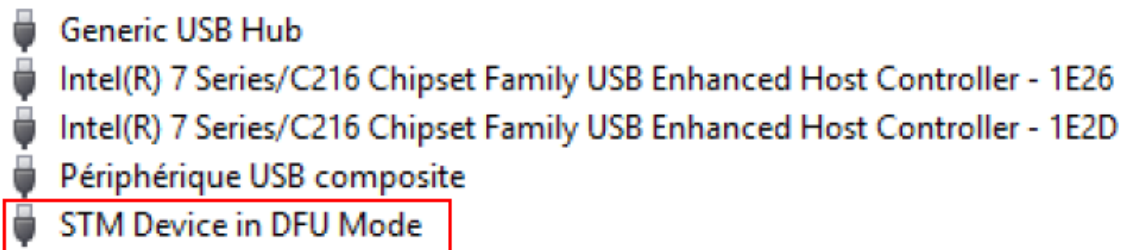
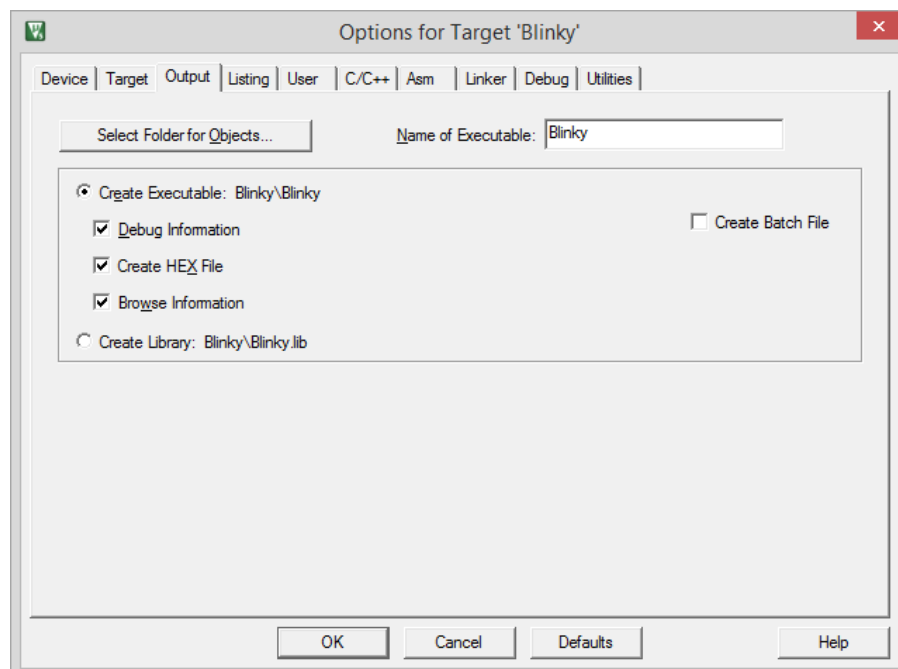


