Update Instructions

E6681A EXM-WB Wireless Test Set Instrument Software Update Instructions

Introduction

The purpose of this document is to outline the instrument software update procedure for the E6681A Wireless Test Set.

This procedure will update the instrument software, 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 E6681A Wireless Test Set current and up to date.
2. Updating the measurement applications where appropriate.
3. Updating 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), so long as the application(s) were licensed prior to the update.

To determine what revision of instrument software is currently installed, press [**Gear Icon**], {**System tab**}, look for the "Instrument S/W Revision" number (Example: "E.28.41"). If the installed revision is the same as the latest revision on the web, there is no need to update the E6681A Software.

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, as described in the E6681A service guide, is performed, the instrument will revert back to the instrument software revision that was originally shipped from the factory.

KEYSIGHT TECHNOLOGIES

Requirements

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

- A properly functioning instrument.
- A USB keyboard and mouse.
- The ability to log in to the instrument as the **administrator**.
- The ability to transfer a large file (~3G Byte) to the instrument being updated.

File Download

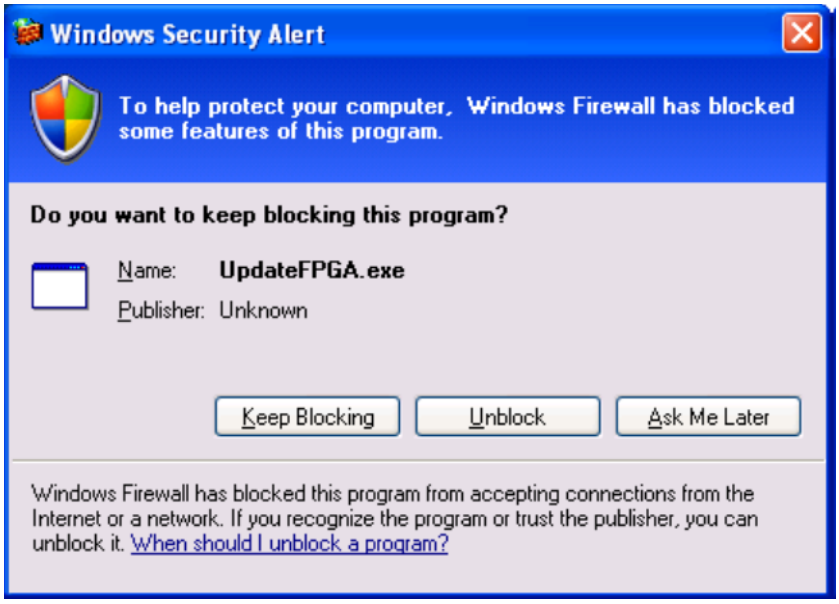
1. Go to http://www.keysight.com/find/E6681A_Software
2. Select and download the executable file "Instrument Software (Version E.xx.xx)" in the "Drivers, Firmware and Software" section of the webpage.

If you do not have the ability to download files directly to the C: drive of the instrument being updated, store the file on a large capacity USB storage device for transfer to the instrument. (The file size is ~3 GByte.)

USB: If you downloaded the instrument software update file to a PC, then transferred to a USB storage device, plug that USB device into one of the USB ports on the instrument. Access the file using Windows Explorer, and proceed to Step 1.

LAN: If you downloaded the instrument software update file directly via LAN to the instrument, for example, to C:\Temp, access the file from that location and proceed to Step 1.

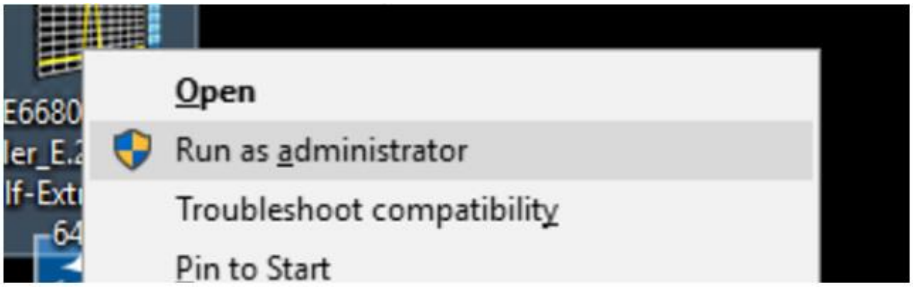
Note: If using the LAN method, depending on your firewall settings, you may see the pop-up message shown in Figure 2, Select "**Unblock**" to continue.



