

M9484C VXG Vector Signal Generator

Updated:

November 2024

Attention

This procedure is updated for version A.15.xx and newer, please pay attention to additional steps.

Purpose



The purpose of this document is to outline the instrument software update procedure from the revision that is currently installed, to the latest revision available. The advantages of updating the instrument software with the current revision include:

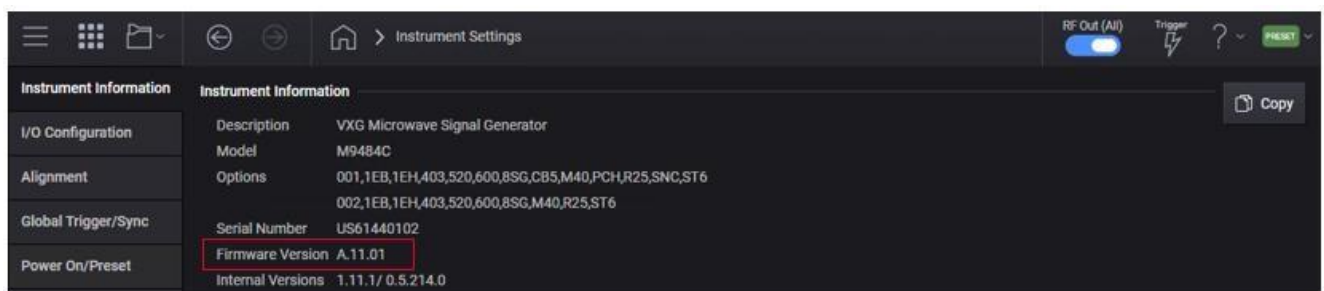
1. Keeps the instrument current and up to date
2. Updates the generator applications where appropriate
3. Updates the PC board software where appropriate

An update to the instrument software version **does not** require a new license key for the generation application(s), so long as the application(s) were licensed prior to the update.

This procedure will not update any other software.

Note: Connecting a mouse and keyboard is recommended.

To determine the revision of instrument software currently installed, tap the triple -bar icon  on the top bar of the graphical user interface then the gear icon , then tap **Instrument Information**. Look for the “Firmware Version” as shown below. If the installed revision is the same as the latest revision on the web, there is no need to update the software.



Requirements




To use this update procedure, the following requirements must be met:

1. Instrument must be functioning properly before the update is attempted
2. The ability to login to the instrument as the **administrator**
3. The ability to transfer a large file (~4 GBytes) to the instrument being updated
4. Approximately 10 GBytes of available space on the D: partition of the instrument

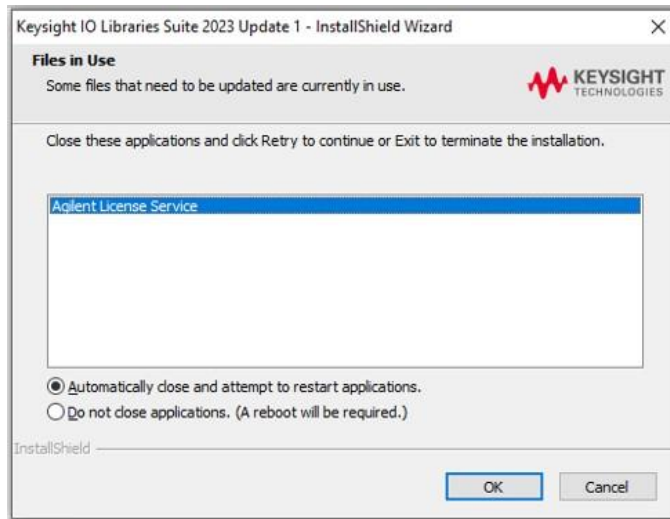
Prerequisites

If the instrument to update is currently running a version less than A.14.00, you must first update Keysight IO Libraries to version 18.3, and Microsoft .NET Framework 4.8. Perform this procedure to update these prerequisites. If the instrument is already running IOLS version 18.3, and Microsoft .NET Framework 4.8, proceed to [Fading Files update](#).