## General Description

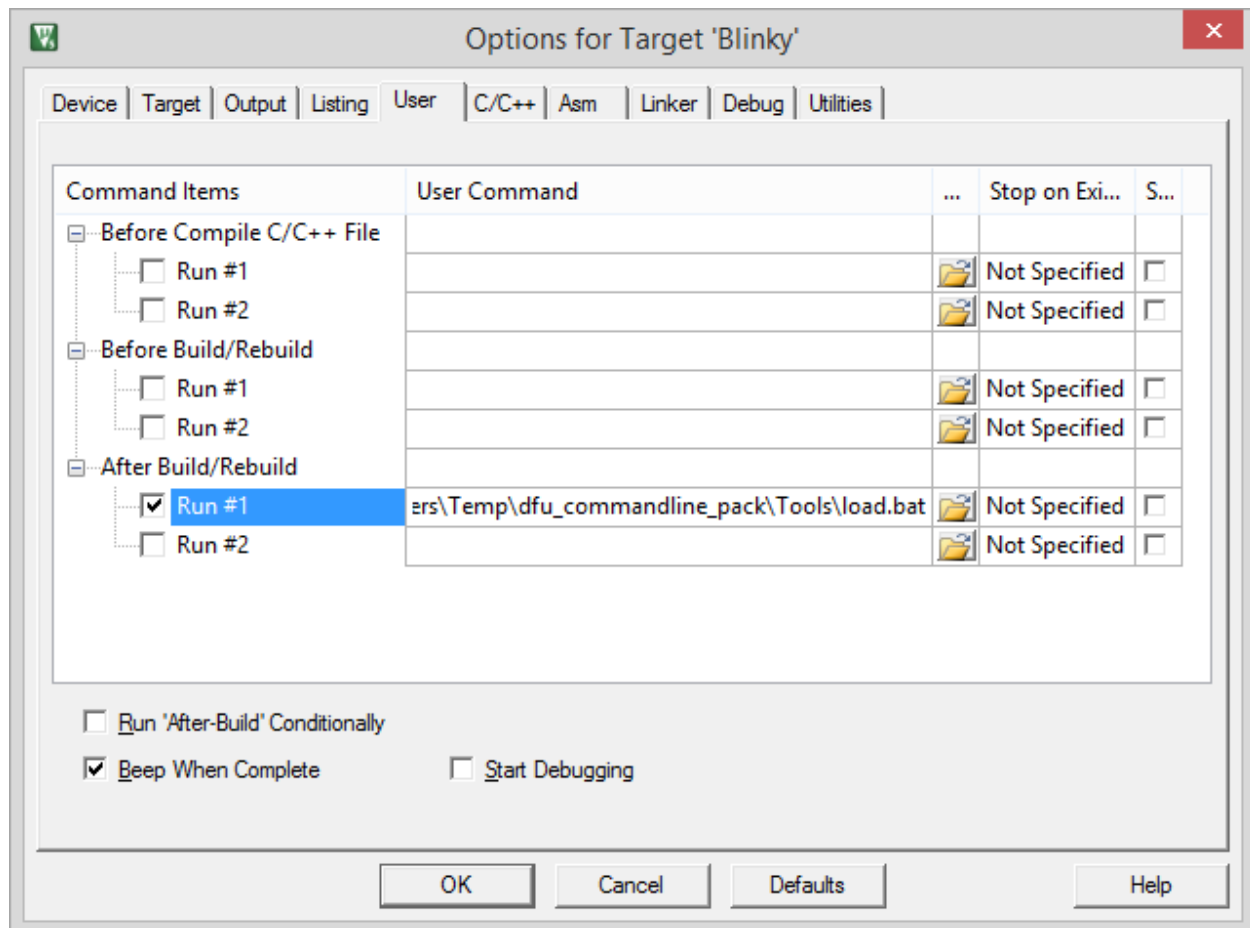
- 1- First, Install the DFU driver located in the Driver folder.
- 2- Plug in your DFU device, make sure it's in DFU mode. If your driver is installed and the device connected, you should see a DFU device in your device manager.



- 3- Your device is ready, now setup the IDE to load automatically the program. Here we've used Keil IDE.  
Open the project settings dialog in **Project>Options for target 'XXX'**. In the **Output** tab select **Create Hex File**. Build your project once and locate the \*.hex file in your project directory. **Be sure the output HEX file name shall not have any spaces.**



- 4- In the projects settings dialog at the **User** tab. In the section **After Build/Rebuild**, activate **Run#1** and browse to the **load.bat** file in the **BIN** directory.



5- Congratulations Your IDE is now ready! Build your program and if the device is plugged in the DFU mode, the loader will find and program it. Otherwise, it will do nothing.

**Note 1:** If you want to see the command-line echo results in the output window of the compiler, just remove ">nul" keyword from the end of each line in the "load.bat" file.

**Note 2:** To program a device just using a single HEX file, copy your HEX file in the **BIN** directory and execute **load.bat**.

#### References:

[1] STM32 DFU File converter. Command Line Executable for Easy DFU Upload

<https://hackaday.io/project/4139-stm32-dfu-file-converter>

[2] DfuSe USB device firmware upgrade STMicroelectronics extension: contains the demo GUI, debugging GUI, all sources files and the protocol layer (UM0412)

<http://www.st.com/web/en/catalog/tools/FM147/CL1794/SC961/SS1533/PF257916>

[3] Calling the STM32 SystemMemory Bootloader from your application

<https://www.youtube.com/watch?v=cvKC-4tCRgw>