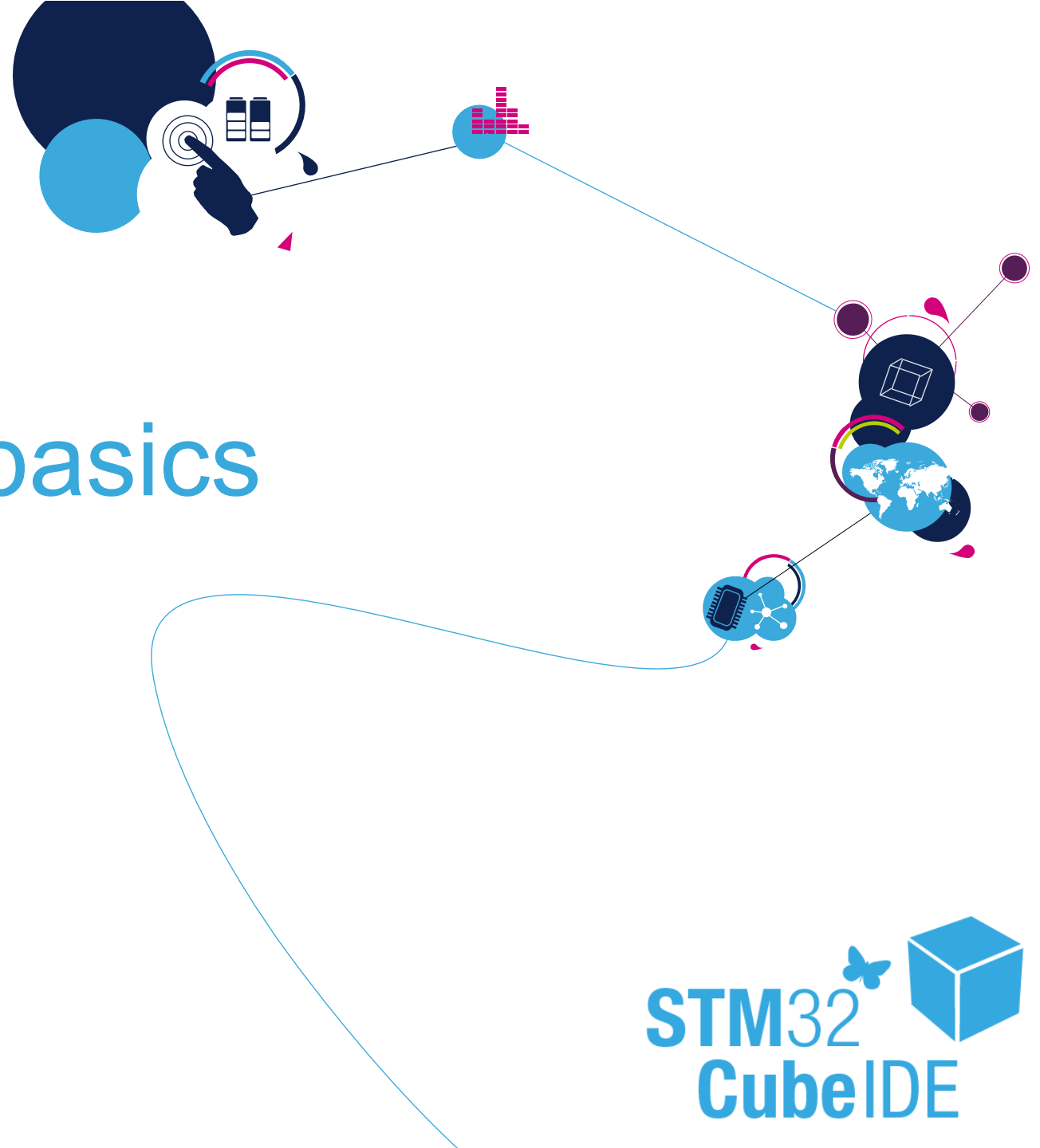
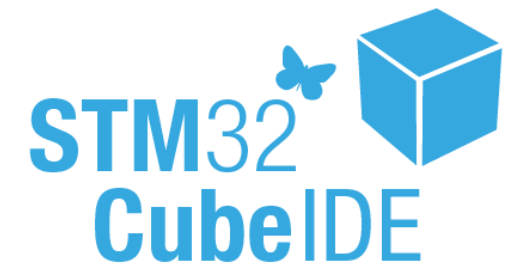


STM32CubeIDE basics

Projects management



STM32CubeIDE – projects management

Objective:

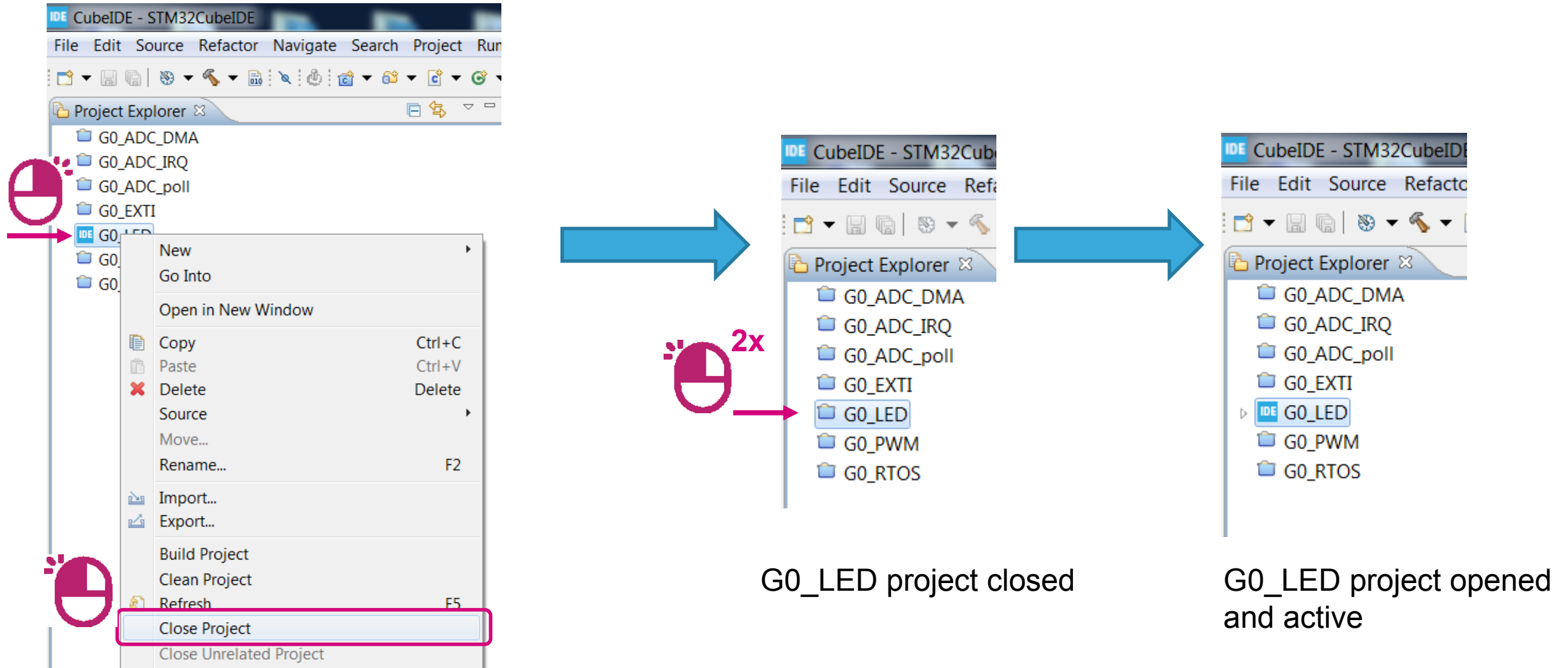
- Demonstrate how we can manage projects within STM32CubeIDE workspace
- Explore projects settings
- Demonstrate how to share the project with others using Import/Export features
- Switching to another workspace
- Resetting perspective

Projects: open, close, delete, switch

- Within one workspace we can have several projects.
- To make opened project active, just highlight its name
- To open closed project double click (left button on mouse) on its name
- To close the project (and all its related sources), click right button on mouse and select “Close Project” from menu (project will be not deleted)
- To delete project click on the project name (to make it active), then click either Delete key on the keyboard or select Delete option from scroll down menu once click right button on mouse over active project name

