

Functional Mockup Interface 2.0: The Standard for Tool independent Exchange of Simulation Models

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The Functional Mockup Interface (FMI) standard version 1.0 (see [1]) was published in 2010 as one result of the ITEA2 project MODELISAR, see [1]. In a short time after this first release several modeling and simulation tools started to support FMI. Today, more than 30 tools support FMI 1.0, and it is heavily used in industrial and scientific projects, not only in the automotive sector.

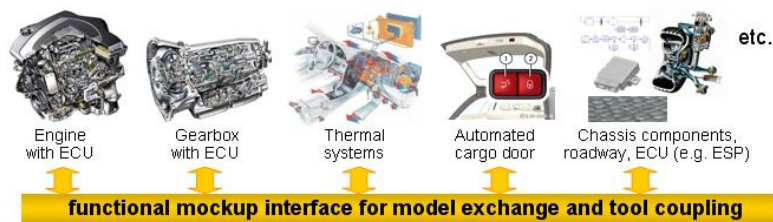


Figure 1: Improving model-based design between OEM and supplier with FMI.

After ending of the MODELISAR project in Dec. 2011, maintenance and further development is now performed by the Modelica Association in form of the Modelica Association Project FMI (see www.fmi-standard.org). FMI was initiated and organized by Daimler AG with the goal to improve the exchange of simulation models between suppliers and OEMs. The further FMI development is performed by 16 companies and research institutes. The FMI project is open for FMI interested persons and for (Modelica and non-Modelica) tool vendors supporting FMI. In this article an overview about the upcoming version 2.0 of FMI is given. This new version combines the formerly separated interfaces for Model Exchange and Co-Simulation in one standard. The specification document was clarified which increases the compatibility of implementations. New features ease the use and increase the performance especially for larger models.

References

- [1] T. Blochwitz, M. Otter, M. Arnold, C. Bausch, C. Clauß, H. Elmqvist, A. Junghanns, J. Mauss, M. Monteiro, T. Neidhold, D. Neumerkel, H. Olsson, J.-V. Peetz, S. Wolf: **The Functional Mockup Interface for Tool independent Exchange of Simulation Models**. 8th International Modelica Conference. Dresden 2011.
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