



# virtualGTM installation

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# Installation of virtualGTM



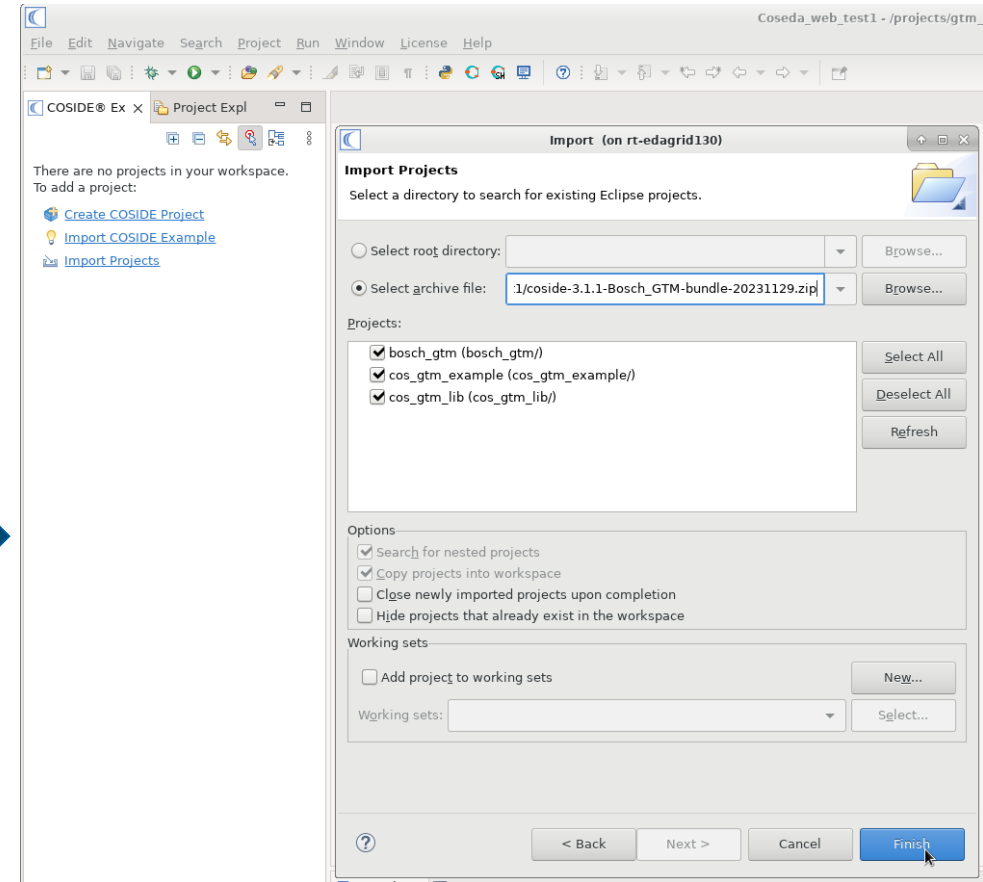
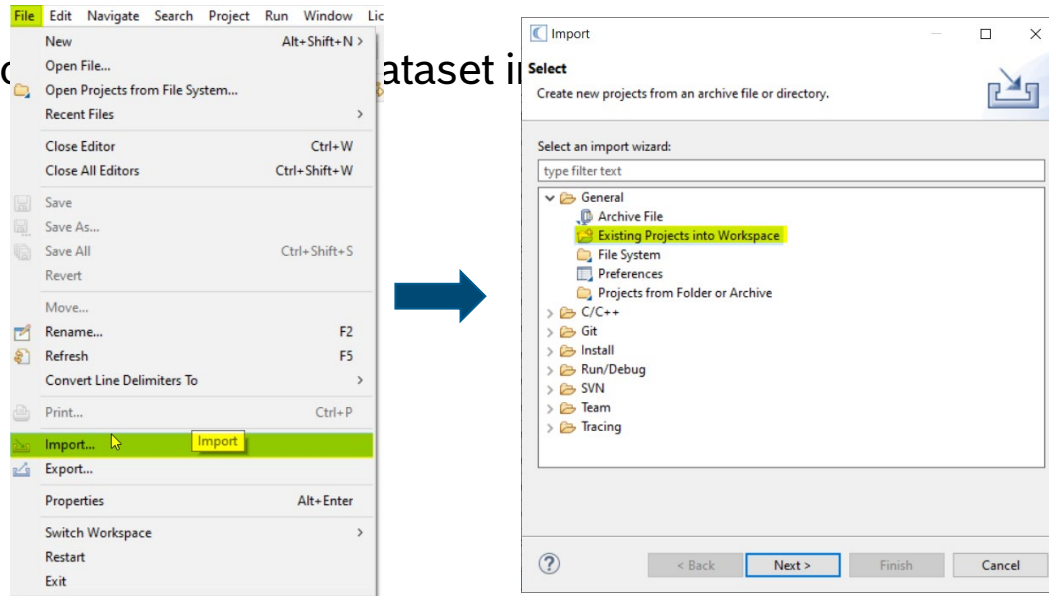
Downloaded package will include the object code for the virtualGTM integration into Coside