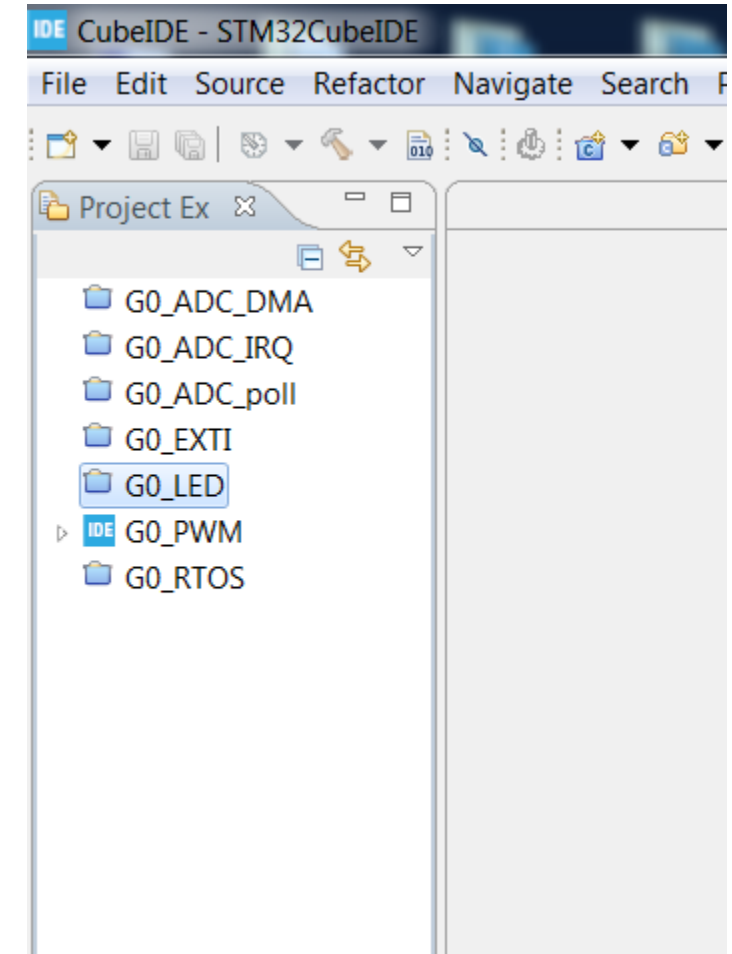
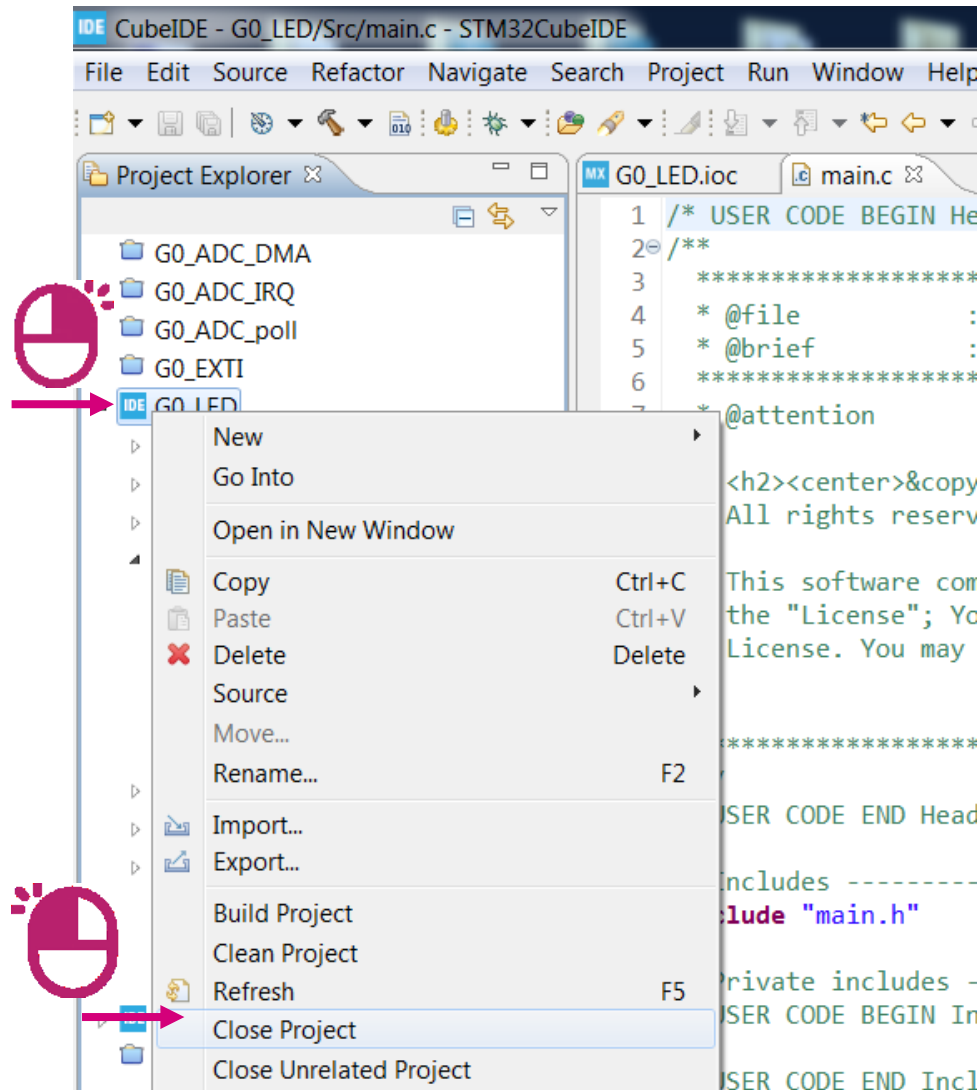
Projects: open, close

- Closing and opening a project



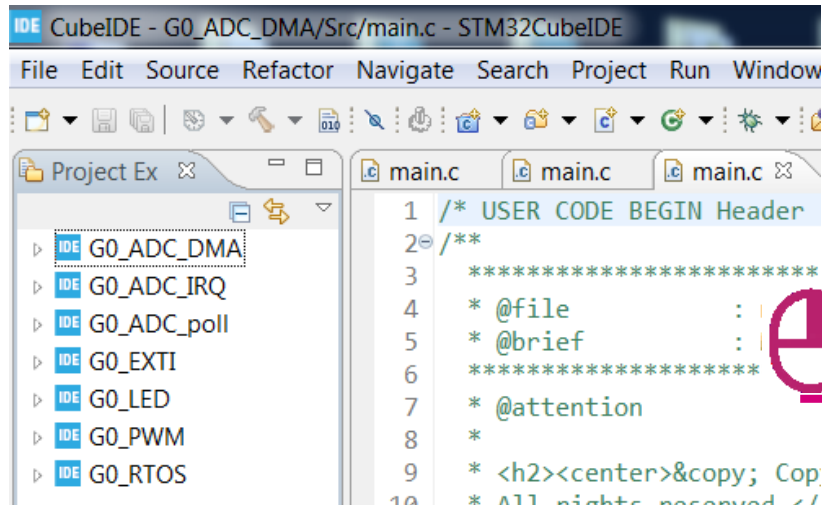
Projects: open, close, delete, switch

- When we close the project, all its opened files are closed automatically

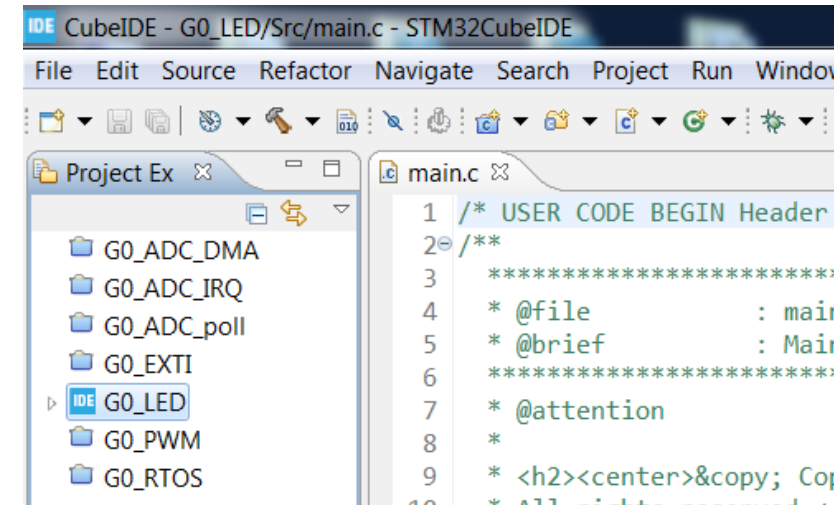
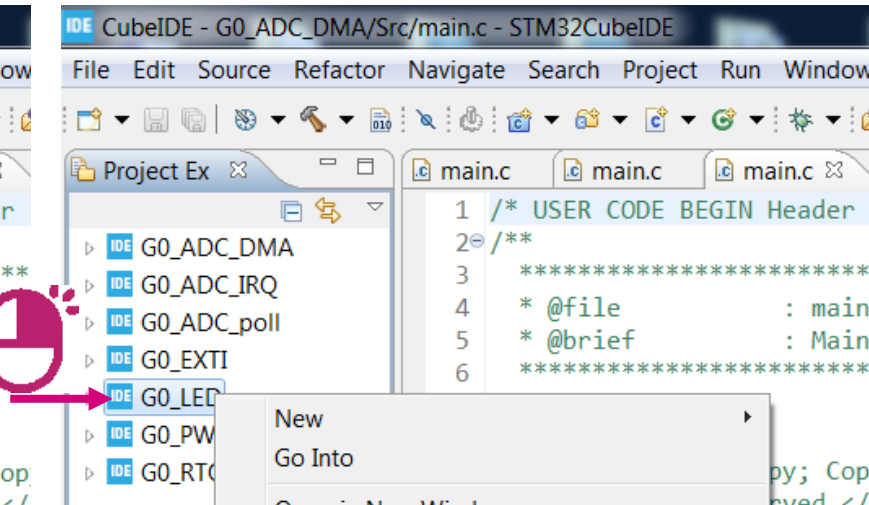


