Online Guide

WinRunner® 7.0

Java Add-in
Installation Guide

Table of Contents

Books
Online

Find

Find
Again

Help

Top of
Chapter

Back

Before You Install

Before you install the Java Add-in, please review the following installation procedures.

System Requirements

In order to successfully run WinRunner with the Java Add-In, you need the following minimum system requirements:

Platform	An IBM-PC or compatible with a Pentium® /100MHz or higher microprocessor.
Memory	32 MB of RAM memory.
Disk Space	24 MB of free disk space for a minimum installation, or 66 MB for a typical or complete installation. (An additional 5 MB of free disk space is required in your browser installation folder.)
Operating System	Windows 95, Windows 98, Windows 2000, Windows Me, or Windows NT 4.0.
Prerequisites	WinRunner 7.0 standalone installation.
	Netscape 4.05-4.76 Professional Edition, or Internet Explorer 4.01, 5.0x, or 5.5, using Microsoft JVM versions 2340 - 3802 or Java Plug - In, or JDK or JRE 1.1.6 or higher.

If you want to install from the network, map the installation drive before installing and run the installation from the mapped drive.

Notes to Windows 95/98 Users: If the CLASSPATH variable in the *autoexec.bat* file contains more than 400 characters, modify this line to fewer than 400 characters prior to installation of the Java Add-in.
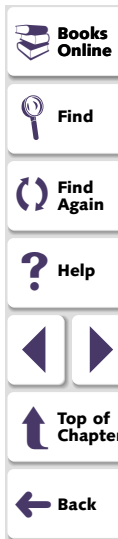
Preparing Your System for the Java Add-in

Before you install the Java Add-in, you must have a WinRunner 7.0 standalone installation on your computer.

Note: If you installed the Mercury classes on the Web Server with a previous version of the Java add-in, please remove them from the Web Server before updating the Java add-in.

Java Testing Prerequisites

If you intend to test applets in a browser, you must have the browser installed. If you intend to test a Java Plug-in or Jinitiator, these must be installed.

If you intend to test a Java Application or use the AppletViewer, you must have the Java Development Kit (JDK) or the Java runtime environment (JRE) installed.

If you reinstall or install a new version of a Web browser or other Java Environment, you must re-install the Java Add-in. Before you reinstall, however, be sure to close any browsers, Java applications, and WinRunner.

Books
Online

Find

Find
Again

? Help

Top of
Chapter

Back

This chapter explains how to install and set up the WinRunner Java Add-in.
Installing and setting up the WinRunner Java Add-in includes the following steps:

- **Running the Setup Program**

- **Configuring Java Applications Manually for Use with JDK/JRE Environments**

- **Activating WinRunner with Java Support**

Books Online

Find

Find Again

Help

Top of Chapter

Back

Running the Setup Program

The setup program installs the Java Add-in support in your WinRunner installation folder and in your *Common Files\Mercury Interactive\SharedFiles\JavaAddin* folder. If this folder did not exist previously, it is created.


Note: Before you install the Java Add-in, be sure to read **Preparing Your System for the Java Add-in** on page 5.

To run the Java Add-in setup program:

1 Close any instances of WinRunner, all web browsers, and any other programs that run Java applets or applications.

2 Insert the CD-ROM into the drive from which you want to install. If you are installing from a network drive, map to the drive.

3 Select **Run** on the **Start** menu.

4 Type the location from which you are installing, and setup.exe. For example, type d:\setup.exe.

5 Click **OK**. The WinRunner Java Add-in setup program starts.

6 Read the **Welcome** screen and click **Next**.

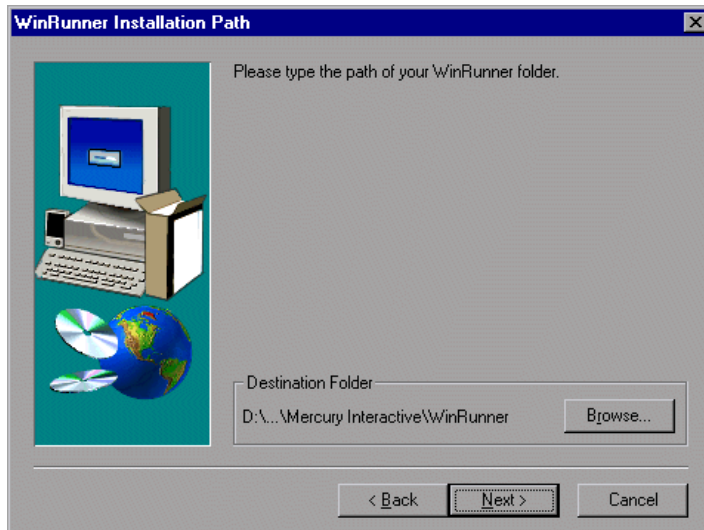Books Online

Find

Find Again

Help

Top of Chapter

Back

7 Choose the setup type that you prefer and click **Next.**
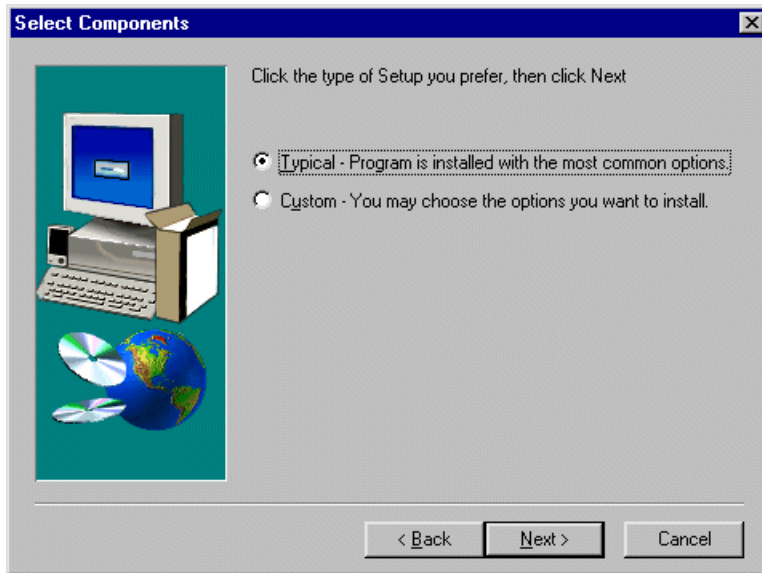

If you chose **Typical**, proceed to step 10. If you chose **Custom**, proceed to the next step.

8 Specify the folder in which WinRunner is installed. If the displayed folder is not
the WinRunner installation folder, click **Browse** to find the correct folder. Click
Next.

