

# Smart.IO Software Upgrade Guide

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As Smart.IO is in the early stages of production release, it is expected we may send out software upgrades. To recap, the software part of the Smart.IO toolkit consists of:

1. The Smartphone App
2. The Host Interface Layer (available in C source, and binaries for select MCU targets)
3. The Smart.IO firmware

## Updating the Smartphone Apps

The latest versions can be downloaded and installed from the Apple App Store and the Google Play Store respectively. Additionally, the Android version may be made available on our website <https://imagecraft.com/smartio> prior to availability in the Play Store.

## Updating the Host Interface Layer code

The latest source code and binaries are available on <https://imagecraft.com/smartio>,

## Updating Smart.IO firmware

The latest Smart.IO firmware is available upon request. The firmware is only provided to Smart.IO users, and may not be shared with any other person or organization. Smart.IO users must obtain the images directly from ImageCraft, and not from someone else, including other Smart.IO users.

The Smart.IO firmware is copyright material. You may not modify or disassemble the file for any purpose.

To upgrade the Smart.IO firmware, you must either use a JTAG/SWD debug pod (such as Segger JLINK or ST ST-LINK), or use the bootloader in the Smart.IO's BlueNRG1 SoC (System on a Chip) Bluetooth processor.

The easiest method is to use the Smart.IO Arduino shield, which has the header for the JTAG/SWD pod and also the UART->USB connector. However, since all the required signals

are brought out in the Smart.IO module header, you may wire up your own circuits to perform similar functions.

## Using a JTAG/SWD Pod

ST provides a BlueNRG1 specific version of their STLINK utility that works with the ST-LINK pod and is the recommended JTAG/SWD for that reason.

As of this writing, there is no support for BlueNRG1 flash programming using the Segger JLINK pods, but that support should be forthcoming from Segger. Please contact them for details.

## Using the Bootload Mode

The ST BlueNRG1 bootloader flasher program is available from st.com as part of their ST BlueNRG1 DK package, and also on our webpage: <https://imagecraft.com/smartio>. To use the bootload mode to flash the new firmware, you must reset the Smart.IO/BlueNRG1 while pulling the DIO7 pin high. Please see the “Hardware Integration Guide” for details.