Projects: open, close, delete, switch

- Closing all unrelated projects and unrelated files to G0_LED project



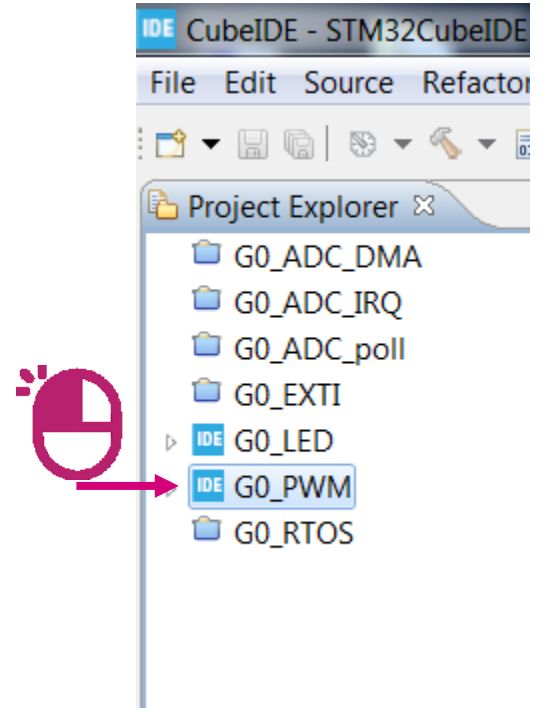
All projects opened,
G0_ADC_DMA active, three
different main.c files opened
(from different projects)



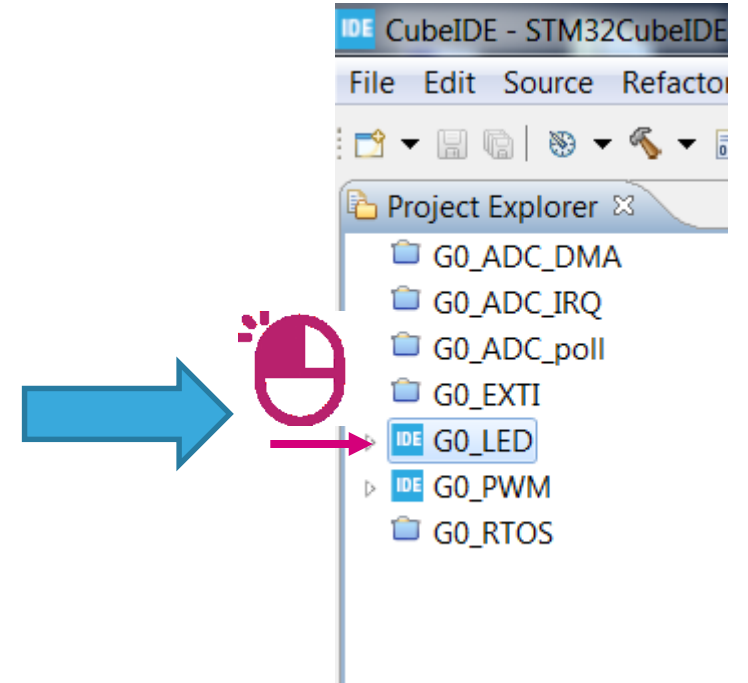
Only G0_LED project opened
(and active) with its main.c file

Projects: switching between projects

- Only one project can be active at the time
- To switch from one project to the other click on its name
- Be careful, as all opened files related to not active projects are not closed automatically on active project switch – it is necessary to do it either manually or use “Close Unrelated Projects” option (have a look at next slide)



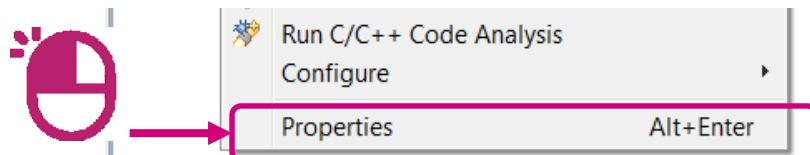
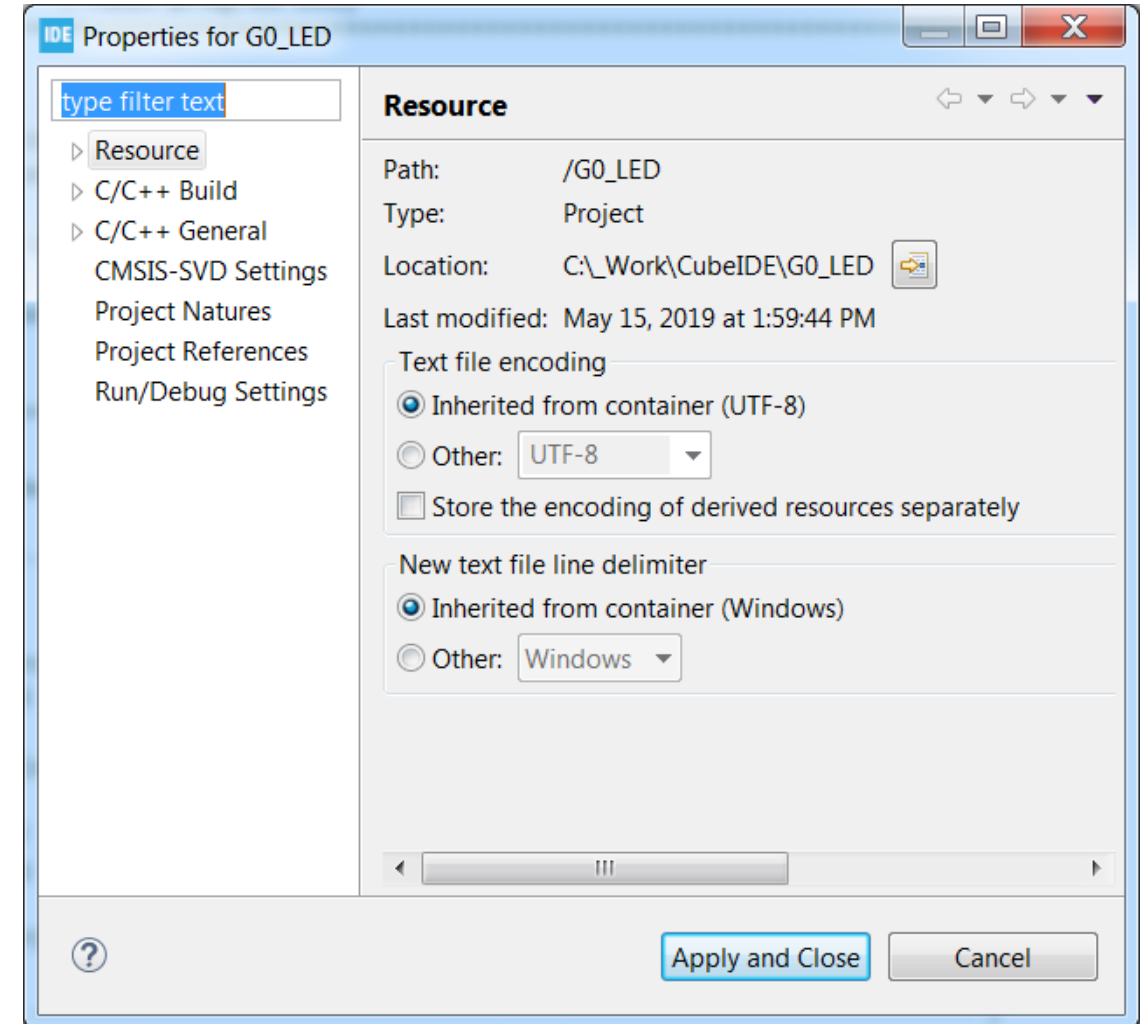
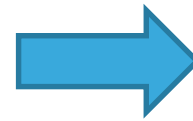
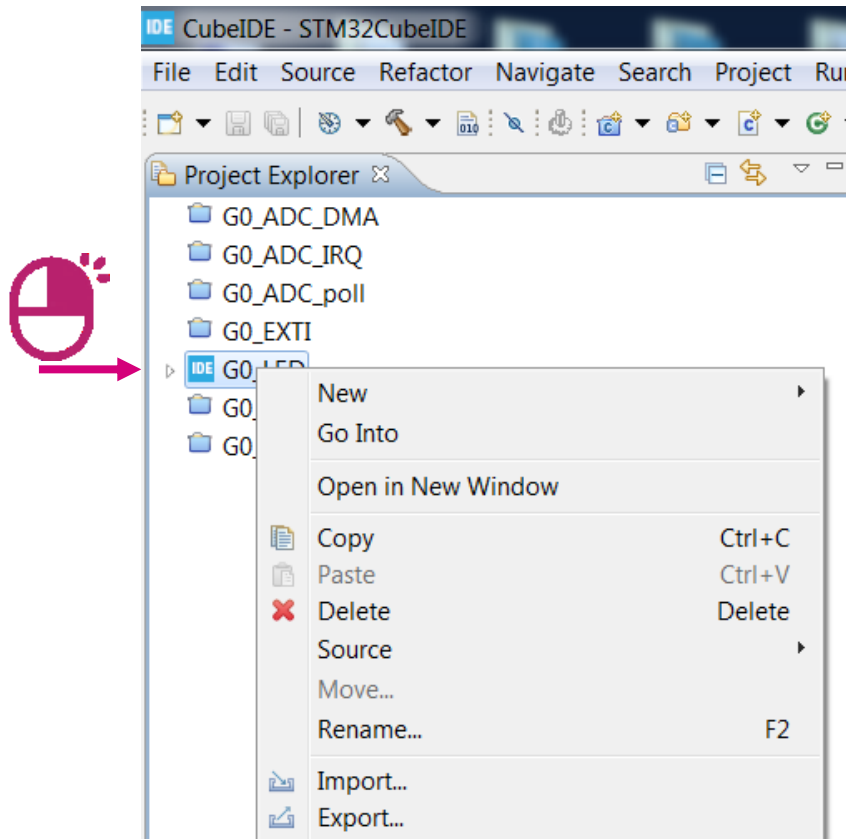
G0_PWM is
an active project



