

Smart-UPS Firmware Upgrade Wizard v4.2.1



A Technical Guide

April 2021
990-4395C-001

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 or USB, the exact method depending on the device itself.
- 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:

- Operating systems: Microsoft® Windows® 7, Windows 2016, Windows 8.1, Windows 10, and Windows 2019.
- 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.

USB Connection

Use the USB cable provided along with the UPS to connect the computer to the device being updated.

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

Supported Devices

All Smart-UPS devices with the SRT, SMC, XU, XP, SMX, SMT, SCL, SRC, CHS, and EER prefixes are supported.

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](#).

SMTL Family: SMTL1500RM3UC, SMTL1000RM2UC, SMTL750RM2UC, SMTL1500RMI3UC, SMTL1000RMI2U, SMTL1000RMI2UC, SMTL750RMI2U SMTL750RMIUC, SMTL1500RMI3U, SMTL750RMI2UC

SCL Family: SCL500RM1UC, SCL500RMI1UC, SCL500RMI1UNC, SCL500RMI1U

SRC Family: SRC10KUXI, SRC5KUXI

Usage

Upgrade Notes

- AC utility power should be supplied to the device and the internal battery should remain connected throughout the firmware upgrade.
- Do not remove the serial/USB 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.
- In the case of updating the firmware directly after plugging in a USB cable to a UPS, please ensure the USB driver installation is complete before proceeding with the upgrade.

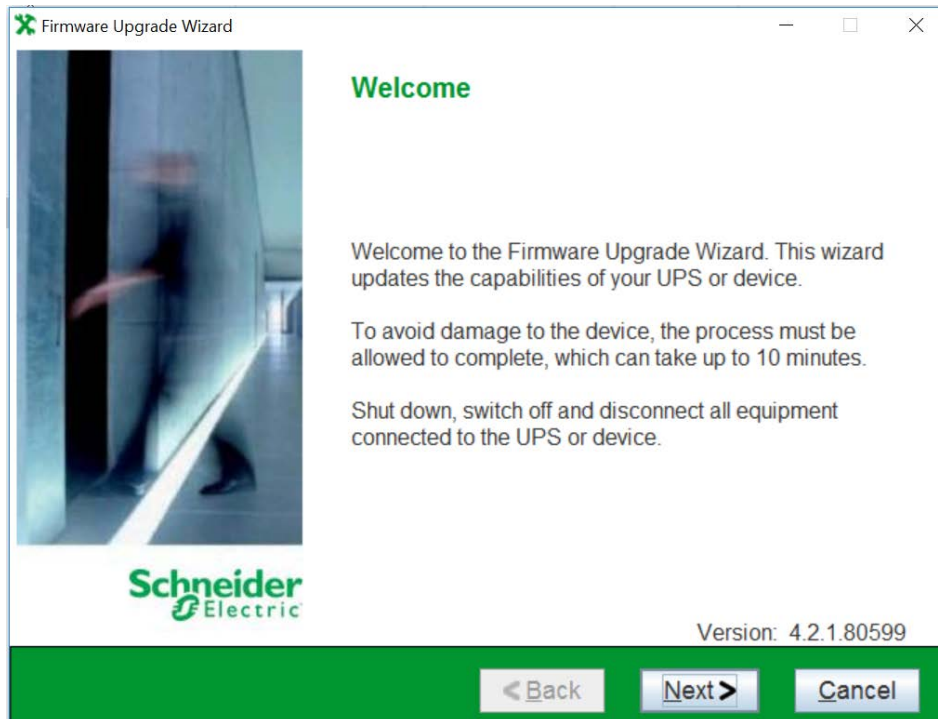
Troubleshooting

- 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 Business Edition).
To access Windows services, launch "Services" from the Windows Control Panel in Administrative Tools or type "Services.msc" in the command prompt.
The PowerChute Business Edition service is called 'APC PBE Agent'. 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. (This does not apply for a firmware upgrade using the USB port).
- The Firmware Upgrade Wizard will display an error message if the UPS is not capable of performing a firmware upgrade using the USB port. This will cause no harm to the device.
- The Firmware Upgrade Wizard uses its own 32-bit Java environment. Some operating systems might ask for confirmation to run this Java version.

