



virtualGTM installation

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virtualGTM installation

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Installation of virtualGTM



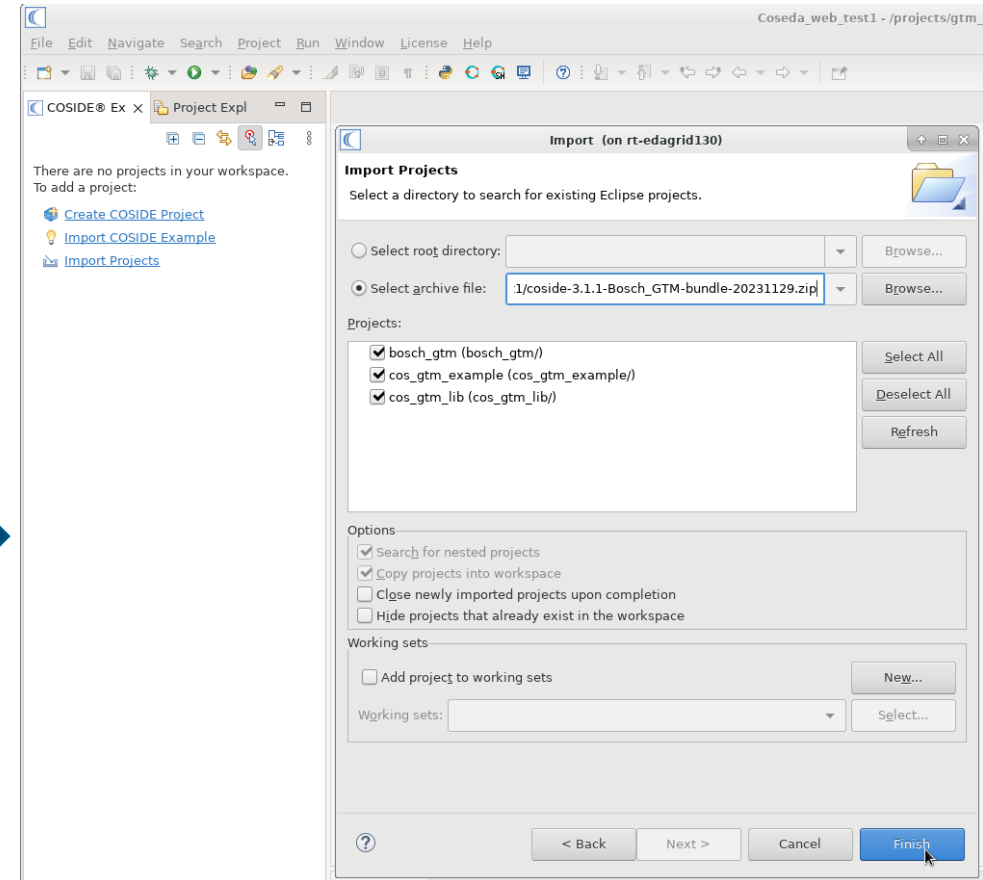
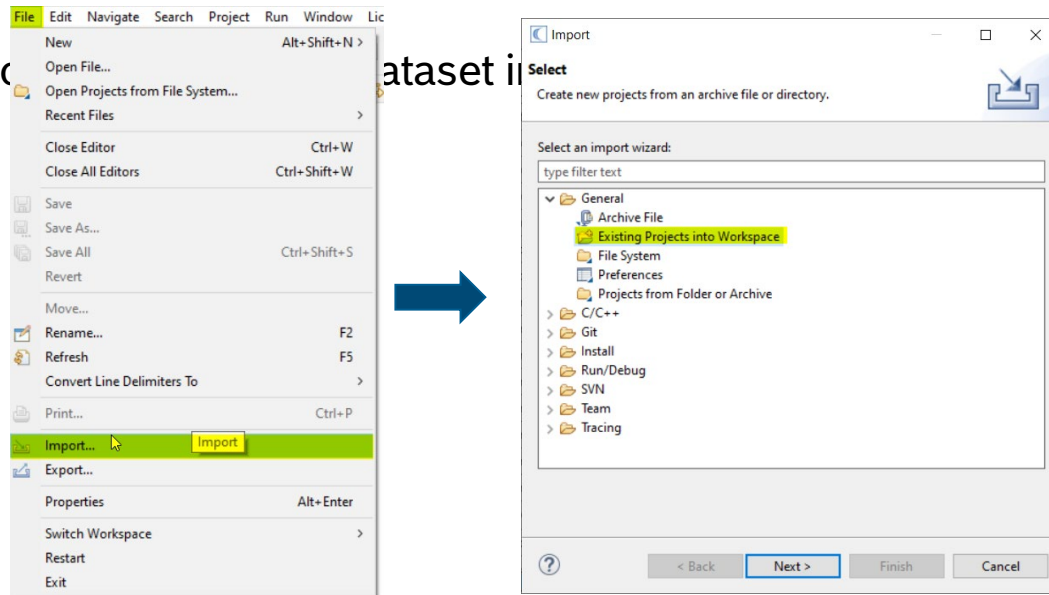
Downloaded package will include the object code for the virtualGTM integration into Coside

