has a fixed IP address. QuickTest Professional client computers must have TCP/IP installed. To use concurrent licenses across networks, UDP port 5093 must be open on the server.
Entering license key	At the end of the installation procedure, QuickTest asks you to enter the license key. If you do not have a license key at that point, QuickTest asks you to enter the key the first time you open QuickTest.	Each time QuickTest opens, it automatically searches the same subnet for the concurrent license server. You do not need to enter a license key for your QuickTest client installation.

You can view and copy license information and license validation information, if needed. For example, you may want to retrieve license information for administrative or troubleshooting purposes. For more information, see "Validating QuickTest Licenses" on page 88.

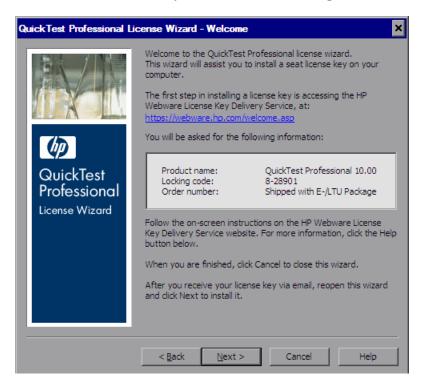
Requesting a Seat License Key

When you install QuickTest Professional with a seat license for the first time, it includes a 14-day demo license. To use QuickTest Professional beyond the 14-day period, you must request and activate a license key for your copy of QuickTest Professional.

To request a seat license key:

- **1** Perform one of the following:
 - ➤ From the license warning message displayed when you start QuickTest Professional, click Install License.
 - ➤ From within QuickTest Professional, select Help > About QuickTest Professional. The About QuickTest Professional dialog box opens. Click License. The License Summary dialog box opens. Click Modify License.

The License Type screen opens. Select **Seat license** and click **Next**. Click **Yes** to install a new license key. The Welcome screen opens.



2 Make a record of the displayed locking code for your computer. You will need it to request your license key. Click the link on the QuickTest Professional License Installation - Welcome screen for the HP Webware License Key Delivery Service to request your license key. Follow the instructions as described in "Requesting a License Key via the HP Webware License Key Delivery Service" on page 60.

Requesting a License Key via the HP Webware License Key Delivery Service

The HP Webware License Key Delivery Service assists you in requesting a license key. This procedure provides an overview of this process as it specifically relates to requesting QuickTest Professional license keys.

For details on the individual fields in the License Key Delivery Service form, download the ESD and Webware License Management Guide. (Click the **Webware User Guide** link in the **Support** section of the HP License Key Delivery Service Welcome page.)

To request a license key:

- 1 Click the link on the QuickTest Professional License Installation Welcome screen for the HP Webware License Key Delivery Service. The HP License Key Delivery Service Welcome page is displayed.
- **2** Click **Generate New Licenses**. The Generate license(s) page is displayed.
- **3** Enter the order number from the Software Entitlement Certificate you received in your LTU or ELTU package.
- **4** Click **Next**. The Product Selection page is displayed.
- **5** Select the check box next to the product for which you are requesting a license key.
- **6** Click **Next**. The Order Product Detail(s) page is displayed.
- **7** Enter the locking code for your computer. The locking code is found in the QuickTest Professional License Installation Welcome screen.
- **8** Click **Next**. The Member sign-in page is displayed.
- **9** If you have used the Webware Licensing service before, enter your e-mail address and password. Otherwise, login as a new user.
- **10** Click **Sign-in**. The Address information page is displayed. If you are a returning user, Webware automatically populates the fields with your information. If you are a new user, fill in the information according to the on-screen instruction. For information on filling in the Address information page, see the ESD and Webware License Management Guide.

- 11 If you are a customer representative requesting a license key on behalf of a customer and do not want them to receive a copy of the transaction, deselect the E-mail a copy of this license transaction to the license owner check box.
- **12** If you are the end-user customer select the **I** am the License owner check box. The License owner (End-user) information section is disabled.
- **13** If you are a customer representative requesting a license key on behalf of a customer, deselect the I am the License owner check box. Complete the information requested in the License owner (End-User) information section.
- **14** Click **Next**. The License/Password page is displayed. Keep a record of your **Session ID** and click **Main Menu** to return to the Welcome page. A Permanent Password Certificate will be e-mailed to the address you provided, containing your license key.
- **15** Click **Cancel** and wait for your Permanent Password Certificate to arrive by e-mail. When it arrives, follow the instructions as described in "Installing a Seat License Key" on page 61.

Installing a Seat License Key

In the License Key screen, you enter the license key you received from HP. The license key is included in the .dat file attached to the e-mail containing your Permanent Password Certificate.

Note: You must have Administrator privileges to install a license key.

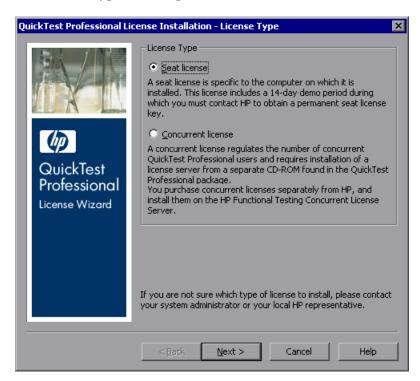
To install a seat license key:

- **1** Perform one of the following:
 - ➤ From the warning message displayed when you start QuickTest Professional, click Install License.

➤ From within QuickTest Professional, select Help > About QuickTest Professional. In the About QuickTest Professional dialog box, click License. Then in the License Summary dialog box, click Modify License.

Note: You can also activate the seat license as part of the QuickTest installation. After you click **Finish** in the final installation screen, the QuickTest Professional License Installation - Welcome screen opens, as described below.

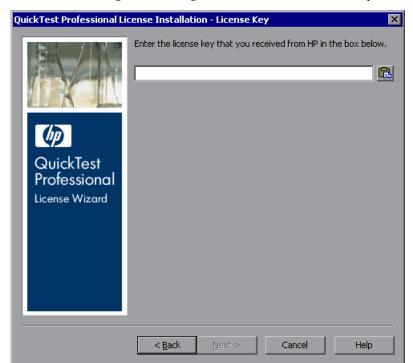
The License Type screen opens.