Firmware Upgrade Process: Step-by-Step Walkthrough

Step One

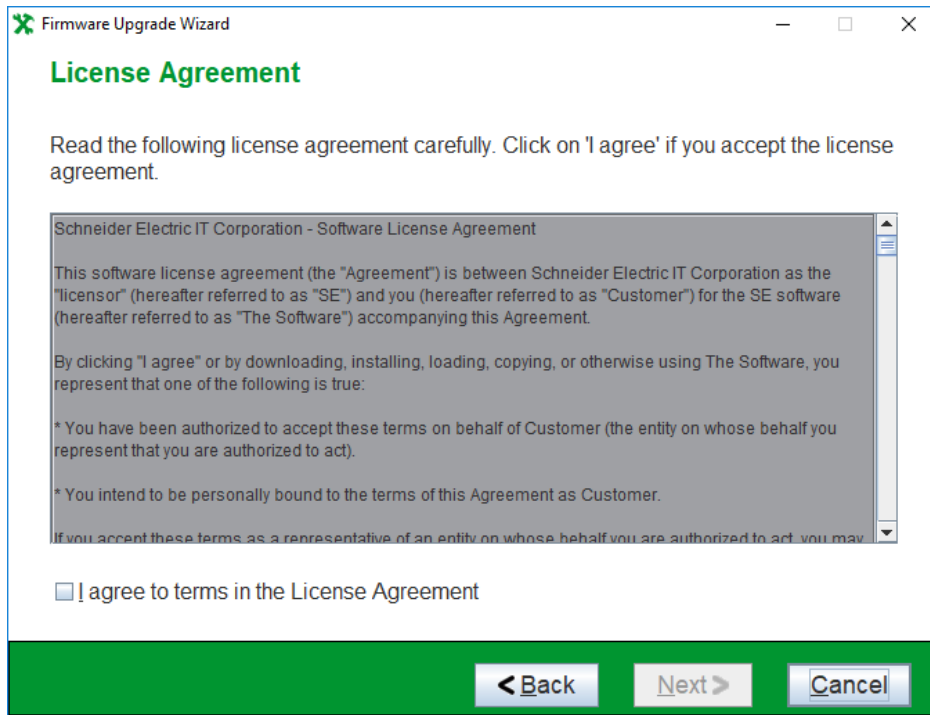
Download the Firmware Upgrade Wizard from the [Software / Firmware page](#) on the APC website (select “Software Upgrades – Wizards and Configurators” from the drop-down list) or Knowledge Base article [FA279197](#). Double-click the downloaded file, and launch the application.



Click “Next” to begin.

Step Two

Select the “I agree to terms in the License Agreement” checkbox, and click “Next”.



The screenshot shows a window titled "Firmware Upgrade Wizard" with a "License Agreement" section. The text reads: "Read the following license agreement carefully. Click on 'I agree' if you accept the license agreement." Below this is a scrollable text area containing the license agreement terms. At the bottom of the window, there is a checkbox labeled "I agree to terms in the License Agreement" and three buttons: "< Back", "Next >", and "Cancel".

License Agreement

Read the following license agreement carefully. Click on 'I agree' if you accept the license agreement.

Schneider Electric IT Corporation - Software License Agreement

This software license agreement (the "Agreement") is between Schneider Electric IT Corporation as the "licensor" (hereafter referred to as "SE") and you (hereafter referred to as "Customer") for the SE software (hereafter referred to as "The Software") accompanying this Agreement.

