

Code-export in SimulationX – from offline model to real-time platform

Karsten Todtermuschke
ITI GmbH
Webergasse 1, 01067 Dresden, Germany
todtermuschke@itisim.com

The tutorial is provided with the creation of a simple powertrain model using elements from the Modelica Standard Library. Different analyzing methods like computation of natural frequencies or error estimates of state variables will be applied to ensure the real-time capability of this model.

Afterwards, a functional mock-up unit (FMU) of a selected component of the powertrain will be created for both Mmodel Exchange and Co-Simulation via code export. This will be followed by a re-import of the generated FMU into the powertrain model.

Finally, the comparison of the created models will show the similarities and differences between Model Exchange and Co-Simulation.

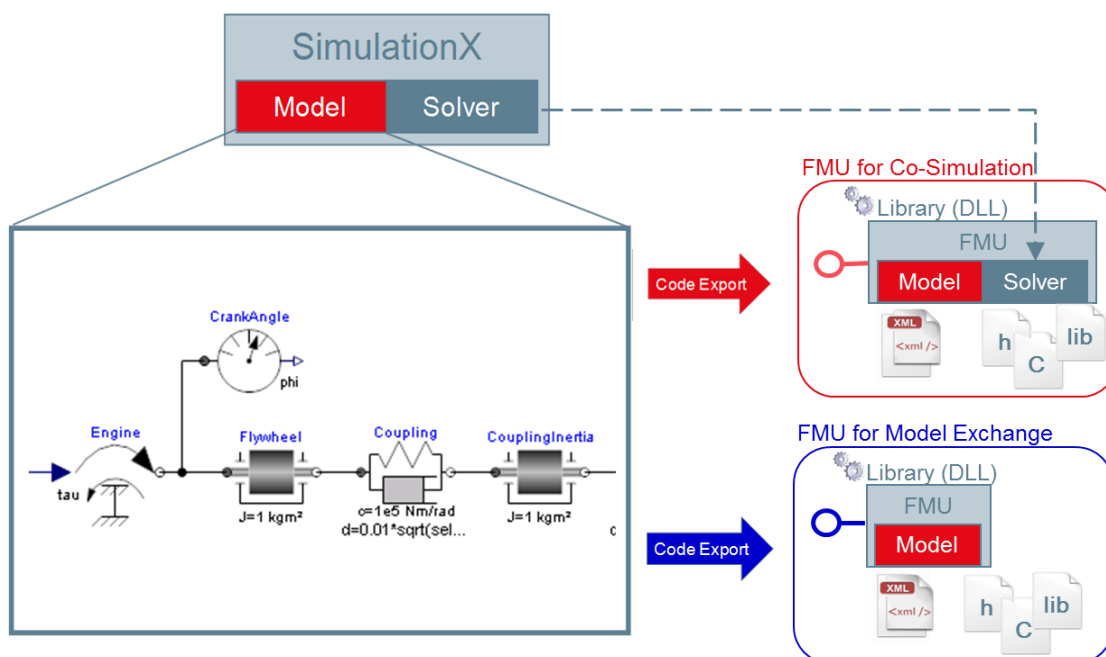


Figure 1: Code-Export of model components as FMU for Co-Simulation and Model Exchange

You do not need a laptop for the tutorial as we will provide you with everything necessary.