Software 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, the user must be logged in as the ***Administrator***.

The E6681A automated instrument Software upgrade process has an install wizard which removes the old software version and installs new software version with a couple manual steps. It only requires the user to be logged in as administrator. The installer can be run from the instrument account by right clicking on the installer and selecting "Run as administrator"



Password = **Keysight4u!**

The removal of the old software version and the installation of the new software version completes in approximately 20 to 30 minutes. (Dependent on number of files requiring update)

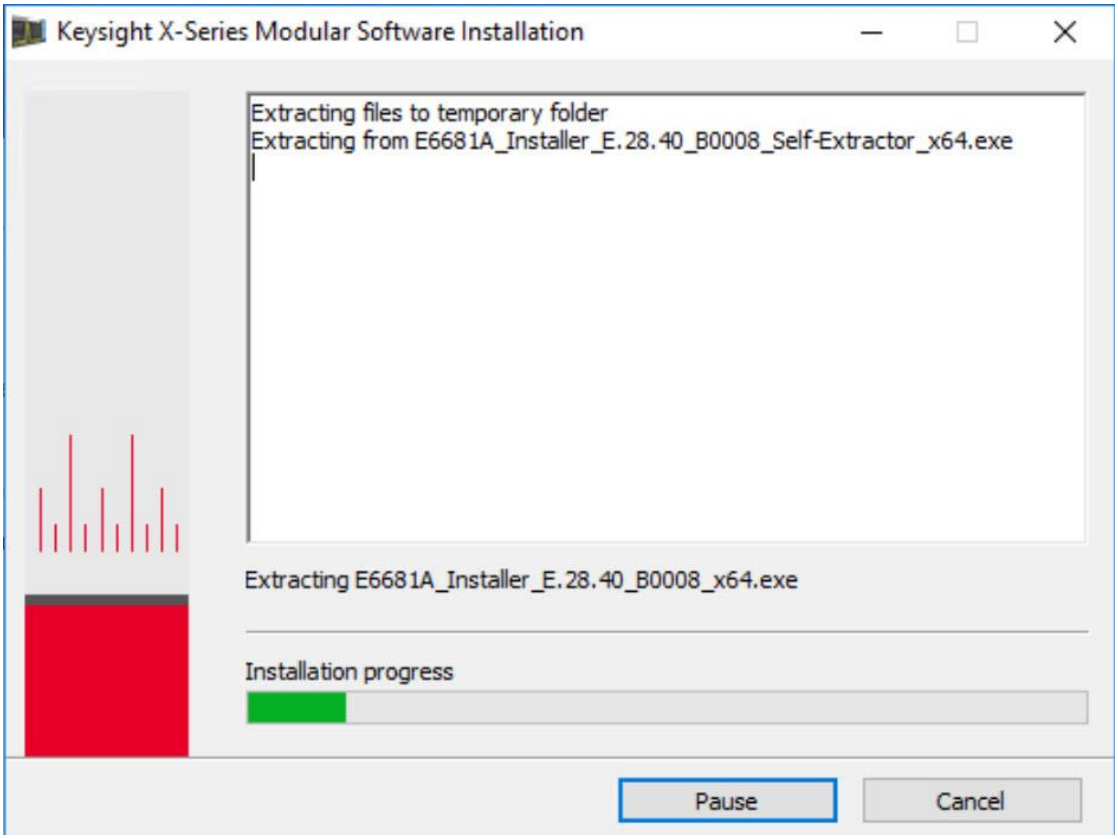
Software installation

1. Close the application by pressing [**File**], {**Exit**}
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.**
4. At the login prompt enter:
    - User name: **administrator**
    - Password: **Keysight4u!**

