

# **Web Remote Control SA Software Installation Guide**



**Agilent Technologies**



# **Web Remote Control Software Installation Guide**

**for Agilent ESA, EM and PSA Series Analyzers**



**Manufacturing Part Number: (part of E4401-90334)**

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# Server Installation

The topics described in this booklet are:

- “Server Requirements” on page 4
- “Server Preparation” on page 6
- “Installation Procedure” on page 11

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## NOTE

There are several PC preparation tasks that must be completed before doing the software setup. These are described on the following pages, but only briefly. Detailed installation information is on the product CD-ROM. To view this information, insert the Web Remote Control SA Software CD-ROM in your PC drive:

- when it autoloads, select **Instructions**,
  - *or* if it doesn't autoload, double-click the Autorun.exe file (not the Setup.exe file) and select **Instructions** (usually in drive D:\).
  - *or* double-click the D:\Help\Html\Setup.htm file.
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## Server Requirements

The required server:

- is a PC with a 180 MHz Pentium II CPU or better.
- is a desktop computer running Windows NT 4.0 (or later) with service pack 6 (or later),  
*or* is a desktop/laptop computer running Windows 2000 (any version) or Windows XP.
- has a working connection to a Local Area Network (LAN), with TCP/IP installed and configured such that it can “ping” all required clients. (Check with your system administrator if you are unsure if this requirement is met.)
- is a desktop computer with at least one available PCI expansion slot that contains a PCI GPIB card (supported cards are listed in the CD-ROM on-line Instructions under I/O hardware),  
*or* is a laptop computer with at least one available PCMCIA slot that contains a PCMCIA GPIB card (supported cards are listed in the CD-ROM on-line instructions under I/O hardware),  
*or* is a desktop/laptop computer that connects to your instrument by using an Agilent E2050A LAN/GPIB portal.

*or* is a desktop/laptop computer that connects to your instrument using its own built-in LAN port.

- has a working web server such as Apache for Windows NT/2000/XP.
- has Microsoft Java Virtual Machine (JVM), File Version 5.00.3299.0 or higher, installed and working properly.
- has at least 128 MB of RAM, and at least 20 MB of free disk space
- has at least a 15 inch monitor capable of greater than 256 colors, and display resolution of at least 1024 x 768 pixels.

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## Server Preparation

1. Verify that your operating system version meets the system requirements by selecting **Start, Settings, Control Panel, Help** then click on the **About. . .** option. Your operating system version (and related service pack, if any) will be displayed. If it is necessary to update either the operating system version or service pack, you will need to download any updates from the Microsoft web site at [www.microsoft.com](http://www.microsoft.com).
2. Verify that you have a running web server on your PC server. This is software (from Apache or Microsoft) that can serve web pages to browsers.

If you do not have a web server running, you will want to install Apache for Windows NT/2000/XP from the Web Remote Control SA CD-ROM (usually drive d:\) located in the Files\Apache folder. Once it is installed, locate the **Apache Web Server** program group then click **Apache as a service**, and **Install service**.

- a. Identify your server computer's network name or IP address and turn on your web server. (To start the Apache web server, locate the **Apache Web Server** program group then click **Apache as a service**, and **Start Apache Server**. You may need to reboot your computer.)



- b. Test your web server by starting a browser and entering:  
*http://<your server computer's network name or IP address>*

You should see some default web page from your web server. If you get error 404 or any other indication that the page is not found, make sure that the web server is running and started as a service by looking at *Services* under **Start, Settings, Control Panel** (Windows NT) or under **Control Panel, Administrative Tools**.

To start the Apache web server, click on **Apache** in the *Services* dialog then click on **Startup . . .** and set the *Startup Type* to **Automatic**.

- c. Reboot and retest that your web server is running per Step b above.
3. Verify that Microsoft Java Virtual Machine is installed and working properly by searching your hard drive for the file *wjview.exe* (may be located in the *c:\winnt* folder). If the *wjview.exe* file is present on your hard drive, then verify the version number requirement by right-clicking on the file and selecting **Properties**. Click on the **Version** tab and verify the *File Version number* is 5.0.3229.0 or higher.

If this file is not present on your hard drive or if the version number is not high enough, you can install the JVM from the Web Remote Control SA CD-ROM (usually drive *D:\*) located under the *Files/MS JVM* folder.

4. Verify that your GPIB connection to the spectrum analyzer is working properly using your Agilent or National Instruments GPIB card. Or verify your connection to the LAN port of the PSA.

If you have installed an Agilent GPIB interface, you should now have a blue IO icon in the lower-right corner of your screen (near the clock display), indicating that you have installed the Agilent I/O Libraries. If you are using the LAN port on the PSA you need to install the Agilent IO Libraries to connect to the instrument.

If you do not have these libraries, you may install them from the Web Remote Control SA CD-ROM located under the Files/IO Libs folder. Select the Full SICL and Agilent VISA Installation.

If you are using an Agilent GPIB card, Agilent E2050A LAN/GPIB portal, or the PSA LAN port, you should now:

- a. Verify the Agilent I/O Libraries version is J.00.00 or newer by clicking on the blue IO icon and selecting **About Agilent IO Libraries Control**.
- b. If you are using the PSA LAN port, make sure your instruments IP address, host name, and subnet mask correspond to the settings from your local IT department. Then configure the IO Libraries to connect with the PSA, by clicking on the blue IO icon and selecting **Run IO Config**. First, configure a "TCPIP LAN Client (LAN Instruments)". The default settings are OK to use.

