# WinRunner<sup>®</sup> Floating-License Installation Guide Version 7.5



MERCURY INTERACTIVE

WinRunner Floating-License Installation Guide, Version 7.5

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WinRunner Floating-License Installation Guide

# Part I

# Setting Up the WinRunner Floating License

# Installing a Floating License

You can work with WinRunner with two types of licenses: local, and floating. This guide describes everything you need to know about installing a floating license server and a floating license code. For information on installing a local license, refer to the to the *WinRunner Installation Guide*.

If you are not sure which type of license to install, refer to the "Understanding Your WinRunner License" section of the *WinRunner Installation Guide* or contact your system administrator or your local Mercury Interactive representative.

Note that after you install your floating license server and code, you must install the WinRunner client, using the floating license option, on each computer from which you want to run WinRunner. When you install a floating license, you can install WinRunner on as many machines as you want. However, WinRunner's floating-license server regulates the number of copies of WinRunner that are allowed to run concurrently based on your floating license code. You can increase the number of copies of WinRunner you can run at the same time by purchasing additional copies of WinRunner from Mercury Interactive and getting a new license code that enables the required number of users. For information on installing the WinRunner client, refer to the to the *WinRunner Installation Guide*.

Installing a WinRunner floating license consists of two main steps:

- ► Installing a Floating-License Server
- ► Installing a Floating License Code

### **Installing a Floating-License Server**

We recommend that you install the license server on a machine that is running the Windows NT 4.0 Server or Windows 2000.

You should install the license server on a machine that also meets the following criteria:

- ► has TCP/IP installed
- ► has a fixed IP address (not a laptop)

Note: To ascertain that TCP/IP is installed and functioning properly, you can check that another machine on the network can identify the machine where you plan to install the license server. On another machine, click **Start > Run**. In the **Open** box, type "ping [name of the machine where the license server will be installed]". Click **OK**. If the first machine can identify the second machine on the network, an MS-DOS window opens and four successful reply messages appear. If the first machine cannot identify the second machine on the network, an MS-DOS window opens, but there are no successful reply messages.

Note that once you have installed the license server, it must be running whenever you use WinRunner.

#### To install the floating-license server:

1 Insert the WinRunner Floating License Server CD-ROM into the drive from which you want to install. If the CD drive is on your local machine, the WinRunner License Installation window opens. If you are installing from a network drive, connect to it and run *autorun.exe* 



- 2 Click Install License Server.
- **3** In the Choose Setup Language dialog box, choose a language for the installation and click **OK**.

**4** The SentinelLM Server setup program starts, and the Welcome screen is displayed.



Click Next.

#### **5** The License Agreement opens.

InstallShield Wizard
License Agreement Please read the following license agreement carefully.
Press the PAGE DOWN key to see the rest of the agreement.
SOFTWARE LICENSE AND DEVELOPER'S AGREEMENT All Products (including developer's kits, Sentinel hardware keys, diskettes or other magnetic media, software, documentation and all future orders) are subject to the terms stated below. If you disagree with these terms, please return the Product and the documentation to Rainbow, postage prepaid, within three days of your receipt, and Rainbow will provide you with a refund, less freight and normal handling charges.
setup will close. To install SentinelLM 7.1.0 Server, you must accept this agreement.
< <u>B</u> ack <u>Y</u> es <u>N</u> o

To install the WinRunner floating-license server, you must accept the terms of the license agreement by clicking **Yes**. If you click **No**, the setup program will close.

**6** Specify the destination folder for the WinRunner floating-license server. To choose a different destination, click **Browse**.

InstallShield Wizard
Choose Destination Location
Select folder where Setup will install files.
Setup will install SentinelLM 7.1.0 Server in the following folder.
To install to this folder, click Next. To install to a different folder, click Browse and select another folder.
Destination Folder
E:\\SentinelLM 7.1.0 Server Browse
< <u>B</u> ack <u>Next</u> > Cancel

Click **Next** to proceed.

The installation process begins. To pause or quit the installation process, click **Cancel**.

7 Click Finish to complete the installation process.

Once you have installed the floating-license server, you must install the floating license before you can use WinRunner. Note that no demo license is available for a floating license.

**Note:** If you are installing a floating license on Windows 95, you should restart your floating-license server before installing the floating license.

