

Agilent Logic Analyzers License Server

Administration Guide



Notices

© Agilent Technologies, Inc. 2004-2010

No part of this manual may be reproduced in any form or by any means (including electronic storage and retrieval or translation into a foreign language) without prior agreement and written consent from Agilent Technologies, Inc. as governed by United States and international copyright laws.

Trademarks

Microsoft®, MS-DOS®, Windows®, Windows 2000®, and Windows XP® are U.S. registered trademarks of Microsoft Corporation.

Adobe®, Acrobat®, and the Acrobat Logo® are trademarks of Adobe Systems Incorporated.

Manual Part Number

Version 04.00.0000

Edition

October 5, 2010

Available in electronic format only

Agilent Technologies, Inc. 1900 Garden of the Gods Road Colorado Springs, CO 80907 USA

Warranty

The material contained in this document is provided "as is," and is subject to being changed, without notice, in future editions. Further, to the maximum extent permitted by applicable law, Agilent disclaims all warranties, either express or implied, with regard to this manual and any information contained herein, including but not limited to the implied warranties of merchantability and fitness for a particular purpose. Agilent shall not be liable for errors or for incidental or consequential damages in connection with the furnishing, use, or performance of this document or of any information contained herein. Should Agilent and the user have a separate written agreement with warranty terms covering the material in this document that conflict with these terms, the warranty terms in the separate agreement shall control.

Technology Licenses

The hardware and/or software described in this document are furnished under a license and may be used or copied only in accordance with the terms of such license.

Restricted Rights Legend

If software is for use in the performance of a U.S. Government prime contract or subcontract, Software is delivered and licensed as "Commercial computer software" as defined in DFAR 252.227-7014 (June 1995), or as a "commercial item" as defined in FAR 2.101(a) or as "Restricted computer software" as defined in FAR 52.227-19 (June 1987) or any equivalent agency regulation or contract clause. Use, duplication or disclosure of Software is subject to Agilent Technologies' standard commercial license terms, and non-DOD Departments and Agencies of the U.S. Government will receive no greater than Restricted Rights as defined in FAR 52.227-19(c)(1-2) (June 1987). U.S. Government users will receive no greater than Limited Rights as defined in FAR 52.227-14 (June 1987) or DFAR 252.227-7015 (b)(2) (November 1995), as applicable in any technical data.

Safety Notices

CAUTION

A **CAUTION** notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a **CAUTION** notice until the indicated conditions are fully understood and met.

WARNING

A WARNING notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a WARNING notice until the indicated conditions are fully understood and met.

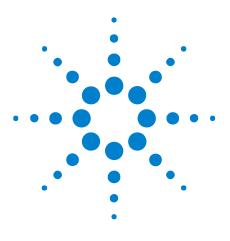
Contents

1 License Server Administration

Overview 8

Setting Up the License Server 9 Server Step 1: Installation of License Server Software 9 Server Step 2: Add the Server License File Path to Registry Key 9 Server Step 3: Install the Server License File 9 Server Step 4: Adjust the Server Firewall to Allow License Services 10 Server Step 5: Configure and Start the Server 21 Setting Up Client Logic Analyzers or PCs 24 Client Step 1: Add the license server using the Agilent Logic Analyzer application 24 **Client Step 2: Verification of Server Access** 24 Borrowing Licenses on a Client 26 Installing New License Files After the Server is Running 27 Tearing Down a License Server 28 Teardown Step 1: Uninstalling the License Server 28 Sample License Files 32 Sample Server File (3 Lines): 32 Sample Node-Locked File: 32

Index



Agilent Logic Analyzers License Server Administration Guide

License Server Administration

Overview 8 Setting Up the License Server 9 Setting Up Client Logic Analyzers or PCs 24 Borrowing Licenses on a Client 26 Installing New License Files After the Server is Running 27 Tearing Down a License Server 28 Sample License Files 32

Starting with the *Agilent Logic Analyzer* application version 3.20 release, you are able to order floating (also known as *counted*) licenses for tools and other add-in software. (Previously, all licenses were *node-locked*.)

Before you can use floating licenses, you need to set up a license server.

This document describes how to set up a license server for the Agilent Logic Analyzer software.

See Also For more information on FLEXnet licensing, see the *FLEXnet Publisher Licensing Toolkit 11.8 License Administration Guide* included with the license server software as: "LicenseAdministration.pdf".



1 License Server Administration

Overview

Setting up for centrally managed floating licenses is a fairly simple procedure. It involves specially configuring one PC or logic analyzer as your license server, obtaining license files for it, and testing to see that the server is working. Then, each logic analyzer or PC that will be obtaining licenses from this central server must be set up and tested.

In general, here are the steps you'll be following:

- **1** Set up the server:
 - a Identify the server and get license files customized to the server.
 - **b** Install the License Server package.
 - c Install the server's license file.
 - **d** Adjust the firewall so the license requests can get through.
 - e Start the server.
 - f Test the running server.
- 2 Set up and test each client:
 - a Add the license server using the Agilent Logic Analyzer application.
 - **b** Test to see that this client can get to the server.
- **3** After set up and testing is complete, you will be ready to run licensed logic analysis software.

The remainder of this document provides detailed instructions for accomplishing these steps.

Setting Up the License Server

This section walks you through the installation and setup of the license server for Agilent logic analyzers.