Received dataset: e.g:

coside-3.1.1-Bosch\_GTM-bundle-20231129.zip

Import

dataset in



# Installation of virtualGTM

ReadMe.txt located in `cos_gtm_example/doc`



This readme describes the limitations and more information of virtual GTM model

=====

The Virtual GTM model used by COSEDA is based on the Reference Model of the GTM 4.1 IP.

Known limitations of the GTM 4.1 Reference model are mentioned in the `GTM_RM_Limitations.pdf` in this folder.

The virtual GTM model is for ATOM, TOM, DTM, and TIO cycle accurate for the use data output behavioral to the GTM 4.1 IP. Other features/modules are not cycle accurate in the virtual GTM compared to the GTM 4.1 IP.

The current specification of the GTM 4.1 can be downloaded from:

<https://www.bosch-semiconductors.com/ip-modules/gtm-platform/gtm-generic-timer-ip-module/>

# Installation of virtualGTM

## Default use cases



This virtualGTM release is delivered with 2 use cases:

Each is located in a separate folder in `cos_gtm_example`:

- `cmu_clk`:
  - see documentation in `cos_gtm_example/doc/Coside_CMU_CLK_V1.1.pdf`
- `atom_somp`:
  - see documentation in `cos_gtm_example/doc/Coside_ATOM_SOMP_V1.1.pdf`

Additional use cases will be made available by Robert Bosch GmbH, Automotive Electronics

- Published on the website:
  - <https://www.bosch-semiconductors.com/ip-modules/gtm-platform/gtm-virtual-prototyping/>
- Or distributed by GTM Support team

For installation follow the process on next pages

# Installation of virtualGTM

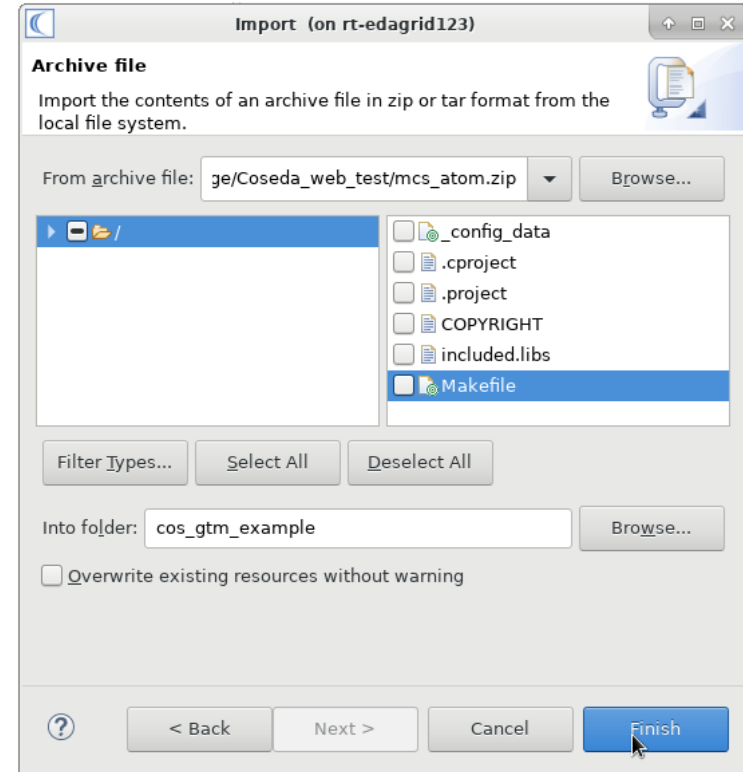
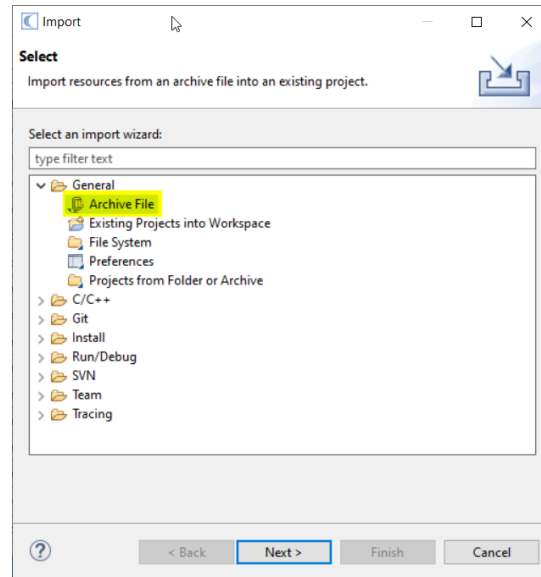
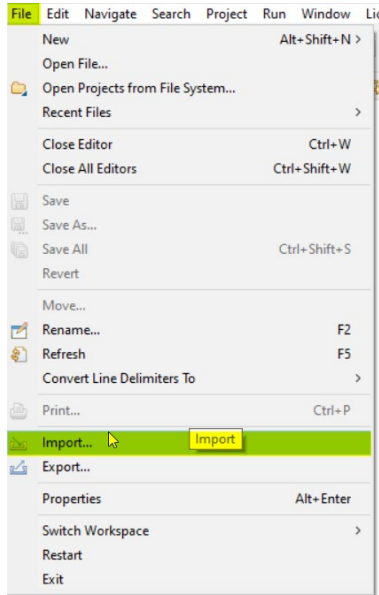
## Usage of an additional testcase on the virtualGTM