9 If you do not already have a common directory folder for shared Mercury Interactive files, you are prompted to specify this folder.
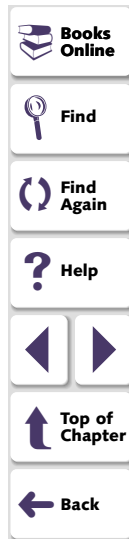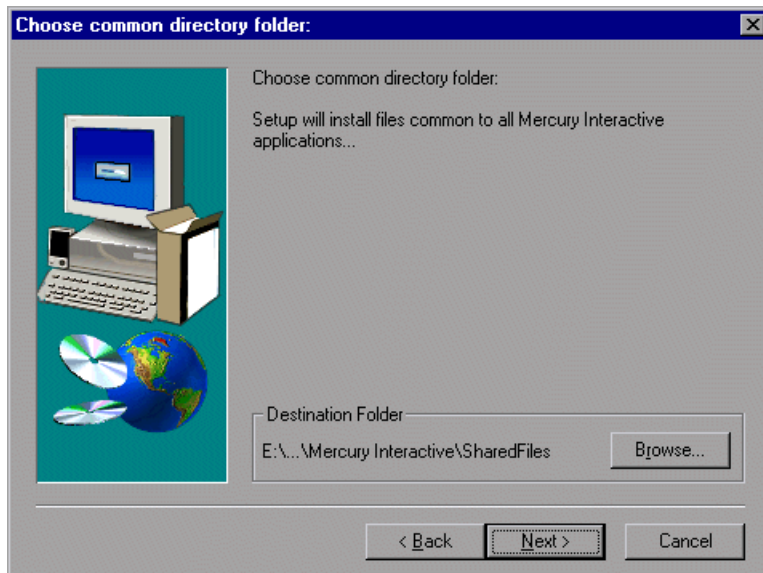
10 Select the Java Add-in component updates you would like to search for on the Internet.
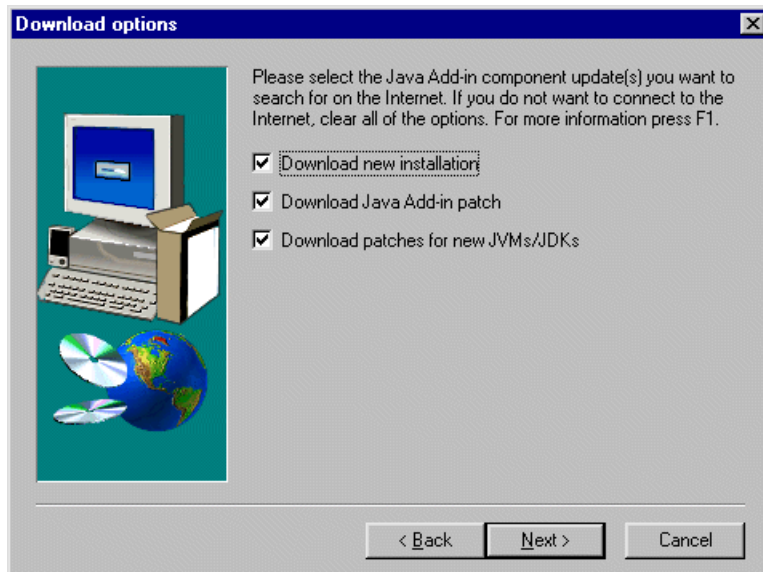
You may choose none, one, or any combination of the following options. If you do not want to connect to the Internet, clear all the options and the installation will proceed using the environment support included in this version.

- **Download new installation** searches for a newer version of the Java Add-in installation. If it finds a newer installation, the Setup downloads the new installation, closes the current installation and then runs the new one. If this occurs, return to step 6 and proceed through the new installation. When the Download options screen opens in the new installation, the Download new installation option is cleared by default.

- **Download Java Add-in patch** searches for patch updates for the Java add-in. If a new Java Add-in patch is found, the current setup program continues and incorporates the new patches as it proceeds.

- **Download patches for new JVMs/JDKs** searches for updated support for new JVMs/JDKs. the current setup program continues and incorporates the new patches as it proceeds.

    Click **Next.** If you are performing a typical installation, proceed to step 13. Otherwise, proceed to the next step.
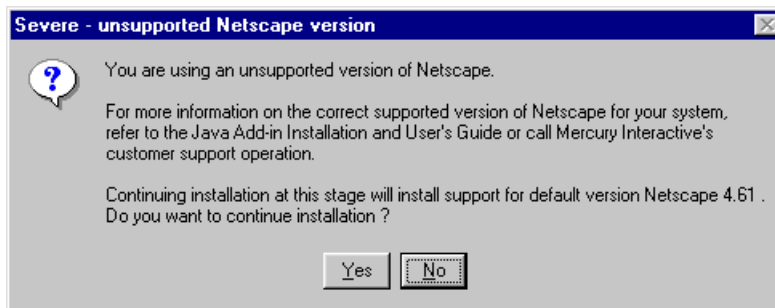
11 Select the Java environment(s) that you intend to use.
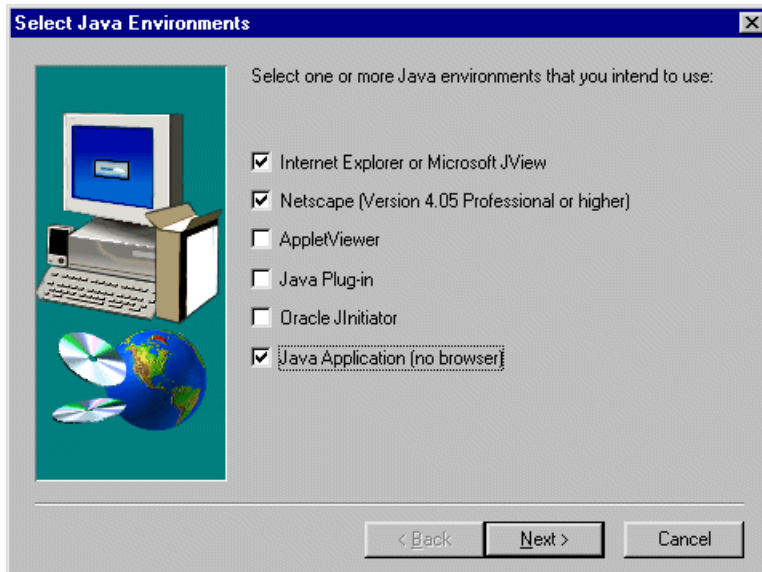
Click **Next**.

If you have a Java environment installed that is not supported by the Java Add-in installation, you will receive a warning message similar to the one below.


This message will state which Java environment is not supported.