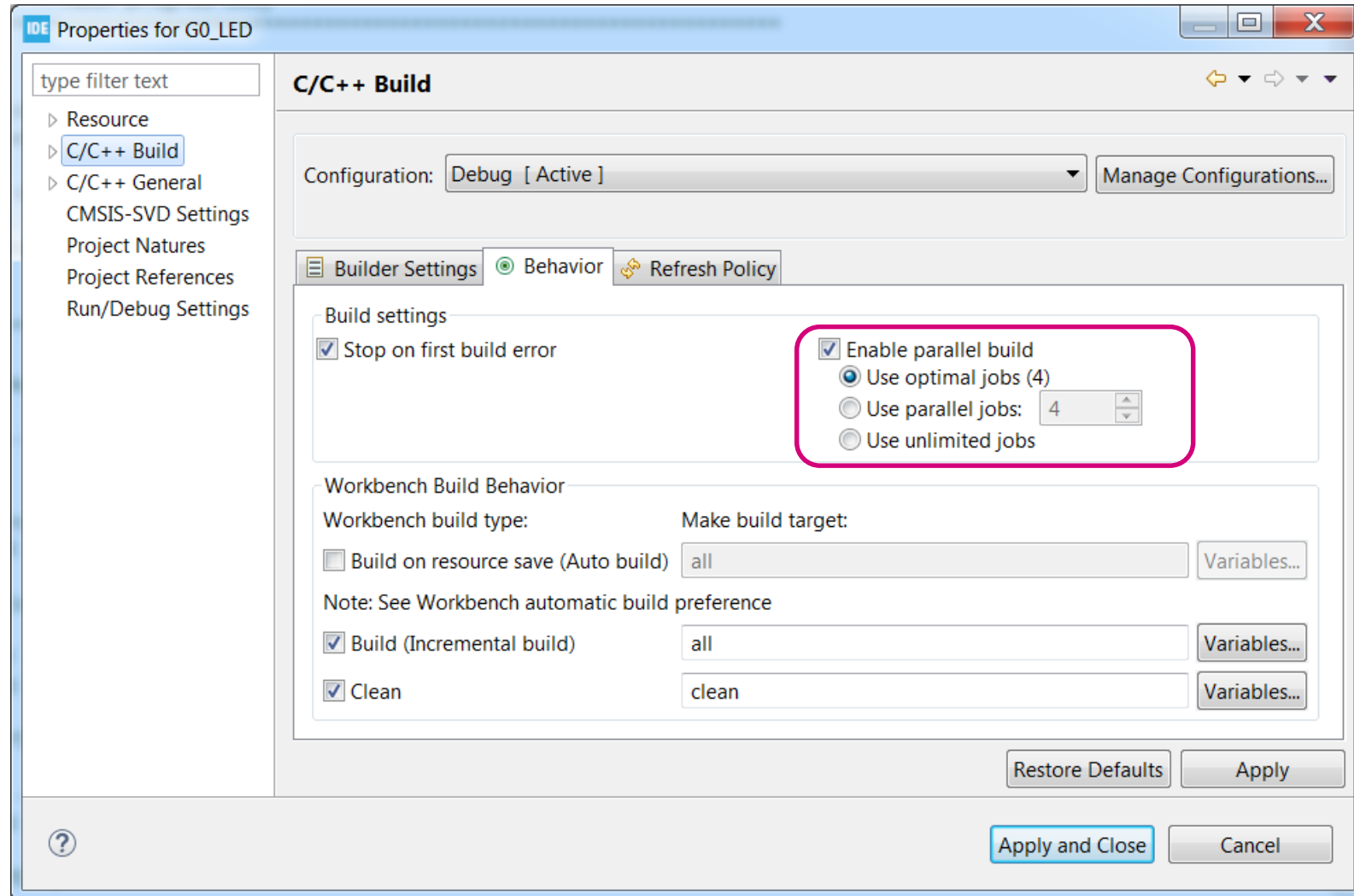
G0_LED is
an active project

Projects properties

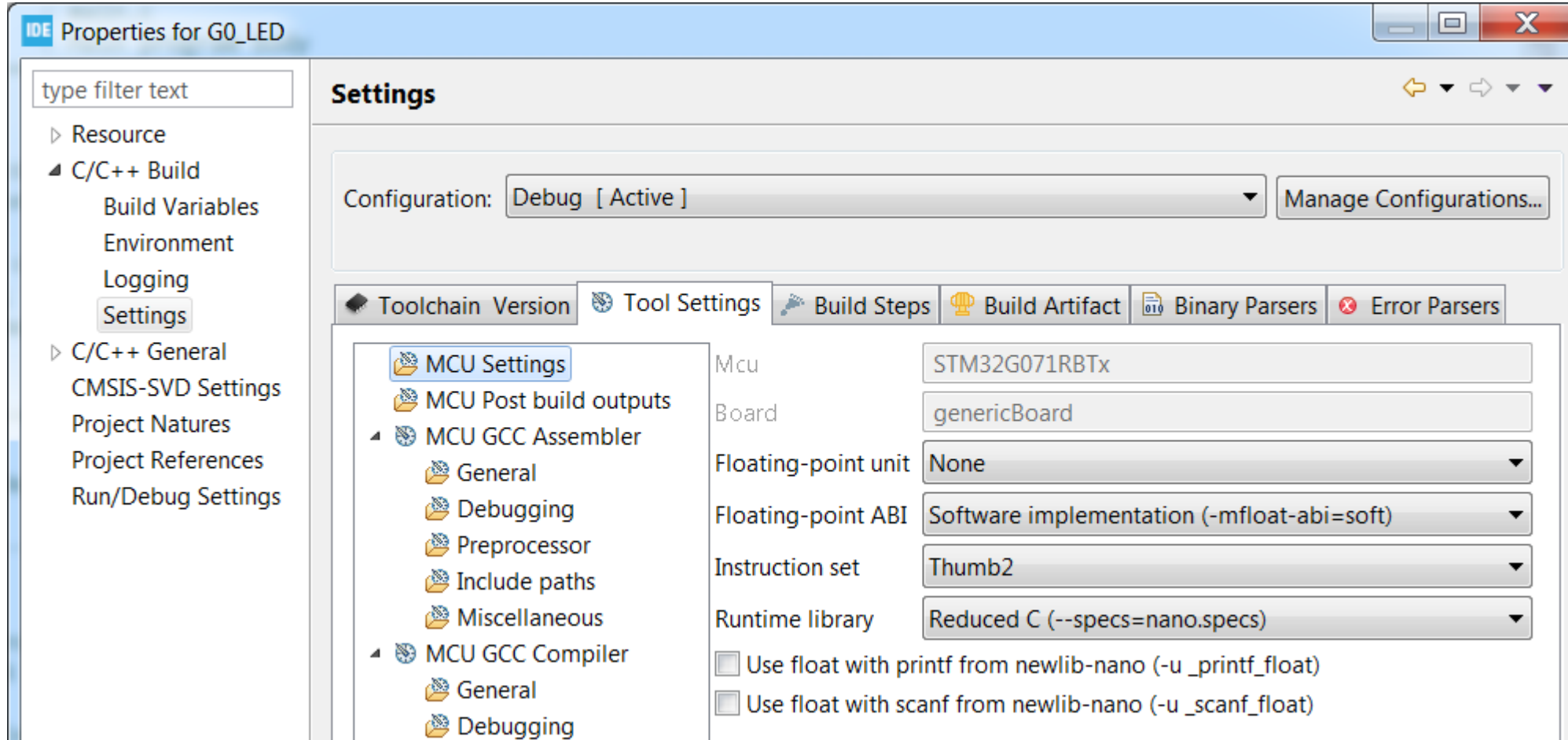
- Display active project properties



- Configuring parallel build



- Configuration of MCU settings



IDE Properties for G0_LED

type filter text

- Resource
 - C/C++ Build
 - Build Variables
 - Environment
 - Logging
 - Settings
 - C/C++ General
 - CMSIS-SVD Settings
 - Project Natures
 - Project References