By clicking "I agree" or by downloading, installing, loading, copying, or otherwise using The Software, you represent that one of the following is true:

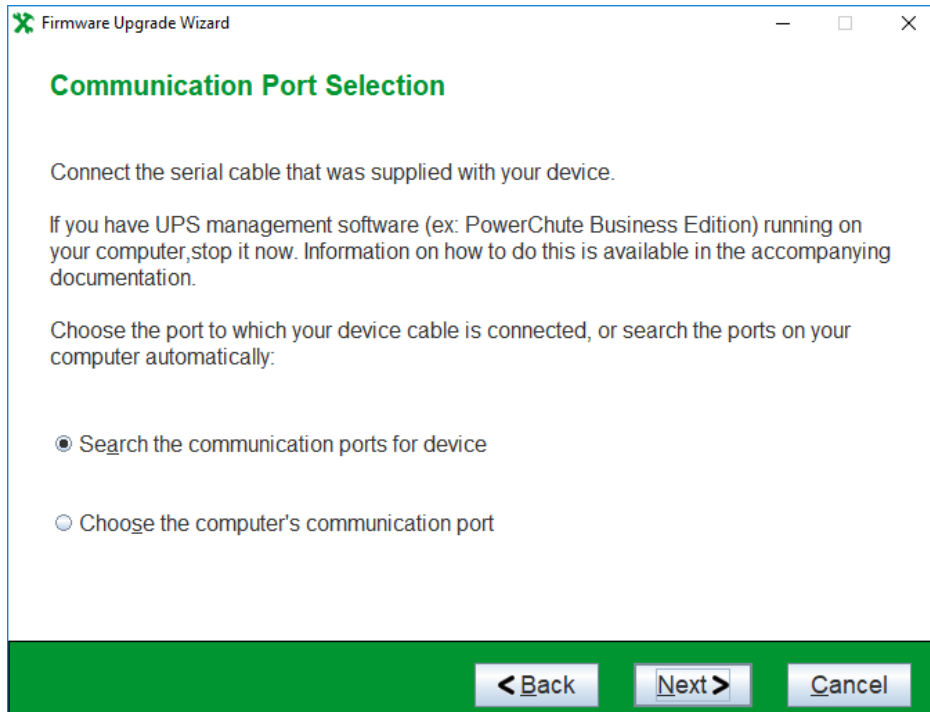
- * You have been authorized to accept these terms on behalf of Customer (the entity on whose behalf you represent that you are authorized to act).
- * You intend to be personally bound to the terms of this Agreement as Customer.

If you accept these terms as a representative of an entity on whose behalf you are authorized to act, you may