If you want to continue the Java Add-in installation, click **Yes**. The Setup program will install support for the version listed in the screen.

Note: The Java Add-in offers Multi-JDK support, which enables you to work with multiple JDK versions without modifying your installation. The Multi-JDK support includes support for versions 1.1.x, 1.2.x, and 1.3.

For more information, see **Configuring Java Applications Manually for Use with JDK/JRE Environments** on page 22.

---
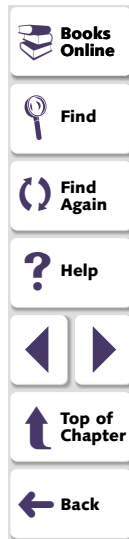
12 If you selected the **Applet Viewer** and/or **Java Application (no browser)** in the previous step, the Installing WinRunner hooks screen opens. Otherwise proceed to step 14.

The Installing WinRunner hooks dialog:

Installing WinRunner hooks

Installing WinRunner hooks enables WinRunner to recognize Java objects within your application automatically. If you do not want to install the hooks now, you will be required to configure your environment manually and to add a command line argument every time you invoke the application. For information on how to configure your environment manually, please refer to the Java Add-in User's Guide.

- Install hooks now
- I will configure my application for WinRunner manually

< Back   Next >   Cancel

Side navigation buttons:
- Books Online
- Find
- Find Again
- Help
- Top of Chapter
- Back

The WinRunner hooks option inserts the Mercury classes into the compressed file of classes provided together with JDK or JRE. This enables you to include Mercury support when launching *java.exe* or *jre.exe,* or when running batch files, without the need to configure each application manually as described on **page 22**.

- If you usually use the same JDK or JRE version with all of your applications, installing the WinRunner Hooks option will facilitate launching your applications. In this case, you should load your application normally.

- If you regularly use multiple versions of JDK or JRE, you may prefer to configure each application manually, as described on **page 22**, in the following cases:

  - when you select the **Install hooks now** option and work with a non-default JDK/JRE environment

  - when you select the **I will configure my application for WinRunner manually** option and work with multiple JDKs/JREs on your local machine

Click **Install hooks now** or **I will configure my application for WinRunner manually** and click **Next**.

Books Online

Find

Find Again

Help

Top of Chapter

Back
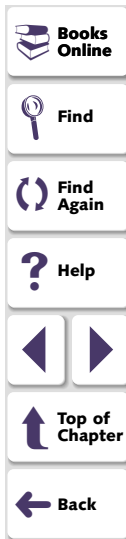
Note: During the WinRunner Hooks installation process, the JDK/ JRE classes file is saved to the *jp_ bak* folder. If you delete or move the contents of this folder, you will not be able to use the WinRunner Hooks restore itinerary mechanism to restore the JDK/JRE classes. For more information about the restore mechanism, see **Restoring Your Java Classes** on page 24.

**13** If you selected **Install hooks now** in the previous step (custom installation), or if the Installation finds a JDK or JRE version on your local machine (typical installation), the Installing WinRunner hooks alert appears while the WinRunner hooks are installed. This process may take several minutes.

Installing WinRunner hooks. This may take several minutes...
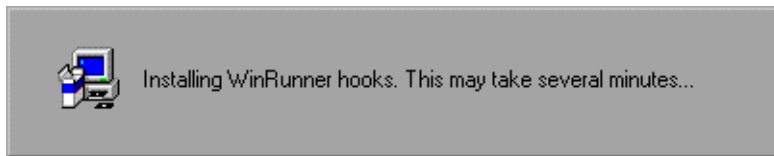
14 The installation process begins. To pause or quit the installation process, click **Cancel**.

Books Online

Find

Find Again

Help

Top of Chapter

Back

15 Select a program folder. The default is WinRunner. Click **Next**.
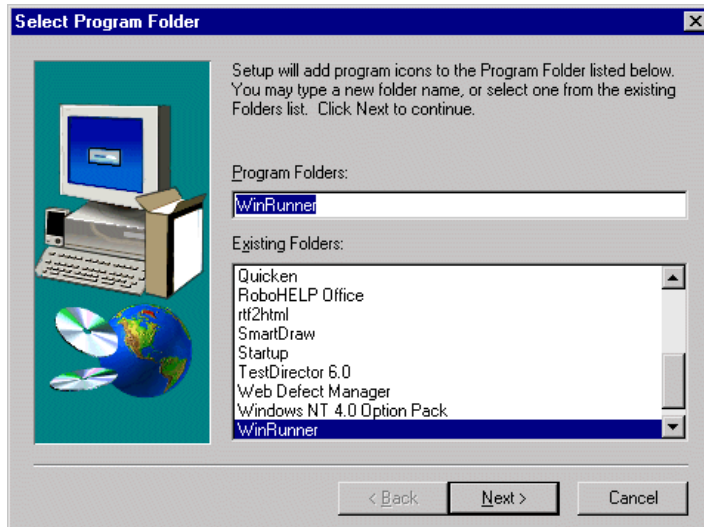
16 The Installed components screen opens and reports the components that were successfully installed during the installation.
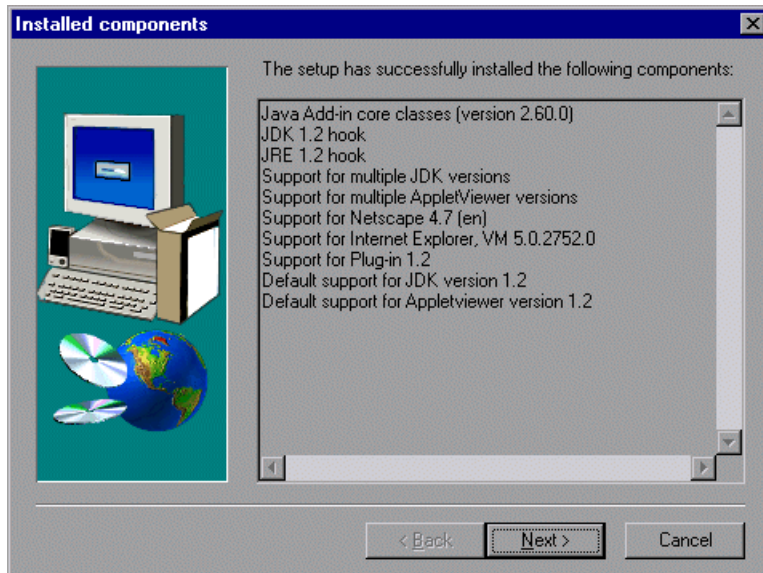
The following components may be listed in the installed components report.

- **JDK x.x hook and/or JRE x.x hook** - indicates that the WinRunner hooks option was installed successfully for the specified version.