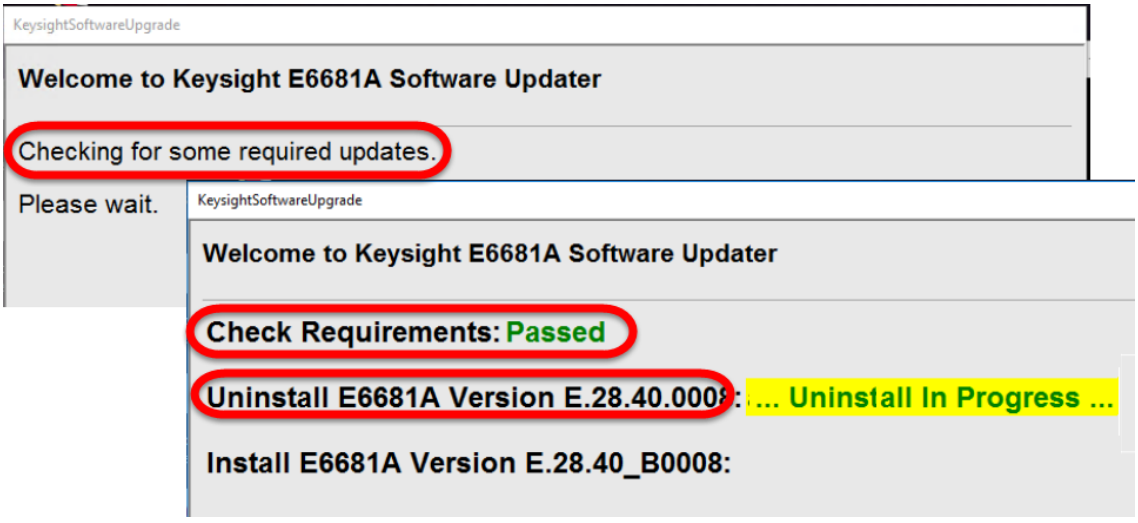
Note: If a "Found New Hardware" wizard window pops up, select "No Not at this Time" to bypass the activity.

5. Locate the instrument software file you downloaded from the Keysight web site.
6. Double click on the file named "**E6681A_Installer_E.XX.YY.exe**"

7. A window appears showing the extraction of the software installer. When the extraction process is complete, there will be another widow that will check that all software update requirements are meet. The next window will show the progress of the software removal and installation.

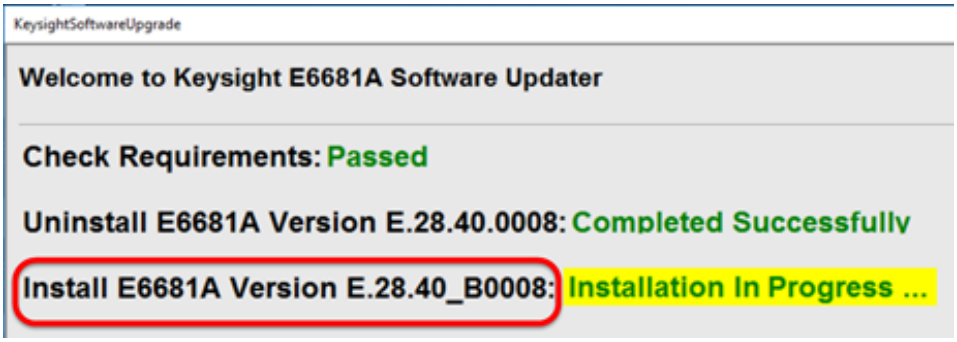


Wait while the system checks for required updates, and uninstalls the previous version of the software.