I agree to terms in the License Agreement

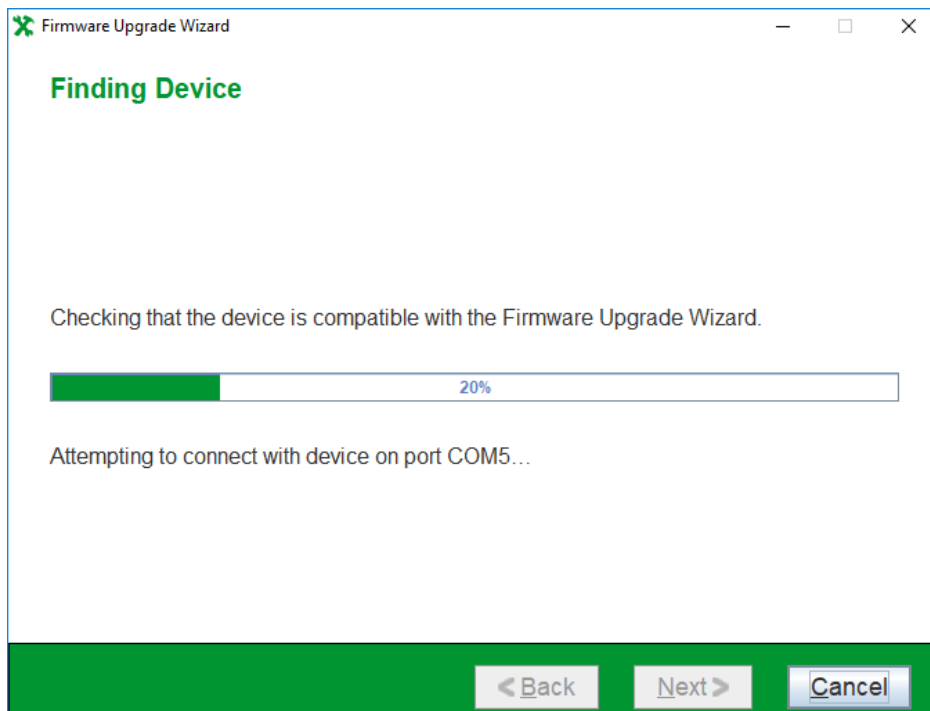
< Back Next > Cancel

Step Three

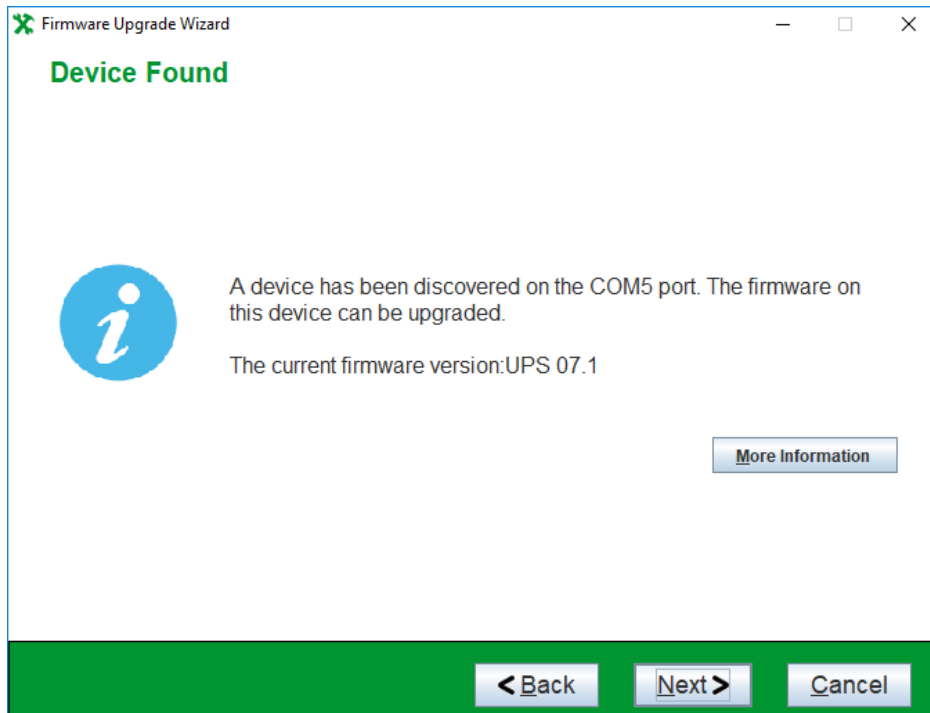


The Firmware Upgrade Wizard will now search the communication ports for the UPS. The UPS is referred to on-screen as the “device”. If you have set up virtual ports, it is important to manually select the correct port, the UPS is connected to, here.

If the device is connected via USB, the wizard will detect the device.