2 Select **Seat license** and click **Next**. In the confirmation box, click **Yes** to install a new license key. The Welcome screen opens.



Tip: Check that the locking code in the above screen matches the locking code you sent to HP when you requested a license key.



3 Click **Next** to begin installing the license. The License Key screen opens.

Notes:

- ➤ The license key is valid only for the computer with the locking code that you entered in the HP Software Support license request form.
- ➤ A computer with multiple bootable partitions may generate a different locking code for each partition. If a different locking code is generated for a partition, you will need to request a unique license key for it.
- **4** Open the .dat file attached to the email containing your Permanent Password Certificate using any text editor. The license key is also included in the Permanent Password Certificate.
- **5** Select and copy the license key including the # character from the .dat file to the clipboard.



- Paste the key into the QuickTest Professional License Installation License Key screen by clicking the **Paste From Clipboard** button.
- Click **Next**. The Install Summary screen opens.



8 Verify that the information is correct and click **Next**. The Finish screen opens.



If you entered a valid license key, the Finish screen confirms that your license key was successfully installed.

If the license could not be installed successfully, a message is displayed describing why. For example, if a seat license was previously installed on your computer, and you try to install a seat license again using the same license key, the license installation will not succeed. If the license could not be installed, a **Send to Support** button is displayed. You can click **Send to Support** to create an e-mail with licensing information and send it to your nearest HP Software Support location. Make sure that you fill in the required information in the e-mail so that Software Support can assist you.

Tip: You can install another license by selecting the **Install another license** check box, clicking **Finish** and continuing with step 2 on page 63.

9 If you do not want to install another QuickTest license, click **Finish** to complete the license activation process and close the wizard.

Working with a Concurrent License

If there is an accessible concurrent license server on your network with an available license, you can connect to it. This enables you to use a concurrent license instead of a seat license. For more information on working with concurrent license servers, and the supported versions, see the *HP Functional Testing Concurrent License Server Installation Guide*.

Note: You can also specify a concurrent license server during the QuickTest installation procedure. For more information, see "Installing QuickTest Professional" on page 20.

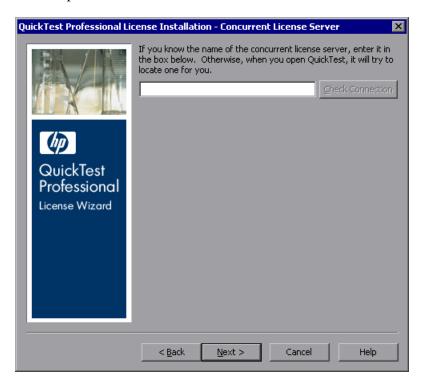
To work with a concurrent license:

- **1** Perform one of the following:
 - ➤ From the license warning message displayed when you start QuickTest Professional, click **Install License**.
 - ➤ From within QuickTest Professional, select Help > About QuickTest Professional. The About QuickTest Professional dialog box opens. Click License. The License Summary dialog box opens. Click Modify License.

The License Type screen opens.



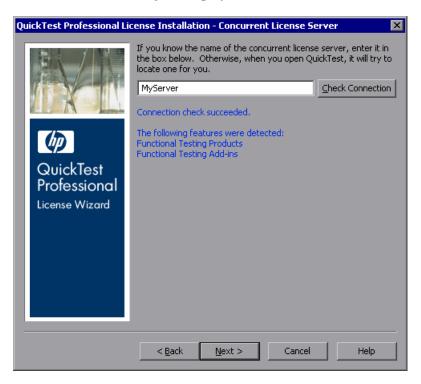
2 Select **Concurrent license** and click **Next.** The Concurrent License Server screen opens.



3 In the edit box, either enter the name or IP address of the concurrent license server to which you want to connect, or leave the box blank to instruct QuickTest to search for an available server on your local network.

Tip: When you activate a concurrent license using the License Wizard, the LSHOST user variable is automatically defined with the concurrent license server you specified. You can modify the concurrent license server either by running the License Wizard or by setting the LSHOST or LSFORCEHOST user variable. For more information, see "Setting the LSHOST or LSFORCEHOST Variable" on page 74.

4 Click **Check Connection**. If QuickTest can connect to the concurrent license server, a success message is displayed.



Note: If the installation cannot connect to a concurrent license server, the Concurrent License Server screen informs you of this.

Tip: If you want to specify the name of a concurrent license server that is currently unavailable, but will be available later, you can enter the name of the concurrent license server in the edit box. Even though the Concurrent License Server screen informs you that the specified server is not available for connection, the next time you open QuickTest, QuickTest will try to locate the server you specified.

5 Click **Next**. The installation informs you that the concurrent license activation was successful.



6 Click **Finish** to close the wizard. If QuickTest Professional is open, you must close and restart it to use the concurrent license server.

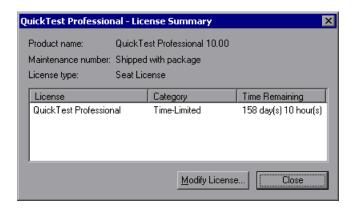
Modifying License Information

After you install QuickTest Professional, you can modify your license key and/or change your license type at any time. For more information on requesting a new license key, see "Requesting a Seat License Key" on page 58.

Note: You must be logged in with administrator privileges to change the license type used by your QuickTest installation from seat to concurrent or vice versa.

To modify your license information:

- **1** Open QuickTest Professional.
- **2** Click **Help > About QuickTest Professional**. The About QuickTest Professional dialog box opens.
- **3** Click **License**. The License Summary dialog box opens.



QuickTest Professional License Installation - License Type License Type Seat license A seat license is specific to the computer on which it is installed. This license includes a 14-day demo period during which you must contact HP to obtain a permanent seat license Concurrent license A concurrent license regulates the number of concurrent QuickTest Professional users and requires installation of a license server from a separate CD-ROM found in the QuickTest Professional package. You purchase concurrent licenses separately from HP, and install them on the HP Functional Testing Concurrent License License Wizard If you are not sure which type of license to install, please contact. your system administrator or your local HP representative. Next > Cancel Help

4 Click **Modify License**. The License Type screen opens.

- ➤ To change your license type from concurrent to seat, select **Seat license** and click **Next**. A confirmation box opens.
 - ➤ If you already have a valid seat license key installed, click **No** to save your selected license type.
 - ➤ If you checked out a commuter license and want to use it now, click **No**.
 - ➤ If you do not have a seat license key installed, click **Yes**.