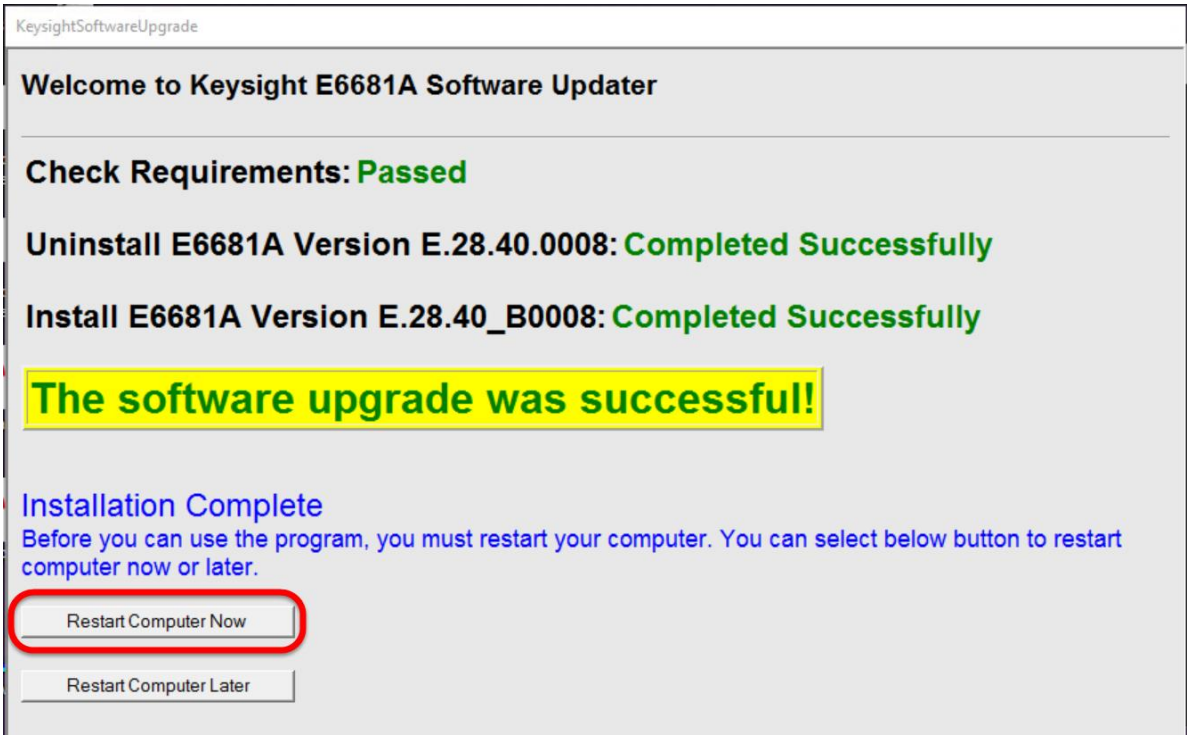


The old instrument software is being removed. The “Uninstall in Progress” text will roll across the screen indicating software activity. There will be several windows appearing and disappearing. It will display “Completed Successfully” when this step is finished.

Once the removal is complete. The Installer for the new version will appear. Select “Next” and then accept the end user license agreement.



Software upgrade “Completed Successfully”

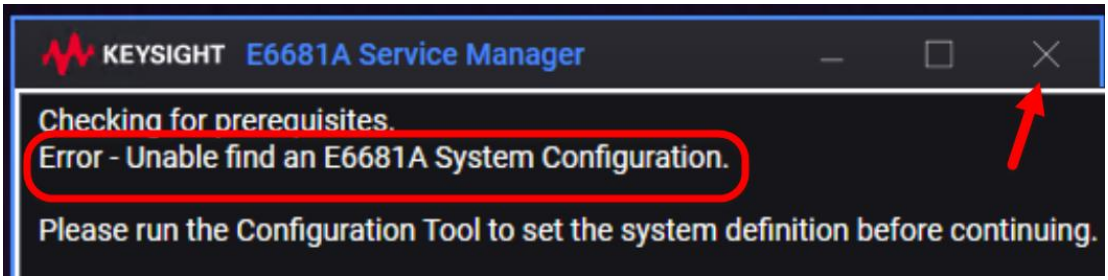


8. When the Software installation is complete. You will be asked to restart the instrument**.**

   Note: When "Finish" you will see this window message indicating that the system is shutting down. This is normal message.