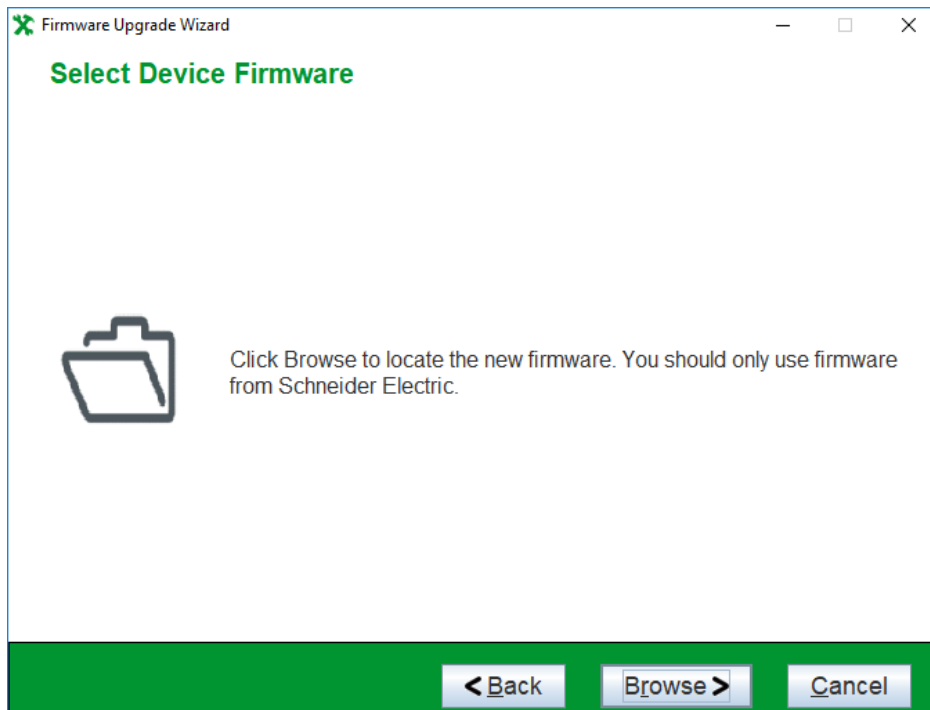


Click “Next” and the Firmware Upgrade Wizard will display the current firmware version installed on the device.