(NEW November 2024) NOTE: Do not update to Keysight IO Libraries version 2024 or 2024 Update 1, these version are not compatible with VXG Signal Generator.

1. If the instrument is not already running, turn the instrument on and allow it to completely boot up
2. Go to <https://www.keysight.com/find/iolibraries>, scroll down the page and select the **Previous Versions** tab. Expand the version 2023 Update 1. Scroll down and select button for **Download IOLS 2023 Update 1**. Save the file to a location of your choice that can be accessed when logged in as the administrator; recommendation is to use a folder on the D: partition.
3. From [Microsoft .NET Framework 4.8 offline installer for Windows](#), click on this link to download the offline installer: <https://go.microsoft.com/fwlink/?linkid=2088631>. Save the file to a location of your choice that can be accessed when logged in as the administrator; recommendation is to use a folder on the D: partition.
4. Close the instrument application by pressing the triple-bar  icon on the top bar of the graphical user interface, then Exit 
5. **Sign Out** of the default user (**Instrument**): if the Windows task bar is not present at the bottom of the screen, tap the lower section of the display until the Windows task bar appears. Tap the **Windows Start** icon, select the **Change Account settings** icon  and **Sign out**.
6. At the login prompt enter (factory default indicated, if you have changed the password enter the appropriate password): 7. User name: **administrator**
8. Password: **Keysight4u!**
9. Press the Next arrow to log in
10. Using File Explorer navigate to the location where IOLS 2023 Update 1 was downloaded in Step 2. Double-click on the IOLS .exe file to invoke the installer. Follow the instructions.

You may encounter a prompt regarding Agilent License Service:

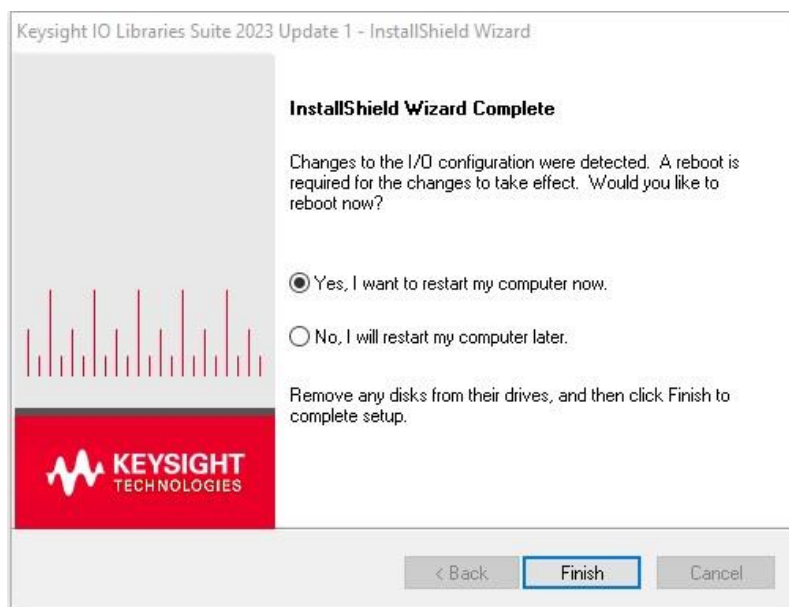


Select OK.

At any point in the process of updating IOLS you may encounter either or both of these messages:

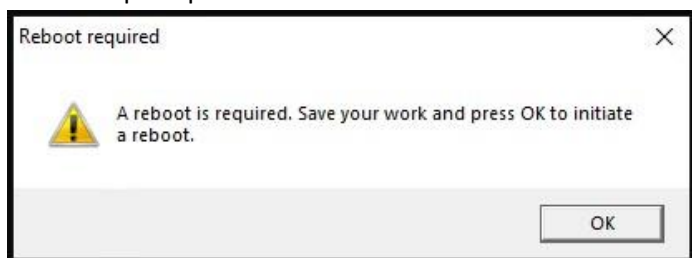


This is expected during the update process, there is no concern with the licensing hardware. Select OK for these messages and let the procedure complete. You may encounter these messages until the instrument software has been updated to A.14.00 or newer. At the end you will be prompted to restart the instrument:



Select Finish.