### **Installing a Floating License Code**

Once the floating-license server is installed, you must run the floating license installation in order to install your floating license code. Installing the floating license consists of two main stages:

- using the maintenance number to create information that is sent to Mercury Interactive's Customer Support Organization
- entering the license code provided by Mercury Interactive's Customer Support Organization

#### To install the floating license:

**1** Insert the WinRunner Floating License Server CD-ROM into the drive from which you want to install. If the CD drive is on your local machine, the WinRunner License Installation window opens.



If you are installing from a network drive, connect to it and run *autorun.exe* 

#### 2 Click Install Floating License.

The WinRunner License Installation program starts, and the Welcome screen opens, displaying the locking code for your computer, the license type, and the WinRunner maintenance number that you entered when you installed WinRunner.

Note that there is a single maintenance number for each team of users. (The maintenance number identifies the customer and replaces what was formerly a serial number for each purchased copy of WinRunner.)



**3** Use the Web site displayed in the screen to send the locking code, license type, and maintenance number to Mercury Interactive Customer Support. Note that you can copy and paste the information from the Welcome screen into the license request form at the Mercury Interactive Customer Support Web site or an e-mail message.

**Note:** If you do not have Web access from the computer where you are installing WinRunner, you can send an e-mail to Customer Support.

**4** If you already have your license code, click **Next** to begin the license activation process, and proceed to step 4 of "Activating a Floating License Code" on page 14. Otherwise, click **Cancel** and wait for your license code to arrive. When it arrives, follow the instructions for activating a floating license code as described below.

# **Activating a Floating License Code**

Once you receive your license code from Mercury Interactive, you need to run the WinRunner License Installation again to activate the code.

#### To activate your local WinRunner license code:

**1** Insert the WinRunner Floating License Server CD-ROM into the drive from which you want to install. If the CD drive is on your local machine, the WinRunner License Installation window opens.

If you are installing from a network drive, connect to it and run *autorun.exe*.



**2** Click Install Floating License.

The WinRunner License Installation program starts, and the Welcome screen opens.

The Welcome screen displays the locking code for your computer, the license type, and the WinRunner maintenance number that you entered when you installed WinRunner.



- **3** Click **Next** to continue.
- **4** Read the message about exiting all Windows programs before continuing with the installation. Exit all Windows programs and click **Next**.

WinRunner License Installation - User Information	
	Type in below your name and your company name. You must also type in your maintenance number (this number was shipped to you with your product).
O	Eirst Name:     Last Name:       Company:
	< <u>Back</u> <u>M</u> ext > Cancel

**5** The User Information screen opens.

Enter your first name, last name, and company name in the appropriate boxes. In the **Maintenance Number** box, enter your maintenance number, which you received from Mercury Interactive when you purchased WinRunner. This number can be found in the Maintenance Pack Number envelope or on the bill of lading. Note that there is a single maintenance number for each team of users. The maintenance number replaces what was formerly a serial number for each purchased copy of WinRunner. The maintenance number, which identifies the customer, determines the license type.

Click Next.

**6** The Details screen opens. Verify that the information on the WinRunner License Installation screen is correct and insert the license code provided by Mercury Interactive's Customer Support Organization into the License Code box.

WinRunner License Installation - Details	
	Please check that the following information matches the data you supplied to the Mercury Interactive Customer Support office.          Maintenance Number : 8888-1234567899         Locking Code       8-28784         License Type       : Network License         Please enter the License Code in the box below.         License Code:
	< <u>B</u> ack <u>N</u> ext> Cancel

Note that the license code is valid only for the computer with the locking code that you entered in the license request form. Click **Next**.

- **7** If you entered a valid license code, the Status screen confirms that your license code was successfully installed. Click **Next**.
- **8** The Finished screen opens and displays customer support information. Click **Finish** to complete the license activation process.

**Note:** For additional information, and answers to common license code questions, see *http://kb-web.mercuryinteractive.com/license.html*.

### **Uninstalling a Floating-License Server**

You can uninstall the floating-license server.

**Note:** If you uninstall the license server, you will not be able to use WinRunner unless you install a local license on each WinRunner machine. For more information about local WinRunner licenses, refer to the *WinRunner Installation Guide*.

#### To uninstall the license server:

- 1 Click Start > Settings > Control Panel.
- 2 Double-click Add/Remove Programs.

The Add/Remove Programs dialog box opens.

- **3** In the Install/Uninstall tab, select SentinelLM.
- 4 Click Add/Remove.

If you want to uninstall the license server in order to reinstall it on a different machine, contact Mercury Interactive's Customer Support Organization in order to receive a new license code that matches the locking code for the machine on which you want to install the license server.