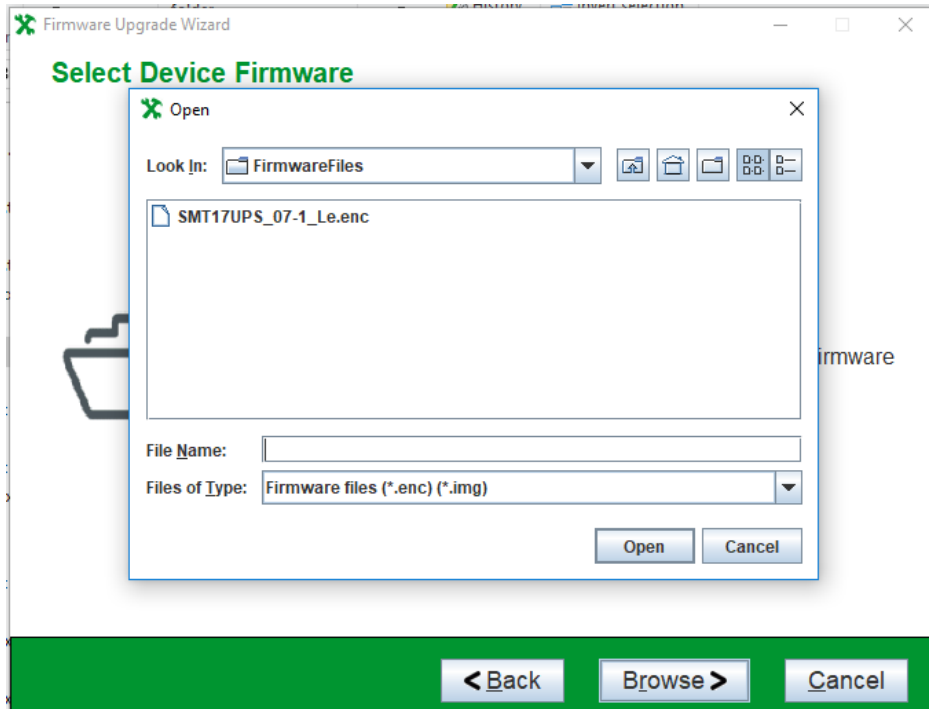


Step Four

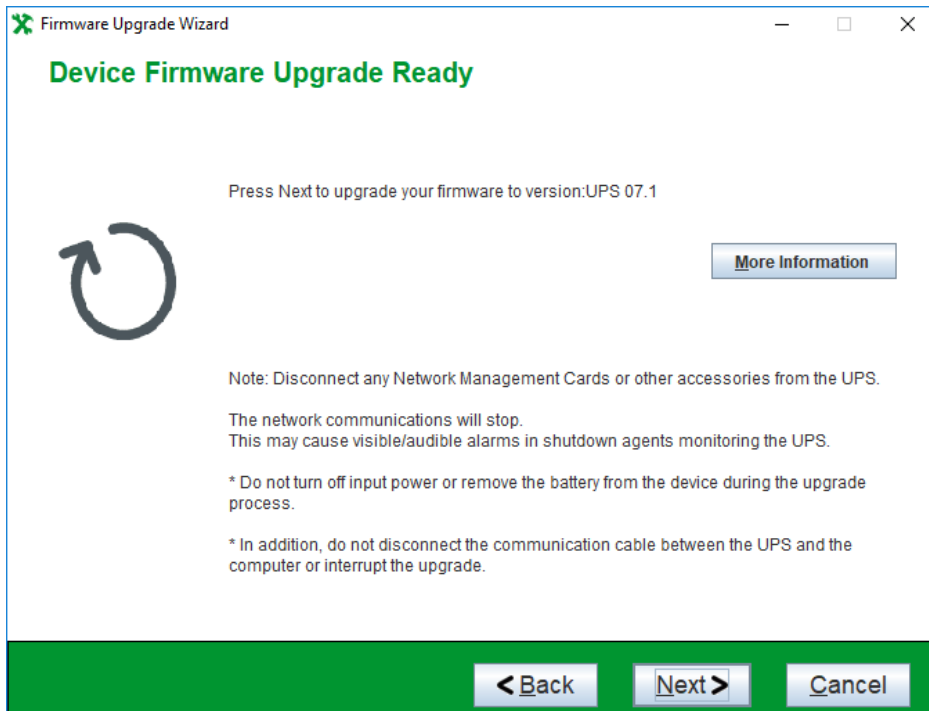
Click “Browse” to select your firmware file.



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 it, and click “Open”.



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.