- **Support for multiple [JDK/AppletViewer] versions** - indicates that Java Add-in's Multi-JDK support for the specified Java components was installed successfully.

- **Support for [environment]** - indicates that Mercury support has been successfully installed for the specified Java environment (browsers or plug-ins).

- **Default support for [JDK/AppletViewer] version x.x** - indicates that Mercury support will be loaded for the default Virtual Machine.

Read the list and click **Next**.

17 To complete the installation process, click **Finish**.

You should reboot your computer before using the Java Add-in.

Configuring Java Applications Manually for Use with JDK/JRE Environments

If you chose not to install WinRunner hooks during the Java Add-in installation, you can configure your application(s) for WinRunner manually using the appropriate command line.

The Java Add-in offers Multi-JDK support, which enables you to work with multiple JDK versions without modifying your installation. The add-in automatically selects the correct JDK version when you run your application or applet.

The Multi-JDK support includes support for versions 1.1.x, 1.2.x, and 1.3.

- When working with version 1.1.x, you should load the application normally.

- In order to use JDK versions 1.2.x or 1.3, you must add the *Xrunmic_supp* and the *Xbootclasspath* parameters to the application's command line.

The Java Add-in does not support version 1.1.5. as this version is not Year 2000 compliant.

For JDK versions other than those listed above, please contact Mercury Interactive Customer Support.

Note: If you launch *java.exe* or *jre.exe* from other applications or from batch files, see **Configuring Java Applications Manually for Use with JDK/JRE Environments** on page 22.

For example, to run an application with java.exe, the following command-line should be used:

java -Xrunmic_supp -Xbootclasspath/p:%mic_classes% <ApplicationClass>

Note: The predefined environment variable *mic_classes* defines the folder *<JavaAddIn Shared Files folder>\classes*. Note that by default, this is *Common Files\Mercury Interactive\SharedFiles\JavaAddin* folder on the drive on which Windows is installed.

To run an applet with applet viewer, the following command line should be used:

appletviewer -J-Xrunmic_supp -J-Xbootclasspath/p:%
mic_classes%<AppletURL>

Books
Online

Find

Find
Again

Help

Top of
Chapter

Back

Restoring Your Java Classes

If it is necessary, you can restore your java classes to their pre-WinRunner Hooks state.

To restore your Java classes:

1 Choose **Programs > WinRunner > Java Add-in > Java Add-in Patching Tool** from the **Start** menu. The Choose Itinerary screen opens. Click **Restore previously patched Java classes** to restore the classes that you patched with the WinRunner Hook option during installation.
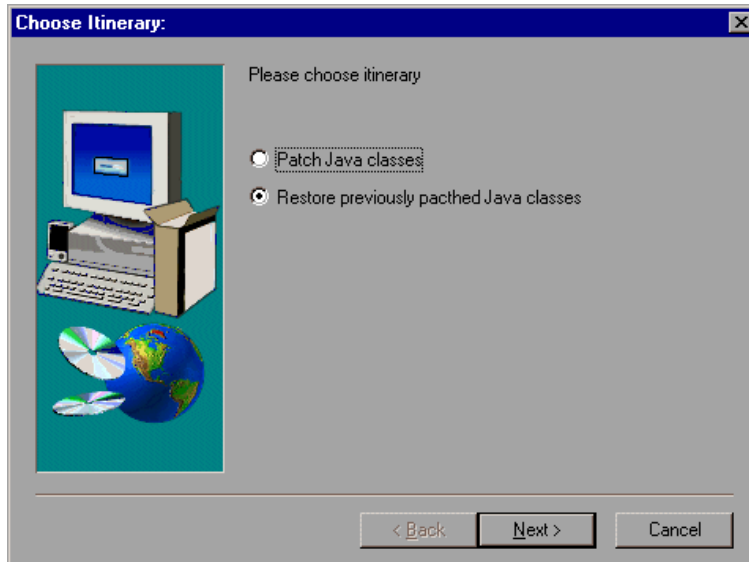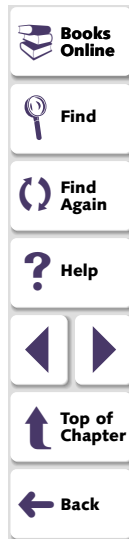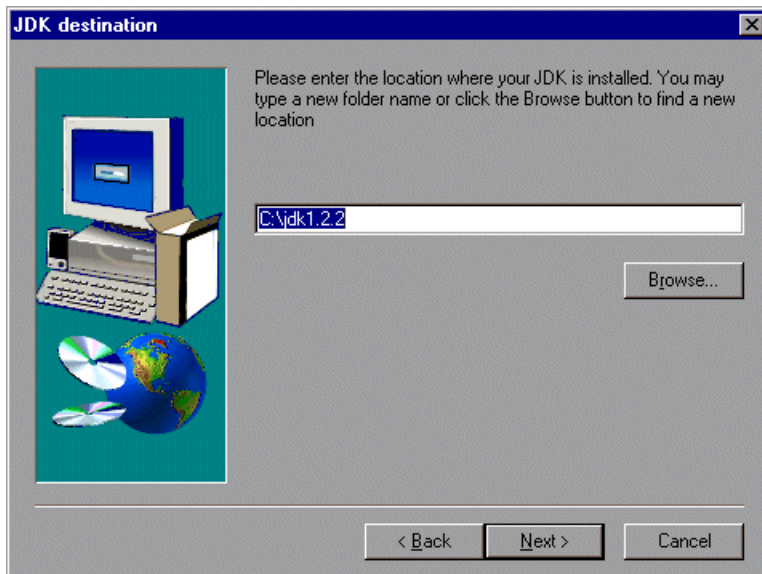

Click **Next.**

2 The Choose Environments screen opens. Click **Java Development Kit classes,** or **Java Runtime Environment classes**, or both, as appropriate.
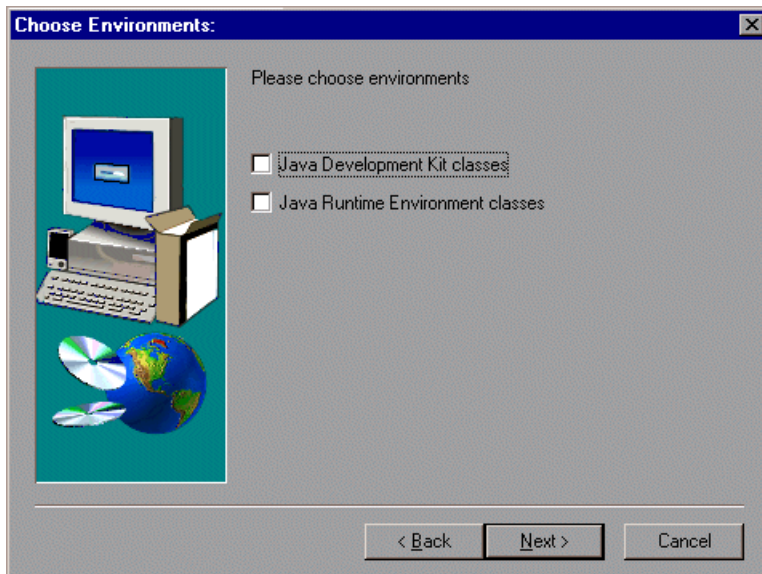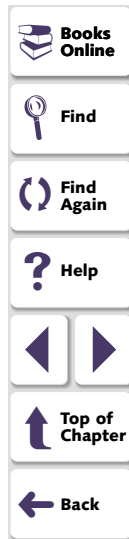