 - Run/Debug Settings

Settings

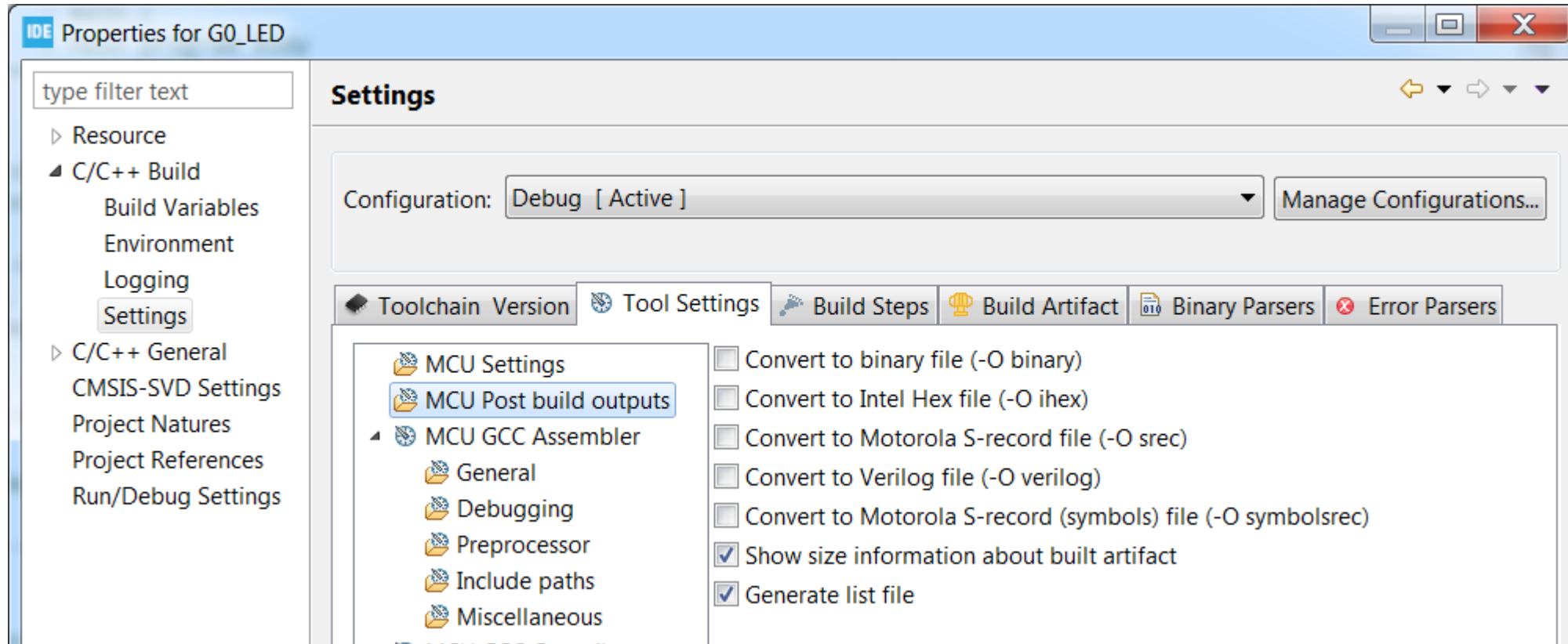
Configuration: Debug [Active] Manage Configurations...

Toolchain Version | **Tool Settings** | Build Steps | Build Artifact | Binary Parsers | Error Parsers

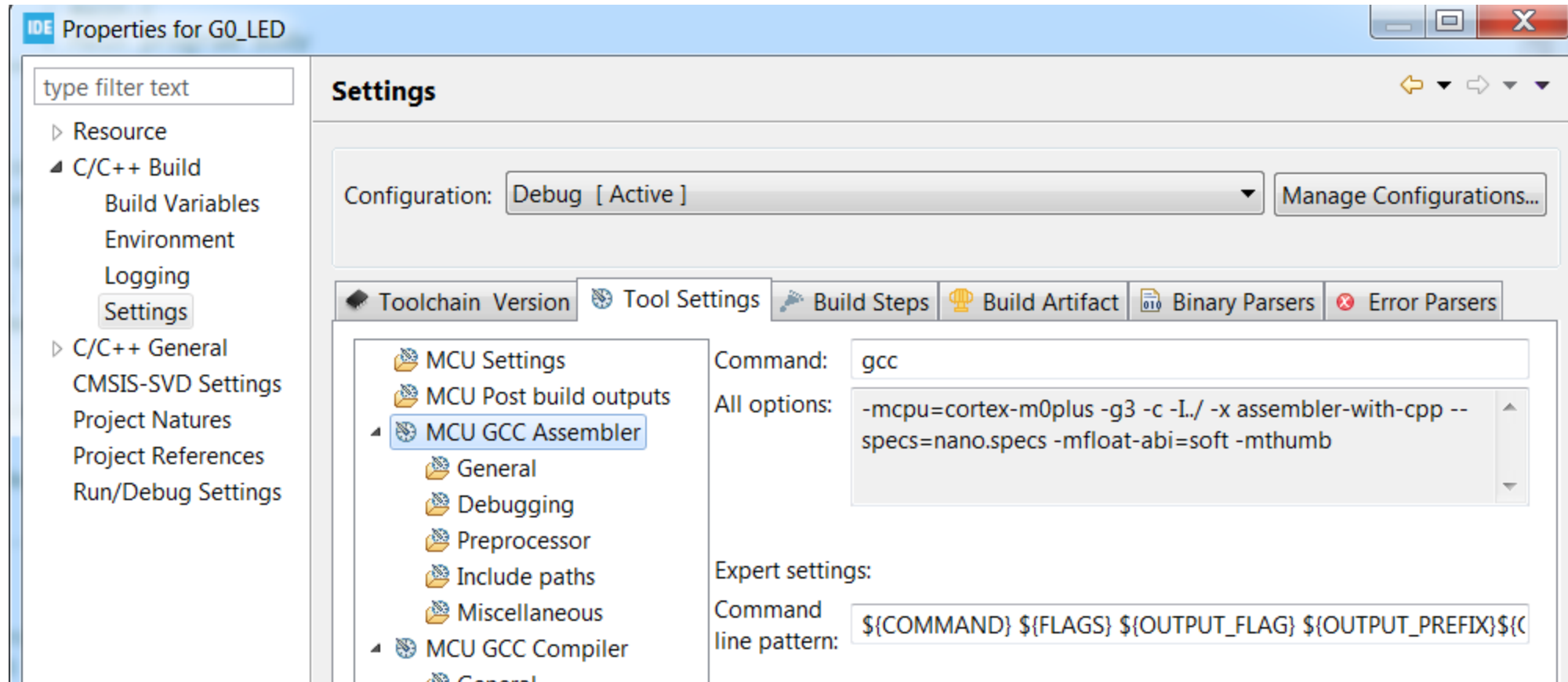
- MCU Settings
 - MCU Post build outputs
 - MCU GCC Assembler
 - General
 - Debugging
 - Preprocessor
 - Include paths
 - Miscellaneous
 - MCU GCC Compiler
 - General
 - Debugging