Server Step 1: Installation of License Server Software

1 Be sure to use the license server software that comes with the version of *Agilent Logic Analyzer* application software you are using.

If you installed the application from CD or DVD, you can find the appropriate license server installation package on the same CD or DVD (the file name is: SetupLALicenseServer.exe).

2 Run the installation package on the designated server.

Server Step 2: Add the Server License File Path to Registry Key

If you are running the license server and the *Agilent Logic Analyzer* application on the same instrument or PC, you need to add the server license file path to the AGILENT_LICENSE_FILE registry key. (When the *Agilent Logic Analyzer* application starts up, it adds the node-locked license file path to the registry key.)

For information on editing the registry, see:

"http://support.microsoft.com/kb/322756"

The registry key location is:

• My Computer\HKEY_LOCAL_MACHINE\SOFTWARE\FLEXIm License Manager\AGILENT_LICENSE_FILE

Use the semicolon ';' delimiter to separate the server license file path from any other content in the key.

The default server license file path is:

• C:\Program Files\Agilent Technologies\LicenseServer\LicenseFiles

Server Step 3: Install the Server License File

• Install all license information into one file in the directory:

C:\Program Files\Agilent Technologies\LicenseServer\LicenseFiles (default location)

NOTE

If the license server is running the Windows 2000 operating system, please ensure that the license file in this directory has a filename of 8.3 (11 chars in length or shorter). There is a FLEXnet issue with longer names, and at least one license file must be no longer than 8.3. When you browse to the license file in Server Step 5 – Item 5, below, select this short filename.

Server Step 4: Adjust the Server Firewall to Allow License Services

NOTE

The steps for adjusting the server firewall are different depending on the server's operating system and service pack level. Perform only the steps appropriate for your server's operating system and service pack level.

This section describes how to adjust the server firewall on these types of server hardware and operating systems:

- "On Logic Analyzers with Windows XP Service Pack 2 (or later)" on page 10
- "On Logic Analyzers with Windows XP Service Pack 1" on page 12
- "On PCs with Windows XP Service Pack 2 (or later)" on page 13
- "On PCs with Windows Vista" on page 16
- "On PCs with Windows 7" on page 19

When the license server is on a PC (or a logic analyzer with Windows 2000, which does not have built-in firewall software), you must make sure that its firewall allows access to ports 27000 and 27005.

If you need to use
different portIf the port numbers 27000 and 27005 are already in use, you can use
different port numbers. Port numbers from 27000 through 27009 are
recommended, but you can use any unused port number from 0 through
64000.

If you use different port numbers, be sure to change the port numbers specified in the license file as well.

On Logic Analyzers with Windows XP Service Pack 2 (or later)

- 1 Open a Command Prompt window by choosing **Start>All Programs>Accessories>Command Prompt** from the Windows Start menu.
- **2** In the Command Prompt window, change to the directory where the license server software was installed. For example, if you installed to the default location, enter the command:

cd "C:\Program Files\Agilent Technologies\LicenseServer"

3 Define the license server firewall ports by entering the following command (with both options):

ė	agFir	ewSP2.wsf /	licserve	er /setup
	agFirew	SP2: Confirm Firew	all Setup 🛛 💈	<
	♪	About to set up Logic A This will RESET all curre Do you still want to pro	nt Firewall settings	
		OK Ca	ancel	

Click **OK** in the confirmation dialog.

NOTE

Because the logic analyzer's environment is well-defined (known operating system, firewall, etc.), the agFirewSP2.wsf command resets the current firewall settings to those that are appropriate for the logic analyzer.

After running agFirewSP2.wsf, the Windows Firewall is set up as shown in Figure 1.

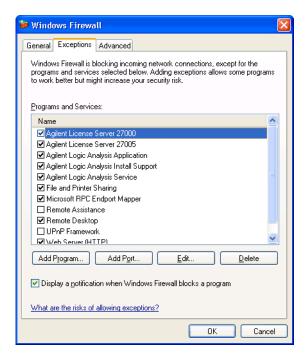


Figure 1 Windows Firewall setup for license server

On Logic Analyzers with Windows XP Service Pack 1

On your intended license server frame only, please ensure that the firewall is enabled on the network interface that is connected to the corporate LAN. You also do not want the firewall enabled on any IEEE 1394 FireWire interface (if present) or the 1GB LAN interface.

- 1 Open the Network Connections control panel applet.
- 2 The padlock icon should appear on only the LAN interface to which your corporate LAN is connected. If there is no padlock icon, then no firewall is enabled on any interface. If there is more than one icon with a padlock, then the firewall is enabled on more LAN interfaces than you really need.

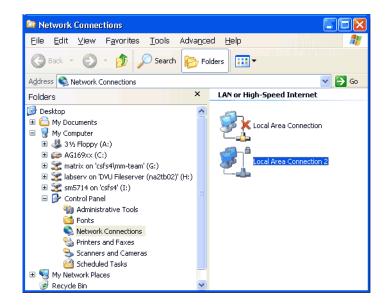


Figure 2 Network connections, one with firewall enabled

NOTE

The padlock icon is made to appear by right mousing on one of the network interface icons and selecting **properties**. From the properties page select the **Advanced** tab. Check the **Protect my computer...** checkbox to make the padlock appear or remove the check to remove the padlock.

