Summary of https://gnu-mcu-eclipse.github.io/install/ below:

- Overview here: https://gnu-mcu-eclipse.github.io/install/
- Java from here https://www.java.com/en/download/win10.jsp
  - If you run 64 bit windows make sure to install 64 bit JRE from here https://java.com/en/download/manual.jsp
  - $\circ~$  Install and test
- Gnu Arm toolchain from here, Win32 exe https://developer.arm.com/open-source/gnu-toolchain/gnu-rm/downloads
  - Execute. Installs in C:\Program Files (x86)\GNU Tools ARM Embedded\7 2017-q4-major
  - See https://gnu-mcu-eclipse.github.io/toolchain/arm/install/
- Download Gnu Arm Windows build tools from here
  - https://github.com/gnu-mcu-eclipse/windows-build-tools/releases
    - Copy all .exe files from "bin" directory from downloaded .zip to C:\Program Files (x86)\GNU Tools ARM Embedded\7 2017-q4-major\bin
    - See https://gnu-mcu-eclipse.github.io/windows-build-tools/install/
- Install J-Link from here http://www.segger.com/jlink-software.html (If you have J-Link..)
  - See https://gnu-mcu-eclipse.github.io/debug/jlink/install/
  - Download from here https://www.segger.com/downloads/jlink/
  - Will install in C:\Program Files (x86)\SEGGER\JLink\_V630d
- Install Git for Windows from here https://git-scm.com/download/win
- Install OpenOCD as explained here
  - https://gnu-mcu-eclipse.github.io/blog/2018/01/23/openocd-v0-10-0-7-20180123-released/
    - Install node.js "TLS" from here https://nodejs.org/en/
    - $\circ\,$  Open Command line window in win10. Enter

npm install xpm --global

This installs xpm package manager executable

• Open Command line window in win 10. Enter

xpm install @gnu-mcu-eclipse/openocd --global

to install Gnu MC Eclipse openOCD

- Install Quemu as explained here https://gnu-mcu-eclipse.github.io/qemu/install/
  - Download latest Windows exe from here
  - https://github.com/gnu-mcu-eclipse/qemu/releases
  - Will install in C:\Program Files\GNU ARM Eclipse\QEMU\2.8.0-201612271623-dev
- Get latest MCU Eclipse from here https://github.com/gnu-mcu-eclipse/org.eclipse.epp.packages/releases/
  - $\circ\,$  Extract downloaded zip file to c:\ (otherwise path names may become too long)
- Run GNU MCU Eclipse
  - $\circ\,$  Follow work space preferences "global tool chain path" in
    - https://gnu-mcu-eclipse.github.io/eclipse/workspace/preferences/
  - Follow tool chain path management in https://gnu-mcu-eclipse.github.io/toolchain/path/

Install PAckages CMSIS

- See https://gnu-mcu-eclipse.github.io/plugins/packs-manager/
- In Eclipse Help→Install new software, Work with: "GNU MCU Eclipse plug-ins", Click "What is

already installed"

- $\circ\,$  Check that "GNU MCU C/C++ Packs (Experimental)" are installed, or install them
- In Eclipse goto C/C++ packs perspective (hover over toolbar icons to find the icon with two boxes in orange yellow)
- In this perspectiv, above middle window, click on the icon with the two yellow arrows, to update the packages definitions from all repositories
- If any warnings that certain packages cannot be downloaded please click "ignore" to continue, as long as it does not concern the STMicro packages we are interested in -STM32F7 and STM32H7
- $\circ$  When finished, in left window, choose STMMicroelectronics
  - Install STM32F7 pack
    - In left window, click once on STM32F7 series.
    - Then select package in middle window
    - then above middle window click yellow box icon to install a local copy of the selected package
    - You will see status message "Install Packs" in bottom right of Eclipse window
  - Install STM32H7 in the same way

Set active project, check MCU set correctly

- See https://gnu-mcu-eclipse.github.io/eclipse/project/assign-device/
  - Set/check that active project is correct
  - $\circ\,$  Set/check that device is correct:
    - For OVI40 with F7 MCU: Project → Properties → C/C++ Build → Settings → Devices → STM32F767ZI
    - For OVI40 with H7 MCU: Project → Properties → C/C++ Build → Settings → Devices → STM32H743ZI

Using Git with GNU-MCU-Eclipse

- Download Github desktop from https://desktop.github.com/
- Start Github Desktop, enter your Githu username and password, clone repository "https://github.com/df8oe/UHSDR" \* Optional: create local branch of cloned repo for tests \* In Eclipse, create new workspace pointing to local clone of cloned Github UHSDR repository \* Check Eclipse settings for \* active build config \* MCU device used \* ...

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Permanent link: https://www.amateurfunk-sulingen.de/wiki/doku.php?id=en:uhsdr\_dev:win10\_toolchain&rev=1519548938