Mcu	STM32G071RBTx
Board	genericBoard
Floating-point unit	None
Floating-point ABI	Software implementation (-mfloat-abi=soft)
Instruction set	Thumb2
Runtime library	Reduced C (--specs=nano.specs)
<input type="checkbox"/> Use float with printf from newlib-nano (-u _printf_float)	
<input type="checkbox"/> Use float with scanf from newlib-nano (-u _scanf_float)	

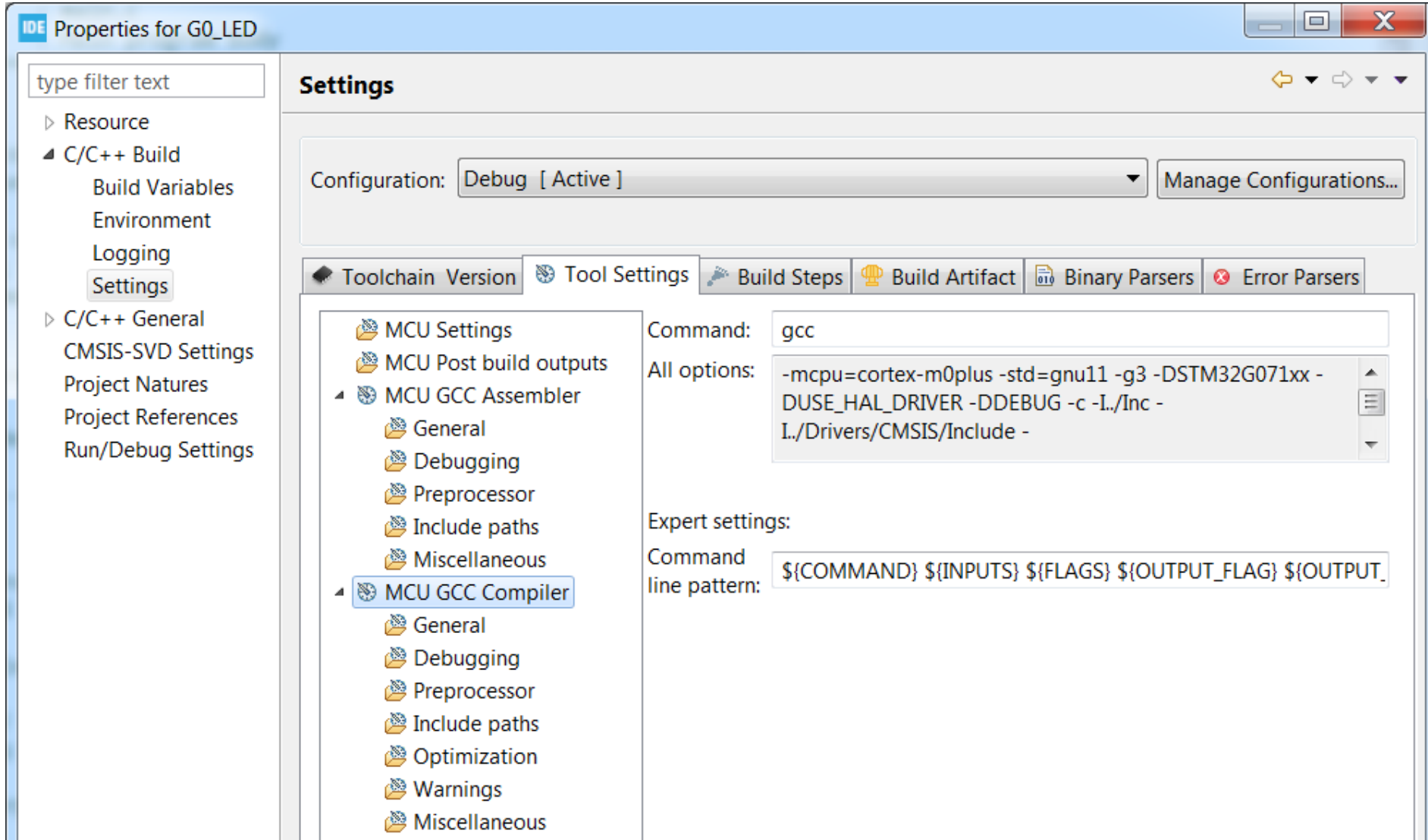
- Configuration of post build settings



- Configuration of GCC Assembler settings



- Configuration of GCC C Compiler settings



IDE Properties for G0_LED

type filter text

- Resource
- C/C++ Build
 - Build Variables
 - Environment
 - Logging
 - Settings
- C/C++ General
 - CMSIS-SVD Settings
 - Project Natures
 - Project References
 - Run/Debug Settings

Settings

Configuration: Debug [Active] Manage Configurations...

Toolchain Version | Tool Settings | Build Steps | Build Artifact | Binary Parsers | Error Parsers

- MCU Settings
- MCU Post build outputs
- MCU GCC Assembler
 - General
 - Debugging
 - Preprocessor
 - Include paths
 - Miscellaneous
- MCU GCC Compiler
 - General
 - Debugging
 - Preprocessor
 - Include paths
 - Optimization
 - Warnings
 - Miscellaneous

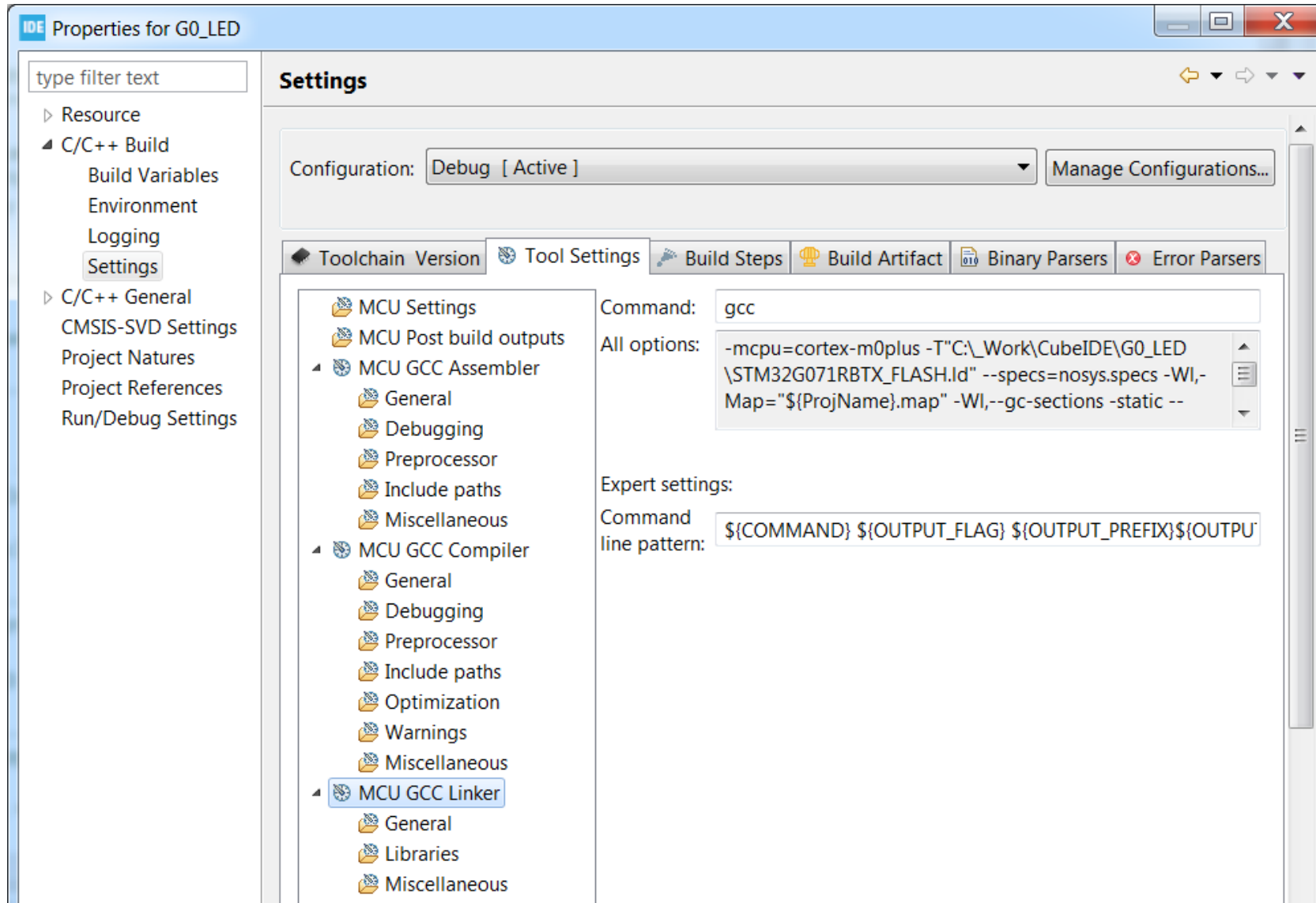
Command: gcc

All options: -mcpu=cortex-m0plus -std=gnu11 -g3 -DSTM32G071xx -DUSE_HAL_DRIVER -DDEBUG -c -I./Inc -I./Drivers/CMSIS/Include -