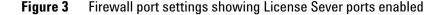
3 Define the license server firewall ports by running agFirewall.exe, which is located in:

C:\Program Files\Agilent Technologies\LicenseServer\ (by default)

NOTE When agFirewall.exe is run, it will put up a term window and a dialog. You must press **Yes** on the dialog to allow the utility to make its changes. When it has completed, the term window will close. (Takes about a minute or so.)

- **4** Enable the server specific ports (two of them):
 - a Open the Network Connections control panel applet.
 - **b** Open the **properties**... dialog for the firewalled interface.
 - **c** From the **Advanced** tab, press the **Settings...** button to get to a list of ports.
 - **d** Scroll down in the list to locate two lines starting with "License Server".
 - e Enable both of these lines (place a check mark in each).

Advanced Settings	? 🗙
Services Security Logging ICMP	
Select the services running on your network that Internet use access.	ers can
Services	
FTP Server	~
Internet Mail Access Protocol Version 3 (IMAP3)	
Internet Mail Access Protocol Version 4 (IMAP4)	
Internet Mail Server (SMTP)	
License Server 27000	12.0
License Server 27005	
Microsoft RPC endport mapper	
netbios-dgm (Netbios Datagram Service)	
netbios-ds (Direct host over TCP/IP)	
netbios-ds (Direct host over TCP/IP)	
netbios-ns (Netbios Name Service)	
netbios-ssn (Netbios Session Service)	
netbios-ssn (Netbios Session Service)	
Netop	
Post-Office Protocol Version 3 (PDP3)	
Add Edit Delete	
OK C	ancel



- f Press **OK** on both open dialogs to make the changes.
- g Close the Network Connections Applet.

On PCs with Windows XP Service Pack 2 (or later)

On a PC with the Windows XP SP2 operating system using the Windows Firewall, you would follow these steps:

- 1 Open the Windows Firewall control panel applet.
- 2 Select the Exceptions tab, and click Add Port....

1 License Server Administration

📁 Winda	ows Firewa	all					X
General	Exceptions	Advanced					
Windows Firewall is blocking incoming network connections, except for the programs and services selected below. Adding exceptions allows some programs to work better but might increase your security risk.							
Program	ns and Service	es:					
Name	e						
□ File □ Jel □ Re ☑ Re	e and Printer S es and Setting (SendTray Ap emote Assistar mote Desktop PnP Framewor	gs Transfer W plication nce p	fizard				
Add F	Program	Add Por		Edit) elete	
	Display a notification when Windows Firewall blocks a program What are the risks of allowing exceptions?						
					ок	Cance	ł

Figure 4 Adding a port to the Windows Firewall exceptions

3 In the **Edit a Port** dialog, enter the name of the port and the TCP port number.

Edit a Port Use these settings to open a port through Windows Firewall. To find the port number and protocol, consult the documentation for the program or service you want to use.						
Name:	Agilent License Server 27000					
Port number:	27000					
	⊙ TCP O UDP					
What are the risks of opening a port?						
Change scope	OK Cancel					

Figure 5 Adding the first port to the Windows Firewall exceptions

- 4 Click **OK**.
- 5 Click Add Port... again, and add the second port number.

Add a Port						
Use these settings to open a port through Windows Firewall. To find the port number and protocol, consult the documentation for the program or service you want to use.						
Name:	Agilent License Server 27005					
Port number:	27005					
	⊙ TCP ○ UDP					
What are the risks	of opening a port?					
Change scope	OK Cancel					

Figure 6 Adding the second port to the Windows Firewall exceptions

6 Click OK.

After adding the port exceptions, the Windows Firewall is set up as shown in Figure 7.

😻 Windows	s Firewa	II — — — — — — — — — — — — — — — — — —	X				
General Ex	ceptions	Advanced	_				
programs a	Windows Firewall is blocking incoming network connections, except for the programs and services selected below. Adding exceptions allows some programs to work better but might increase your security risk.						
Programs a	and Service	38:					
Name							
🗹 Agilen	it License (Server 27000					
		Server 27005					
	nd Printer 9	2					
	-	is Transfer Wizard					
	ndTray Apj te Assistar	•					
	te Desktor						
	Framewor						
Add Prog	gram	Add Port Edit Delete	ן כ				
Display a notification when Windows Firewall blocks a program							
What are t	What are the risks of allowing exceptions?						
		OK Cancel					

Figure 7 Ports added to the Windows Firewall exceptions

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

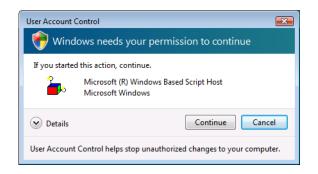
On PCs with Windows Vista

On a PC with the Windows Vista business or enterprise operating system, follow these steps:

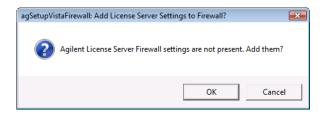
 Navigate to the LicenseServer directory (the default install location is C:/Program Files/Agilent Technologies/) and double-click the "agSetupVistaFirewall.vbs" to run the script.

