# **Eclipse Configuration for Nordic**

This page is intended to give an introduction on how to set up Eclipse with the tools needed to develop code for nrf51 and nrf52 kits from Nordic

# Nomenclature

CDT c/c++ Developement tools JDK Java Developement Kit JRE Jave Runtime Enviroment

# Configuring Eclipse with CDT

#### Eclipse neon on windows 10

- 1. Download eclipse
  - a. start eclipse if it returns eclipse returned exit code 1. You need to point eclipse to the correct java version
  - b. Download the correct version of java jdk for eclipse (1.8 minimum for eclipse neon)
  - c. Open eclipse.ini located in the eclipse directory
  - d. Add the following above two lines before -vmargs: -vm and <Path to JDK>/bin
  - e. now eclipse should start
- 2. Install the GNU ARM Eclipse plug-in [1]

a. Open eclipse marketplace from help-> marketplace and drag the install from the link in.

- b. Confirm and install
  - If this fails with handshake exception[2]. You need the Java Cryptography Extention(JCE)[3].
    - i. Download this from oracle.
    - ii. Extract and copy files into <path to JDK>/jre/lib/security
  - iii. Restart eclipse and try again
- 3. Check the global tools paths
- a. Go to window->preferences->c/c++ ->build->global tools path and check if this is correct. (GNU Tools for ARM Embedded Processors)
- 4. Set workspace preferences [4]. At least set the space formatting in the code formatter! (Remember that this will make you unable to use tab in makefiles.)
- 5. You should now be ready to go!

#### Eclipse on Linux <xx>

Linux gurus write something here!

### Start a new Project

- 1. Find a suitable location for your project
- 2. Copy a config folder from one of the examples in the SDK to your project folder
- Update your makefile to reflect these changes. This includes the PROJECT\_NAME, SDK\_ROOT, PROJ\_DIR, LINKER\_SCRIPT also some backslash needs to be removed or added depending on your chosen location.
- 4. Try making the project on the command line before trying to compile trough Eclipse.
- 5. Import the project in Eclipse by file->new(alt+shift+n).
  - a. Name your project
  - b. Existing code location should be the location of your makefile for the project.
  - c. Select "Cross ARM GCC" from the list of toolchains.
  - d. Click finish and you are done.
- 6. Remember to set the build command to "make VERBOSE=1" this field can be found by marking the project, pressing alt+enter and navigate to c /c++ build -> build settings.
- 7. Try compiling.
- 8. Change the compiler command pattern under project properties-> c/c++ General-> Preprocessor Include Paths, Macros... -> providers -> CDT
- GCC Build output parser to "(.\*gcc)|(.\*[gc]\+\+)" This is for symbols to be handled correctly in Eclipse.
- 9. Try rebuilding the project and you should be good.
- 10. If symbols are not detected by the OCD add symbol by hand in properties->c/c++ General->Paths and Symbols -> symbols-> add. Do you find another solution please write it down here!

# Tips And Tricks for error messages

If you have forgotten to include paths to c files in the make file you would get undefined reference errors similar to: main.c:139: undefined reference to `nrf\_drv\_timer\_init'

If you get error messages similar to this: error: invalid suffix "\_INSTANCE\_INDEX" on integer constant You probably defined something you shouldnt have.