

T.O.M.A.S Team







There is right time for some theory

- We will demonstrate how to configure SW4STM32 in "Release" mode to have the final code ready to be programmed in the final application. You can follow this part on your projects.
- Further we will demonstrate basic features of two applications dedicated for programming STM32 microcontrollers using graphical interface and command line interface.





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# After debugging preparation for production





### "Release" configuration in SW4STM32





### Creating "Release" configuration SW4STM32

C LO DAC ADC: Manage



It is possible to create different project configuration within Eclipse The procedure is following:

- Click on Manage Configuration button
- Select **New** to create new configuration
- Select its name and short description and specify base for initial settings
- 4. Press OK.

From now on, it will be possible to select which configuration should be build

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### **Tuning "Release" configuration** SW4STM32

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### Erasing/programming MCU SW4STM32

It is possible to Program and Erase MCU without entering debug session. In order to erase Flash memory content:

- Right click project name
- select Target-> Erase chip
- In order to Program MCU with selected output .elf file,
- Right click project name
- select Target -> Program Chip
- specify output .elf file to be programmed
- additionally it is possible to reset the MCU after programing

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## Configuration of RUN session

It is possible to configure RUN session which would allow to program the MCU using Open OCD settings without entering debug mode. Procedure is the following:

- 1. Press the small arrow near **RUN** icon
- 2. Select Run Configurations from the list
- 3. Double click on Ac6 STM32 Debugging
- All fields in new configuration should be filled using project settings. If not, select first project then C/C++ Application in Main tab and then in the next tab select proper configuration of STLink (there should be STLink v2.1 on SWD configuration)
- 5. Press Run button to program the board



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### Applications for programming STVP and STLink-Utility

- There are 2 main applications dedicated to programming the STM8 and STM32 devices apart of the development toolchain:
  - STVP ST Visual Programmer dedicated for STM8 and STM32 devices
  - STM32 STLink Utility dedicated for STM32 devices
- Both come in GUI and command line versions allowing work in semi-automatic mode (serial programming). Command line versions can be found in the installation folders:
  - STLink Utility: c:\Program Files (x86)\STMicroelectronics\STM32 ST-LINK Utility\ST-LINK Utility\ST-LINK\_CLI.exe
  - STVP: c:\Program Files (x86)\STMicroelectronics\st\_toolset\stvp\**STVP\_CmdLine.exe**
- Both of them allow programming of all embedded FLASH memory regions
- STLink Utility can program external memories (using external software drivers) and monitor SWO input channel (Single Wire Output), a non-intrusive method to monitor activity of the application
- Both applications fully support ST-Link programmers (all versions).







### www.st.com/mcu