🕒 🔍 🗢 📔 « Program	n Files ▶ Agilent Technologi s ▼	es 🕨 LicenseServer 🕨	- 4 €	earch
Favorite Links	Name	Date modified	Туре	Size
 Documents Pictures Music More w 	 ↓ docs ↓ LicenseFiles ↓ LogFiles ③ agFirewSP2 ■ agilent 	12/4/2008 9:17 AM 12/4/2008 9:17 AM 12/4/2008 9:17 AM 12/3/2008 3:32 PM 12/3/2008 3:32 PM	File Folder File Folder File Folder Windows Script File Application	2 KB 968 KB
Folders Program Files Agilent Agilent Ciccuse Man Liccuse Serve docs	agSetupSP2Firewall agSetupVistaFirewall Imgrd Imtools Imutil	12/3/2008 3:32 PM 12/3/2008 3:32 PM 12/3/2008 3:32 PM 12/3/2008 3:32 PM 12/3/2008 3:32 PM	VBScript Script File VBScript Script File Application Application Application	43 KB 21 KB 1,398 KB 1,566 KB 1,363 KB

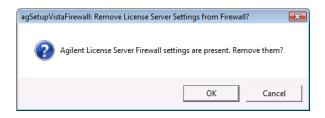
2 In the User Account Control dialog, click Continue.



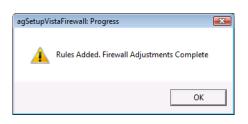
3 In the agSetupVistaFirewall dialog, if you see "Add License Server Settings to Firewall?", click **OK**.



If you see "Remove License Server Settings from Firewall?", click **Cancel**. (The same script is also used to remove the license server firewall settings.)



After the script completes, you see the following dialog. Click OK.



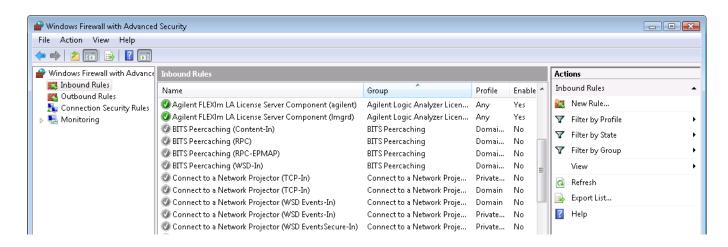
- **4** To verify the results of the script:
 - a Open the Windows Firewall with Advanced Security control panel applet (under Control Panel>System and Maintenance>Administrative Tools>).

System	and Maintenance Administrative Tools	▼ 4 ₇	Search	م
🖢 Organize 👻 🏢 View	s 🔻			0
avorite Links	Name	Date modified	Туре	Size
Documents	Computer Management	9/15/2008 2:24 PM	Shortcut	2 KB
	Data Sources (ODBC)	11/2/2006 5:53 AM	Shortcut	2 KB
Pictures	🛃 Event Viewer	11/2/2006 5:54 AM	Shortcut	2 KB
Music	🛃 iSCSI Initiator	11/2/2006 5:54 AM	Shortcut	2 KB
More »	🛃 Local Security Policy	9/15/2008 2:25 PM	Shortcut	2 KB
olders 🗸 🗸	Memory Diagnostics Tool	11/2/2006 5:53 AM	Shortcut	2 KB
Public	Microsoft .NET Framework 1.1 Configuration	9/17/2008 1:48 PM	Shortcut	2 KB
Computer	Microsoft .NET Framework 1.1 Wizards	9/17/2008 1:48 PM	Shortcut	2 KB
Network	Print Management	11/2/2006 5:55 AM	Shortcut	2 KB
Control Panel	Reliability and Performance Monitor	9/15/2008 2:24 PM	Shortcut	2 KB
Additional Options	😹 Services	9/15/2008 2:24 PM	Shortcut	2 KB
Appearance and Per =	🛃 System Configuration	11/2/2006 5:53 AM	Shortcut	2 KB
Clock, Language, an	🔊 Task Scheduler	11/2/2006 5:54 AM	Shortcut	2 KB
Ease of Access	Hindows Firewall with Advanced Security	9/15/2008 2:25 PM	Shortcut	2 KB
Hardware and Sound		Configure policies th	at provide enhanc	ed network security for V
Network and Interne		computers.	at provide enhance	ica network secanty for f
Programs				
Security				
System and Mainten				
Administrative Too				
🐌 Backup and Restor 🔻				

- **b** In the User Account Control dialog, click **Continue**.
- c In the Windows Firewall with Advanced Security window, select Inbound Rules.



- d In the Inbound Rules list, make sure you see both:
 - Agilent FLEXIm LA License Server Component (agilent).
 - Agilent FLEXIm LA License Server Component (lmgrd).



e Close the Windows Firewall with Advanced Security window.

If you need to use different port numbers in Windows Vista To use different port numbers in Windows Vista, simply change the port numbers specified in the license file and restart the license server service.

Again, port numbers from 27000 through 27009 are recommended, but you can use any unused port number from 0 through 64000.

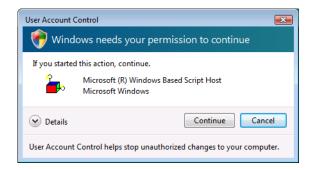
On PCs with Windows 7

On a PC with the Windows 7 business or enterprise operating system, follow these steps:

 Navigate to the LicenseServer directory (the default install location is C:/Program Files/Agilent Technologies/) and double-click the "agSetupWin7Firewall.vbs" to run the script.