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

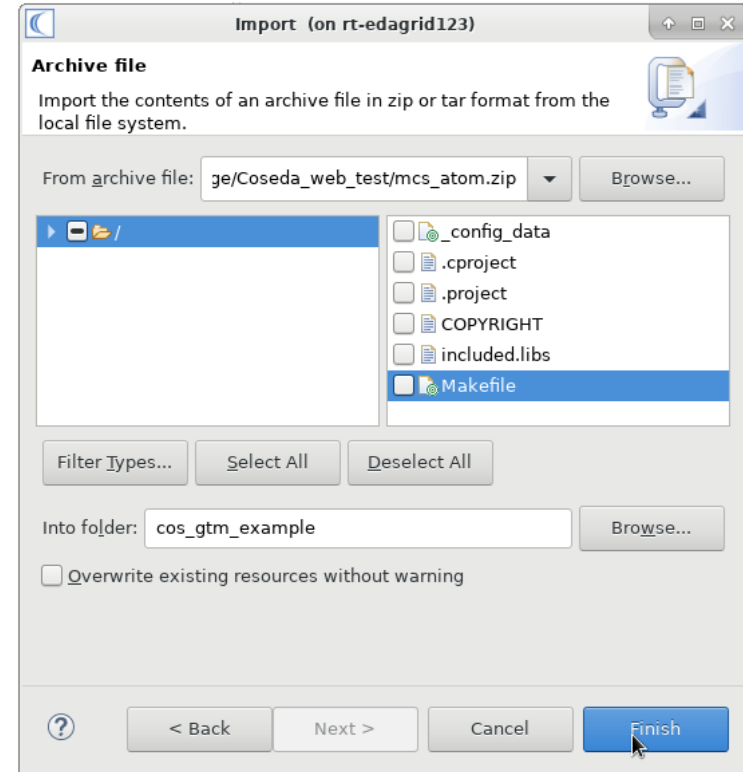
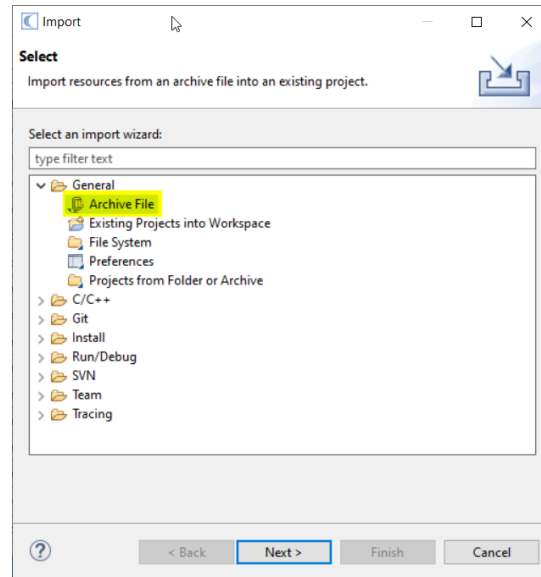
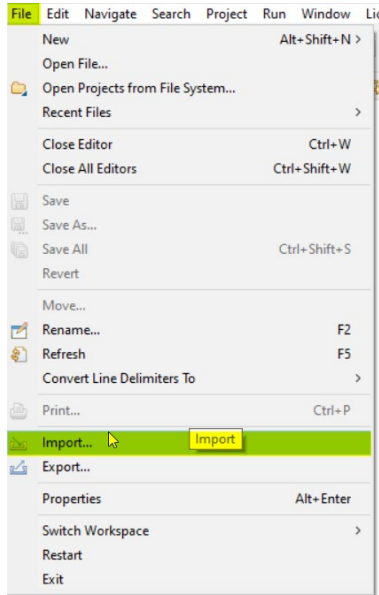
Usage of an additional testcase on the virtualGTM



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

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 'Project' is visible, with 'included.libs' selected under the 'Configuration' folder. On the right, the content of the 'included.libs' file is displayed in a code editor. The code includes comments and several '#include_project' directives for various sub-projects and configurations.

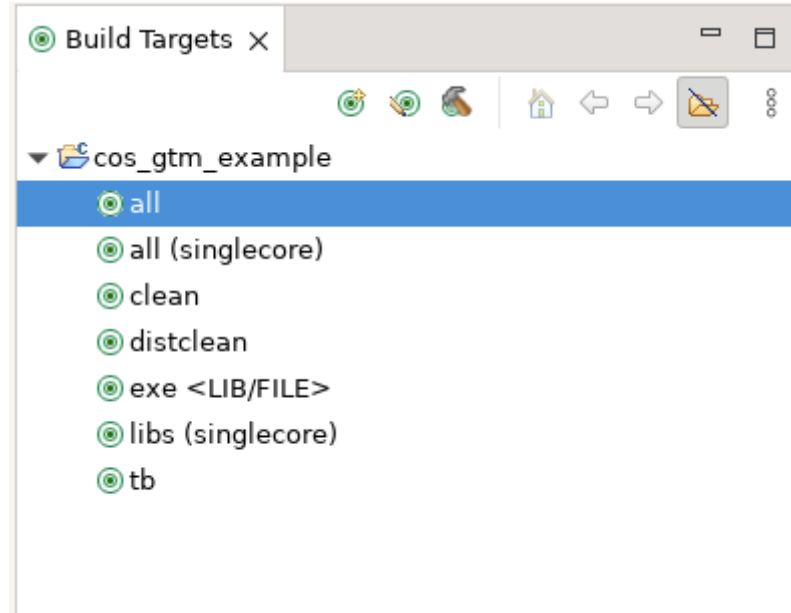
```
10 //
11 // #include_project path/to/project BUILD_DIRECTORY
12 //
13 // The reference of other projects is only allowed in
14 // in the project root!
15 //
16 // Example content which compiles the libraries utilit
17 // and references another project which lies parallel
18 //
19 // utilities
20 // 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