The Welcome screen opens. Follow steps 4 to 9 in Installing a Seat License Key.

➤ To change your license type from seat to concurrent, select **Concurrent license** and click **Next**. Follow steps 2 to 6 in Working with a Concurrent License.

Note: To work with a concurrent license, a concurrent license server must be installed on and accessible from the network, and a concurrent license must be available. For information on installing a concurrent license server, see the *HP Functional Testing Concurrent License Server Installation Guide*.

- **5** Click **Close** to close the About QuickTest Professional dialog box.
- **6** Restart QuickTest Professional to apply your changes.

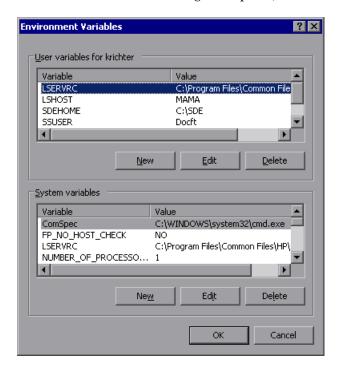
Setting the LSHOST or LSFORCEHOST Variable

In addition to using the License Wizard to specify the concurrent license server to which you want QuickTest to connect, you can also specify a concurrent license server using Windows Environment variables. For example, you can use the LSHOST variable to set the preferred concurrent license server for a QuickTest client. If the specified concurrent license server cannot be found in the local subnet, then a search is conducted on the entire network. Alternatively, you can use the LSFORCEHOST variable to restrict QuickTest to a specific concurrent license server.

Note: If you activated a concurrent license using the License Wizard, the LSHOST user variable is already defined with the concurrent license server you specified.

To set the LSHOST or LSFORCEHOST variables:

1 Open the Environment Variables dialog box. (Select **Start** > **Settings** > **Control Panel**. Double-click **System**. In the System Properties dialog box, click the **Advanced** tab. Then click the **Environment Variables** button. The Environment Variables dialog box opens.)



Note: If the concurrent license server is already defined using an LSHOST or LSFORCEHOST system variable, you do not need to define it using the user variable.

- **2** Under **User variables for <user name>**, click **New**. The New User Variable dialog box opens.
- **3** In the Variable Name box, type LSHOST or LSFORCEHOST.

4 In the **Variable Value** box, type the full name of the concurrent license server. Alternatively, you can enter the IP address of the host computer.

Notes:

- ➤ The LSHOST and LSHOSTFORCE environment variable values are limited to 64 characters.
- ➤ For multiple host names (for example, where there are HP Functional Testing Concurrent License Servers running on one network), use a semicolon (;) to separate the hosts' names or IP addresses in the Variable Value box.
- **5** Click **OK** to close the New User Variable dialog box.
- **6** Click **OK** to close the Environment Variables dialog box.
- **7** Click **OK** to close the System Properties dialog box.

Working with Commuter Licenses

If you use QuickTest with a concurrent license, but cannot connect your computer to your network (for example, during a business trip), you can install a commuter license. Commuter licenses are available in companies that have only concurrent licenses (not seat licenses).

For example, suppose you need to travel on business with your laptop computer and you want to use QuickTest while you are away. You can check out a QuickTest license from the concurrent license server to use for the duration of your trip, and then check the license back in upon your return. Commuter licenses are valid for up to 30 days, according to your requirements.

Tip: If you have a concurrent license and are located far from the concurrent license server, you can also use a commuter license if you encounter network traffic.

For more information, see "Checking Out a Commuter License" below, and "Checking In a Commuter License" on page 80.

Note: Installing a commuter license requires administrator permissions for the computer on which you want to use the license.

In addition, if you are unable to check out a license before you disconnect from the network (that is, leave for your trip), or if you checked out a license but it expired because your return was delayed, you can ask a local network user to check out a commuter license and send it to you remotely. For more information, see "Obtaining a Commuter License Remotely" on page 81.

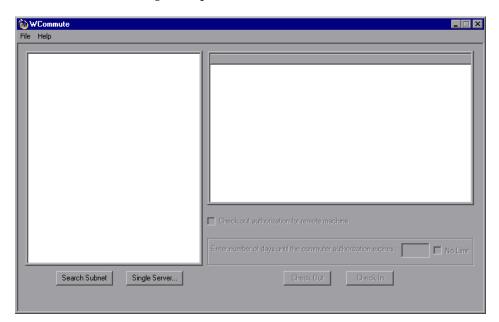
Note: Commuter licensing is supported by HP Functional Testing Concurrent License Server version 7.6 and later. If you have upgraded to HP Functional Testing Concurrent License Server version 7.6 or later, you need to request a new server license key to enable the commuter licensing functionality. For details, contact HP Software Support or your local representative.

Checking Out a Commuter License

Before you check out a commuter license, ensure that the computer (for example, a laptop) on which you want to install the commuter license has QuickTest installed, is connected to the network, and has access to a concurrent license server with an available QuickTest license. After you have checked out the license, you can disconnect the computer from the network.

To check out a commuter license:

1 Run the **WCommute.exe** file located in **<QuickTest installation folder>\bin**. The WCommute dialog box opens.



- **2** To see commuter licenses available on all concurrent license servers located within your subnet, click **Search Subnet**. If you want to specify a particular concurrent license server, or if you want to select a concurrent license server outside of your subnet, click **Single Server**.
 - ➤ If you click **Search Subnet**, the WCommute utility searches the subnet for concurrent license servers that support commuter licensing and displays them in the WCommute dialog box. Note that this process may take several minutes.
 - ➤ If you click **Single Server**, a dialog box opens enabling you to specify the concurrent license server you want to locate. Enter the concurrent license server computer's host name, IP address, or IPX address and click **OK**. The specified concurrent license server is located and displayed in the WCommute dialog box.

For each concurrent license server, a list of available commuter licenses is displayed. A red check mark next to a commuter license means that the license is already checked out to your computer. You cannot check out multiple licenses for the same application to the same computer. Click a license to view the license details in the right pane of the dialog box.