# Changing the WinRunner Client License Type

You can change the license type your WinRunner client uses from local to floating or from floating to local.

To change your license type:

 In WinRunner, choose Help > Change License Type. The Change License Type utility opens. The screen indicates your current license type.

😹 Change License Type	×
	This utility changes your license type.
	You are currently using a local license. By default, this utility modifies the wrun ini configuration file stored under the Windows folder, the default location of this file. Use the browse button to specify the WinRunner configuration file to change.
Sec.	E:\WINNT\wrun.ini
	Click OK to use a floating license. Click Cancel to continue using a local license.
	Cancel

- **2** By default, this utility modifies the *wrun.ini* configuration file stored in the Windows folder. (This is the default location of the *wrun.ini* configuration file.) If the *wrun.ini* configuration file you are using is stored in a different location, click the browse button to specify the correct configuration file to modify.
- **3** Click **OK** to change your license type, or click **Cancel** to continue using the existing license type.

Note that you must restart WinRunner for the change in license type to take effect.

If you change your license type from floating to local, you need to request and activate the local license code. For more information, refer to the *WinRunner Installation Guide*.

If you mistakenly changed your license type from local to floating, but there is no floating-license server installed and running on your network, you will not be able to restart WinRunner. If this happens, you can open the Change License Type utility by running *LicTypeDlg.exe* from your *<WinRunner installation folder>\arch* directory.

# **Floating-License Server Tips and Tricks**

This chapter describes:

- ► General Tips
- ► Troubleshooting
- ► Locking Codes
- ► Frequently Asked Questions
- ► Known Problems and Workarounds

### **General Tips**

When the client machines (running WinRunner) are on multiple domains, you should install a license server on each domain.

We recommend installing the license server on a machine running the Windows NT 4.0 Server.

You should install the license server on a machine that also meets the following criteria:

- ► has a fixed IP address
- ► has TCP/IP installed

### Troubleshooting

#### I want to turn off or reset the license server.

If you want to reset the license server, we recommend rebooting the machine. You can also turn off the license server without rebooting the machine by following the instructions below:

Note that the license server starts at startup on the host machine.

# To turn off the license server if the host machine is running Windows NT 4.0:

- 1 Click Start > Settings > Control Panel.
- **2** Double-click **Services**.

Note that **SentinelLM** appears in the **Service** list in the **Services** dialog box.

- **3** Highlight **SentinelLM** and click **Stop**.
- **4** To restart the license server, highlight **SentinelLM** and click **Start**.

#### To turn off the license server if the host machine is running Windows 95:

Note that SentinelLM appears in the taskbar. Right-click on the icon and click **Close** on the pop-up menu.

To restart the license server, reboot your machine.

**Note:** We do not recommend running the license server on a machine running on Windows 95 or Windows 98. We recommend running the license server on a machine running on the Windows NT 4.0 Server.

# **Locking Codes**

A locking code is a number generated by a license server or a local license host. Every machine has its own locking code. The locking code, together with the maintenance number, are used to generate the license code for the server computer. A license code generated based on the locking code from one computer cannot be used on another computer.

# **Frequently Asked Questions**

Question	Explanation/Solution
Why does the WinRunner license code not match the locking code of the license server or the standalone license? (error 19)	If the license code does not match, the user is trying to use a license code generated according to a specific locking code on a different machine. Determine whether the user is inserting the correct license code.
Why does the WinRunner client machine not find the WinRunner server on the network?	LSHOST and LSFORCEHOST were not defined even though WinRunner's license server is on a different subnet. Set LSHOST on your client machine. For additional information on the LSHOST system variable, see Appendix B, "License Server Utilities."

The following are the most commonly encountered questions:

# **Known Problems and Workarounds**

Problems	Workarounds
The WinRunner license server is installed on a different domain than the WinRunner clients.	Open UDP port 5093 between domains. Set the LSHOST and LSFORCEHOST parameters on the WinRunner client machines. For additional information, see Appendix B, "License Server Utilities."
	To check the connection, use "ping -a" from the Windows command line.
	If this is successful, it should display: Reply from <server address="" i.p.=""> : <byte size=""> &lt; time &gt;</byte></server>
You want to install WinRunner license servers on Novell or Unix machines.	The license server software does not support Noveell or Unix. Generate a standalone license code for each WinRunner client machine. Alternatively, use a Windows platform network machine as a WinRunner license server.
Although you have a legal license code, you cannot start WinRunner.	If you install WinRunner using the <i>setup.exe</i> instead of from the autorun screen, it automatically installs WinRunner with the local license option. Use the Change License Type utility (run <i>LicTypeDlg.exe</i> from your <i><winrunner folder="" installation="">\arch</winrunner></i> directory) to change your WinRunner license type to the floating license option.
You have changed the date on the license machine, for example, due to date operations testing. This locked the WinRunner license.	Restore the machine's clock to the original date. Contact Mercury Interactive's Customer Support Organization for the license code.