Click **Next.**

3 The JDK (or JRE) destination screen opens. Type in the path or use the **Browse** button to choose the destination of the JDK/JRE that you want to restore.
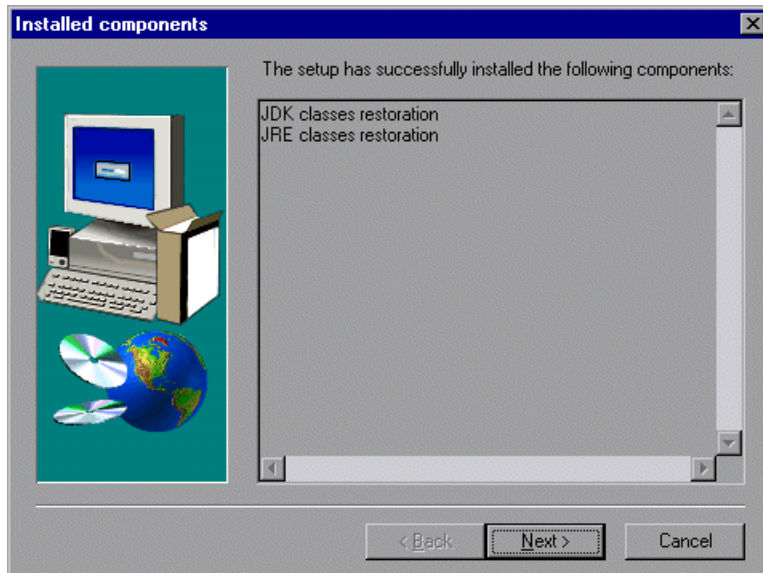

Click **Next**.

4 If you chose to restore both JDK and JRE classes, the JRE destination screen opens after the JDK destination screen. Type in the path or use the **Browse** button to choose the destination of the JRE that you want to restore. The restoration process begins.
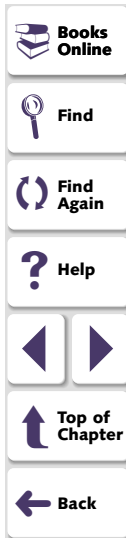
5 When the patching process is complete, the Installed Components screen opens and displays the versions of the JDK/JRE environments that you chose to restore.

Click **Next.**

6 The Setup Complete screen opens. Click **Finish** to complete the restoration.

Activating WinRunner with Java Support

To start WinRunner with support for Java applets and applications, select **Programs > WinRunner > WinRunner** from the **Start** menu. The Add-in Manager dialog box opens. Select **Java** and click **OK**.

Add-In Manager

Select add-ins to load:

- ☐ ActiveX Controls
- ☑ Java
- ☐ PowerBuilder
- ☐ Visual Basic
- ☐ WebTest

☑ Show on startup

| OK | Help |
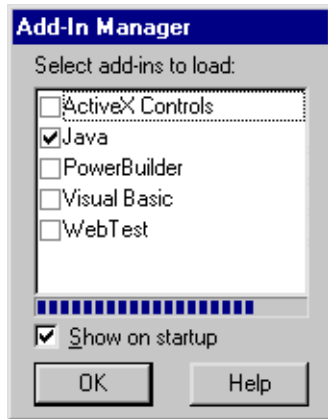
Note: When you start WinRunner, you may need to configure it to display the Add-in Manager on start up.

To display the Add-in Manager on startup:

1 Start WinRunner.

2 In **Settings** > **General Options** > **Environment tab**, check **Show Add-in Manager dialog for ___ seconds** and fill in a comfortable amount of time in seconds. (The default value is 10 seconds.)

3 Click **OK**.

4 Close WinRunner. A WinRunner Message dialog opens asking "Would you like to save changes made in the configuration?" Click **Yes**.

5 Start WinRunner again and select Java in the Add-in Manager box as described above.

Books Online

Find

Find Again

Help

Top of Chapter

Back

This chapter explains how to run and analyze the Java Add-in Verifier in order to isolate installation problems.

About the Java Add-in Verifier

If you experienced problems installing the Java Add-in, or you successfully installed it but experience difficulties when you try to launch WinRunner, record a Java applet or application with WinRunner, or run a test script, you can verify your Java Add-in installation by running the Java Add-in Verifier.

The Java Add-in Verifier checks the environment settings and installations that will affect the performance and operation of the Java Add-in. It collects information about the WinRunner version, the Java Add-in, and Java development kits (JDKs) installed on your computer.