😋 🔵 🗢 📙 « Program Files 🕨 Agilent Techr	ologies 🕨 LicenseSe	erver 🕨 👻 🐓	Search LicenseServer	× 2
Organize ▼ 👸 Open ▼ Print New	v folder		:≕ ▼ □	0
PerfLogs Perf Agilent Agilent MS Office Templates Agilent Technologies LicenseServer Logic Analyzer AgilentE6Settings AgilentEfSettings		me docs LicenseFiles LogFiles agFirewSP2.wsf agIent.exe agSetupSP2Firewall.vbs agSetupVistaFirewall.vbs agSetupWistaFirewall.vbs agSetupWin7Firewall.vbs Imgrd.exe Imgrd.exe Imtools.exe	Date modified 10/4/2010 4:18 PM 10/4/2010 4:18 PM 10/4/2010 1:49 PM 10/1/2010 11:45 AM 10/1/2010 11:45 AM 10/1/2010 11:45 AM 10/4/2010 3:25 PM 10/1/2010 11:45 AM 10/1/2010 11:45 AM	Type File File Win App VBS VBS VBS App App

2 In the User Account Control dialog, click Continue.



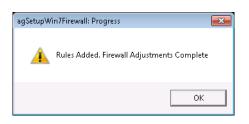
3 In the agSetupWin7Firewall dialog, if you see "Add License Server Settings to Firewall?", click **OK**.



If you see "Remove License Server Settings from Firewall?", click **Cancel**. (The same script is also used to remove the license server firewall settings.)



After the script completes, you see the following dialog. Click **OK**.



- **4** To verify the results of the script:
 - a Open the Windows Firewall with Advanced Security control panel applet (under Control Panel>Administrative Tools>).

🗸 🗢 🗟 « All Control Panel Items 🕨 Ad	ministrative Tools 🛛 👻 🍫 Search Admini	strative Tools	\$
Organize 🔻 🔳 Open		· ·	?
🔆 Favorites	Name	Date modified	Ту
📃 Desktop	🔊 Component Services	7/13/2009 10:46 PM	Sh
鷆 Downloads	🛃 Computer Management	7/13/2009 10:41 PM	Sh
🕮 Recent Places	📷 Data Sources (ODBC)	7/13/2009 10:41 PM	Sh
	🛃 Event Viewer	7/13/2009 10:42 PM	Sh
🥽 Libraries	🚮 iSCSI Initiator	7/13/2009 10:41 PM	Sh
📑 Documents	🛃 Local Security Policy	6/14/2010 11:30 AM	Sh
🎝 Music	ह Microsoft .NET Framework 1.1 Configura	6/25/2010 4:41 AM	Sh
📔 Pictures	ह Microsoft .NET Framework 1.1 Wizards	6/25/2010 4:41 AM	Sh
📑 Videos	Performance Monitor	7/13/2009 10:41 PM	Sh
	📷 Print Management	6/14/2010 11:30 AM	Sh
💻 Computer	😹 Services	7/13/2009 10:41 PM	Sh
🚢 Local Disk (C:)	🔝 System Configuration	7/13/2009 10:41 PM	Sh
雬 mmteam (\\cosfs2) (T:)	🔝 Task Scheduler	7/13/2009 10:42 PM	Sh
坖 c\$ (\\dm5727p1) (Z:)	🔝 Windows Firewall with Advanced Security	7/13/2009 10:41 PM	Sh
	📷 Windows Memory Diagnostic	7/13/2009 10:41 PM	Sh
🙀 Network	📷 Windows PowerShell Modules	7/13/2009 10:52 PM	Sh

- **b** In the User Account Control dialog, click **Continue**.
- c In the Windows Firewall with Advanced Security window, select **Inbound Rules**.



- **d** In the Inbound Rules list, make sure you see both:
 - Agilent FLEXIm LA License Server Component (agilent).
 - Agilent FLEXIm LA License Server Component (lmgrd).

Windows Firewall with Advanced	Security						- • ×
File Action View Help							
🗢 🔿 🖄 🖬 🗟 🔽							
Windows Firewall with Advance	Inbound Rules					Actions	
Inbound Rules Outbound Rules	Name	Group	Profile	Enabled	Action 🔺	Inbound Rules	-
Connection Security Rules	🖉 Agilent FLEXIm LA License Server Compo	Agilent Logic Analyzer Licen	All	Yes	Allow	🚉 New Rule	
Monitoring	O Agilent FLEXIm LA License Server Compo			Yes	Allow	🝸 Filter by Profile	+
	BranchCache Content Retrieval (HTTP-In) BranchCache Hosted Cache Server (HTT			No No	Allow	🕎 Filter by State	•
		BranchCache - Peer Discove		No	Allow Allow	🕎 Filter by Group	•
	Connect to a Network Projector (TCP-In)	Connect to a Network Proje	Domain	No	Allow 📄	View	۲.

e Close the Windows Firewall with Advanced Security window.

If you need to use To use different port numbers in Windows 7, simply change the port different port numbers specified in the license file and restart the license server service. numbers in Again, port numbers from 27000 through 27009 are recommended, but you Windows 7 can use any unused port number from 0 through 64000.