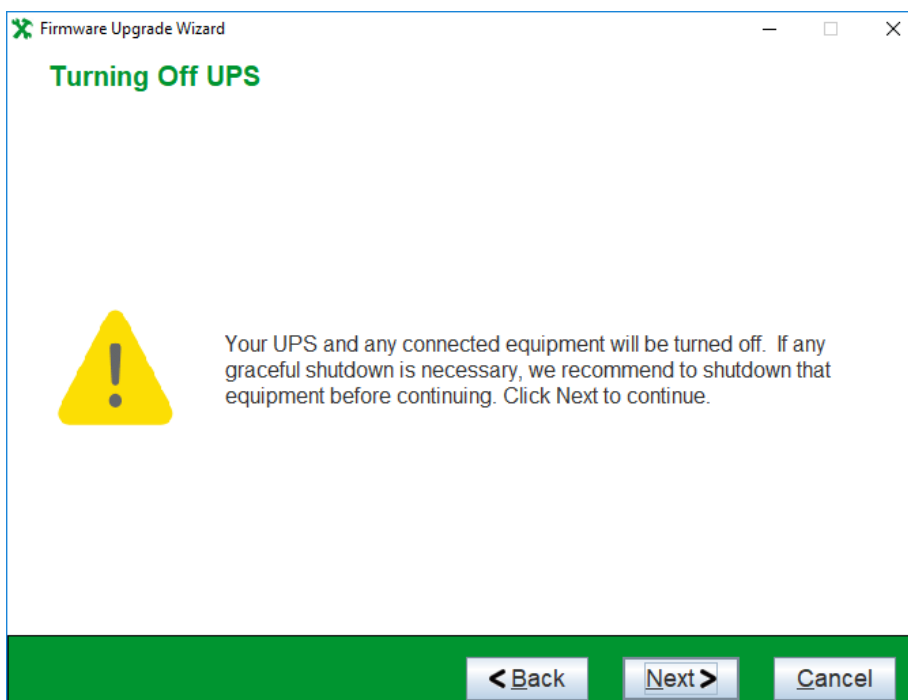
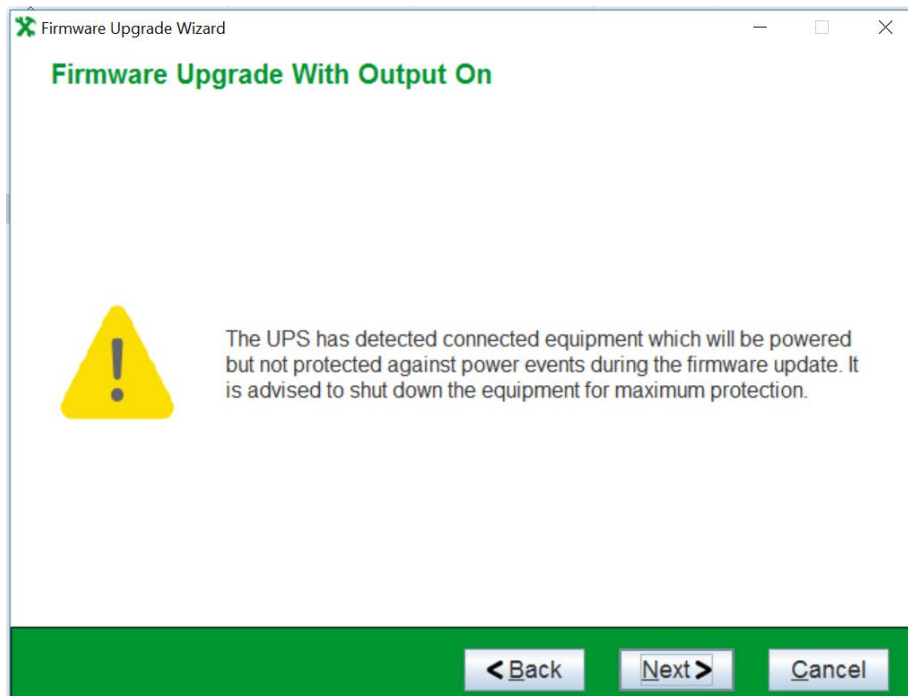


Click “Next”.

Step Five

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, so ensure the attached load is correctly shut down. For most UPS device, the Wizard supports “Firmware Upgrade With Output On”, and the UPS and its connected load do not need to be turned off.

