

# **STM32 IDE HowTo**

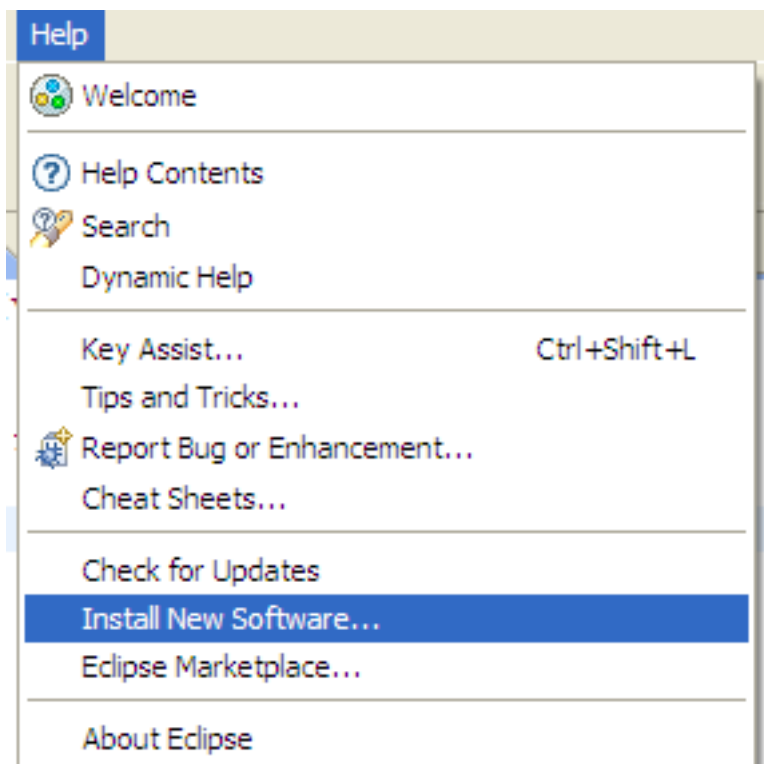
# Pre Requirements

- Install the Java JRE (<http://www.java.com/download/>)
- Get Eclipse Helios (<http://www.eclipse.org/downloads/>)
- Get the Yagarto toolchain (<http://www.yagarto.de/>)

# Set up GNU ARM Eclipse Plug-in

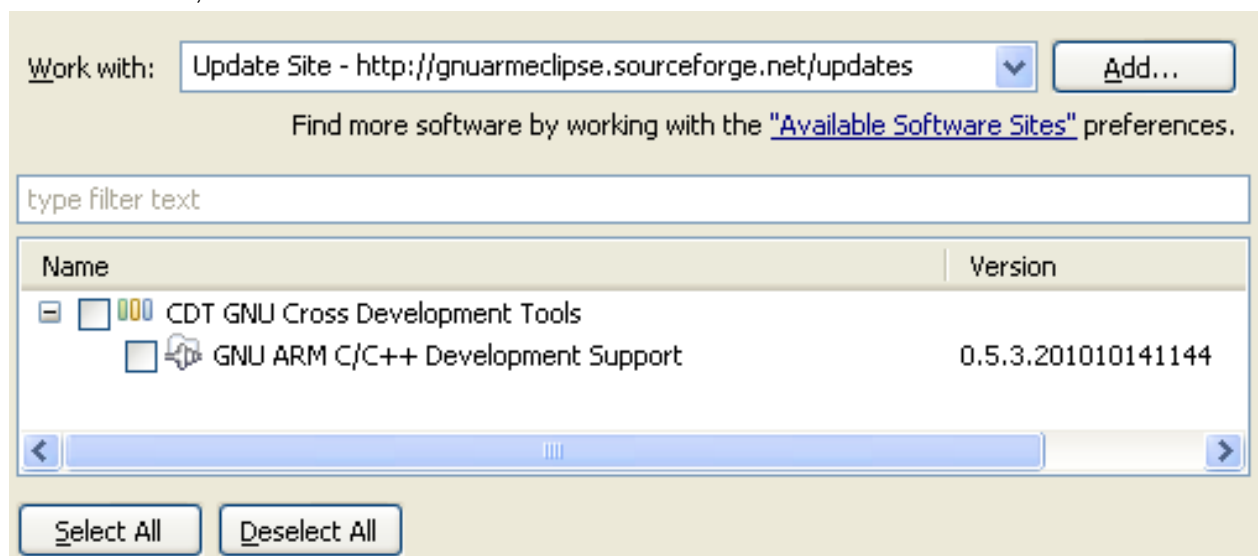
Needed to get a nice interface for setting the CPU type, compiler and linker options etc.