Server Step 5: Configure and Start the Server

- 1 Run the Imtools.exe application by choosing Start>All Programs>Agilent Logic Analyzer>Utilities>License Server>LM Tools from the Windows Start menu.
- 2 Select the **Config Services** tab.
- **3** Enter a name in the **Service Name** field, use something to distinguish this, such as "Agilent FLEXnet Service".
- 4 In the **Path to Imgrd.exe file** field, enter (or browse to):

 $\label{eq:c:Program Files} Agilent Technologies \\ LicenseServer \\ lmgrd.exe (default location)$

5 In the **Path to license file** field, enter (or browse to):

C:\Program Files\Agilent Technologies\LicenseServer\LicenseFiles\ <filename> (default location)

6 In the **Path to the debug log file** field, enter (or browse to):

C:\Program Files\Agilent Technologies\LicenseServer\LogFiles\ agilent.log (default location)

- 7 Check the Use Services box.
- 8 Check the Start Server at Powerup box if desired.

LMTOOLS by Flexera Softwa	re, Inc.	
File Edit Mode Help		
Service/License File System Set	tings Utilities Start/Stop/Reread Server Status Server Diags	Config Services Borrowing
Configure Service Service Name	Agilent FLEXnet Service	Save Service Remove Service
Path to the Imgrd.exe file Path to the license file	:\Agilent Technologies\LicenseServer\Imgrd.exe Browse inologies\LicenseServer\LicenseFiles\License.lic Browse	
Path to the debug log file	echnologies\LicenseServer\LogFiles\agilent.log Browse	View Log Close Log
I⊽ Start Server at Por	ver Up	

Figure 8 LMTOOLS dialog after filling in fields to setup server

- 9 Click the Save Service button.
- 10 Select Yes when asked if you would like to save the service.
- 11 Select the Service/License File tab.
- 12 Select the **Configuration using Services** option.
- 13 Select the service you just created in the list.
- 14 Select the Start/Stop/Reread tab.
- 15 Press the Start Server button.
- 16 Select the Server Status tab.
- 17 Press the Perform Status Enquiry button.

18 At this point, if set up correctly, you should see that the main (lmgrd) server is up and that the vendor daemons (agilent, futureplus) are up. Also, you should see a list of licenses available on the server.

If there are problems, see the *FLEXnet Publisher Licensing Toolkit 11.8 License Administration Guide* included with the license server software as: "LicenseAdministration.pdf".

Setting Up Client Logic Analyzers or PCs

This section walks you through configuration of the logic analysis software so that it can locate and use the new central license server. This section must be accomplished for each client logic analyzer or PC that will access the central server.

NOTE With the 3.20 release of the *Agilent Logic Analyzer* application, you had to set up the LM_LICENSE_FILE environment variable to access floating license servers. Starting with the 3.30 release, license servers are accessed from within the *Agilent Logic Analyzer* application, and you must not use the LM_LICENSE_FILE environment variable any more.

```
NOTE
```

If the central license server is a logic analyzer (typical in multi-frame configurations), then you must also configure the logic analysis software on it by following the steps in this section.

Client Step 1: Add the license server using the Agilent Logic Analyzer application

1 See "To access floating license servers" in the *Agilent Logic Analyzer* application's online help. This topic is under the "Managing Software Licenses" topic.

Software Licensing Summary Activation Floating License Servers Borro	X
License Servers 27004@silk 27000@dvuqa06	Add Server Delete Server Move Up Move Down
NOTE: Servers are searched in order from top to bottom Green/Red status shows presence on network, OK	for available licenses.

Client Step 2: Verification of Server Access

1 To verify that all expected licenses are available, see "To view active software license information" in the *Agilent Logic Analyzer*

application's online help. This topic is under the "Managing Software Licenses" topic.

Software Licensing
Summary Activation Floating License Servers Borrow
Active Software Licenses
🖅 🛪 😰 6833x-7x Inverse Assembler
🚊 🗸 🧝 Advanced Customization Environment - Runtime Package
📄 🖌 🗐 B4607A-020, 10 available, 2 in use from dvuqa06
🚽 🕺 1 in use by dvutest@dvuqa01
1 in use by pw5670@mtx33 (Borrowed - returns 11/02/05 09:59:36)
😥 🛶 🙀 Advanced Switching Interface (ASI) Packet Analysis
🚊 🔫 🗶 ARM11 and ARM7/9 ETM Inverse Assembler
🚊 🛶 🧟 ARM7/9 AHB Inverse Assembler
🖶 🛨 🙀 ARM7/9 Inverse Assembler 🗸 🤍
(X indicates that the assocated software which uses this license is not installed.)
Show Details Copy to Clipboard
OK Cancel Apply Help

1 License Server Administration

Borrowing Licenses on a Client

If you need to "check out" a licence, for example, for a laptop that will be off the network for a period of time, you can borrow a floating license from the server.

1 To borrow licenses or return borrowed licenses early, see "To borrow floating licenses and return them early" in the *Agilent Logic Analyzer* application's online help. This topic is under the "Managing Software Licenses" topic.