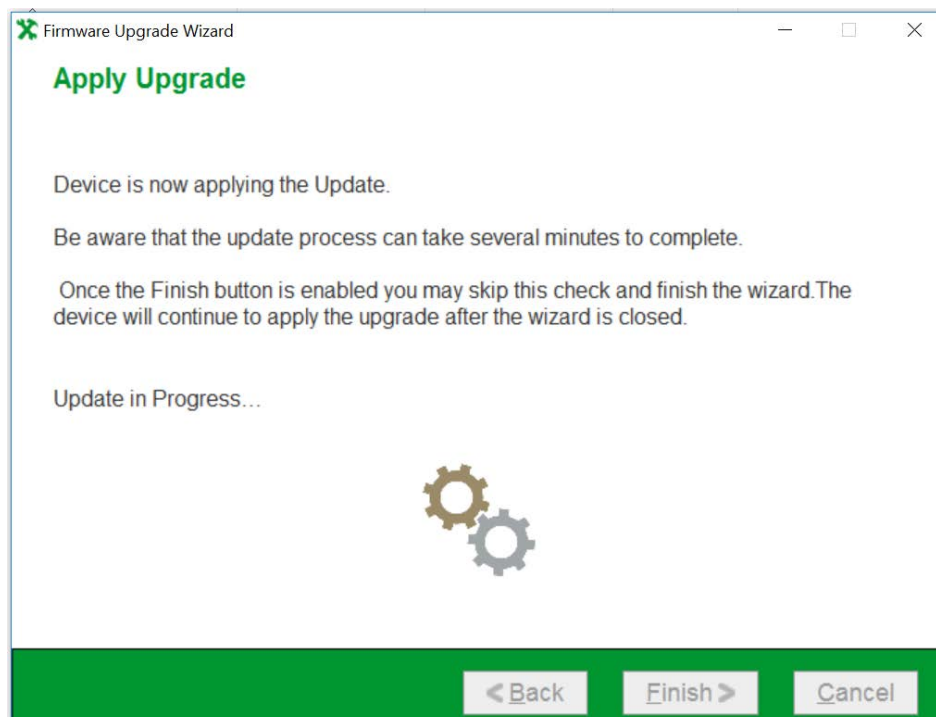
Click “Next”.



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.



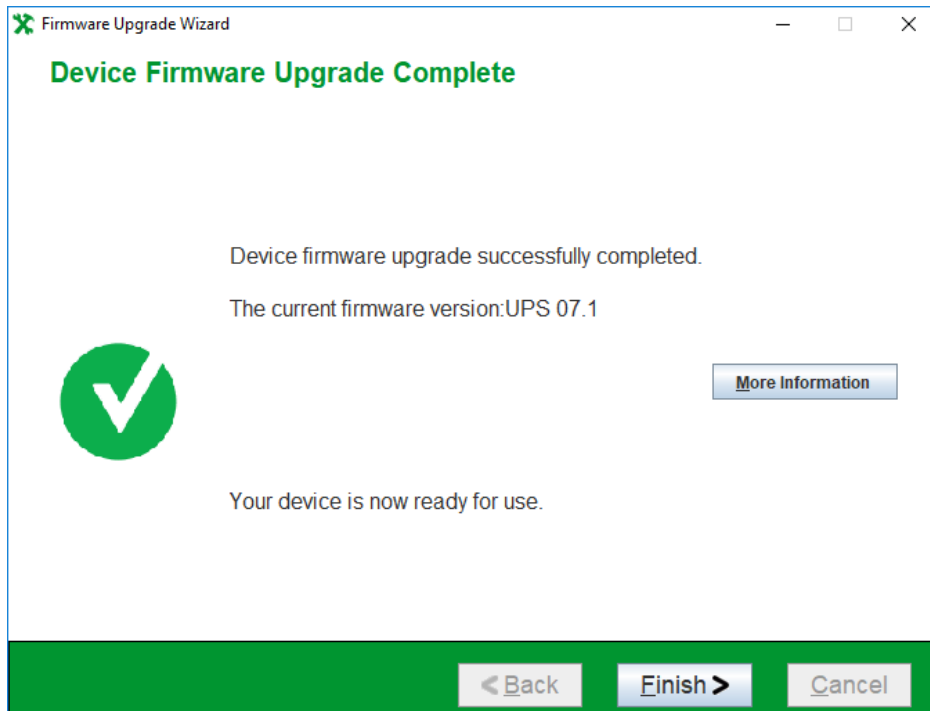
The wizard begins applying the upgrade to the UPS. This process may take a few minutes to complete.



Click "Finish" to exit the upgrade wizard before completion, or wait for the confirmation screen.

Step Six

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_v4.2.1. A log file called FUW.log gets created when the tool is run in the FirmwareUpgradeWizard_v4.2.1 folder. If you have problems with running the wizard, go to the FirmwareUpgradeWizard_v4.2.1 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.