Second, since the IO Libraries always default to using GPIB, you must redirect the interface to LAN. So configure a "GPIB VISA LAN Client (e.g. E2050)". In our case the LAN Client is the PSA itself, so for the configuration screen in the Remote Hostname field enter the IP address. In the Remote SICL Interface Name field enter "gpib7" in place of the default "hpib7".

- c. Test your connection to the spectrum analyzer by clicking on the blue IO icon then selecting **Run VISA Assistant**. After searching for all connected instruments, it will show you which instruments are connected to GPIB0, GPIB1, and so on. (GPIB0 is normally the first GPIB interface configured.)
- d. Click on the instrument you want to test. Then click the **Formatted I/O** tab and the IEEE 488.2 option. Enter any queries you wish in the Enter String to Print or Query text box then click the **Query** button; or, simply click on the **\*IDN?** button to query the instrument's ID string. When it returns with a string that resembles the instrument you expect, you can be assured that you have configured your instrument to be properly connected to a GPIB handle.

If you have installed a National GPIB interface, you should now:

- a. Check which instruments are connected to the GPIB by selecting the National Instruments program group. Then click on **Explore GPIB, Devices and Interfaces**, and **GPIB Interface**. Now

you can select **Scan for Instruments** from the **Tools** menu and it will show you which instruments are connected to the GPIB.

- b. Click on the instrument you want to test. The **\*IDN?** query is in the command box. Click on the **Query** button to query the instrument's ID string. When it returns with a string that resembles the instrument you expect, you can be assured that you have configured your instrument to be properly connected to a GPIB handle.

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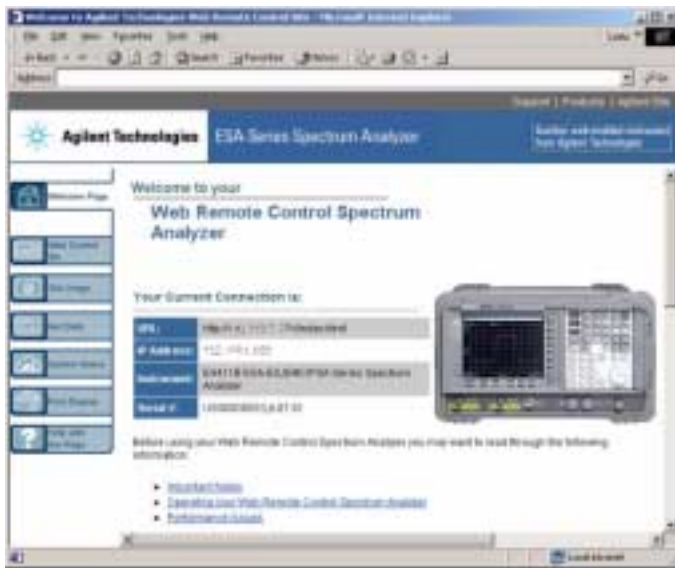
## Installation Procedure

1. Insert the Web Remote Control SA CD-ROM into your CD-ROM drive and the installation program will automatically start. Or click/run the setup.exe file on the CD-ROM (usually drive D:\).
2. From the main menu, choose the Install Web Remote Control SA button and follow the screen prompts of the InstallShield Wizard. If all requirements were met prior to installation, your software will install successfully.

If the Requirements Report dialog appears with detailed information about missing requirements, either note or copy the text to a text editor in order to complete the necessary requirements. You must perform the appropriate upgrades listed here to successfully install the Web Remote Control SA software.

3. After successful installation of the Web Remote Control SA software, the `Configure` dialog will appear allowing you to create the special web pages that will provide clients with the software that connects to the web-enabling instrument server for remote access and control. Verify the information entered in the various text fields in the `Configure` dialog is correct then click **Continue**.
4. Verify the `Instrument Information` is correct then select **Yes** to create the web pages.

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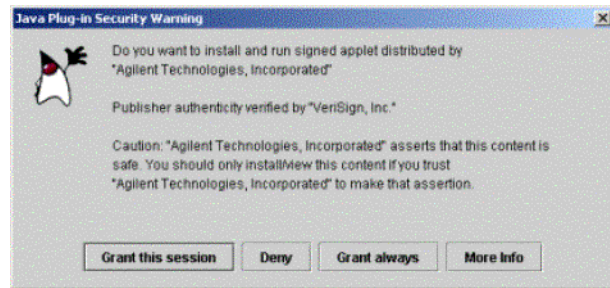


7. Click on the Web Control SA button in the navigator bar on the left. If you are running Internet Explorer, after a brief period while the browser starts to load the applet, the Security Warning window shown below will appear. You *must* accept this certificate to run the installed applet.



When using Netscape Navigator, the Security Warning window shown below *must* be accepted in order to complete the applet

installation successfully.



8. After *accepting* the Security Warning certificate, the applet will finish loading and a display resembling the spectrum analyzer display will appear indicating that you have successfully installed the Web Remote Control SA software!