Software Licensing	×
Summary Activation Floating License Servers Borrow	
Borrow Licenses	
Click on the Borrow button to borrow additional licenses used by this configuration.	
Borrow until 11/ 9/2005 👽 09:43 AM 😂	
Return Borrrowed Licenses	
The following licenses cannot be returned while licenses are still checked out. The following licenses cannot be returned while licenses are still checked out. The following licenses cannot be returned while licenses are still checked out. The following licenses cannot be returned while licenses are still checked out. The following licenses cannot be returned while licenses are still checked out. The following licenses cannot be returned while licenses are still checked out. The following licenses cannot be returned while licenses are still checked out. The following licenses cannot be returned while licenses are still checked out. The following licenses cannot be returned while licenses are still checked out. The following licenses cannot be returned while licenses are still checked out. The following licenses cannot be returned while licenses are still checked out. The following licenses cannot be returned while licenses are still checked out. The following licenses cannot be returned while licenses are still checked out. The following licenses cannot be returned while licenses are still checked out. The following licenses cannot be returned while licenses are still checked out. The following licenses cannot be returned while licenses are still checked out. The following licenses cannot be returned while licenses are still checked out. The following licenses cannot be returned while licenses are still checked out. The following licenses cannot be returned while licenses are still checked out. The following licenses cannot be returned while licenses are still checked out. The following licenses cannot be returned while licenses are still checked out. The following licenses cannot be returned while licenses are still checked out. The following licenses cannot be returned out. The	
Borrowed from dvuqa06	
Return	
OK Cancel Apply Help	

Installing New License Files After the Server is Running

After the License Server is up and running, you may find yourself wanting to add licenses for new features or to support more simultaneous users. Follow these steps to adjust available licenses:

1 Install all license information into one file in the directory:

C:\Program Files\Agilent Technologies\LicenseServer\LicenseFiles (default location)

When copying license information from new license files, make sure the first two lines in the new license file (SERVER and VENDOR) are the same as the existing license file (to verify the licenses are for the correct server); then, copy the remaining license information to the existing file.

2 Start the lmtools.exe application:

C:\Program Files\Agilent Technologies\LicenseServer\lmtools.exe (default location)

- **3** Stop the license server:
 - a Select the Start/Stop/Reread tab.
 - **b** Select the correct license service in the list.
 - c Check the Force Server Shutdown checkbox.
 - d Click Stop Server.
 - **e** Use the Windows Task Manager to verify the "lmgrd.exe" process is no longer running.
- 4 After the license server has been stopped, start it again by clicking **Start Server**.

Tearing Down a License Server

If you wish to no longer use a central license server, there are a small number of things you need to do to tear down the server and to adjust the clients so that they no longer attempt to get licenses from the server.

- 1 Shut down the logic analysis application software running on all clients.
- 2 At the server, shut down and remove the License Server (follow Teardown Step 1, below).
- **3** At each client, delete the license server using the *Agilent Logic Analyzer* application. See "To access floating license servers" in the *Agilent Logic Analyzer* application's online help. This topic is under the "Managing Software Licenses" topic.
- 4 Test licensing at each client that has its own license file.

Teardown Step 1: Uninstalling the License Server

- 1 Undo the firewall changes for a license server:
 - For license servers on logic analyzers with Windows XP Service Pack 2, run:

agFirewSP2.wsf /licserver /teardown

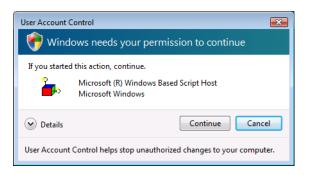
The agFirewSP2.wsf file is located in:

C:\Program Files\Agilent Technologies\LicenseServer\ (by default)

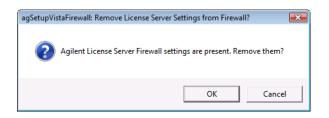
- For license servers on PCs, or on logic analyzers running Windows XP SP1 or Windows 2000, change the firewall settings to disallow access to ports 27000 and 27005.
- For license servers on PCs with the Windows Vista business or enterprise operating system:
 - i Navigate to the LicenseServer directory (the default install location is C:/Program Files/Agilent Technologies/) and double-click the "agSetupVistaFirewall.vbs" to run the script.

			1.0	
🖢 Organize 👻 📗 Vie				
avorite Links	Name	Date modified	Туре	Size
Documents	locs	12/4/2008 9:17 AM	File Folder	
	LicenseFiles	12/4/2008 9:17 AM	File Folder	
Pictures	LogFiles	12/4/2008 9:17 AM	File Folder	
Music	agFirewSP2	12/3/2008 3:32 PM	Windows Script File	2 KB
More »	💷 agilent	12/3/2008 3:32 PM	Application	968 KB
olders	agSetupSP2Firewall	12/3/2008 3:32 PM	VBScript Script File	43 KB
	▲ agSetupVistaFirewall	12/3/2008 3:32 PM	VBScript Script File	21 KB
- Fridgrammes	🔲 Imgrd	12/3/2008 3:32 PM	Application	1,398 KB
Agilent	- Imtools	12/3/2008 3:32 PM	Application	1,566 KB
4 📗 Agilent Technı	Imutil	12/3/2008 3:32 PM	Application	1,363 KB

ii In the User Account Control dialog, click Continue.



iii In the agSetupVistaFirewall: Remove License Server Settings from Firewall? dialog, click **OK**.



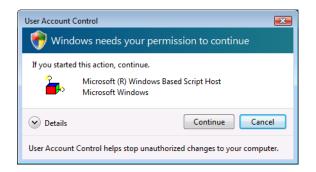
After the script completes, you see the following dialog. Click OK.