Help -> Install New Software



Add -> Location: <http://gnuarmclipse.sourceforge.net/updates>

In case it's slow, untick "Check All Servers".

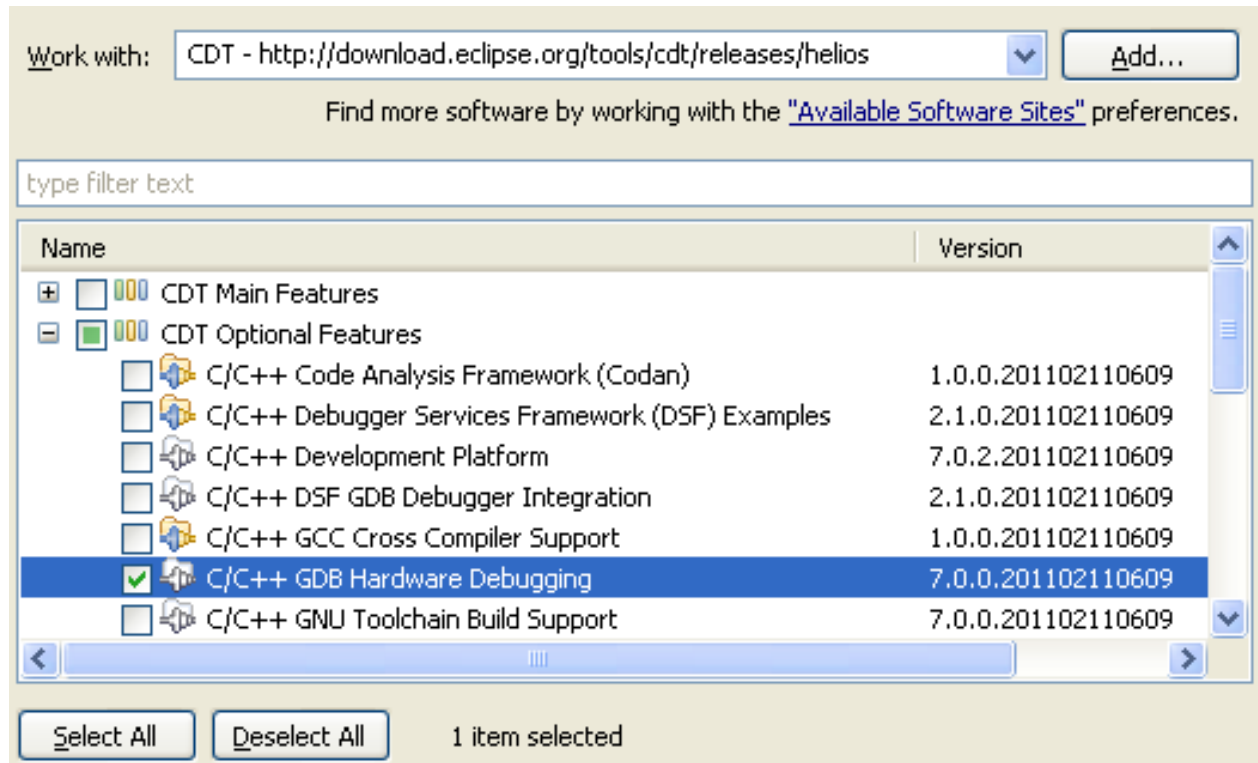


# Set up Hardware Debugging

Help -> Install New Software

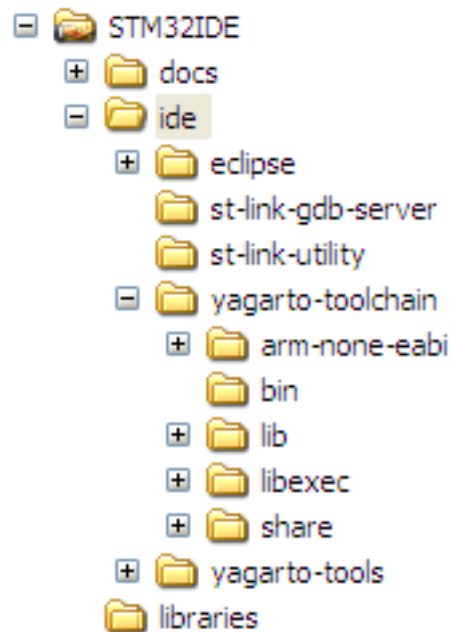
Add -> <http://download.eclipse.org/tools/cdt/releases/helios>

Select C/C++ GDB Hardware Debugging