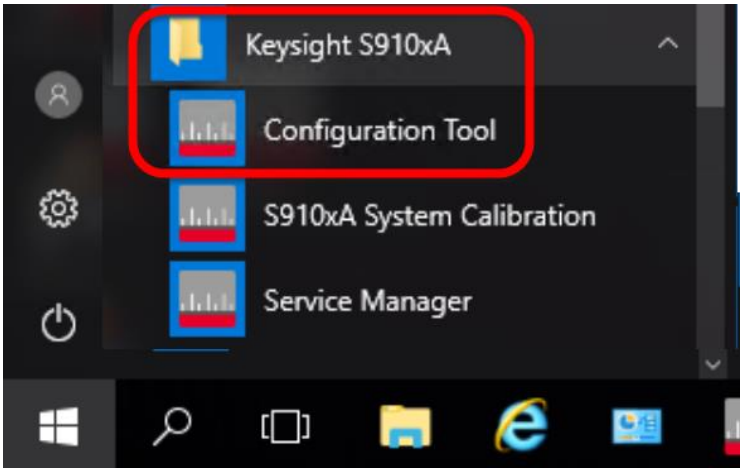
   If the instrument shuts down but does not reboot automatically, remove the USB storage device and cycle power. The boot order for the instrument may have been changed in the instrument BIOS previously, and the instrument may be instructed to boot from USB first, and the internal drive second. If this is the case, failure to remove the USB device will result in an error, as the instrument attempts to boot from it.

9. After reboot, allow the **Service Manager** to configure the system and open the TRX measurement applications. Watch for a configuration error, and close the window if it appears. The **Service Manager** may show a message saying that it is unable to find an E6681A System Configuration (If it doesn't, skip the next three steps). If this occurs, close the Service Manager window by clicking the close icon at the upper right corner of the window.

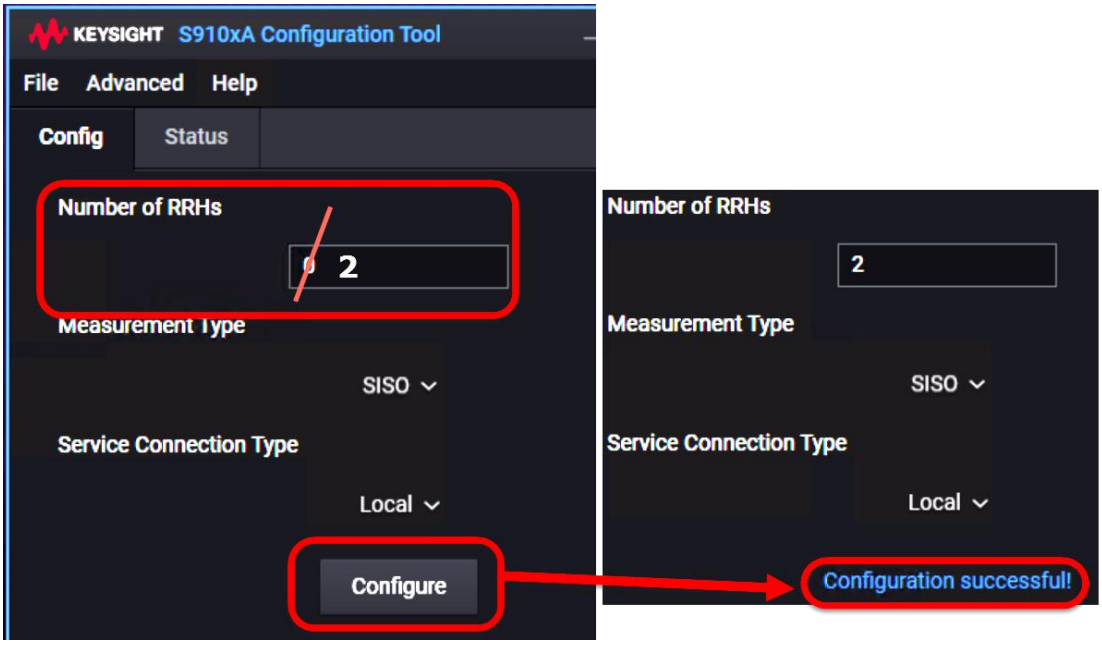


   If you fail to close the Service Manager at this point, updating the configuration (as described below) may result in confusing error messages (for example, "Reboot CIU/Power cycle the E7770"). A restart of the Service Manager should clear these errors.