Following package will include the source code for a testcase to be simulated on the virtualGTM in Coside

Received dataset e.g: mcs\_atom.zip

Import the mcs\_atom dataset as a new library in the cos\_gtm\_example project:



# Installation of virtualGTM

## Usage of a testcase on the virtualGTM



Insert the new testcase as a new library in included.libs

and save the file

The screenshot shows the COSIDE IDE interface. On the left, the project tree for 'cos\_gtm\_example' is visible, with 'included.libs' selected. On the right, the content of the 'included.libs' file is displayed. The file contains several include directives and project references.

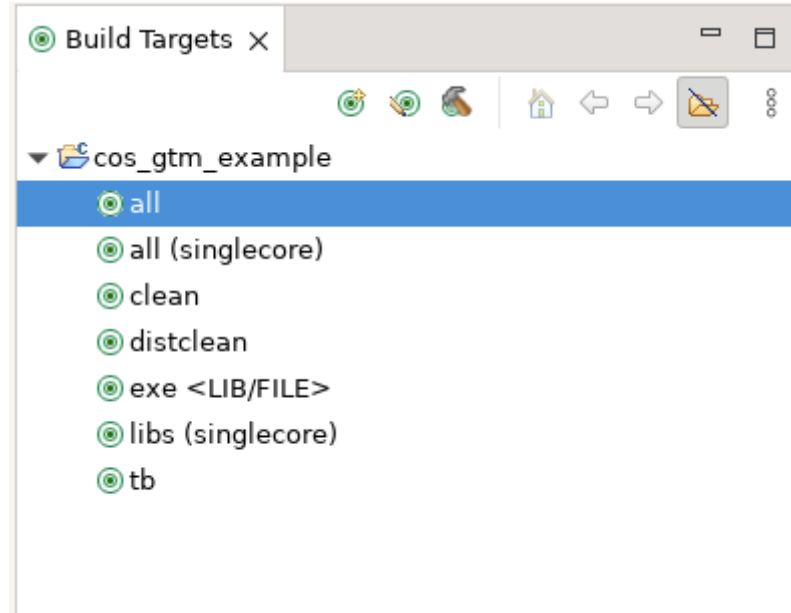
```
10 //
11 // #include_project path/to/project BUILD_DIRECTORY
12 //
13 // The reference of other projects is only allowed in
14 // in the project root!
15 //
16 // Example content which compiles the libraries utilit
17 // and references another project which lies parallel
18 //
19 // utilities
20 // models
21 // testbench
22 // #include_project ../otherproject
23 // #include_project ../anotherproject RELEASE
24 // #include_project $MY_ENV_VAR/anotherproject DEBUG
25
26 #include_project ../bosch_gtm
27 #include_project ../cos_gtm_lib
28
29 configurations
30 atom_somp
31 cmu_clk
32 mcs_atom
33
34
```

# Installation of virtualGTM

## Build target for added testcase



- Build cos\_gtm\_example





# Installation of virtualGTM

## Run added testcase



- Run mcs\_atom\_tb\_simple\_tb.exe

