<u>Instrument Software Update Instructions</u> Agilent X-Series Signal Analyzers (PXA/MXA/EXA/CXA)

Purpose

The purpose of this document is to outline the instrument software update procedure for all X-Series Signal Analyzers (PXA/MXA/EXA/CXA) from the revision that is currently installed in the analyzer to the most current available revision. The advantages to updating the instrument software with the current revision include:

- 1. Keeps the analyzer current and up to date.
- **2.** Updates the advanced measurement applications where appropriate.
- **3.** Updates the PC board software where appropriate.

An update to the instrument software revision **does not** require a new license key for the measurement application(s) as long as the application(s) were licensed prior to the update. This procedure will not update the 89601A or 89601B VSA measurement software.

<u>Important:</u> Upgrading to revision A.08.00 and later requires that Service Pack 3 be installed. These instructions include steps to download Service Pack 3 from the Microsoft® website and install it on your X-Series signal analyzer.

To determine what revision of instrument software is currently installed press [**System**], {**Show**}, {**System**} on the analyzer and look for the "Instrument S/W Revision" number (ex. A.03.08).

Please Note:

This will only update the instrument software that currently resides on the C: drive of the instrument. It will not update the version that exists on the recovery partition. Because of this, if the recovery process is performed on an instrument it will revert back to the instrument software revision that was originally installed in the instrument when it was shipped from the factory.

Requirements

In order to use this update procedure the following requirements must be met:

- Instrument must be functioning properly before the update is attempted
- Must have a USB keyboard and mouse to perform tasks required to install the update
- Must have the ability to login to the instrument as the administrator
- Must have the ability to transfer a large file (~1G Byte) to the instrument being updated

File Download

- 1. Go to http://www.agilent.com/find/Xseries_software
- 2. Select the appropriate link in the Software Update section of the table for the X-Series analyzer that is being updated.

- **3.** Download the executable file located near the bottom of the webpage in the "Documents & Downloads" section by selecting the "Instrument Software (Version A.xx.xx)" link.
- **4.** If you will be installing instrument software version A.08.xx, also download the updated SMBus Controller Driver zip file located near the bottom of the webpage of the "Documents & Downloads" section by selecting the "Updated SMBus Controller Driver" link. This is necessary <u>only</u> if you will be installing A.08.xx versions; installations of older or newer versions do not require this.

If you do not have the ability to download these files directly to the D: drive of the Signal Analyzer being updated, store the file on a large capacity USB storage device for transfer to the instrument. (The total file size is ~1G Byte)

The following two steps are mandatory if upgrading to instrument software version A.08.00 or later:

- **5.** To obtain Service Pack 3, go to www.microsoft.com
 - a. Click Downloads and select Download Center from the drop-down menu.
 - b. Scroll down to "Stay up to date" and click "Windows Service Pack Center"
 - c. Under Windows XP, click on "Download PS3 from the Download Center (advanced)

<u>Note:</u> Although Microsoft® recommends using Automatic Updates as the easiest way to install SP3, this process can take several hours and requires a great deal of manual intervention.

6. Click the red "Download" button to download the "Windows XP Service Pack 3 Network Installation Package for IT Professionals and Developers" onto a large capacity USB storage device for transfer to the instrument.

Update Procedure

While the default user of the instrument does have permissions to install some software it does not have the required permissions to install the instrument software updates. Because of this the entire process outlined below must be run as the user *administrator*.

Software Uninstall

- 1. If the analyzer is not already running, turn the instrument on
- 2. Connect a USB keyboard and mouse to the instrument
- 3. Log out of the default user (*instrument*) by selecting Start→Log Off→Log Off. If the Start button does not appear, press the File hardkey on the analyzer, select the Exit softkey, then select OK. The desktop will now appear and the Start button will be accessible to choose Log Off.