- **3** Select the license that you want to check out.
- **4** In the **Enter number of days until the commuter authorization expires** box, specify the maximum number of days to check out the license (up to a maximum of 30 days).

Note: When you check out a license, it decreases the number of licenses available for use by others. Therefore, you should specify the absolute minimum number of days that you require.

- **5** Click **Check Out**. The selected license is saved locally on your computer.
- **6** To use the new checked-out license, open QuickTest and change your license type from concurrent to seat. In the confirmation message that opens after you change the license type, click **No** to use the commuter license. For more information, see "Modifying License Information" on page 72.

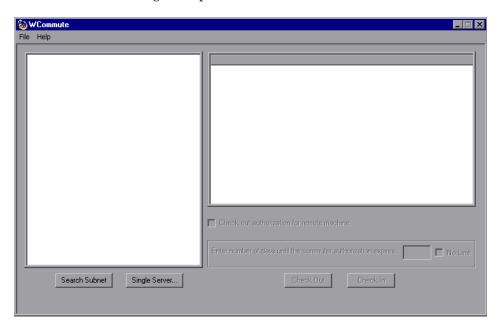
Checking In a Commuter License

When you finish using the commuter license, you should check it in from your computer to the concurrent license server from which you checked it out. This makes the license available to other users.

Note: If your license expires, you do not need to check it in. When a license expires, you can no longer use it. The license is automatically returned to the concurrent license server, even if your computer is not connected to the concurrent license server network.

To check in a commuter license:

1 Run the **WCommute.exe** file located in **<QuickTest installation folder>\bin**. The WCommute dialog box opens.



- **2** Locate the concurrent license server for the commuter license you want to check in, as described in step 2 of "Checking Out a Commuter License" on page 79. You must check in the license to the same concurrent license server from which you checked it out.
- **3** Select the license you previously checked out.

Tip: The checked-out license is indicated by a red check mark.

4 Click **Check In**. The license is returned to the concurrent license server, and is made available for use by others.

Note: Before you can use QuickTest again, you must change your license type from seat to concurrent. For more information, see "Modifying License Information" on page 72.

Obtaining a Commuter License Remotely

A local network user can locally check out a QuickTest commuter license and send it to you for installation on a remote computer. This is useful in situations in which you are currently not connected to the concurrent license server network. For example, you may be out of the office on an extended business trip, but need to be able to use QuickTest.

To obtain a commuter license remotely:

- 1 Run the WRCommute utility to generate a commuter locking code for your computer and send the commuter locking code to a local user who has access to the concurrent license server. For more information, see "Step 1: Generating a Remote Computer Locking Code" on page 82.
- **2** Ask the local user to run the WCommute utility (entering the commuter locking code you generated) to check out a remote commuter license, and send it to you. For more information, see "Step 2: Checking Out a Commuter License for a Remote Computer" on page 84.

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- **3** Run the WRCommute utility to install the remote commuter license on your computer. For more information, see "Step 3: Installing a Commuter License on a Remote Computer" on page 87.
- **4** Open QuickTest and change your license type from concurrent to seat. In the confirmation message that opens after you change the license type, click **No** to use the commuter license. For more information, see "Modifying License Information" on page 72.

Step 1: Generating a Remote Computer Locking Code

The first step in remotely obtaining a commuter license is to generate a locking code on your computer using the WRCommute utility, and transfer it (by e-mail) to a network user who has access to the concurrent license server.

Note: The remote computer locking code used to lock a commuter license is not the same as the locking code displayed by the ECHOID utility. You must use the WRCommute utility to obtain the commuter license locking code.

To generate a locking code on a remote computer:

1 Run the WRCommute.exe file located in <QuickTest installation folder>\bin. The WRCommute dialog box opens.



The **Locking code string for the current machine** box contains the locking code that you need to e-mail to a network user who has access to the concurrent license server containing the QuickTest licenses.

- **2** Send the locking code to the local network user in one of the following ways:
- ➤ Select the locking code string and click the **Copy to clipboard** button to copy the string to your Windows clipboard. Then open your e-mail program and paste the string into a new e-mail message and e-mail it to the local network user.



➤ Click the **Save lock code string to file** button to save the locking code in a file. Specify the name and location for the file, and then attach the file to a new e-mail message and e-mail it to the local network user.



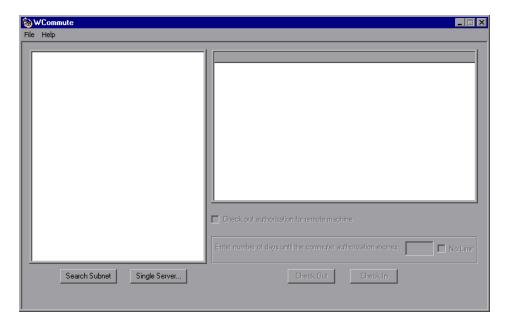
- ➤ Click the **Display locking code string** button to display the entire locking code in another dialog box. You can then select the locking code string, right-click it and select **Copy** to copy it to your Windows clipboard. Then open your e-mail program and paste the string into a new e-mail message and e-mail it to the local network user.
- ➤ In the **E-mail address** box, enter the e-mail address of the local network user and click **Send**. Note that this option is supported only if Microsoft Outlook Express is set up as your e-mail client.

Step 2: Checking Out a Commuter License for a Remote Computer

After a local network user receives the locking code, the user can check out the license and transfer it to you (by e-mail). To do this, the user must have QuickTest installed on his or her computer and also have access to the concurrent license server with an available QuickTest license.

To check out a commuter license for a remote computer:

1 Run the **WCommute.exe** file located in **<QuickTest installation folder>\bin**. The WCommute dialog box opens.



- Locate the concurrent license server from which you want to check out a remote commuter license, as described in step 2 of "Checking Out a Commuter License" on page 79.
 - For each concurrent license server, a list of commuter licenses that you can check out is displayed.
- Select the license that you want to check out.
- Select the **Check out authorization for remote machine** check box.
- In the Enter the number of days until the authorization expires box, specify the number of days to check out the license (up to a maximum of 30 days).

Note: When you check out a license for a remote computer, it cannot be checked in and remains in use (unavailable to other users) for the number of days specified. Therefore, you should specify the absolute minimum number of days required.

