A. Mandatory requirements.

1. Make utility

Build system is based on GNU Make utility. The required version is at least 4.1.

i) Windows:

Make utility that built in Windows OS is very limited and so not supported!
Usually, the Make utility for windows is located in:
$(YOUR_PATH)/uCWorkspace/uCProjects/windows/make/make4.1

ii) Linux:

Usually make utility is sytem wide. Only make sure that version is as required.

You can change the default location of Make utility by editing the file
$(YOUR_PATH)/uCWorkspace/uCProjects/workspace_config.mk.
Uncomment/add/change variable REDEFINE_MAKE_PROGRAM_DIR and assigning to it the path of Make utility folder.
For example: REDEFINE_MAKE_PROGRAM_DIR = c:\make4.1 .
Make sure that this folder contains 'bin' sub-folder with 'make' executable.

2. GIT

GIT is critical component. It's used not only for source control but for synchronization of repositories.
Two options available:

i) Install system wide GIT.

a) Install from official online source.
b) After installing check that installation succeed: open 'cmd' or 'shell' window and run 'git'command. You should see git help/usage output. If command not found then system PATH needs to be fixed.

ii) Use GIT located in particular folder.

a) Edit file $(YOUR_PATH)/uCWorkspace/uCProjects/workspace_config.mk by uncomment/add variable REDEFINE_GIT_ROOT_DIR and assigning to it the path of GIT folder. For example: REDEFINE_GIT_ROOT_DIR = c:\my_git_dir

B. Optional requirements.

1. KConfig utility

Project configuration is based on .config files.
You can find more about KConfig language in https://www.kernel.org/doc/html/latest/kbuild/kconfig-language.html

i) Windows:

$(YOUR_PATH)/uCWorkspace/uCProjects/windows/kconfig/kconfig3.12.0

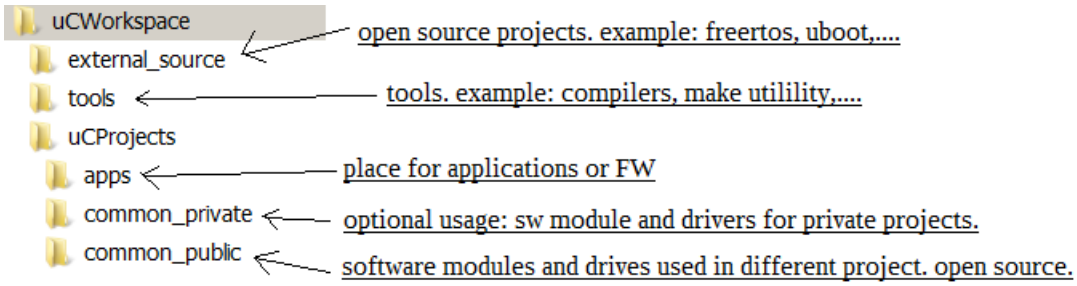
ii) Linux:

Usually kconfig is installed system wide during installation of build-essential for kernel. Check according to you distribution.

You can change the default location of KConfig utility by editing the file
$(YOUR_PATH)/uCWorkspace/uCProjects/workspace_config.mk.
Uncomment/add/change variable REDEFINE_KCONFIG_DIR and assigning to it the path of KConfig utility folder.
For example: REDEFINE_MAKE_PROGRAM_DIR = c:\kconfig .
Make sure that this folder contains 'kconfig-mconf' executable.

C. Workspace folder structure.

i. Note for Windows: Don't put uCWorkspace folder in too deep path because Windows has limitation for length of path name.



D. Compilation of project.

1. From command line or shell.

i. Go to $(YOUR_PATH)/uCWorkspace/uCProjects/apps/your_app

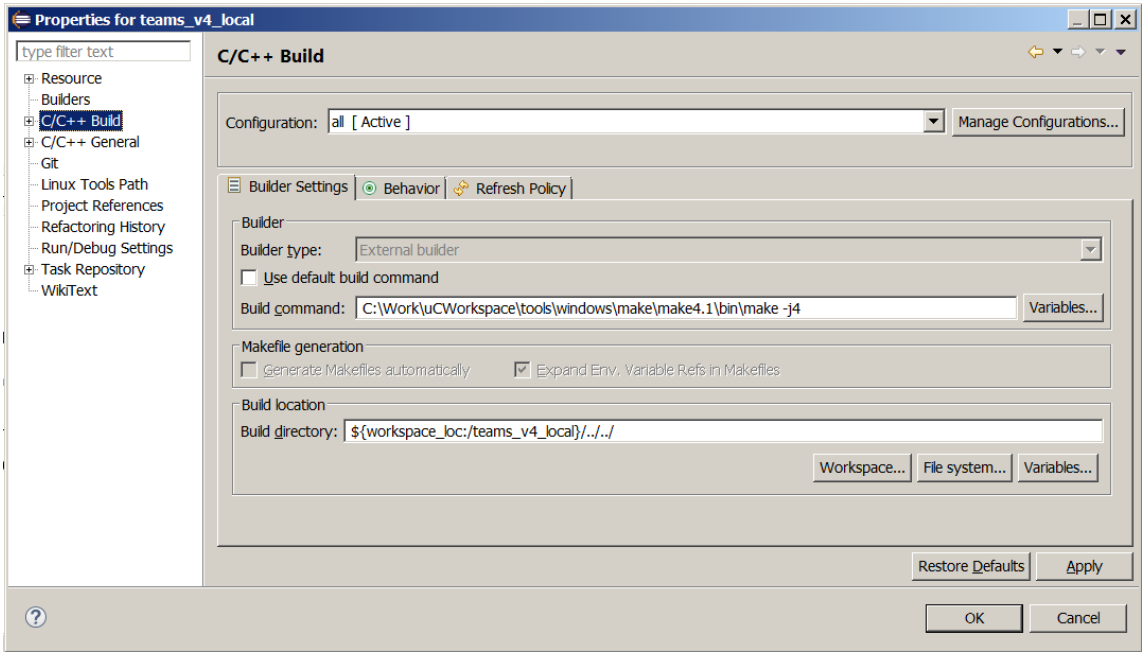
ii. Run make all.