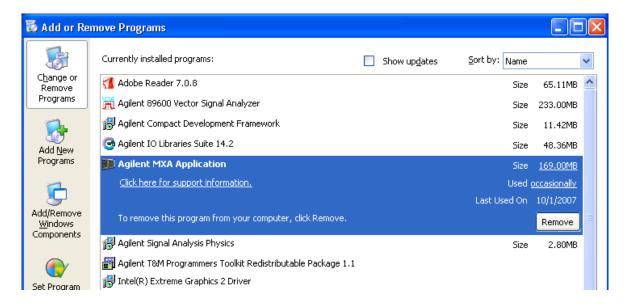
4. At the login prompt enter:

User name: **administrator** Password: **agilent4u**

Note: If a "Found New Hardware" wizard window pops up select "No Not at this Time" to bypass the activity.

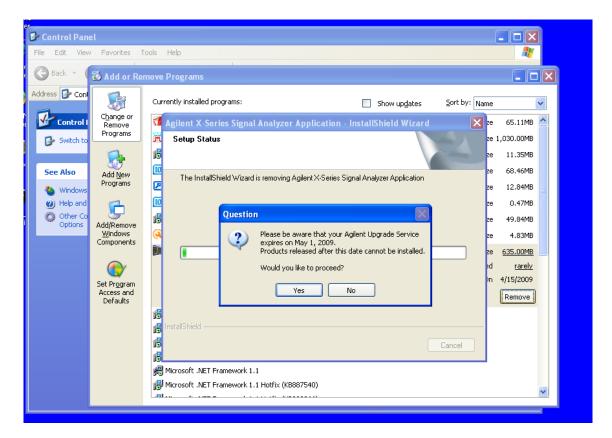
- **5.** Uninstall the analyzer application by performing the following steps:
- Select Start→Control Panel→Add or Remove Programs
- Find and click on the entry with the signal analyzer application. This will be title, "Agilent MXA Application" or "Agilent X-Series Signal Analyzer Application" and select "Remove" as shown in the Figure 1.

Figure 1



- When asked if you want to completely remove the selected application and all of its features, select "Yes". While the software is being uninstalled you may see a couple of windows pop-up. Just select "OK" and keep going.
- If you are uninstalling version A.02.06, you will see a screen similar to Figure 2. The Agilent Upgrade Service is not needed to upgrade to revisions A.02.07 and above. Click "Yes" to proceed.

Figure 2



- When the software uninstall is complete select "Finish"
- **6.** Wait for the analyzer to restart and display the Desktop.
- 7. Log out of the default user (instrument) by selecting Start \rightarrow Log Off \rightarrow Log Off
- **8.** At the login prompt enter:

User Name: administrator Password: agilent4u

Installing Service Pack 3 (Mandatory if upgrading to instrument software version A.08.00 or later)

- 1. Insert the USB storage device containing the Windows XP Service Pack 3 Network Installation Package" ("SP3 Install Package") into one of the available USB ports on the instrument.
- **2.** Navigate to the SP3 Install Package on the USB storage device. Click on the SP3 Install Package to run it.
- **3.** Follow the on-screen prompts to complete the installation. This installation will take between 30 and 45 minutes.
- **4.** When the installation has finished, select "Yes, I want to restart my computer now" and then select "Finish".

- 5. After the instrument restarts, you will be asked to either, "Help protect my PC by turning on Automatic Updates now." Or "Not right now." Select "Not right now" and click "Next" in the lower-right hand corner.
- 6. Click Start→Log Off→Log Off.
- 7. At the log in prompt, enter:

User Name: administrator

Password: agilent4u

Update SMBus Controller Driver (Only necessary for installing any A.08.xx release)

If you downloaded the updated SMBus controller driver to the instrument via LAN, access that file from the location that it was stored and proceed to step 1

If you downloaded the updated SMBus controller driver to a USB storage device, plug that into one of the USB ports on the front of the instrument. Access the file using Windows Explorer for the removable drive, then proceed to step 1.