Click **Check Out**. The Locking Code for Remote Machine dialog box opens.



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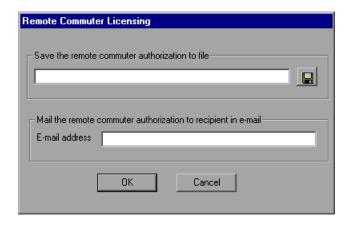
7 Enter the locking code that the remote user e-mailed you in one of the following ways:



➤ If the locking code was e-mailed to you in the body of an e-mail, copy it to your Windows clipboard. In the Locking Code for Remote Machine dialog box, select Enter the locking code string for remote machine and then click the Paste from clipboard button.



- ➤ If the locking code was e-mailed to you as an attached file, save the attachment and then select **Get locking code string for remote machine from file**. Click the **Load** button. Select the file that contains the locking code and click **Open**.
- **8** Click **OK**. The Remote Commuter Licensing dialog box opens.



9 Send the commuter license to the remote user in one of the following ways:



- ➤ Click the **Save** button to save the locking code in a file. Specify the name and location for the file, click **Save** and then click **OK**. Attach the file to a new e-mail message and e-mail it to the remote user.
- ➤ In the **E-mail address** box, enter the e-mail address of the remote user. Click **Send** and then click **OK**. Note that this option is supported only if Microsoft Outlook Express is set up as your e-mail client.

Step 3: Installing a Commuter License on a Remote Computer

The final step in remotely obtaining a commuter license is to install the license that was sent to you by the network user on your computer.

To install a commuter license on a remote computer:

- **1** Ensure that you are logged in to your computer with administrator privileges.
- **2** Run the WRCommute.exe file located in <QuickTest installation folder>\bin. The WRCommute dialog box opens.
- **3** Click the **Install Remote Authorization Code** tab.



4 Enter the commuter license that the network user e-mailed you, as follows:



➤ If the commuter license was e-mailed to you in the body of an e-mail, copy it to your Windows clipboard. In the Install Remote Authorization Code tab of the WRCommute dialog box, select Enter remote authorization code and then click the Paste from clipboard button.



- ➤ If the commuter license was e-mailed to you as an attached file, save the attachment and then select **Get remote authorization code(s) from file.** Click the **Load** button. Select the file that contains the locking code and click the **Open** button.
- **5** Click **Install**. The new license code is installed on your computer.

Step 4: Modifying the License Type on the Remote Computer

Open QuickTest and change your license type from concurrent to seat. In the confirmation message that opens after you change the license type, click **No** to use the commuter license. For more information, see "Modifying License Information" on page 72.

Note: A remote commuter license cannot be checked in to the concurrent license server when you have finished using it—it simply expires on the remote computer. After you return to your office and are reconnected to the network, you should change your license type from seat to concurrent. For more information, see "Modifying License Information" on page 72.

Validating QuickTest Licenses

The License Validation Utility decodes and validates QuickTest Professional license strings. This enables you to view and copy license information and license validation information for troubleshooting purposes.

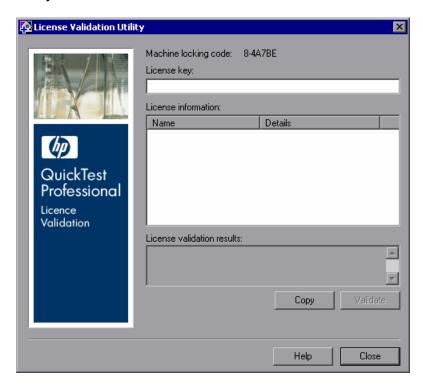
The License Validation Utility performs the following operations:

- ➤ Decodes the license string and retrieves important information regarding the license. For more information, see "License Information" on page 91.
- ➤ Validates the license according to a predefined set of checks. For more information, see "Validation Checks" on page 92.

If required, you can copy the decoding and validation results to the clipboard. For more information, see "Copying your License Validation Result to the Clipboard" on page 92.

To decode and validate a license:

1 Select Start > Programs > QuickTest Professional > Tools > License Validation Utility.



2 In the **License Key** box, enter the license code you want to decode and validate. You can find the license code already installed on a QuickTest computer in the **Iservrc** file. The location of this file is specified by the **Iservrc** environment variable.

Tips:

- ➤ When you enter the license code, ensure that a # character is inserted at the end of the license code, or an error will be reported in the License validation results area. The # indicates the end of the license code, and any string after the # character is ignored by the License Validation Utility.
- ➤ To find the path of the **Iservrc** file in the environment variable, right-click **My Computer** and select **Properties**. In the System Properties dialog box, select the **Advanced** tab, and then click **Environment Variables**. The path is displayed in the **User variables for <user>** box of the Environment Variables window for the LSERVRC variable. For example, C:\Program Files\Common Files\HP\License Manager\lservrc.
- **3** Click **Validate**. The license string is decoded.

License information is displayed in the **License information** area. For more information, see "License Information" on page 91.

The result of the validation is displayed in the License validation results area. For more information, see "Validation Checks" on page 92.

- **4** If required, click **Copy** to copy the information to the clipboard. The copied information includes the current computer locking code, the license string that was decoded, and the decoding and validation results. For more information, see "Copying your License Validation Result to the Clipboard" on page 92.
- **5** Click **Close** to close the utility.

License Information

The result of the decoding operation includes the following information about the license.

Note: Some information provided by the operation is intended for HP Software Support only and is not described here.

- ➤ **Feature Name.** The QuickTest feature name specified when the license was created.
- ➤ **Feature Version**. The license version specified when the license was created. This is not the QuickTest Professional version number.
- ➤ **Seat/Concurrent.** The license type. This can be either a **Seat** license that is specific to the computer on which it is installed, or a **Concurrent** license, which references a current license server that can be used by multiple QuickTest users.
- ➤ **Trial/Normal.** The license type. It can be either a **Trial** license, which is a demo license that has a limited period of use, or a **Normal** license.
- ➤ **Trial Days Count.** Applicable only for trial licenses. Specifies the number of days until the trial period is over. The count is started from the date the QuickTest core components are installed.
- ➤ Locking Code. The locking code specified when the license was created. This code uniquely identifies the computer on which QuickTest is installed.
- ➤ Clock Tamper. Indicates whether a license can be issued, based on whether any date changes have been made to the computer on which QuickTest is installed.
- ➤ Commuter License. Indicates whether commuter licenses are supported. A commuter license enables you to work with QuickTest Professional when you are not connected to the QuickTest concurrent license server. Commuter licenses are available only with concurrent licenses. For more information, see "Working with Commuter Licenses" on page 76.