Expert settings:

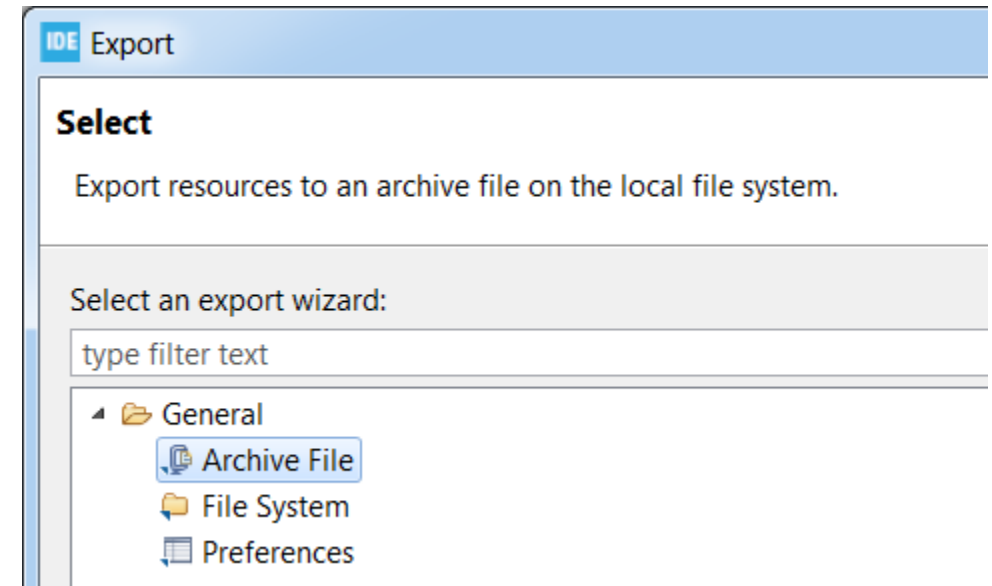
Command line pattern: \${COMMAND} \${INPUTS} \${FLAGS} \${OUTPUT_FLAG} \${OUTPUT}

- Configuration of GCC Linker settings



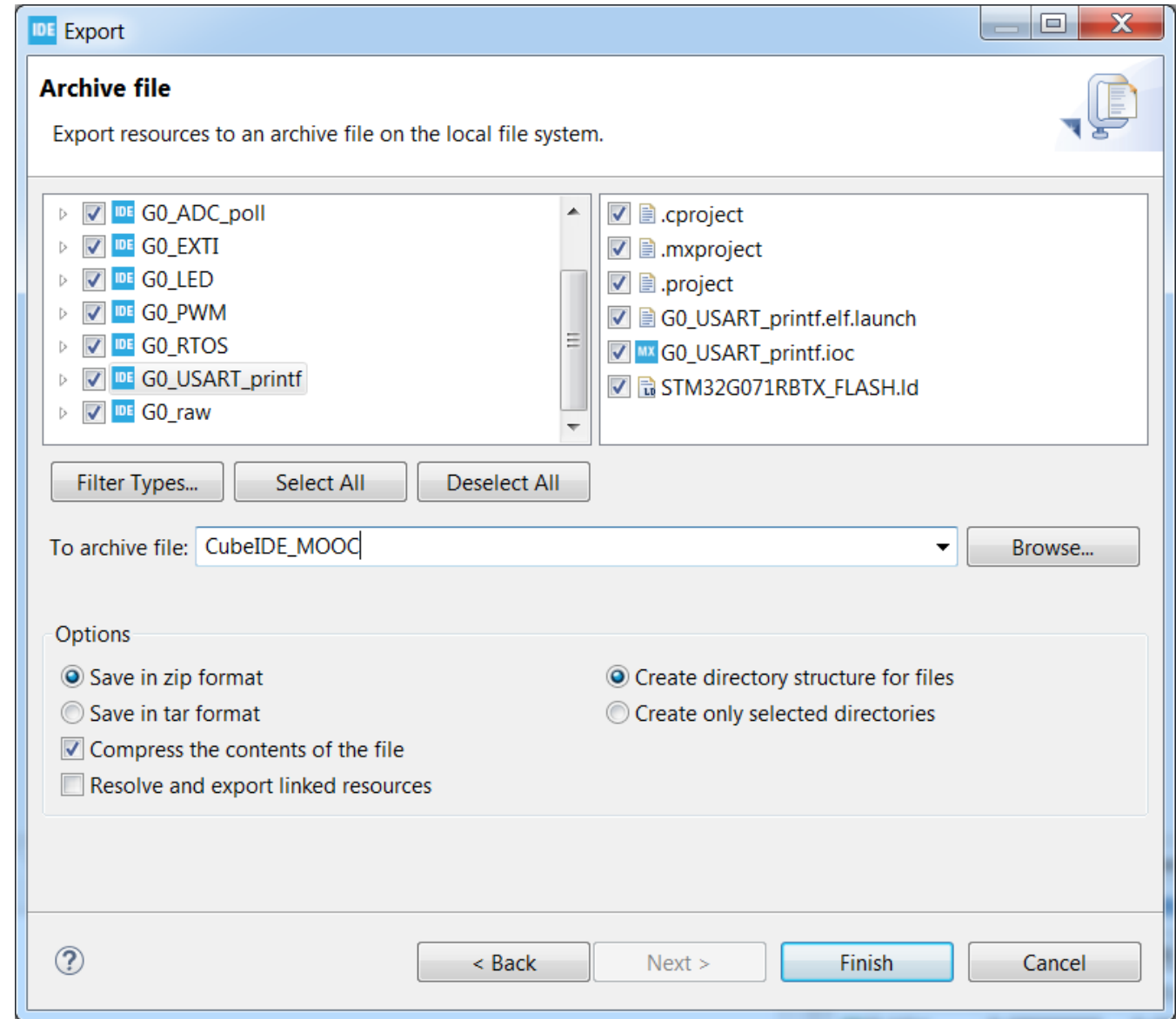
Exporting projects

- Export option is used to share the project with others
- It is possible to export only active projects in current workspace. Closed ones are not visible within export
- In order to export some project from the workspace, select File -> Export which displays an Export window



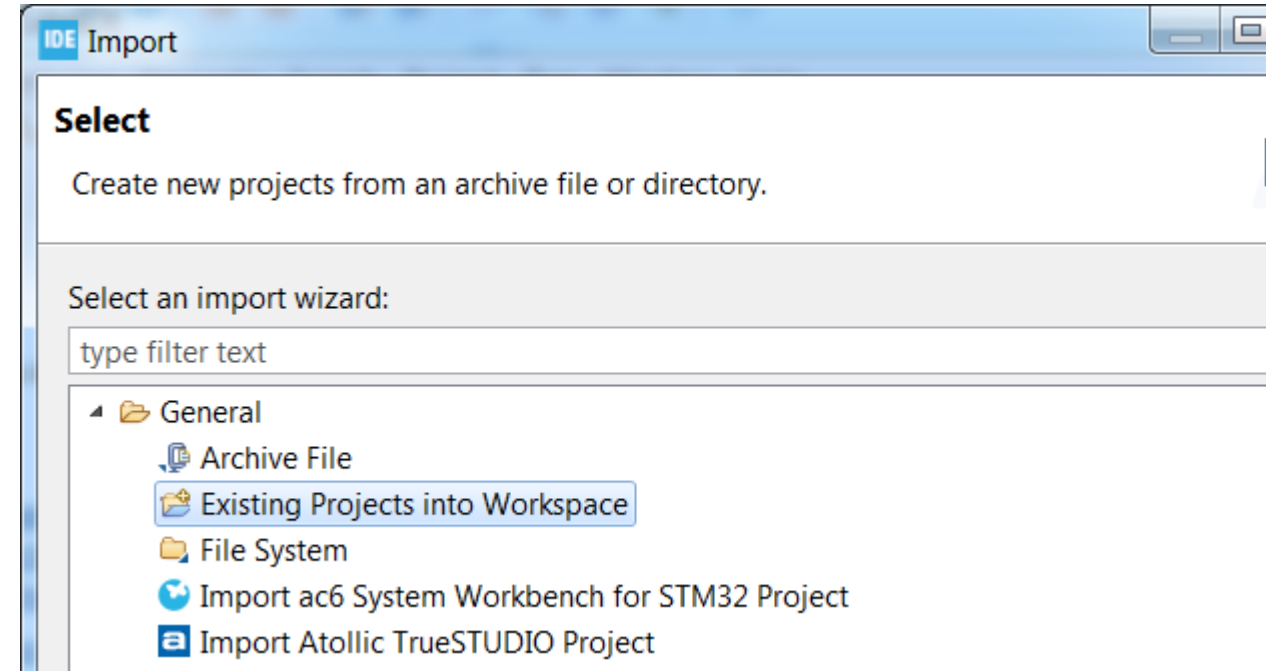
Exporting projects

- Within Export window we need to perform the following steps:
 - Select way we would like to store exported projects: one zip file, project file system, project settings only
 - Specify which opened projects from current workspace we would like to export
 - Specify the location (or .zip file name) where project(s) should be stored