## Set up the Toolchain

First the toolchain needs to be added to the current path. In this case the following folder structure was chosen:



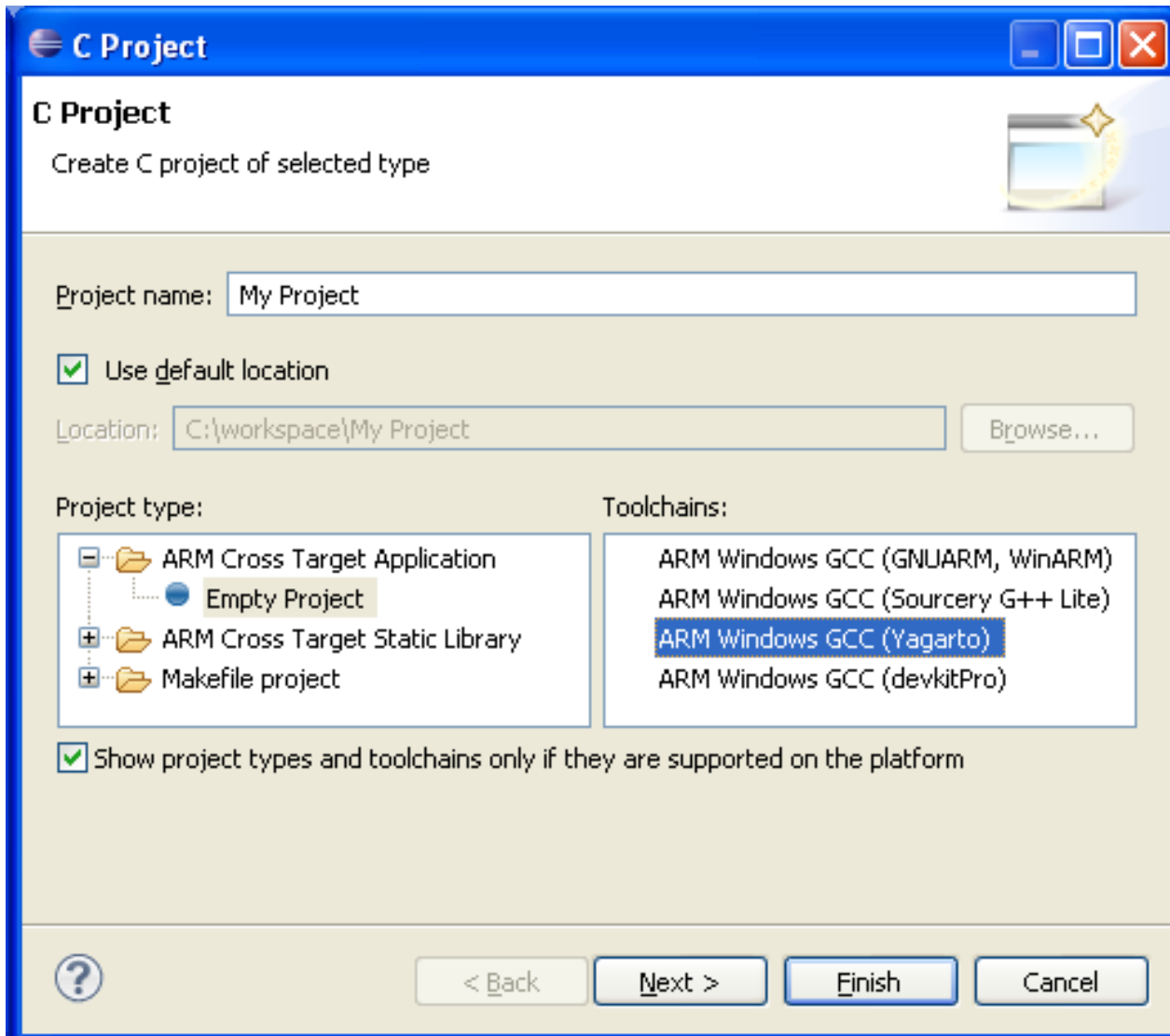
The following code in a bat file adds the toolchain to the path and starts Eclipse independent of the current path:

```
set PATH=%PATH%;%CD%\ide\yagarto-toolchain\bin;%CD%\ide\yagarto-tools\bin
ide\eclipse\eclipse.exe
```