The following is a list of known problems and workarounds:

WinRunner Floating-License Installation Guide • Setting Up the WinRunner Floating License

# Part II

# Appendixes

# **License Server Error Codes**

This appendix describes the following error codes:

- ► Error 5: Cannot talk to the license manager. "LocalHost" server not running.
- ► Error 8: Failed to install temporary license (error code 8).
- ► Error 19: Cannot install a license code.

### Error 5: Cannot talk to the license manager. "LocalHost" server not running.

The license server has stopped. For Windows NT and Windows 2000, choose **Start > Settings > Control Panel > Services**. Locate the Sentinel LM service and click **Start**. If the license server does not start, then contact your local Mercury Interactive Customer Support office.

### Error 8: Failed to install temporary license (error code 8).

A temporary license cannot be installed because the License Manager library cannot be found. This library is normally called *lsapiw32.dll*. It should be in the same directory as the running executable.

Possible Causes	Possible Solutions
The host name does not match the computer name.	Ensure that the host name matches the computer name: Choose Start > Settings > Control Panel > Network > Identification to see the computer name. The computer name must be the same as the host name displayed when you choose Start > Settings > Control Panel > Network > Protocols > TCP/IP Protocol > DNS.

### Error 19: Cannot install a license code.

Error 19 can occur in two situations:

► Failed to add license string "Unknown" to the license server on "NO-NET."

A local license cannot be installed on the server running on the specified machine.

► Failed to add license string UNKNOWN to the license server on "Local-host."

A floating license cannot be installed on the server running on the specified machine.

#### **Reasons that Error 19 Occurs**

The following is general information about why error 19 occurs:

Possible Causes	Possible Solutions
The license code is nodelocked and does not match the locking code of the PC where the license server is being installed.	Contact Mercury Interactive Customer Support to reissue the license with the correct license code.
When you try to install a local license, the license code is for a floating license.	Copy <i>Isdecode.exe</i> from <i>WinRunner CD-ROM</i> \ <i>LicenseManager</i> \ <i>utils</i> to <i>Program Files</i> \ <i>Common Files</i> \ <i>Mercury Interactive</i> \ <i>License Manager</i> and execute the file. This displays the license code information, which enables you to verify that you are installing the correct license type.
The license code was entered incorrectly.	Copy <i>lsdecode.exe</i> from <i>WinRunner CD-ROM</i> \ <i>LicenseManager</i> \ <i>utils</i> to <i>Program Files</i> \ <i>Common Files</i> \ <i>Mercury Interactive</i> \ <i>License Manager</i> and execute the file. This displays the license code information, which enables you to verify that you are installing the correct license type.
The license code has already been installed.	Check that the <i>lservrc</i> file exists in <i>Program Files</i> \ <i>Common Files</i> \ <i>Mercury Interactive</i> \ <i>License Manager</i> , <i>Program Files</i> \ <i>Rainbow Technologies</i> \ <i>sentLM</i> \ <i>Server</i> \ <i>lservrc</i> , or the Rainbow Technologies installation path. <b>Note:</b> If you want to reinstall the license code, delete the <i>lservrc</i> file before doing so.

# **License Server Utilities**

This appendix describes the utilities included with WinRunner's license management that assist you in managing your WinRunner licenses. The license management utilities are in the *WinRunner Floating-License Installation CD-ROM\utils* folder. It is divided into the following sections:

- ► Overview
- ► Displaying Current WinRunner Users
- ► Displaying License Servers
- ► Setting the LSHOST System Variable

#### **Overview**

You can start all WinRunner License Management utilities from a Windows user interface by running *SrvUtils.exe* in the *WinRunner Floating-License Installation CD-ROM*\*utils* folder.

Server Utilities Tool	×
S 🖉 ಖ 🖇 ±	
ECHOID Utility	
Generates a WinRunner n information from the custor for generating the license	nachine's locking code. Obtains the mer machine (locking code) to be used key for a specific computer.
Commendation	
Command Line	
Executable Name:	echoid.exe
Command Line Options:	

The following table provides a brief description of the WinRunner license management utilities and short examples to facilitate usage.