After the verification process is complete, you can view a report. The Java Add-in Verifier saves this report as a log file that you can view in any text editing tool.
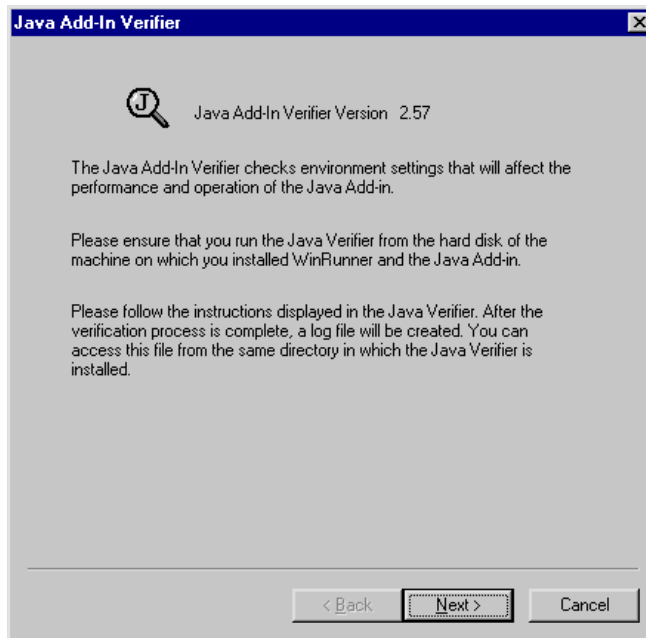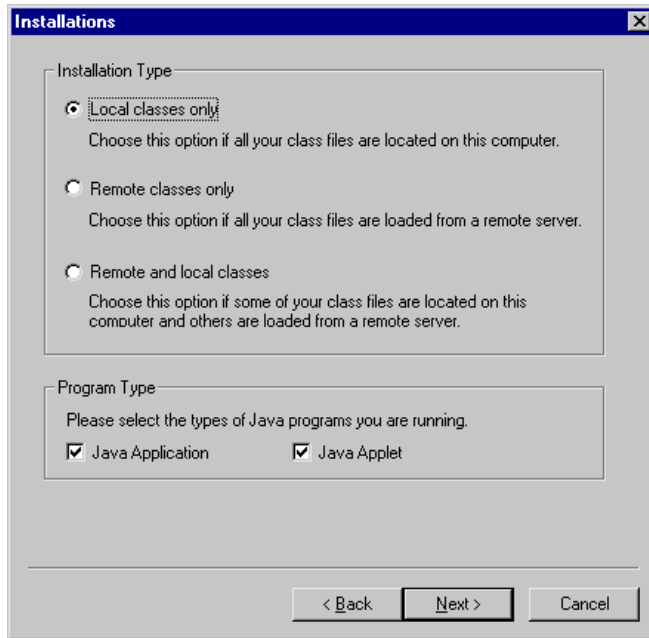
Using the Java Add-in Verifier
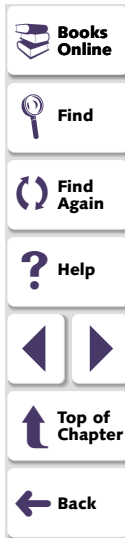
To verify your Java Add-in installation:

1 Launch the Java Add-in Verifier. Choose **Programs > WinRunner > Java Verifier** in the **Start** menu. The Java Add-in Verifier screen opens.

Java Add-In Verifier

Java Add-In Verifier Version 2.57

The Java Add-In Verifier checks environment settings that will affect the performance and operation of the Java Add-in.

Please ensure that you run the Java Verifier from the hard disk of the machine on which you installed WinRunner and the Java Add-in.

Please follow the instructions displayed in the Java Verifier. After the verification process is complete, a log file will be created. You can access this file from the same directory in which the Java Verifier is installed.
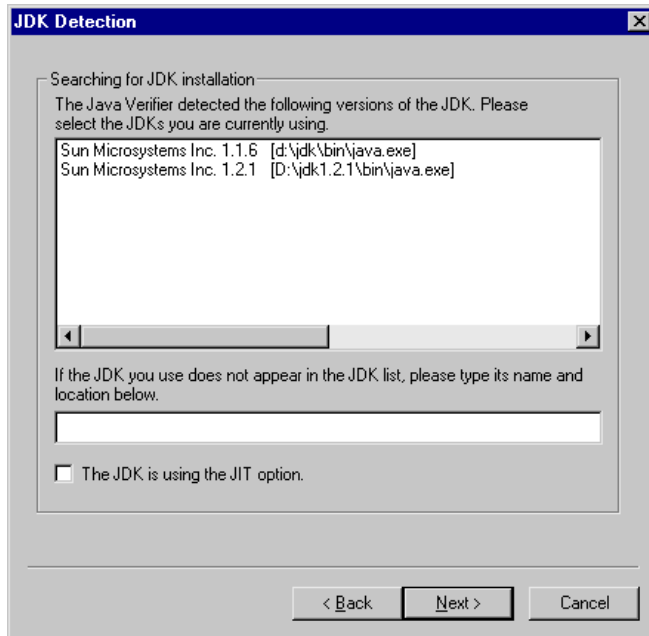
< Back   Next >   Cancel

2 Read the opening screen. Click **Next**.

3 In the Installations screen, select **local classes only** and select the type(s) of Java programs you run on your system.

Installations

Installation Type

- ⊙ Local classes only

  Choose this option if all your class files are located on this computer.

- ○ Remote classes only

  Choose this option if all your class files are loaded from a remote server.

- ○ Remote and local classes

  Choose this option if some of your class files are located on this computer and others are loaded from a remote server.

Program Type

Please select the types of Java programs you are running.

☑ Java Application   ☑ Java Applet

< Back   Next >   Cancel

Click **Next**. The Java Add-in Verifier scans your computer's hard disk, and creates a list of the JDKs installed on your computer.

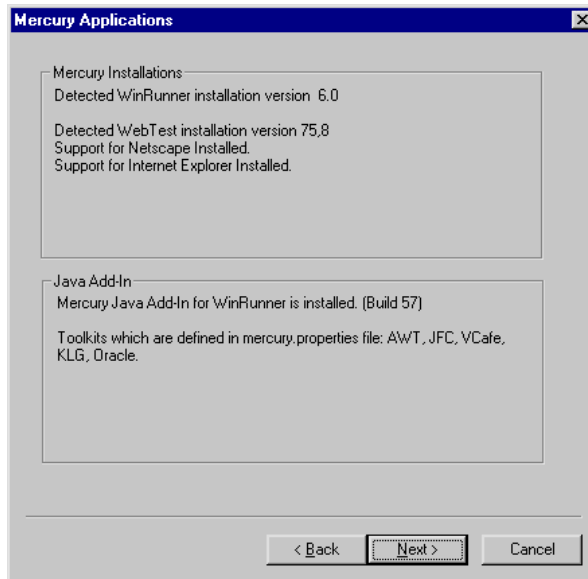**4** In the JDK Detection screen, select the JDKs you use from the list.

JDK Detection

Searching for JDK installation

The Java Verifier detected the following versions of the JDK. Please select the JDKs you are currently using.

Sun Microsystems Inc. 1.1.6 [d:\jdk\bin\java.exe]
Sun Microsystems Inc. 1.2.1 [D:\jdk1.2.1\bin\java.exe]

If the JDK you use does not appear in the JDK list, please type its name and location below.

☐ The JDK is using the JIT option.

< Back   Next >   Cancel

Books Online

Find

Find Again

Help

Top of Chapter

Back

Note: If your JDK is not displayed in the list, first check your JDK installation and make sure that your Java bin folder is in the system path variable. If the Java Add-in Verifier is still unable to recognize the JDK, try to reinstall the JDK. If this does not work, enter the name and location of the JDK in the text box or contact Mercury Interactive Customer Support.

Select **The JDK is using the JIT option** check box if you are using your JDK's "just in time" compiler option. Note that by default JDK 1.1.6 and higher use JIT.