- 1. Right-click on the AgtSMBusIch.zip file and extract the AgtSMBusIch folder to the Desktop.
- 2. Click on Start → Control Panel → Performance and Maintenance → System
- 3. Select the Hardware tab and click the Device Manager box
- **4.** Click the "+" next to System Devices to expand that selection
- **5.** Look for an entry of either "Intel (R) 82801DB/DBM SMBus Controller" or "Intel (R) 82801G (ICH7 Family) SMBus Controller".
- **6.** If the device is "Intel (R) 82801G (ICH7 Family) SMBus Controller", this procedure does not apply; exit the Device Manager and return to the Desktop and proceed with **Software Install** below.
- 7. Double-click on "Intel (R) 82801DB/DBM SMBus Controller"
- **8.** Select the Driver tab and click the Update Driver box
- **9.** In the Welcome to the Hardware Update Wizard dialog box, select "No, not at this time" and click Next
- 10. Select "Install from a list or a specific location (Advanced)" and click Next
- 11. Select "Don't search; I will choose the driver to install" and click Next
- **12.** On the next screen, if there are several entries for "Intel (R) 82801DB/DBM SMBus Controller", select the top-most entry and click Have Disk.
- **13.** Click Browse and navigate to the AgtSMBusIch folder on the Desktop. The AgtSMBusIch.inf file should be highlighted. Click Open. Click OK.
- **14.** Click Next to start the update process.
- 15. When the update is completed, click Finish
- **16.** Click **Start** → **Shutdown** → **Restart** and wait for the analyzer to restart.
- 17. Wait for the analyzer to restart and display the Desktop.
- 18. Log out of the default user (instrument) by selecting Start→Log Off→Log Off
- **19.** At the login prompt enter:

User Name: administrator Password: agilent4u

Software Install

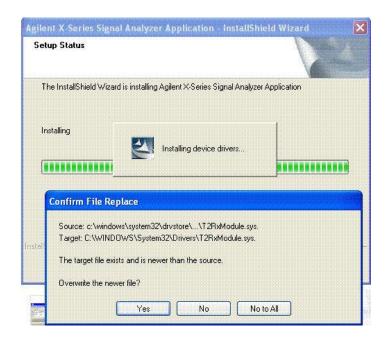
If you downloaded the instrument software update file to the instrument via LAN access that file from the location that it was stored and proceed to step 1.

If you downloaded the instrument software update file to a USB storage device, plug that into one of the USB ports on the front of the instrument. Access the file using Windows Explorer for the removable drive, then proceed to step 1.

- 1. Double click on the file named "XSA_Installer_A.XX.XX.exe" that you downloaded and transferred to the instrument.
- **2.** A message appears reminding you that you must be logged in as administrator, which you completed previously. Select "**Yes**".
- **3.** A window appears showing the extraction process. Following the extraction screen, there will be about a 1.5 minute period where the Desktop is displayed. Please wait for the program to continue.
- **4.** Follow the on-screen prompts to continue the installation.

N9030A Instrument Software Update Only: When updating an N9030A, PXA Signal Analyzer from instrument software version A.04.29 to A.06.06, it is possible that a Confirm File Replace dialogue box will appear when installing the device drivers as shown in Figure 3. The window that is requiring a "Yes", "No" or "No to All" selection may be behind other windows, so you'll have to bring that window into the forefront and make the selection.

Figure 3

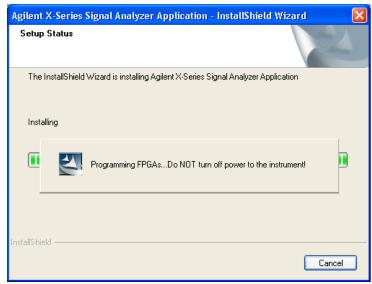


Should this occur, select "Yes" to overwrite the newer file, then follow the remaining on-screen prompts to complete the update.

WARNING:

If you see the message in Figure 4, be sure to do as it says and **DO NOT** turn off the instrument power at this time for **ANY** reason. If this process is interrupted the instrument most likely will need to be sent back to an Agilent Service Center for servicing before it will be usable again.

Figure 4



If you see the pop-up message shown in Figure 5 select "Unblock" to continue.

Figure 5



<u>Note:</u> The installation process can take up to 45 minutes. Do not turn the instrument power off or serious damage may occur. If any popup windows appear click OK or Ignore to proceed.

5. When the installation has finished select "Yes, I want to restart my computer now" and then select "Finish".

After the instrument restarts, the newly installed version of the X-Series instrument software will run. You can verify the new version by pressing System, More, Show System on the analyzer and view the Instrument S/W Revision number.