Validation Checks

The validation checks performed by the License Validation Utility include the following:

- **1** Does the QuickTest feature name match one of the existing features?
- **2** Does the license version match one of the existing versions?
- **3** Does the locking code match the locking code of the computer on which QuickTest is installed?
- **4** Has the trial period specified in the license string ended?
- **5** If the license is a concurrent license, does it support commuter licenses?

Copying your License Validation Result to the Clipboard

In some cases, you may need a copy of the information provided by this utility. For example, you may need to forward this information to HP Software Support.

When the validation operation is complete, click the **Copy** button to copy the information to the clipboard. Then paste the information as required.

Troubleshooting Concurrent Licensing Issues

In certain circumstances, QuickTest Professional cannot connect to the license server, and a License Error message opens.

Check whether one or more of the following are causing the error:

- ➤ "There is no network connection between the server and client computers" on page 93
- ➤ "The license server is not running" on page 94
- ➤ "Licenses are not installed on the license server" on page 94
- ➤ "The license key file (lservrc) cannot be found on the server" on page 95
- ➤ "The license server is being used by the maximum number of users" on page 95
- ➤ "Two or more versions of the license server are running" on page 96
- ➤ "The client computer is configured to use a seat license" on page 96
- ➤ "The license key does not match the license server locking code" on page 96
- ➤ "The client computer cannot identify the license keys on the server computer" on page 97
- ➤ "The LSHOST or LSFORCEHOST variables are not set" on page 98
- ➤ "The LSERVRC system variable is set on the client computer" on page 98
- ➤ "The client computer connects through VPN software" on page 98

There is no network connection between the server and client computers

You can check the network connection between the client and server machines by pinging the license server machine in a command prompt window.

For example: c:\ ping cense server name>

If there are no replies from the ping command, or if there are timeouts in the replies, there may be a network problem. If required, contact your Computer or Network Administrator.

The license server is not running

You may need to start or restart the license server service.

To start or restart the license server service:

- 1 Open the Control Panel (Start > Settings > Control Panel).
- **2** Select **Services**.

Note: On some operating systems, such as Windows 2000, the Services utility is located in the Administrative Tools section (folder) of the Control Panel.

- **3** Select **SentinelLM** service.
- **4** Click **Start the Service** (or **Restart the Service**), or right-click and select **Start** (or **Restart**).

Licenses are not installed on the license server

Use the WlmAdmin utility to check that licenses are installed on the license server. For more information on the WlmAdmin utility, see the **Utilities** chapter in the *HP Functional Testing Concurrent License Server Installation Guide*.

To check licenses on the license server:

- **1** Run **SrvUtils.exe** in the **LicenseServer\utils** folder of the QuickTest Professional installation DVD.
- 2 Select WlmAdmin.
- **3** Enter the license server name as a defined server.
- **4** Try to expand the license server branch.

If no license key information is displayed, then the installed licenses are invalid, or the license key file (lservrc) cannot be found. If license key information is displayed, then the installed licenses are valid. You can check whether the licenses are all in use by selecting a license and checking the **Statistics** pane in the WlmAdmin utility.

The license key file (Iservrc) cannot be found on the server

The lservrc file should be located in the following directory:

<drive>\Program Files\Common Files\SafeNet Sentinel\LM Server\WinNT

If the file is not there, the license server will not be able to locate licenses. Search the license server computer for the file. If found, move the file to the correct directory and restart the SentinelLM service. If the file is not found, licenses are not installed.

The license server is being used by the maximum number of users

- ➤ If all licenses are in use, the License Server Manager will not be able to issue another license until a license is released. You can use the WlmAdmin utility to determine which users are currently using the licenses. Run SrvUtils.exe in the LicenseServer\utils folder of the QuickTest Professional installation DVD, and select WlmAdmin.
 - For more information on the WlmAdmin utility, see the **Utilities** chapter in the *HP Functional Testing Concurrent License Server Installation Guide*.
- ➤ There may be cases where QuickTest closes unexpectedly and does not release the license automatically. If this happens, you can wait for the license to timeout, or you can restart the license server.

For more information, see the HP Software Self-solve knowledge base (http://h20230.www2.hp.com/selfsolve/document) (the Knowledge Base area requires that you register as an HP Passport user and sign in). In the knowledge base, search for:

Document ID 18428. "What happens if AQT/QTP crashes on a client machine while using a Floating license".

Two or more versions of the license server are running

Only one version of the license server should be installed and running on the same computer. If there are more versions, use Add/Remove Programs to uninstall all of the license server instances. Then install the latest version of the license server software and reinstall the license code keys.

The client computer is configured to use a seat license

For information on how to check and modify concurrent license or seat license configuration, see "Modifying License Information" on page 72.

The license key does not match the license server locking code

Use the lsdecode.exe utility to check the locking code for a license key.

To check the license key locking code:

- 1 Copy the Isdecode.exe utility from the LicenseServer\utils folder of the QuickTest Professional installation DVD to the location of the Iservrc file (<drive>\Program Files\Common Files\SafeNet Sentinel\Sentinel LM Server\WinNT).
- **2** Run the **Isdecode.exe** utility. A command prompt window will open with the decoded key information.
 - The locking code for the license key is displayed on the **Server locking code** line.
- **3** Run the inst_key.exe utility from the LicenseServer\KeyInstallation folder of the QuickTest Professional installation DVD.

The license server computer's locking code will be displayed on the Welcome screen.

Note: This step must be done on the license server computer. Accessing the license server computer remotely can generate an invalid license code.

4 Compare the locking code for the license key and from the server computer.

If the locking codes do not match, you will need to determine why the locking code has changed. Reinstalling the operating system, renaming the computer, using a dynamic IP address, retrieving the locking code through a terminal session, or installing the license keys through a terminal session can cause the locking code to be changed and the license keys to become invalid.