Click **Next**.

Books Online

Find

Find Again

Help

Top of Chapter

Back

5 The Java Add-in Verifier lists all of the WinRunner and Java Add-in installation options the Java Add-in Verifier detected.

- The Mercury Installations list displays a list of Mercury Interactive products installed on your computer such as: WinRunner, LoadRunner, and the WebTest Add-in.

- The Java Add-in list displays a list of toolkits which have been defined in the *mercury.properties* file.

Mercury Applications

Mercury Installations

Detected WinRunner installation version 6.0

Detected WebTest installation version 75,8
Support for Netscape Installed.
Support for Internet Explorer Installed.

Java Add-In

Mercury Java Add-In for WinRunner is installed. (Build 57)

Toolkits which are defined in mercury.properties file: AWT, JFC, VCafe, KLG, Oracle.

< Back   Next >   Cancel

Note: If the Java Add-in Verifier failed to detect a Mercury Interactive application, first check the application separately. If it does not work properly, reinstall the application. If the Java Add-in Verifier still fails to detect the application, contact Mercury Interactive Customer support.

Read the list, and click **Next**.

Books Online

Find

Find Again

Help

Top of Chapter

Back

6 In the Browsers screen, select the Web browser(s) you are using to execute Java applets.
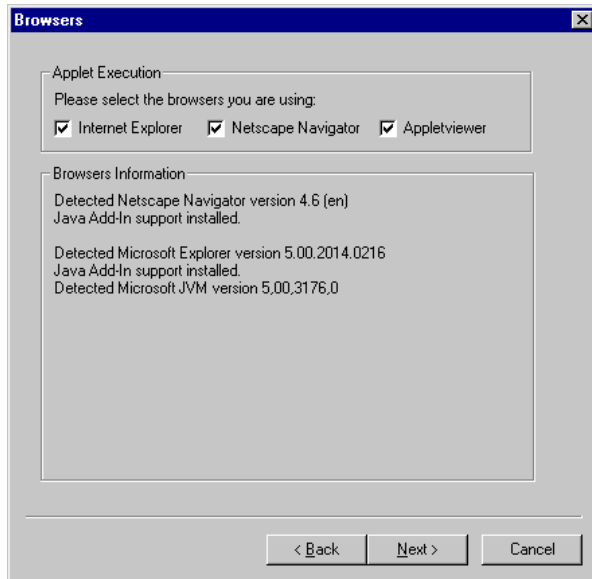
Note: If the Java Add-in Verifier failed to detect a browser installed on your computer, first check the browser separately. If it does not work properly, reinstall the browser. If the Java Add-in Verifier still fails to detect the browser, contact Mercury Interactive Customer Support.

Click **Next**.
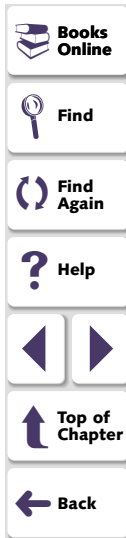
7 In the Java Toolkits screen, select all Java toolkits used by your Java applet or
application.
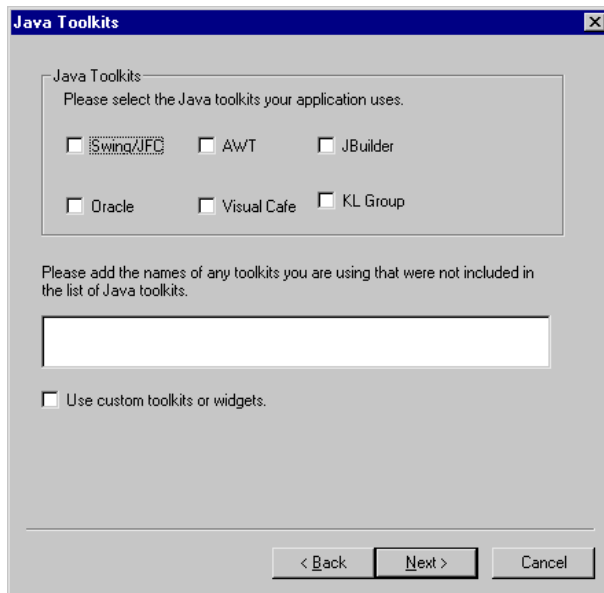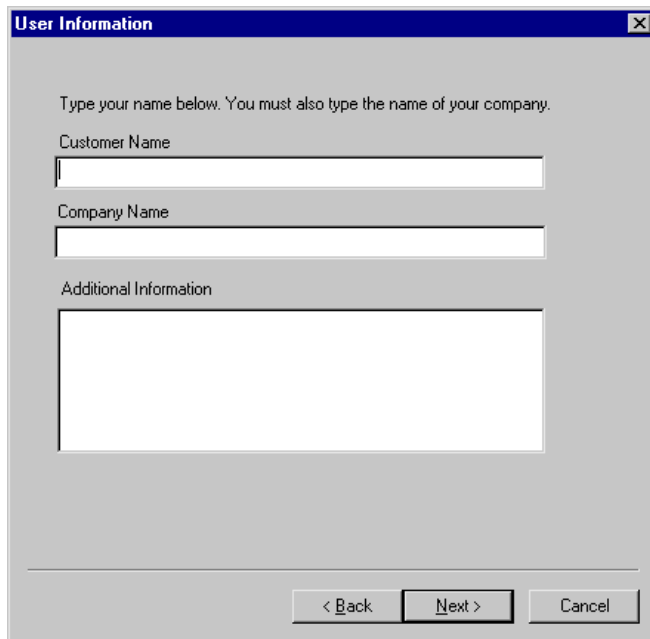
If your toolkit is not listed, you can add the name of the toolkit in the text box.

If you are using your own custom toolkits and widgets, select the **Use custom
toolkits and widget** check box.

Click **Next**.