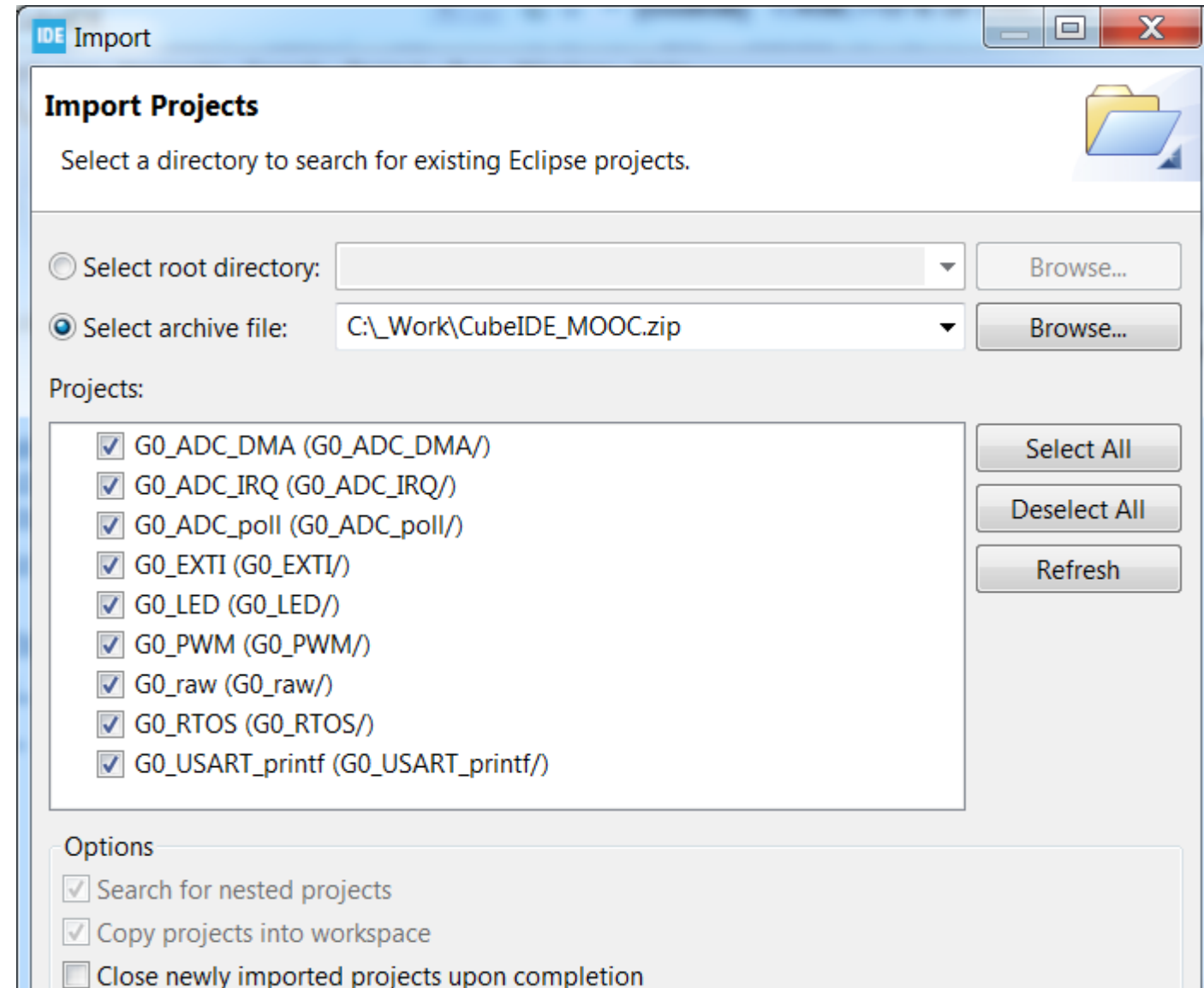
Importing projects

- Import option is used to collect the project from others or from repository
- Projects can be stored as complete file systems or compressed files (.zip)
- In order to import some project to the workspace, select File -> Import which displays an Import window



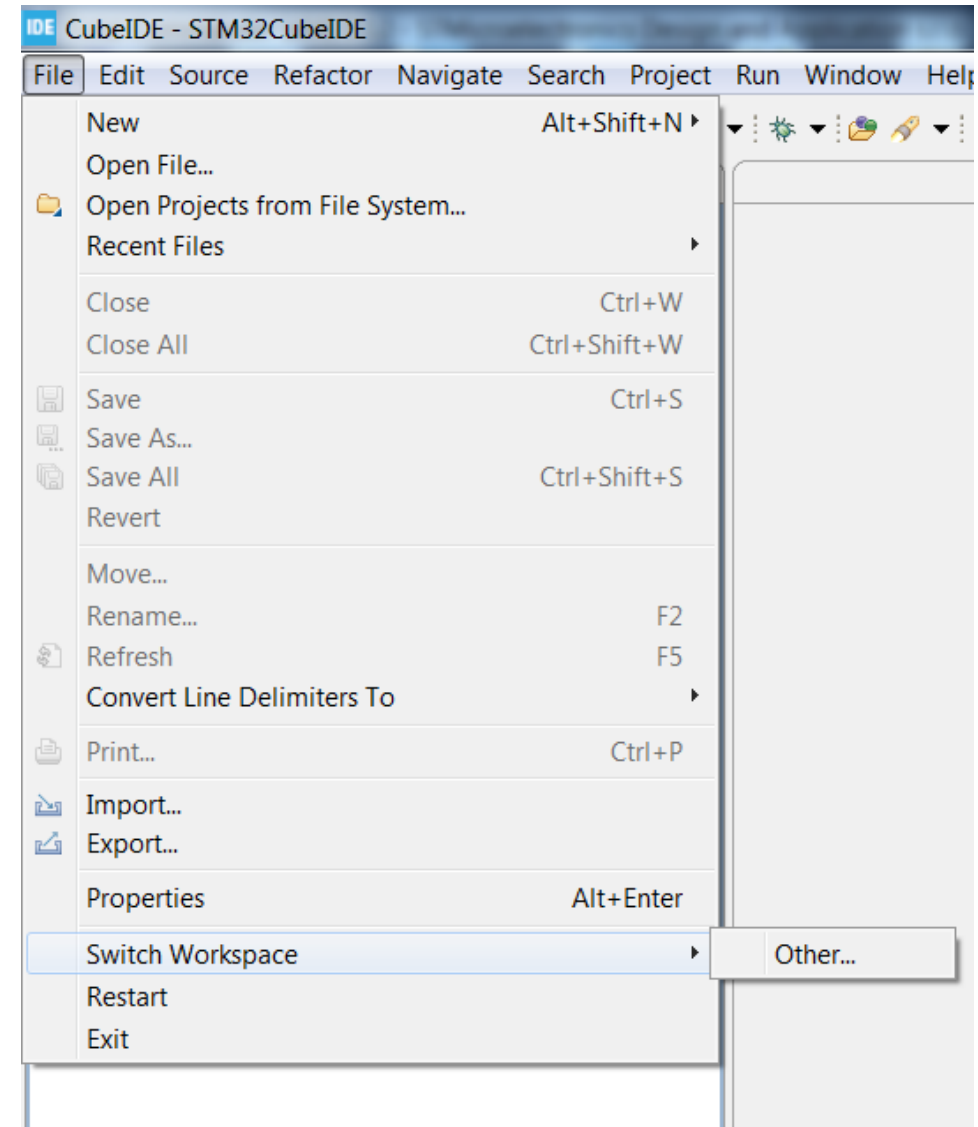
Importing projects

- Within Import window we need to perform the following steps:
 - Select way we would like to import exported projects: one zip file (archive file) or project file system,
 - Specify which projects within selected repository should be imported
 - Press Finish button
- All selected projects would be automatically added to current workspace



Switching to another workspace

- To switch from active workspace to new one, please select File->Switch Workspace
- Select Other to select the location of new workspace or select one from the list



Resetting the perspective

- In case it is necessary to restore original configuration of the workspace windows it is enough to go: Window->Perspective->Reset Perspective

