We invite all interested to participate in the work and join the consortium!

Open Source Modelica Consortium

THE OPEN SOURCE MODELICA CONSORTIUM (OSMC) is a non-profit, non-governmental organization with the aim of developing and promoting the development and usage of the OpenModelica open source implementation of the Modelica modeling language and the OpenModelica associated open-source tools and libraries, collectively named the OpenModelica Environment, in the following referred to as OpenModelica. OpenModelica is available for commercial and non-commercial usage under the conditions of the OSMC Public License. It is the aim of OSMC, within the limitations of its available resources, to provide long-term support and maintenance of OpenModelica, to support its publication on the web, and to coordinate contributions to OpenModelica.

Some Future Directions

- Fall 2009. Continued high priority on better support for the Modelica standard libraries. Completion of MultiBody library and Fluid/Media library flattening support.
- Fall 2009. Change to standard GPL open source license option instead of OSMC-GPL license option.
- During 2010. Improved scalability – support for larger models and improved simulation efficiency.
- During 2010. Support for full Modelica 3.1 and certain Modelica 3.2 features.

Recent History

- Feb 2008. OpenModelica 1.4.4 released.
- Dec 2008. MathCore joins OSMC and contributes 1 man-year of source code to the OpenModelica frontend.
- Jan 2009. OpenModelica 1.4.5 released.
- March 2009. OSMC has increased to 21 organizational members.
- June 2009. Start of OPENPROD ITEA2 11 million €, 27-partner project including substantial OpenModelica development.
- Sept 2009. OpenModelica 1.5 released, including improved Modelica library flattening, new Java-interface, enhanced ModelicaML UML-Modelica profile prototype.

Companies and Institutes

- ABB Corporate Research, Sweden
- Bosch Rexroth AG, Germany
- Siemens Turbo Machinery AB, Sweden
- Creative Connections, Prague, Czech Republic
- Equa Simulation AB, Sweden
- IFP, Paris, France
- MOSTforWATER, Belgium
- MathCore Engineering AB, Sweden
- Maplesoft, Canada
- TLK Thermo, Germany
- VTT, Finland
- XRG Simulation, Germany

Universities

- Linköping University, Sweden
- Hamburg University of Technology/TuTech, Institute of Thermo-Fluid Dynamics, Germany
- Technical University of Braunschweig, Institute of Thermodynamics, Germany
- Université Laval, modeleAU group, Canada
- Griffith University, Australia
- University of Queensland, Australia
- Politecnico di Milano, Italy
- Mälardalen University, Sweden
- Technical University Dresden, Germany

Board

- Oliver Lenord, OSMC Chairman; Bosch-Rexroth, Germany
- Per Sahlin, OSMC Vice Chairman; Equa Simulation AB, Sweden
- Peter Fritzson, OSMC Director, Linköping University, Sweden
- Juha Kortelainen, VTT, Finland
- Alf Isaksson, ABB Corp. Research, Sweden
- Francesco Casella, Politecnico di Milano, Italy
- Jan Brugård, MathCore Engineering AB, Sweden
- Gerhard Schmitz, Univ. Hamburg, Germany

www.OpenModelica.org

Open Source Modelica Consortium (OSMC)
OSMC Director: Peter Fritzson;
OSMC Technical Coordinator: Adrian Pop
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OPENMODELICA IS AN OPEN-SOURCE Modelica-based modeling and simulation environment intended for industrial and academic usage. Its long-term development is supported by a non-profit organization – the Open Source Modelica Consortium (OSMC).

The following are some goals for the project:

- Development and long-term support of an open source industrial-strength Modelica modeling and simulation environment for industrial and academic usage.
- Creation of a complete reference implementation of Modelica in an extended version of Modelica itself. Promoting a model-centric approach to give the modeler increased control, including modeling of both hardware- and software components in complex systems.
- Improved implementation techniques, e.g. to enhance the performance of compiled Modelica code by generating code for parallel hardware.
- Research in areas such as language design, control system design, debugging support, embedded system modeling, new symbolic and numerical algorithms, etc.

Parts of OpenModelica are already used in-house e.g. at ABB, in the released MathModelica product from MathCore Engineering AB, and being integrated in products from Bosch Rexroth, Equa Simulation AB, MOSTforWATER, VTT, TLK-Thermo, as well as being used at many universities.

OMNotebook – Interactive Electronic Book
DrModelica for Teaching
simForge Graphic Editor used with OpenModelica
3D Pendulum Multi-Body Simulation

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