

Building

Building / Make Script

The build process for the controller consists of two main tasks:

Compilation from SCChart to C-Code

The SCCharts for the Controller are compiled by KIELER. This can either be done in the usual GUI Version or with the [KIELER Command Line Compiler](#).

Before trying to run the code the compiler output should be checked. The compiler generates C-Code even if the Controller isn't fully schedulable, so be careful when trying new controllers.

The generated C-Files should be stored in the `/code/` part of the local working copy but not committed to the repository.

Compilation from C-Code to executable

To generate the final executable a python script is provided. This can be found at [/code/make.py](#). The script takes care of including the required modules and adds the needed headers to the controller.

Calling the script with the first parameter **rail** and the path to the C-Code compiles the controller for the real railway installation.

```
python make.py rail railway/Tests/TestAll.c
```

With the parameter **sim** instead of rail the simulation is built.

```
python make.py sim railway/Tests/TestAll.c
```

The generated executables are located in the `/code/build/` directory. These files should normally not be committed to the repository.

With the second parameter **run** the code is executed after finishing the compilation.

```
python make.py sim run railway/Tests/TestAll.c
```