Utility	Description/Example of Usage
echoid.exe ECHOID Utility	Generates a WinRunner machine's locking code. Obtains the information from the customer machine (locking code) to be used for generating the license key for a specific computer.
ipxecho.exe IPXECHO Utility	Displays the IPX network address on the computer on which it is run. Used to determine the IPX address of a license server.

Utility	Description/Example of Usage
lsdecode.exe LSDECODE Utility	Displays the license code information, which enables you to check that you are installing the correct license type. It decodes a WinRunner license code (lservrc) and retrieves license information, e.g. expiration time, temporary/permanent, floating/local etc. Make sure the lservrc file and this utility are in the same directory.
lslic.exe LSLIC Utility	<ul> <li>Adds or removes a license code. You can use the following command line options:</li> <li>-a (add) -f (file name): adds a license code from a license file.</li> <li>-removeall removes all licenses from a WinRunner license server.</li> <li>Either use the LSHOST environment variable to specify the license server or make sure that this Server Utilities program (SrvUtils.exe) and lslic.exe are in the same directory as the lservrc file.</li> </ul>
lsmon.exe LSMON Utility	<ul> <li>Monitors a WinRunner license server machine.</li> <li>You can run the LSMON utility on a client machine (running WinRunner) or the host machine (the license server). This DOS-based program displays: <ul> <li>the maximum number of concurrent WinRunner users allowed</li> <li>the number of machines currently running WinRunner</li> <li>the IDs of the machines currently running WinRunner</li> <li>the number of WinRunner licenses currently not in use</li> </ul> </li> <li>Note: To monitor a remote WinRunner server, use <a href="https://serviru.lim.setwork">https://serviru.lim.setwork</a>. For example: c:\lsmon.exe saturn monitors the "saturn" host. For additional information on this utility, see "Displaying Current WinRunner</li> </ul>

Utility	Description/Example of Usage
lsrvdown.exe LSRVDOWN Utility	Shuts down the license server. Specify the license server host name as the command line option for this utility.
lsusage.exe LSUSAGE Utility	Displays usage information generated by the license server. The license server logs all license codes issued or denied, but it does not record license code updates. e.g. lsusage.exe -l Usage-log-file • [-c CSV-Format-New-log-file]
	<ul> <li>[-f Feature-Name1, Version: Feature- Name2, Version]</li> </ul>
	<ul> <li>[-y Start-Year(YYYY) [-m Start-Month(MM) [-a Start-Day(DD)]]]</li> </ul>
	• [-Y End-Year(YYYY) [-M End-Month(MM)] [-A End-Day(DD)]]]
lswhere.exe LSWHERE Utility	Displays the network names of all machines running WinRunner license servers. It searches for license servers on the network. You can run this utility on a client machine (running WinRunner) or the host machine (the license server). The parameter - <ip address=""> searches for a specific network host. For additional information on this utility, see "Displaying License Servers" on page 36.</ip>
lsdemo.exe LSDEMO Utility	Simulates WinRunner license usage. This utility can "add" or "remove" licenses from a specific server and produce a log file. You can use this utility to check that the license key is installed correctly on the license server host and that you have the correct number of concurrent licenses.
WLMAdmin.exe WLMADMIN Utility	Monitors WinRunner license server transactions and provides information on license servers, WinRunner users, and machines running WinRunner. You can use this utility to check that a WinRunner license server is running.

The following table provides a description of system variables used with the WinRunner license server:

Utility	Description/Example of Usage
LSFORCEHOST system variable	Restricts WinRunner to a specific LM server. (You can specify the server by either host name or IP address.) For more information, see the first reason in "Reasons that Error 19 Occurs," on page 29.
LSHOST system variable	Sets the server list to search for a license server using a colon separator (:). You should use this variable in order to contact a server in a remote sub net. For more information, see the first reason in "Reasons that Error 19 Occurs," on page 29. For information on setting this variable, see "Setting the LSHOST System Variable" on page 36.

# **Displaying Current WinRunner Users**

#### LSMON

You can run the *LSMON* utility on a client machine (running WinRunner) or the host machine (the license server). It is a DOS-based program that displays:

- ➤ the maximum number of concurrent WinRunner users allowed by the license
- ► the number of machines currently running WinRunner
- ► the IDs of the machines currently running WinRunner
- ► the number of WinRunner licenses currently not in use

**Note:** To run the LSMON utility from a client machine and display information for all the machines in the network, type LSMON <license server host name>.

