

Starting with Qtcreator

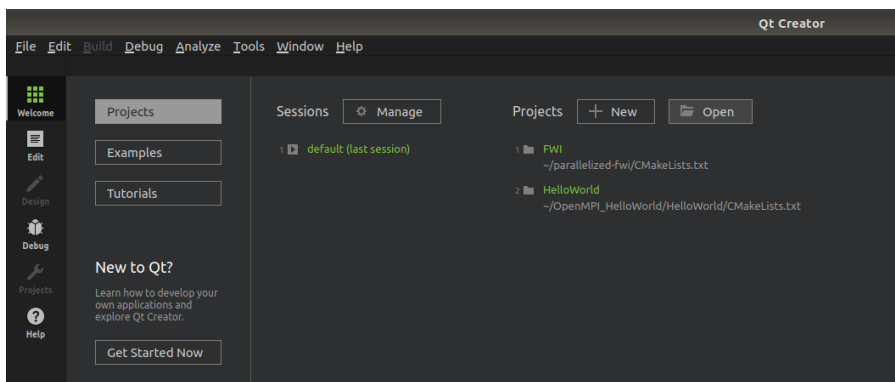
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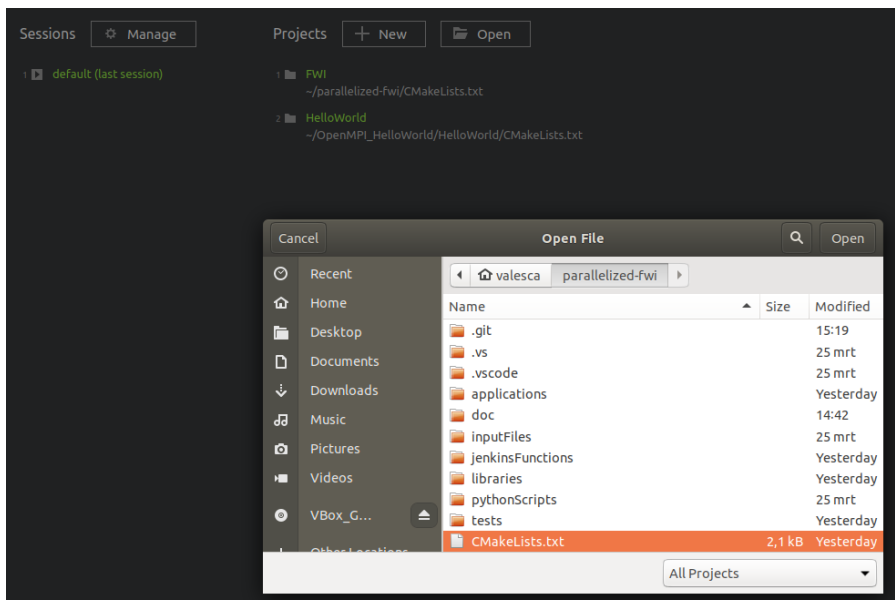
This document shows the steps needed to create the FWI project and run the applications and tests in Qt creator.

1 Create FWI project in Qt Creator

Open Qt Creator, it automatically starts in the Welcome screen. Create the FWI project by pressing the Open button.



Double click on the parallelized-fwi folder, select CMakeLists.txt and press on Open.

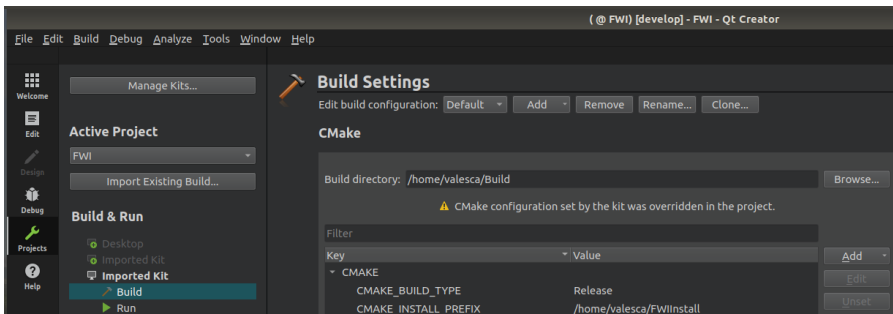


This automatically should creates the project based on the cmake file.

2 Run applications

2.1 Build

Go to Projects at the left of the screen. Select in Build & Run: Build below Imported Kit. At Build Directory: browse to the Build directory. Now the project can be build by pressing Ctrl+B or the hammer symbol at the



left lower corner.



2.2 Run

First Copy the default run folder to the home directory by the following commands in the terminal:

```
cd ~  
cp parallelized-fwi/inputFiles/default ..
```

It is important that Preprocess run is executed before a Process can be executed, so make sure that the file *defaultInvertedChiToPressure.txt* exists in the output directory of default. When it does not exists, run the FWI_Preprocess executable before any other.

For this go to Run below Imported Kit at the left side of the screen. Select FWI_Preprocess in Run configuration in the middle of the screen. Add `../default` to the command line arguments and choose the Build folder as Working Directory. The Preprocess can be executed by pressing Ctrl+R or clicking on the green play icon in the left lower corner

To run the project select the executable in Run configuration, in this case chose FWI_UnifiedProcess. Add to the *command line argument* `../default conjugateGradientInversion integralForwardModel` and choose the Build folder as Working Directory.

The Process can be executed by pressing Ctrl+R or clicking on the green play icon in the left lower corner