After you have determined why the locking code has changed, you can submit a License Request to have a new license key generated.

The client computer cannot identify the license keys on the server computer

Use the WlmAdmin utility to check the licenses on the client computer. For more information on the WlmAdmin utility, see the **Utilities** chapter in the *HP Functional Testing Concurrent License Server Installation Guide*.

To check licenses on the client computer:

- **1** Run **SrvUtils.exe** in the **LicenseServer\utils** folder of the OuickTest Professional installation DVD.
- 2 Select WlmAdmin.
- **3** Enter the license server name as a defined server.
- **4** Try to expand the license server branch.

If license keys are not identified, then either UDP Port 5093 is blocked between the client and server, or the IP address of the license server is using Network Address Translation (NAT), which is not supported. If required, contact your Computer or Network Administrator.

For more information, see the HP Software Self-solve knowledge base (http://h20230.www2.hp.com/selfsolve/document) (the Knowledge Base area requires that you register as an HP Passport user and sign in). In the knowledge base, search for:

- ➤ **Document ID 18402.** "What is port 5093 in the license mechanism used for?"
- ➤ **Document ID 41449**. "Does UDP port 5093 need to be bi-directional?"
- ➤ **Document ID 18424.** "How to set up the License Manager for machines running on different subnets."

The LSHOST or LSFORCEHOST variables are not set

For information on how to set these variables, see "Setting the LSHOST or LSFORCEHOST Variable" on page 74.

The LSERVRC system variable is set on the client computer

The LSERVRC variable is used for seat licenses and may have been created for the demo license when QuickTest was installed. If this variable exists, it must be removed so it does not interfere with locating the license server.

To remove The LSERVRC system variable:

- **1** On your desktop, right-click **My Computer** and select **Properties**.
- **2** Select the **Advanced** tab and click **Environment Variables**.
- **3** Check the System Variables list for the LSERVRC variable. If it exists, click **Delete**.
- **4** Click **OK** to close the windows.
- **5** Reboot the client computer to implement the changes.

The client computer connects through VPN software

If the client computer is connecting through VPN software, verify that VPN has **not** been configured to use **IPSec over UDP**. This configures the network to use Network Address Translation (NAT), which is not supported.

Maintaining and Uninstalling QuickTest Professional

You can install and uninstall individual QuickTest Professional features, or uninstall all QuickTest Professional software and files (including add-ins). You can also repair a QuickTest Professional installation that has become corrupted.

Note: In some situations, you may be prompted to restart your computer after you have installed or made changes to the QuickTest installation. It is recommended that you restart your computer as soon as possible if you are prompted to do so. Delaying the system restart may result in unexpected QuickTest behavior.

This chapter includes:

- ➤ Installing and Uninstalling Specific QuickTest Professional Features on page 100
- ➤ Repairing Your QuickTest Professional Installation on page 102
- ➤ Uninstalling QuickTest Professional on page 103
- ➤ Saving and Restoring Your QuickTest Settings on page 105

Installing and Uninstalling Specific QuickTest Professional Features

Your QuickTest Professional DVD enables you to install or uninstall specific QuickTest Professional features. For example, you can install or uninstall an add-in or the sample applications provided with QuickTest Professional.

Note: You can also install or uninstall specific QuickTest Professional features by choosing **Start > Settings > Control Panel > Add or Remove Programs**, and then clicking the **Change** button for QuickTest Professional.

The procedure for installing or uninstalling features is similar to the procedure for performing a Custom installation. For more information on the specific screens mentioned in the procedure below, see "Installing QuickTest Professional" on page 20.

Note: Before uninstalling QuickTest Professional features, make sure that you have a minimum of 50 MB free disk space.

To install or uninstall QuickTest Professional features:

1 Insert the QuickTest Professional DVD into the DVD drive. If the DVD drive is on your local computer, the QuickTest Professional Setup window opens.

If the DVD is in a network drive, double-click **setup.exe** in the root folder of the DVD. The QuickTest Professional Setup window opens.

Note: You must use the same QuickTest Professional version that you used for the original installation.

- **2** Click **QuickTest Professional Setup**. The Welcome to the HP QuickTest Professional 10.00 Setup Wizard opens. Click **Next** to proceed.
- **3** The Maintenance Type screen opens. Select **Modify** and click **Next**.
- **4** In the Custom Setup screen, click an icon to view a menu and select how that feature is installed on your computer. The following options are available, depending on the feature:
- ➤ Will be installed on local hard drive. Installs the selected feature on your local hard drive.
- ➤ Entire feature will be installed on local hard drive. Installs the entire selected feature on your local hard drive.
 - ➤ Entire feature will be unavailable. Excludes the feature from the installation and it is not available in QuickTest.

You can select an item in the list to see a description of the feature as well as the space requirement on your drive for the feature, or how much space will be freed up if the feature is uninstalled.

Click **Next** to proceed.

- **5** Click **Next** in the Confirm Installation screen. The Installing HP QuickTest Professional 10.00 screen displays the progress of the application modification.
- **6** The Installation Complete screen opens. Click **Finish**.

Note: If you install a feature that has prerequisites for use with QuickTest, the Additional Installation Requirements dialog box will open after the feature is installed. For more information, see "Working with the Additional Installation Requirements Utility" on page 37.

Repairing Your QuickTest Professional Installation

Your QuickTest Professional DVD enables you to repair an existing QuickTest Professional installation, by replacing any missing or damaged files from your previous QuickTest Professional installation.

Note: You can also repair an existing QuickTest Professional installation by choosing **Start** > **Settings** > **Control Panel** > **Add or Remove Programs**, and then clicking the **Change** button for QuickTest Professional.

To repair your QuickTest Professional installation:

1 Insert the QuickTest Professional DVD into the DVD drive. If the DVD drive is on your local computer, the QuickTest Professional Setup window opens.

If the DVD is in a network drive, double-click **setup.exe** in the root folder of the DVD. The QuickTest Professional Setup window opens.

Note: To use the QuickTest Professional DVD to repair an installation, you must use the same DVD that you used for the original installation.