11. Upon restart, the instrument must again be Signed Out as user instrument and login as user administrator; repeat Steps 4 through 9.
12. Once logged in as administrator, the IOLS installation will complete
13. Using File Explorer navigate to the location where Microsoft .NET Framework 4.8 was downloaded in Step 3. Double-click on the ndp48-x86-x64-allos-enu.exe file to invoke the installer. Follow the instructions. At the end of the installation a reboot is required, select OK at the prompt:



Fading Files update

Beginning with version A.12.00, the instrument contains files for use with the N7605AP0C PathWave Signal Generation for 3GPP MIMO fading. The fading files may be updated periodically, ensure the instrument contains the latest files when you perform this instrument software update. See <https://www.keysight.com/us/en/lib/software-detail/instrument-firmware-software/m9484cfading-files-for-n7605ap0c.html> for the latest fading files version and update procedure. If the latest fading files are already installed on the instrument, proceed to [Obtaining the latest software update](#).

Obtaining the latest software update

1. Go to <http://www.keysight.com/find/m9484c>

2. Select the Visit Technical Support link, then Drivers, Firmware and Software and select the appropriate link in the Instrument Firmware/Software section
3. Download the executable file (**Keysight.PathWave.SG.Setup_A.XX.XX.exe**) by clicking on the Download button. Save the file to a location of your choice; recommendation is to use a folder on the D: partition.

If you do not have the ability to download files directly to the D: partition of the instrument being updated, store the **Keysight.PathWave.SG.Setup_A.XX.XX.exe** file on a large capacity USB storage device for transfer to the instrument. (The file size is ~4 GByte.)




If the instrument to update is currently running a version less than A.14.00, the installation process will require updating Keysight IO Libraries to version 18.3 and Microsoft .NET Framework 4.8. The installation will detect if these prerequisites are not met and prompt you to perform the updates, then re-run the **Keysight.PathWave.SG.Setup_A.XX.XX.exe**. The process will go smoother if you perform the updates as indicated in the [Prerequisites](#) section.

Note: This will update the software currently running on the instrument. It will not update the version that exists on the recovery partition. Because of this, if the recovery process is performed, the instrument will revert to the version that was originally shipped from the factory. It is recommended you place a copy of this software installer on the D: partition, so you can easily perform an update in the event you need to do a recovery in the future.

Update Procedure

The default user account is **Instrument**, which does not have the required permissions to install the instrument software updates. For the process outlined below, ensure the Instrument user is **Signed Out**, do not use Switch User, then login as the **administrator**.

The instrument software upgrade process has an install wizard which removes the old software version and installs new software version. The time to perform the upgrade will may vary between 20 and 45 minutes depending if FPGA upgrading is performed. The FPGA updates are handled automatically during the instrument software update process. When updating

1. If the instrument is not already running, turn the instrument on and allow it to completely boot up
2. Close the instrument application by pressing the triple-bar  icon on the top bar of the graphical user interface, then Exit 
3. **Signed Out** of the default user (**Instrument**): if the Windows task bar is not present at the bottom of the screen, tap the lower section of the display until the Windows task bar appears. Tap the **Windows Start** icon, select the **Change Account settings** icon  and **Sign out**.

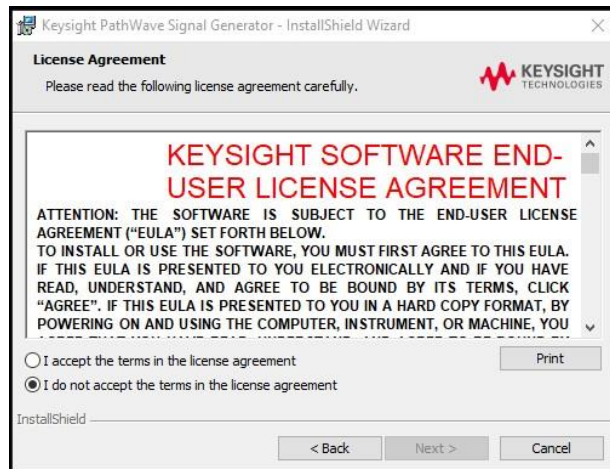
4. At the login prompt enter (factory default indicated, if you have changed the password enter the appropriate password):
 - User name: **administrator**
 - Password: **Keysight4u!**
5. Press the Next arrow to log in

