

# Compiling C and C++

## STM32 System Workbench

This document shows the easy way on how to compile both C and C++ source codes in a project using STM32 System Workbench.

1. Go to your project directory and look for *.project*

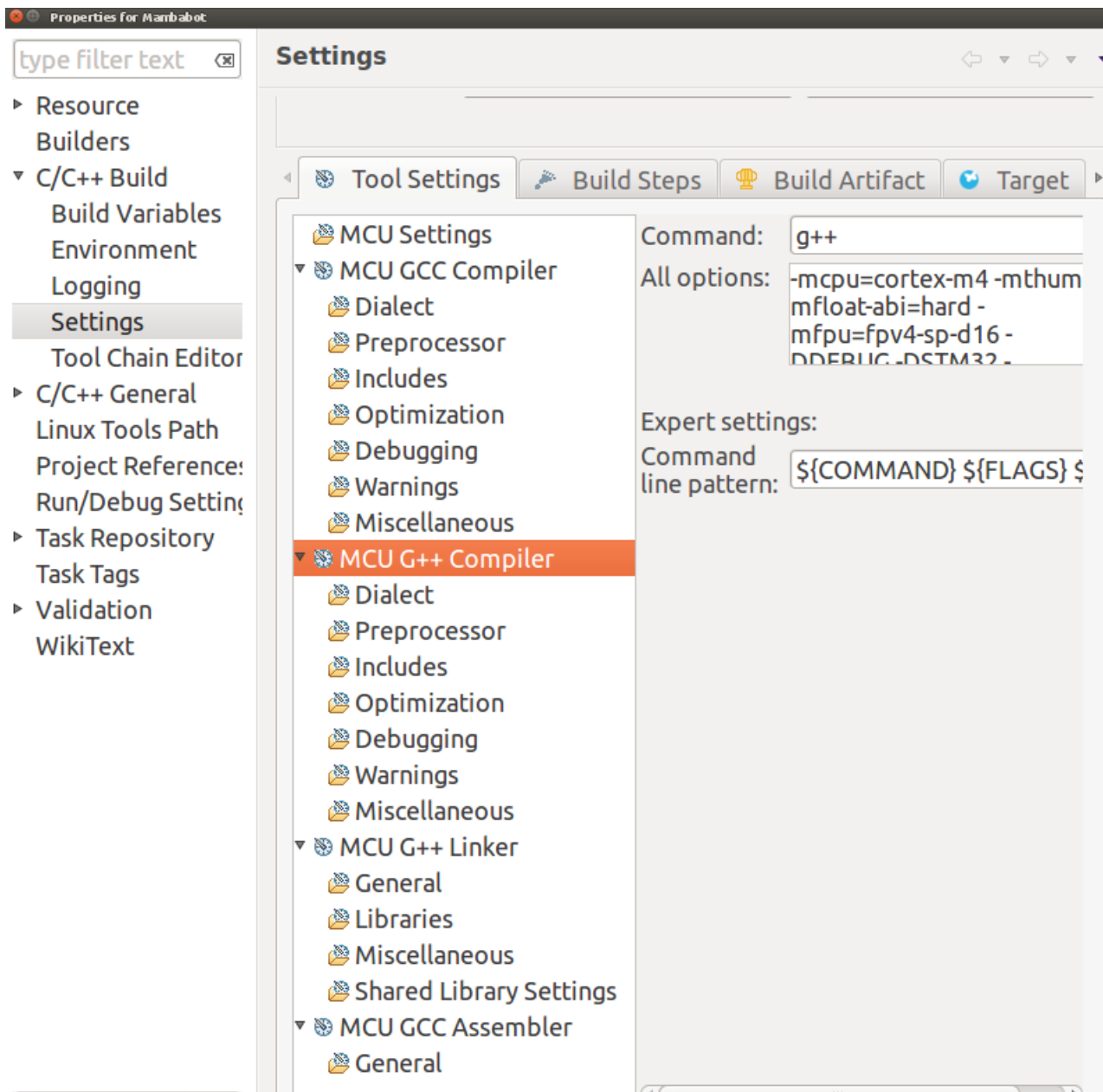
```
rudy@rudy-dell:~/stm32_workspace/Mambabot$ ls -la
total 88
drwxrwxr-x 12 rudy rudy 4096 May  8 15:36 .
drwxrwxr-x 15 rudy rudy 4096 May  8 15:21 ..
drwxrwxr-x  5 rudy rudy 4096 May  8 15:26 appl
drwxrwxr-x  2 rudy rudy 4096 Mar  3 20:52 config
-rw-rw-r--  1 rudy rudy 24248 May  8 15:28 .cproject
drwxrwxr-x  8 rudy rudy 4096 May  8 15:36 Debug
drwxrwxr-x  4 rudy rudy 4096 Mar 15 21:20 Drivers
drwxrwxr-x  2 rudy rudy 4096 May  1 13:38 inc
-rw-rw-r--  1 rudy rudy 5997 Mar 17 20:19 LinkerScript.ld
-rw-rw-r--  1 rudy rudy  530 May  8 15:36 NUCLEO-F429ZI.xml
-rw-rw-r--  1 rudy rudy  945 Mar 14 21:05 .project
drwxrwxr-x  5 rudy rudy 4096 Mar 18 20:42 ros_lib
drwxrwxr-x  2 rudy rudy 4096 Mar 13 17:04 .settings
drwxrwxr-x  2 rudy rudy 4096 May  1 13:39 src
drwxrwxr-x  2 rudy rudy 4096 Mar 17 21:07 startup
drwxrwxr-x  3 rudy rudy 4096 Mar  3 21:35 third-party
rudy@rudy-dell:~/stm32_workspace/Mambabot$ gedit .project
```

2. Open the *.project* and add the following under `<nature>org.eclipse.cdt.core.cnature</nature>`  
`<nature>org.eclipse.cdt.core.ccnature</nature>`

```
<?xml version="1.0" encoding="UTF-8"?>
<projectDescription>
  <name>Mambabot</name>
  <comment></comment>
  <projects>
  </projects>
  <buildSpec>
    <buildCommand>
      <name>org.eclipse.cdt.managedbuilder.core.genmakebuilder</name>
      <triggers>clean,full,incremental,</triggers>
      <arguments>
      </arguments>
    </buildCommand>
    <buildCommand>
      <name>org.eclipse.cdt.managedbuilder.core.ScannerConfigBuilder</name>
      <triggers>full,incremental,</triggers>
      <arguments>
      </arguments>
    </buildCommand>
  </buildSpec>
  <natures>
    <nature>org.eclipse.cdt.core.cnature</nature>
    <nature>org.eclipse.cdt.core.ccnature</nature>
    <nature>org.eclipse.cdt.managedbuilder.core.managedBuildNature</nature>
    <nature>org.eclipse.cdt.managedbuilder.core.ScannerConfigNature</nature>
    <nature>fr.ac6.mcu.ide.core.MCUProjectNature</nature>
    <nature>fr.ac6.mcu.ide.core.MCUSingleCoreProjectNature</nature>
  </natures>
</projectDescription>
```

3. Close and re-open the STM32 Eclipse Workspace

4. Once STM32 Eclipse is open, right click your Project -> Properties -> C/C++ Build -> Settings  
It shows that both C and C++ compiler are available.



5. Adapt the needed “Preprocessor” and “Includes” in both C and C++ accordingly.