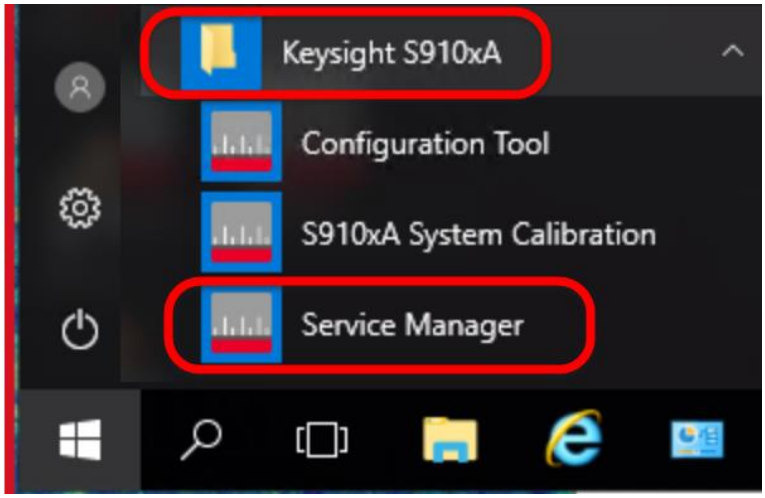
10. To clear the configuration error described in the previous step, open the **Configuration Tool** from the **Windows Start** menu. The **Configuration Tool** is found under the **Keysight S910xA** folder.



11. In the **Configuration Tool**, enter the correct number of installed TRX modules in the **Number of RRHs** field (it may have reset to zero during software installation).



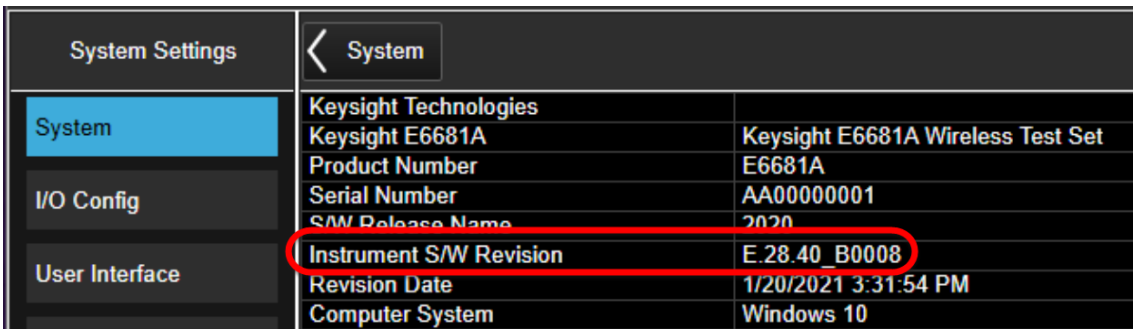
12. Re-launch the **Service Manager** from the Windows **Start** menu, in the **Keysight S910xA** folder.



13. The **Service Manager** will automatically open the TRX measurement applications.

    Be patient during this step: the startup process for the **Service Manager** takes about 4 minutes (with pauses which may make it appear to have stopped working), and after that point the measurement applications must load, which adds additional minutes to the wait. The process isn't complete until the measurement application window appears on the screen (two windows, if two TRXs are installed).

14. Verify that the correct software version is installed. Within the measurement application, select **System > System Information**. On the window which opens, look for the **Instrument S/W Revision** entry on the **System** tab, and verify that it matches the revision of the installer.


System Settings
System
I/O Config
User Interface
System
Keysight Technologies
Keysight E6681A
Keysight E6681A Wireless Test Set
Product Number
E6681A
Serial Number
AA00000001
2020
Instrument S/W Revision
E.28.40_B0008
Revision Date
1/20/2021 3:31:54 PM
Computer System
Windows 10