**Note for TestDirector users:** If you are working with TestDirector, you can monitor the number of WinRunner licenses in use from the Licenses tab of the TestDirector Server Manager. Note that this displays only the number of WinRunner licenses in use by machines currently connected to TestDirector. For additional information, refer to the *TestDirector Administrator's Guide*.

### **Displaying License Servers**

#### LSWHERE

You can run the *LSWHERE* utility on a client machine (running WinRunner) or the host machine (the license server). It is a Windows-based program that displays the network names of all machines running WinRunner license servers.

### Setting the LSHOST System Variable

You may need to set the LSHOST system variable (described above on page 35) in order to solve one of the problems described below:

- ▶ "Error 19: Cannot install a license code." on page 28.
- ➤ The WinRunner client machine cannot find the WinRunner server on the network, described in "Frequently Asked Questions" on page 22.
- The WinRunner license server is installed on a different domain than the WinRunner clients, described in "Known Problems and Workarounds" on page 23.
- WinRunner was configured to use a local license code, but now the user wants to install a license server on the network and use a floating license, described in "Known Problems and Workarounds" on page 23.

#### Setting LSHOST for a Floating License Server

You set the LSHOST system variable to enables WinRunner to search for a license on the network. You set this system variable differently for different operating systems.

If the client machine is running Windows NT:

- 1 Click Start > Settings > Control Panel.
- **2** Double-click **System**.

The System Properties dialog box opens.

- **3** Click the **Environment** tab.
- **4** In the **Variable** box, type LSHOST.
- **5** In the **Value** box, type the full name of the license server. Alternatively, you may enter the IP address of the host machine.

**Note:** For multiple host names (i.e., where there are multiple WinRunner license servers running on one network), use a colon (:) to separate the hosts' names or IP addresses in the Value box.

6 Click Set.

System Properties	? ×
Startup/Shutdown General	Hardware Profiles User Profiles Performance Environment
<u>S</u> ystem Variables:	
Variable	Value
DSQUERY INCLUDE LIB	TDSYBASESERVER E:\Program Files\Mts\Include E:\Program Files\Mts\Lib;c:\sybase\LIB
LSHOST	saturn
User Variables for ofir:	
Variable	Value
CLASSPATH Path TEMP TMP	f:\toolkits\delphi\vbroker\lib\vbcpp.jar c:\tmp\bin;F:\TOOLKITS\DELPHI\DELPHI E:\TEMP E:\TEMP
⊻ariable: LSHOST	
Vajue: saturn	
	S <u>et</u> <u>D</u> elete
	OK Cancel <u>A</u> pply

7 Click OK.

If the client machine is running Windows 2000:

- 1 Click Start > Settings > Control Panel.
- **2** Double-click **System**.

The System Properties dialog box opens.

- **3** Click the **Advanced** tab.
- **4** Click the **Environment variables** button.

The Environment Variable dialog box opens.

**5** Under **System variables**, click **New**.

The New System Variable dialog box opens.

- 6 In the Variable Name box, type LSHOST.
- **7** In the **Variable Value** box, type the full name of the license server. Alternatively, you may enter the IP address of the host machine.

**Note:** For multiple host names (i.e., where there are multiple WinRunner license servers running on one network), use a colon (:) to separate the hosts' names or IP addresses in the Value box.

**8** Click **OK** to close the New System Variable dialog box. The Environment Variables dialog box is displayed as follows:

Environment Variables		
ironb		
Value		
D:\Documents and Settings\yaronb\Loc		
D:\Documents and Settings\yaronb\Loc		
New Edit Delete		
Value 🔺		
D:\WINNT\system32\cmd.exe		
saturn		
I Windows NT		
Ne <u>w</u> Edįt Deļete		
OK Cancel		

- **9** Click **OK** to close the Environment Variables dialog box.
- **10** Click **OK** to close the System Properties dialog box.

If the client machine is running Windows 95/98/Me:

- 1 Click Start > Run.
- **2** In the **Open** box, type **sysedit**.

The System Configuration Editor opens, displaying 5 systems files.

**3** Make the following addition to the *AUTOEXEC.BAT* file:

Set LSHOST=[full name of server]

Alternatively, you may substitute the IP address of the host machine.



**Note:** For multiple host names (i.e., where there are multiple WinRunner license servers on one network), use a colon (:) to separate the hosts' names or IP addresses in the Value box.

**4** Save and close the *AUTOEXEC.BAT* file.

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