- For license servers on PCs with the Windows 7 business or enterprise operating system:
 - i Navigate to the LicenseServer directory (the default install location is C:/Program Files/Agilent Technologies/) and double-click the "agSetupWin7Firewall.vbs" to run the script.

🌀 🕞 💌 📔 « Program Files 🕨 Agilent Technologies	▶ Lice	enseServer 🕨 👻 Search License	Server	× م
Organize ▼ 👛 Open ▼ Print New folder			·= • 🚺	0
 PerfLogs Perl Program Files Agilent Agilent MS Office Templates Agilent Technologies LicenseServer Logic Analyzer Logic Update Tool AgilenttE6Settings AgilentE8Settings AgilentE8Settings AgilentE8Settings AgilentE8Settings AgilentE8Settings AgilentE8Settings AgilentE8Settings 	*	Name A	Date modified 10/4/2010 4:18 PM	Typ File
		accs LicenseFiles LogFiles	10/4/2010 4:18 PM 10/4/2010 4:18 PM 10/4/2010 4:18 PM	File
		j∎ Logries	10/1/2010 11:45 AM 10/1/2010 11:45 AM	Wi
		Image: Setup SP2Firewall.vbs	10/1/2010 11:45 AM 10/1/2010 11:45 AM 10/1/2010 11:45 AM	Ap VB:
	Ε		10/4/2010 3:25 PM	VB: VB:
		💷 Imgrd.exe 🔐 Imtools.exe ——	10/1/2010 11:45 AM 10/1/2010 11:45 AM	Арј Арј
		🗾 Imutil.exe	10/1/2010 11:45 AM	Ар

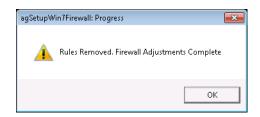
ii In the User Account Control dialog, click Continue.



iii In the agSetupWin7Firewall: Remove License Server Settings from Firewall? dialog, click **OK**.



After the script completes, you see the following dialog. Click **OK**.



2 Run the Imtools.exe application; this is also located in:

C:\Program Files\Agilent Technologies\LicenseServer\ (by default)

- 3 Select the Service/License File tab.
- 4 Select the **Configuration using Services** option.
- 5 Select the Service that you are going to remove.
- 6 Select the Start/Stop/Reread tab.
- 7 Press the **Stop Server** button.
- 8 Select the Config Services Tab.
- 9 Select the Service that you are going to remove.
- 10 Press the **Remove Service** button.
- 11 Exit the Imtools.exe application.
- 12 Go to the Add/Remove Programs selection from the Control Panel.
- 13 Select Remove for the "Agilent Logic Analyzer License Server".

1 License Server Administration

Sample License Files

License files for servers (with floating licenses) are found in the directory:

C:\Program Files\Agilent Technologies\LicenseServer\LicenseFiles (default location)

Node-locked license files on clients or servers are found in the *Agilent Logic Analyzer* application install directory:

C:\Program Files\Agilent Technologies\Logic Analyzer\License\ (by default)

Sample Server File (3 Lines):

SERVER MTXSPECIAL2 0010b57596f3 27000
VENDOR agilent PORT=27005
INCREMENT Protocol_PCI_Express agilent 1.0 permanent 6 \
BORROW SIGN=0000000000

Notice that:

- Last value on the right edge of the SERVER line is the port number which tells the license server to listen at this port number instead of randomly chosen one within the 27000-27009 range.
- PORT=27005 on the VENDOR line does the same for the vendor daemon. It forces it to listen on port 27005 instead of a randomly picked one.
- These port assignments are necessary so that the specific port numbers can be allowed through the firewall (while blocking the remaining port numbers).

Sample Node-Locked File:

FEATURE ARM_Inverse_Assembler agilent 1.0 permanent uncounted \
 HOSTID=DISK_SERIAL_NUM=3b97ad4d SIGN=CCDB37F05880

Notice that:

- The SERVER line is identical to that in the server license file.
- Port number 27000 is required so that the client can find the server.
- No VENDOR line is required.

Currently, by convention, the ports 27000 and 27005 are used by the *Agilent Logic Analyzer* application.

NOTE

Index

A

AGILENT_LICENSE_FILE registry key, 9

В

borrowing licenses on client, 26

C

client set up, 24

F

file path, license server, 9 floating licenses, 7

L

license server administration, 7 license server configuration, 21 license server file path, 9 license server set up, 9 license server software installation, 9 license server, adding on client, 24 licenses, serifying on client, 24

Ν

new server license files, installing, 27 node-locked license file sample, 32 node-locked licenses, 7 notices, 2

0

overview, 8

Ρ

port numbers, firewall access, 10 port numbers, firewall access, Vista, 18 port numbers, firewall access, Windows 7, 21

R

registry, editing, 9

S

sample license files, 32 server firewall, adjusting, 10 server license file sample, 32 server license file, installing, 9

T.

tearing down a license server, 28 trademarks, 2

V

Vista business or enterprise operating system, 16

W

Windows 7 business or enterprise operating system, 19

X

XP SP1 logic analyzer operating system, 12 XP SP2 logic analyzer operating system, 10 XP SP2 server PC operating system, 13

Index