



# First International Workshop on Model-Driven Interoperability (MDI 2010)

## Workshop at MoDELS 2010

Oslo, Norway, October 3-5, 2010

<http://mdi2010.lcc.uma.es/>

**MODELS**  
**SL**  
**2010**

### Scope

Interoperability is the ability of separate entities, systems or artifacts (organizations, programs, tools, etc.) to work together. Although there has always been the need to achieve interoperability between heterogeneous systems and notations, the difficulties involved in overcoming their differences, the lack of consensus on the common standards to use and the shortage of proper mechanisms and tools, have severely hampered this task.

Model interoperability is much more complex than simply defining a local serialization format, e.g., XMI. This would just resolve the syntactic (or “plumbing”) issues between models and modeling tools. However, interoperability should also involve further aspects, including behavioral specifications of models (which in turn describe the behavioral aspects of the systems being modeled), and other “semantic” issues such as agreements on names, context-sensitive information, agreements on concepts (ontologies), integration conflict analysis (including for example automatic data model matching), semantic reasoning, etc. Furthermore, interoperability not only means being able to exchange information and to use the information that has been exchanged, but also to exchange services and functions to operate effectively together.

Models and MDE techniques (especially metamodeling and model transformations) can play a fundamental role for fully accomplishing these tasks. Thus, models can become cornerstone elements for enabling and achieving interoperability between all kinds of systems and artifacts, including data sets (under the presence of different data schemata, and possibly at different levels of abstraction), services (despite their differences in data representation, access protocols and underlying technological platforms), event systems (with different complex types and origins), languages (that use different notations and may have different semantics), tools (with different data formats and semantic representations), technological platforms (with different notations, tools and semantics), etc.

The goal of this workshop is to discuss the potential role of models as key enablers for interoperability, and the challenges ahead. It aims to provide a venue where researchers and practitioners concerned with all aspects of models and systems interoperability could meet, disseminate and exchange ideas and problems, identify some of the key issues related to model-driven interoperability, and explore together possible solutions.

### Important Dates

- Paper submission: July 25, 2010
- Notification of acceptance: August 25, 2010
- Camera-ready version due: September 15, 2010
- Workshop date: October 3-5, 2010

### Topics

- Precise specification of models, metamodels and their properties.
- Precise notations of compatibility/composition of models and metamodels (for, e.g., DSL combination).
- Automated tool support for constructing, analyzing, comparing and composing models.
- Definition of underlying formal frameworks that allow automated reasoning about model interoperability.
- Requirements for interoperability: challenges & roadmap.
- Tool metamodeling.
- Use of existing MDE technologies for interoperability (model transformation, model weaving, model differencing, model evolution,...).
- Analysis of current standards and proposals for extensions to standards to enable interoperability.
- Industrial and experience reports on interoperability.
- Architectures for MDI.
- Integration between Business and IT models.
- Model transformation for Semantic Interoperability.
- Ontological and semantic support for MDI.
- Reverse engineering of Information Systems and MDI.
- Taxonomy of interoperability problems and solutions.
- Methods and support for achieving interoperability through models.

### Submission Format and Procedure

Submissions should be between 4 and 10 pages long in ACM format (<http://www.acm.org/sigs/publications/proceedings-templates>). Submissions are due on July 25, 2010, via <http://www.easychair.org/conferences/?conf=mdi2010>. At least one author of each accepted paper should register for the conference and participate in the workshop. Accepted papers will be published in the ACM Digital Library.

### Workshop Organizers

- Jean Bézivin, INRIA & Ecole de Mines de Nantes, France
- Richard Mark Soley, OMG, Needham, USA
- Antonio Vallecillo, University of Málaga, Spain

### Program Committee

Patrick Albert (France), Uwe Assmann (Germany), Colin Atkinson (Germany), Jorn Bettin (Switzerland), Jean Pierre Bourey (France), Tony Clark (England), Robert Clarisó (Spain), Gregor Engels (Germany), Jean Marie Favre (France), Robert France (USA), Dragan Gasevic (Canada), Sébastien Gérard (France), Martin Gogolla (Germany), Jeff Gray (USA), Esther Guerra (Spain), Tihamer Levendovszky (USA), Richard Paige (England), Alfonso Pierantonio (Italy), Bernhard Rumpe (Germany), Jim Steel (Australia), Hans Vangheluwe (Belgium), Andrew Watson (USA), John Whittle (England), Manuel Wimmer (Austria).