8 In the User Information screen, type your name, the name of your company, and any additional information you want to add to the log file. This information will be included in the Java Add-in Verifier log file.
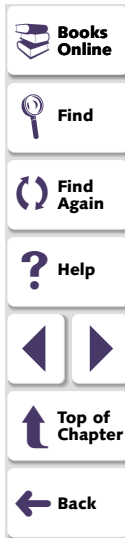

Click **Next**.
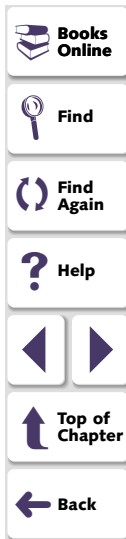
9 View the generated report in the Report View screen.
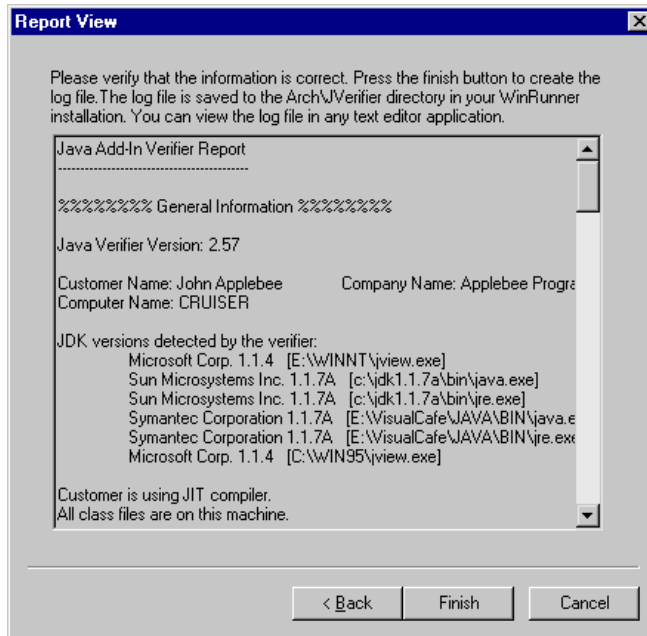
Click the **Finish** button to close the Java Add-in Verifier and generate the log file.
The log file is saved in the *Common Files\Mercury Interactive\SharedFiles\JavaAddin\bin\Jverifier* folder. You can view the file in any text editor application.

If you decide to use WinRunner without the Java Add-in, you have the option of temporarily disabling the add-in, or uninstalling it.

Disabling the Java Add-in Temporarily

In order to disable the Java Add-in, you must disable the Java Add-in support in your application and in WinRunner.

There are two ways to temporarily disable the Java Add-in in your application:

● Disable the toolkit support in the mercury.properties file

Note: You must use this method if you installed WinRunner hooks during installation.

● Remove the WinRunner classpaths

To disable the toolkit support in the mercury.properties file:

1 Select **Programs > WinRunner > Java Add-in > mercury.properties** from the **Start** menu.

2 In the *mercury.properties* file, place a pound sign (#) before the line starting with **mic_toolkit**=. For example:

mic_toolkit=AWT, JFC, VCafe, KLG, Oracle

3 Save and close the file.

4 If you use Jinitiator, open the *mercury.properties* file from the *<Jinitiator Installation folder>\classes* folder and repeat steps 2 and 3 for this file.
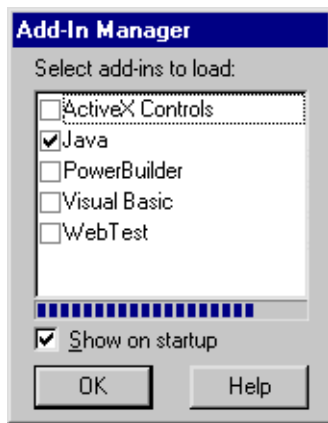
5 If you use JDK or JRE, open the *mercury.properties* file from the *<JRE Installation folder>\classes* folder and repeat steps 2 and 3 for this file.

To remove the WinRunner classpaths:

1 Remove the *<Mercury shared files folder>\JavaAddIn\classes* path from the classpath.

2 Delete the environment variable: _classload_hook

To temporarily disable the Java Add-in in WinRunner:

 1 Select **Programs** > **WinRunner** > **WinRunner** from the **Start** menu to open WinRunner.

 2 After the opening screen appears, the **Add-In Manager** dialog box opens for ten seconds. (If the Add-In Manager dialog box does not open, see the note below.)

Add-In Manager
Select add-ins to load:
☐ ActiveX Controls
☑ Java
☐ PowerBuilder
☐ Visual Basic
☐ WebTest
▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮
☑ Show on startup
OK   Help

To disable Java support, clear the **Java** check box.

 3 Click **OK**. WinRunner opens with the add-in support disabled.

Books Online

Find

Find Again

Help

Top of Chapter

Back

Note:

If the Add-In Manager dialog box does not open:

1 Start WinRunner.

2 In **Settings** > **Options** > **Environment tab**, check **Show Add-in Manager dialog for ___ seconds** and fill in a comfortable amount of time in seconds. (The default value is 10 seconds.)

3 Click **OK**.

4 Close WinRunner. A WinRunner Message dialog opens asking "Would you like to save changes made in the configuration?" Click **Yes**.

5 Repeat the procedure described in "To temporarily disable the Java Add-in in WinRunner," on .

Books Online

Find

Find Again

Help

Top of Chapter

Back

Uninstalling the Java Add-in

To uninstall the Java Add-in:

1 If you installed WinRunner hooks during the installation process, restore your pre-WinRunner hooks JDK/JRE classes.

For more information on how to restore your classes, see **Restoring Your Java Classes** on page 24.

2 Select **Programs > WinRunner > Java Add-in > Uninstall Java Add-in** from the **Start** menu.

Note: Alternatively, you may select Java Add-in from the Add/Remove Programs dialog box (**My computer > Control Panel > Add/Remove Programs**).

---

3 A message asks you to confirm that you want to remove the Java Add-in and all of its components. Click **Yes**.

4 When the uninstall process is complete, click **OK**.

5 If you selected the Java Plug-in environment during installation of the Java Add-in, go to *<Plug-in installation folder>\plug\lib\bak*. Move the rt.jar file to the lib folder and delete the *bak* folder.

Books Online

Find

Find Again

Help

Top of Chapter

Back

6 Remove the path <Mercury Shared Files Folder>\JavaAddin\classes from the classpath. (Note that the *mic_classes* environment variable points to that location.)

- If you are working in Windows NT 4.0, from the Start menu select **Settings > Control Panel > System** from the **Start** menu. In the **System properties** dialog box, click the **Environment** tab. In both the **System Variables** list and the **User Variables** list, delete <Mercury Shared Files Folder>\JavaAddin\classes from the classpath. For example, E:\Program Files\Common Files\Mercury Interactive\SharedFiles\JavaAddin\classes. Click **Close**.

- If you are working in Windows 95 or Windows 98, open the file *[Windows Drive]:\autoexec.bat* in any editing program. Delete <Mercury Shared Files Folder>\JavaAddin\classes from the classpath. For example, E:\Program Files\Common Files\Mercury Interactive\SharedFiles\JavaAddin\classes. Save and close the file, and reboot your computer.

The Java Add-in is now completely uninstalled.

WinRunner - Java Add-in Installation Guide, Version 7.0

If you have any comments or suggestions regarding this document, please send them via e-mail to documentation@mercury.co.il.