Instrument 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 it into one of the USB ports on the front of the instrument. Copy the file to the instrument's disk drive, per Note above it is recommended to use the D: partition, then proceed to step 1.

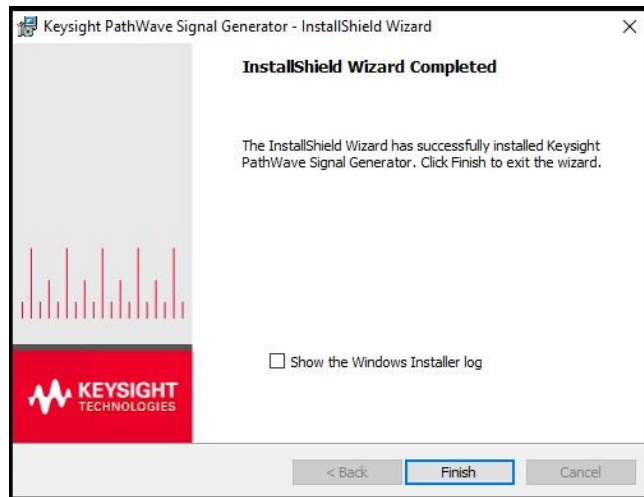
1. Tap the **Windows Start** icon, select **File Explorer** and select the appropriate file location
2. Double tap the filename "**Keysight.PathWave.SG.Setup_A.XX.XX.exe**" 3. A message will appear providing the license agreement, read and accept:



4. The installation process will proceed, you may or may not be prompted for further confirmation during the process (depending on the updating of included component software).

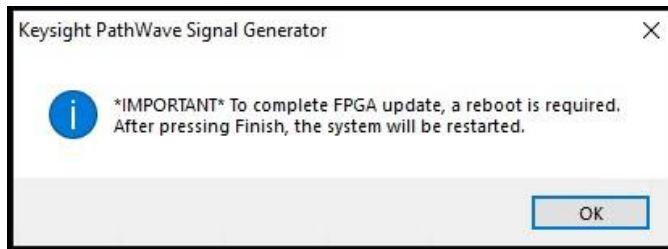
DO NOT cycle the instrument power for any reason during the process. If this process is interrupted, the instrument may end up in an unusable state, and will likely need to be returned to Keysight Technologies for repair before it will be usable again.

5. When the software installation is complete a prompt is displayed



Select **Finish**, one of two actions will then complete the process:

- A. If the upgrade process updated FPGAs the prompt will be:





Press **OK**. The instrument will automatically restart.

- B. If no FPGA updating was necessary, restart the instrument using the **Windows Start**



Note: If the instrument does not reboot, remove any USB storage device and cycle power. The boot order for the instrument may have been changed in the instrument BIOS previously, and the instrument may be instructed to boot from USB first, and the internal disk drive second. If this is the case, failure to remove the USB device will result in an error.

6. Check for any errors and verify that the new software version is installed by tapping the triple-bar icon  on the top bar of the graphical user interface then the gear icon , then tap **Instrument Information**. Look for the “Firmware Version” as shown below.

Instrument Settings

RF Out (All) Trigger ? PRESET

Instrument Information

I/O Configuration

Alignment

Global Trigger/Sync

Power On/Preset

Description

Model

Options

Serial Number

Firmware Version

Internal Versions

VXG Microwave Signal Generator

M9484C

001,1EB,1EH,403,520,600,8SG,CB5,M40,PCH,R25,SNC,ST6
002,1EB,1EH,403,520,600,8SG,M40,R25,ST6

US61440102

A.11.01

1.11.1/ 0.5.214.0

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