Introduction

The Firmware Upgrade Wizard provides the following features:

- It supports upgrading the firmware on designated devices, see Supported Devices.
- It can upgrade your device using serial.
- It supports automatic filtering of compatible firmware images from a directory of images.
- It bundles the latest compatible firmware files for supported devices with the tool.
- It includes bug fixes, and has added compatibility with more devices.

Note: For UPS devices with a SmartSlot, UPS firmware upgrades can also be carried out using a UPS Network Management Card. The detailed process is provided in the "Upgrading Firmware" section of the UPS Network Management Card 2 User Guide. The document is located in the documentation tab here.

System Requirements

The system requirements are as follows:

- Computer screen graphics: Resolution of 800x600 with 16-bit colors (65536 colors) or higher.

Serial Connection

Use the serial cable provided along with the UPS to connect the computer to the device being updated, via a DE-9/DB-9 serial communications port.

Note: You should not use serial converters or other devices to connect your computer to the device being updated.

Supported Devices

All Smart-UPS devices with SMT, SMX, SMC, SMTL, SRT, SCL, SRTL, XU, XP, CSH series.

Unsupported SKUs

No SU, SUA, SUM, SURT, SURTD, or SURTA Smart-UPS models are supported. Note: For upgrading the below non-compatible SKUs, please refer to Knowledge Base article FA279197 on the APC website.

SRC Family: SRC10KUXI, SRC5KUXI
SMT Family: SMT750RMJ1U, SMT2200
SRC Family: SRC5KUXI, SRC10KUXI, SRC1KUXIX828
SMC Family: SMC2200XLI-BR
SURT Family: SURTD5000RMXLP3U
Usage

Upgrade Notes

- AC utility power should be supplied to the device and the internal battery should remain connected throughout the firmware upgrade.
- The UPS display serial interface must be enabled before initiating the firmware upgrade. Use the Configuration menu on the UPS display to set FU.1 for SMC devices. For all other supported models, navigate to Configuration, set the Menu Type as "Advanced" and Firmware Upgrade Interface to "Serial: -Enable".
- Do not remove the serial cable from your device while the upgrade is in progress. If the upgrade is interrupted, the UPS may crash. In this case, contact APC Customer Support.
- It is recommended that the Wizard runs on a laptop or on a power-protected computer. If upgrading a UPS, do not have the UPS supply power to the computer.
- Ensure that the computer does not go to sleep, standby or hibernate due to user inactivity.
- While the Wizard allows a downgrade, this is neither recommended nor supported by Schneider Electric, unless directed by a representative of the company.
- Compatible firmware images for various devices are bundled with this software. Only use these compatible images or any approved firmware upgrade files that were supplied by Schneider Electric. Files received by other means may cause problems with the device, possibly resulting in permanent damage.
- Ensure that only one device is connected at a time to the computer for the firmware upgrade.

Notes for UPS Devices only

- SmartSlot cards should be removed from the UPS before a firmware upgrade of your UPS. It is also recommended that any equipment is disconnected from the UPS.
- The UPS should not be performing a runtime calibration during the upgrade.

Troubleshooting

- No software that is communicating with the device being upgraded should be running while using this Firmware Upgrade Wizard. Some software runs as a service on Windows and should be stopped (example: PowerChute Serial Shutdown).

  To access Windows services, launch "Services" from the Windows Control Panel in Administrative Tools or type "Services.msc" in the command prompt.

  The PowerChute Serial Shutdown service is called 'PowerChute Serial Shutdown service'. Stop this service before running the Wizard, and start it again afterward.

- If you have Bluetooth or virtual COM ports, and you want to do the upgrade using your serial port, you should manually select the COM port you want to perform the upgrade with.
- The Firmware Upgrade Wizard is bundled with OpenJDK v17 and uses its 64-bit Java environment. Some operating systems might ask for confirmation to run this Java version.
Firmware Upgrade Process: Step-by-Step Walkthrough

Download the Firmware Upgrade Wizard from the Software / Firmware page on the APC website (select “Software Upgrades – Wizards and Configurators” from the drop-down list) or Knowledge Base article FA279197. Double-click the downloaded file, and launch the application.

Step One

**NOTE:** Only authorized personnel should have access to the Firmware Upgrade Wizard.

Once you have downloaded the Firmware Upgrade Wizard, extract the tool as per the screenshot below:

Confirm that the application is signed by Schneider Electric before proceeding.
Step Two

Double-click on the “LaunchFUW.exe” application from the extracted folder “Smart-UPS_Firmware_Update_Wizard_v4.3.6”. Validate the process with the below image.
Step Three

Click “Next” to begin.
Step Four

Select the "I agree to terms in the License Agreement" checkbox and click "Next".
Step Five

The Firmware Upgrade Wizard will now search the communication ports for the UPS. The UPS is referred to as the "device" on the screen. If you have set up virtual ports, it is important to manually select the correct port that the UPS is connected to.
To display the current firmware version installed on the device, click “Next”.

![Device Found]

A device has been discovered on the COM5 port. The firmware on this device can be upgraded.

The current firmware version: UPS 07.1

[More Information]

[Back] [Next] [Cancel]
Step Six

Click “Browse” to select your firmware file.

The Wizard will display the Firmware File appropriate for your device. If you want to manually select a different file, you can browse to the appropriate location. Select the file and click “Open”.

![Firmware Upgrade Wizard](Image)
The Firmware Upgrade Wizard is now ready to begin the upgrade process. The Revision Note will give detailed information on the version of the firmware. Click “Next”.

Press Next to upgrade your firmware to version UPS 97.1

Note: Disconnect any Network Management Cards or other accessories from the UPS. The network communications will stop. This may cause visible/audio alarms in shutdown agents monitoring the UPS.

1. Do not turn off input power or remove the battery from the device during the upgrade process.

2. In addition, do not disconnect the communication cable between the UPS and the computer or interrupt the upgrade.
Step Seven

The first step is sending the upgrade file to the UPS. For some UPS devices, the Wizard may ask you to turn off the UPS before proceeding with the upgrade, ensure the attached load is correctly shut down. For most UPS devices, the Wizard supports “Firmware Upgrade with Output On”, and the UPS and its connected load do not need to be turned off.

Click “Next”.

The Firmware Upgrade Wizard will now begin transferring the file to the device. This process will take approximately 5 minutes. Do not turn off power or remove the battery during this process.
The Wizard begins applying the upgrade to the UPS. This process may take a few minutes to complete.

Click “Finish” to exit the upgrade wizard before completion, or wait for the confirmation screen...
Step Eight

The firmware upgrade is now complete. You can verify the new updated revision of your device firmware. Click “Finish” and you can put your UPS and attached load back into production.

If the upgrade was unsuccessful

The Firmware Upgrade Wizard is a self-extracting executable file that gets uncompressed to your chosen folder; the default folder is the Documents directory, e.g. C:\User\Documents\FirmwareUpgradeWizard_v4.3.6. A log file called FUW.log gets created when the tool is run in the FirmwareUpgradeWizard_v4.3.6 folder. If you have problems with running the wizard, go to the FirmwareUpgradeWizard_v4.3.6 folder to access the log file, which gives information on what occurred when the Wizard executed. For security reasons, this log file is encrypted. If problems occurred while running the Firmware Upgrade Wizard, please contact Customer Support and provide this encrypted log file to them for processing.