For Windows you cannot run 'make all' because Windows limited built-in of make.exe will run, so you need to run GNU make.exe version:

$(YOUR_PATH)/uCWorkspace/uCProjects/windows/make/make4.1/bin/make.exe all

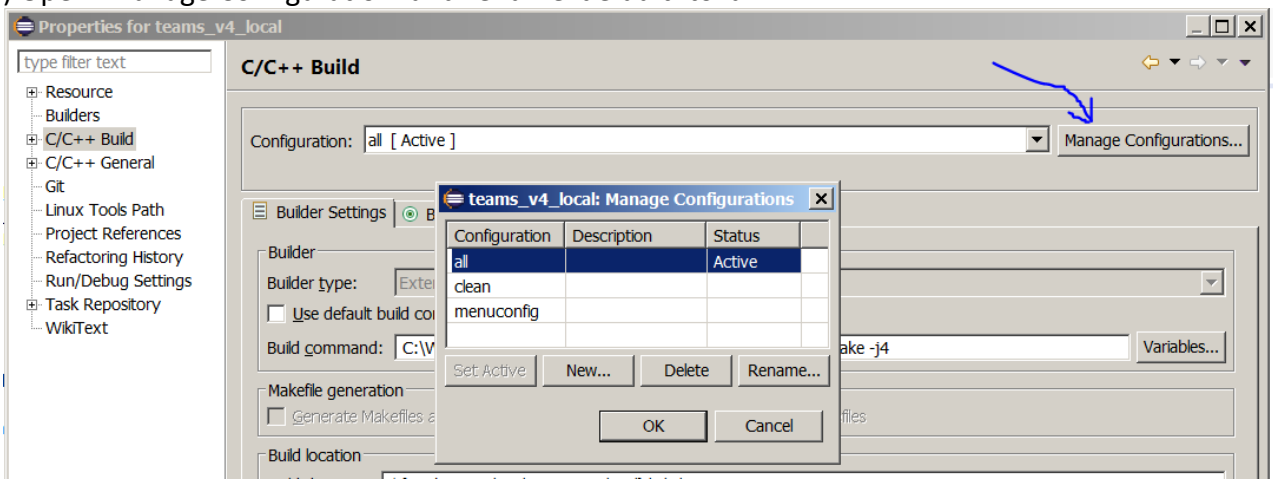
2. From eclipse.

i) Right click on project and select 'Properties'. In properties window go to 'C/C++ Build'

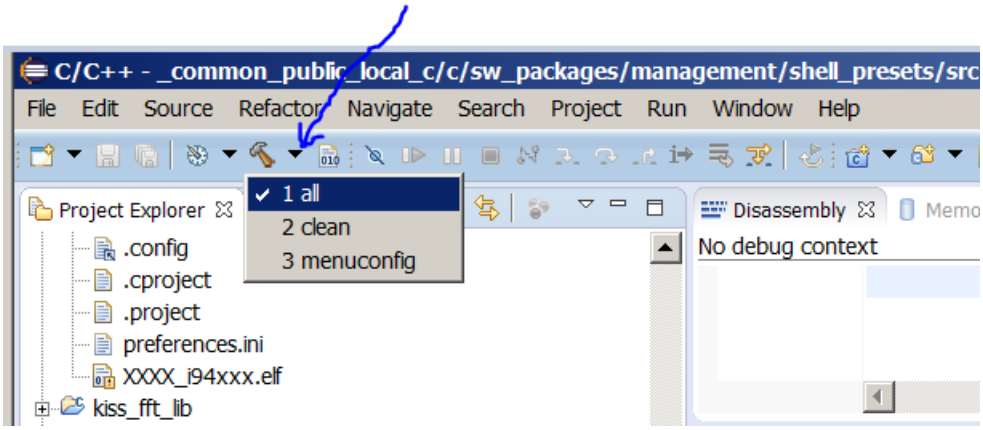


ii) Unselect 'Use default build command'. In 'Build command:' put 'make' in linux or '$(YOUR_PATH)/uCWorkspace/uCProjects/windows/make/make4.1/bin/make.exe' in Windows. To accelerate build process you can add '-j4' flag.

iii) Open ‘Manage Configuration’ and rename ‘default’ to ‘all’.



Now you can compile the project by selecting ‘build all’ in eclipse menu:



<u>Cleaning of project.</u>

1. Go to $(YOUR_PATH)/uCWorkspace/uCProjects/apps/your_app
2. Run make clean.
   For Windows you cannot run ‘make clean’ because Windows limited built-in of make.exe will run, so you need to run GNU make.exe version:
   $(YOUR_PATH)/uCWorkspace/uCProjects/windows/make/make4.1/bin/make.exe clean