# Set up a new Project

File -> New -> Project

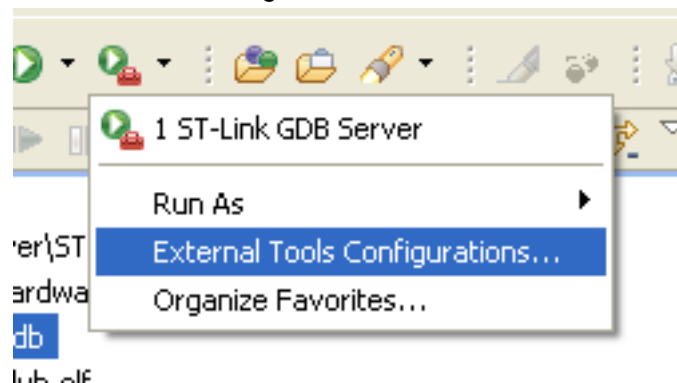
ARM Cross Target Application -> Empty Project -> Yagarto



Now we need to set up GDB debugging.

Switch Elcipse to Debug mode, first the server.

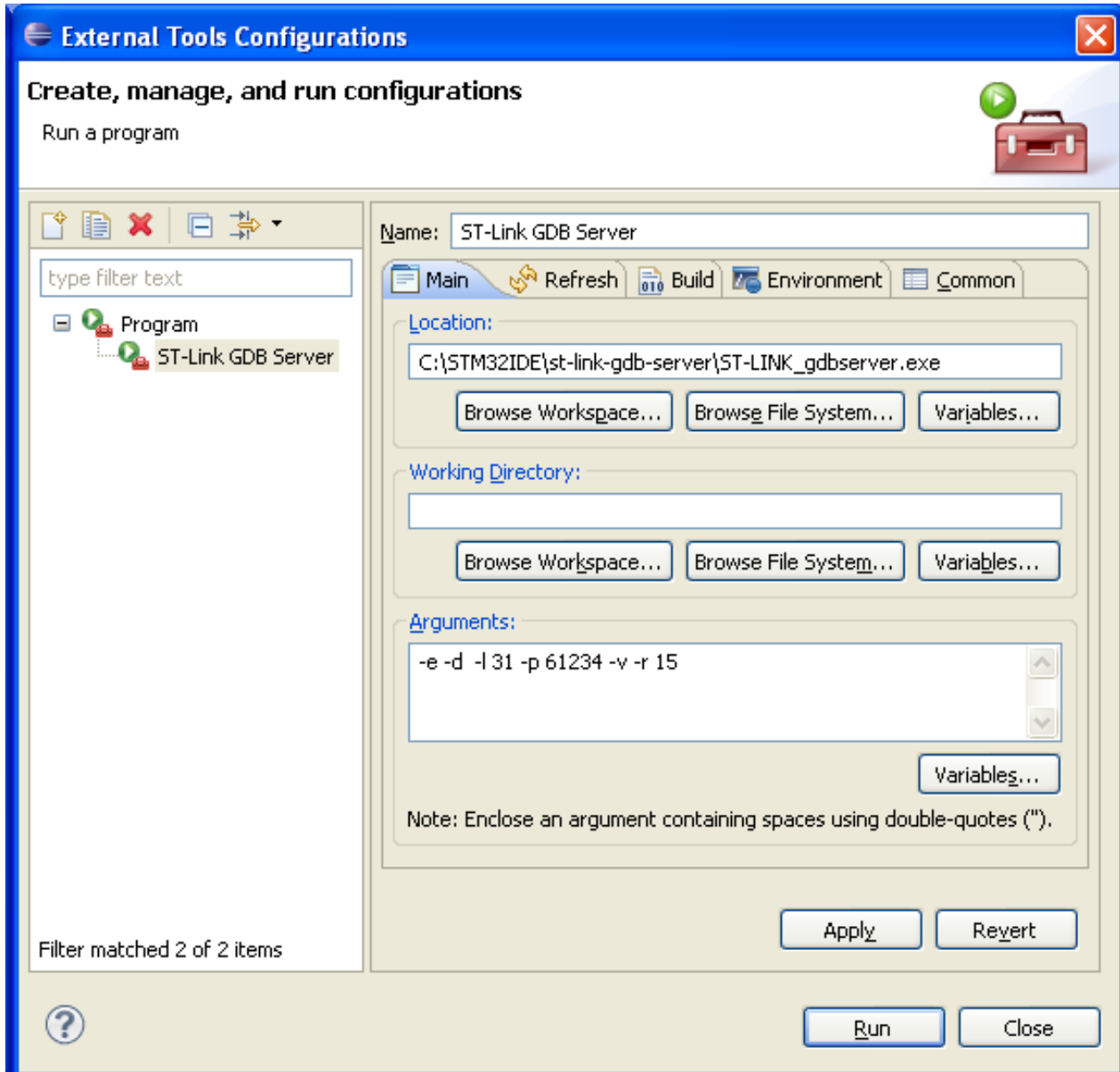
Run -> External Tools -> External Tools Configuration or click on the toolbar button shown below.



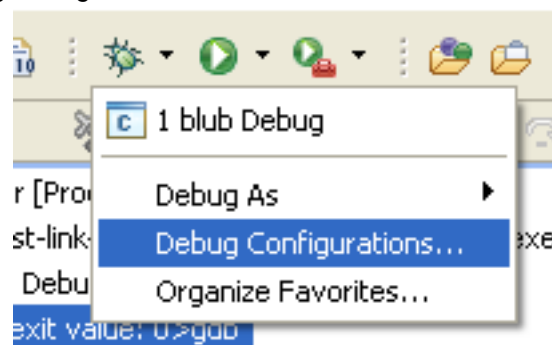
Location needs to be the ST-Link GDB server taken from Atollic. It's a modified GDB Server that includes a driver for ST-Link.

Arguments (taken from Atollic as well): `-e -d -l 31 -p 61234 -v -r 15`

This could be started without Eclipse, but this way it is a one click operation and Eclipse will watch the process, show debug output and notify in case the process crashes.



Now the client. *Run -> Debug Configurations...* or the button shown below.



Add a new *GDB Hardware Debugging* entry and switch to *Debugger*.

*GDB Command* needs to be the toolchains gdb executable. In this case it's *arm-none-eabi-gdb.exe* since yagarto is in the current path.