- **2** Click **QuickTest Professional Setup**. The Welcome to the HP QuickTest Professional 10.00 Setup Wizard opens.
- **3** Click **Next** to proceed. The Maintenance Type screen opens.
- **4** Select **Repair** and click **Next**. Then click **Next** on the Confirm Repair screen. The Setup Status screen displays the progress of the repair process.

Note: The repair process might take some time to start. During this time, the wizard might not respond. Afterwards, the Run Setup screens open and the repair process continues.

5 Click **Finish** in the Installation Complete screen.

Uninstalling QuickTest Professional

You can uninstall QuickTest Professional using the **Add or Remove Programs** option in the Windows Control Panel or using the QuickTest Professional DVD.

You can save your existing customization settings and registry keys before you uninstall QuickTest Professional, and then if required, restore them after you install a new version. For more information, see "Saving and Restoring Your QuickTest Settings" on page 105.

Before uninstalling QuickTest, make sure that you have a minimum of 50 MB free disk space.

Notes:

- ➤ You can uninstall specific QuickTest Professional features as described in "Installing and Uninstalling Specific QuickTest Professional Features" on page 100.
- ➤ You can uninstall individual QuickTest Professional hotfixes (patches) using the Add or Remove Programs option in the Windows Control Panel.

To uninstall QuickTest Professional using the Add or Remove Programs option in the Windows Control Panel:

- 1 Select Start > Settings > Control Panel > Add or Remove Programs. The list of currently installed programs opens.
- **2** Select **QuickTest Professional** and click **Remove**. A message prompts you to confirm your decision to uninstall QuickTest Professional. Click **Yes** and follow the on-screen instructions to uninstall QuickTest Professional. Click **No** to keep QuickTest Professional installed on your computer.

The uninstall program removes all QuickTest Professional features from your computer (including any QuickTest Professional add-ins).

To uninstall QuickTest Professional using the QuickTest Professional DVD:

1 Insert the QuickTest Professional DVD into the DVD drive. If the DVD drive is on your local computer, the QuickTest Professional Setup window opens.

If the DVD is in a network drive, double-click **setup.exe** in the root folder of the DVD. The QuickTest Professional Setup window opens.

Note: You must use the same DVD that you used for the original installation.

2 Click **QuickTest Professional Setup**. The Welcome to HP QuickTest Professional 10.00 Setup Wizard opens.

computer (including any QuickTest Professional add-ins).

- **3** Click **Next**. The Maintenance Type screen opens.
- **4** Select **Remove** and click **Next**. Click **Next** in the Confirm Uninstall screen. The uninstall program removes all QuickTest Professional features from your
- **5** Click **Finish** in the Removal Complete screen.

Note: Uninstalling QuickTest Professional does not uninstall any non-HP applications that you install as part of the QuickTest Professional installation, for example, the Microsoft Script Debugger or the Microsoft .NET Framework. You can uninstall these applications using the **Add or Remove Programs** dialog box in the **Control Panel**.

Saving and Restoring Your QuickTest Settings

If you are upgrading from QuickTest Professional 9.2 or earlier, you need to first uninstall your previous version. The Save and Restore Settings utility enables you to save some existing customization settings and registry keys before you uninstall an old QuickTest version, and then restore them after you install the new version.

The Save and Restore Settings utility is particularly useful for saving the manual customizations made to extensibility .xml files.

For a list of the files and settings saved by the Save and Restore Settings utility, see "Saved Files And Settings" on page 107.

The Save and Restore Settings utility does not backup your tests folder. Although the uninstall process does not delete QuickTest tests, you may want to create a backup copy of your tests folder before uninstalling.

To save existing settings:

1 Before uninstalling your previous QuickTest version, run the SaveRestoreSettings.exe file located in the root of the QuickTest installation DVD.

Note: After installing QuickTest Professional, the Save and Restore Settings utility is also available from **Start** > **Programs** > **QuickTest Professional** > **Tools** > **Save and Restore Settings**.



The Save and Restore Settings dialog box opens.

- **2** Select the **Save settings to** radio button option and enter the location and .**zip** file name in which you want to save your existing QuickTest Professional customization settings, and registry keys.
- **3** Click **OK** to save your settings.

To restore saved settings:

- 1 After installing QuickTest Professional, select Start > Programs > QuickTest Professional > Tools > Save and Restore Settings. The Save and Restore Settings dialog box opens.
- **2** Select the **Restore settings from** radio button option and enter the location and **.zip** file name in which your QuickTest Professional customization settings, and registry keys are saved.
- **3** Click **OK** to restore your settings.

Saved Files And Settings

The Save and Restore Settings utility saves specific files from the **bin** and **dat** folders in the QuickTest Professional installation folder, and specific QuickTest registry keys.

Bin Folder Files

The following files in the **<QuickTest Professional installation>\bin** folder are saved by the Save and Restore Settings utility:

- ➤ Mic.ini
- ➤ Qtreport.ini

Dat Folder Files

The following files from the **<QuickTest Professional installation>\dat** folder are saved by the Save and Restore Settings utility, if they exist (depending on the installed add-ins):

Related Add-in	File Name
Siebel	SiebelConfiguration.xml*
Siebel	SiebelEventConfiguration.xml*
Siebel	SiebelExceptionConfig.xml*
Siebel	SiebelPatterns.xml*
Siebel	CASConfiguration.xml*
Siebel	CASEventConfiguration.xml*
SAP	PropertyPatternConfigSAP.xml*
SAP	SAPConfiguration.xml*
SAP	SAPLearnFilter.xml*
SAP	SapEventConfiguration.xml*
PeopleSoft	PSConfiguration.xml*
PeopleSoft	PSEventConfiguration.xml*
PeopleSoft	PSLearnFilter.xml*

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Related Add-in	File Name
.NET	SwfConfig.xml
.NET	PatternsData.xml
.NET	WebFormsConfiguration.xml*
.NET	WebFormsEventConfiguration.xml*
.NET	WebFormsLearnFilter.xml*

Note: Files marked with an asterisk are copied only if they were changed by the user, but are not copied if no changes were made.

Registry Keys

The following registry key is saved by the Save and Restore Settings utility:

HKEY_LOCAL_MACHINE\SOFTWARE\Mercury Interactive\QuickTest Professional\MicTest\Packages\TEAPackage