

# First Call for Papers International Workshop on Fact-Oriented Modeling (ORM 2014)

Amantea, Italy  
October 29-31, 2014

Held in conjunction with OTM'2014 (Oct. 27-31)  
<http://www.onthemove-conferences.org/>

Proceedings will be published in the Springer LNCS series

**Deadlines: abstracts due June 1, papers due June 15**

## Background:

Following successful workshops held in Cyprus (2005), France (2006), Portugal (2007), Mexico (2008), Portugal (2009), Crete (2010 and 2011), Rome (2012) and Graz (2013), this is the tenth in a series of fact-oriented modeling workshops run in conjunction with the OTM conferences. Fact-oriented modeling is a conceptual, natural-language-based approach to modeling and querying the information content of business domains in terms of the underlying facts of interest, where all facts and rules may be verbalized in language readily understandable by users of those business domains.

Unlike Entity-Relationship (ER) modeling and UML class diagrams, fact-oriented modeling treats all facts as relationships (unary, binary, ternary etc.). How facts are grouped into structures (e.g. attribute-based entity types, classes, relation schemes, XML schemas) is considered a design level, implementation issue that is irrelevant to the capturing of essential business semantics. Avoiding attributes in the base model enhances semantic stability and populatability, as well as facilitating natural verbalization and thus more productive communication with all stakeholders. For information modeling, fact-oriented graphical notations are typically far more expressive than those provided by other notations. Fact-oriented textual languages are based on formal subsets of native languages, so are easier to understand by business people than technical languages like OCL. Fact-oriented modeling includes procedures for mapping to attribute-based structures, so may also be used to front-end other approaches.

Fact-oriented modeling has been used successfully in industry for over 30 years, and is taught in universities around the world. The fact-oriented modeling approach comprises a family of closely related "dialects", the most well known being Object-Role Modeling (ORM), Cognition enhanced Natural language Information Analysis Method (CogNIAM) and Fully-Communication Oriented Information Modeling (FCO-IM). Though adopting a different graphical notation, the Object-oriented Systems Model (OSM) is a close relative, with its attribute-free philosophy. The Semantics of Business Vocabulary and Business Rules (SBVR) proposal adopted by the Object Management Group in 2007 is a recent addition to the family of fact-oriented approaches.

Commercial tools supporting the fact-oriented approach include the ORM solution within Microsoft's Visio for Enterprise Architects, the CogNIAM tool Doctool, the FCO-IM tool CaseTalk, and the Collibra ontology tool suite. The NORMA (Natural ORM Architect) tool for ORM 2 is available as a free, open-source plug-in to Visual Studio; a commercial, professional version of NORMA is also under development. Free ORM tools include InfoModeler, Infagon, ActiveFacts, and ORM-Lite. DogmaStudio is an ORM-based tool for specifying ontologies. Various SBVR tools are also currently under development. General information about fact-oriented modeling may be found at the Fact Based Modeling website (<http://www.factbasedmodeling.org/>) and the ORM Foundation website ([www.ORMFoundation.org](http://www.ORMFoundation.org)).

### Goals and Topics:

The main goal of this workshop is to provide a forum for practitioners and researchers interested in fact-oriented modeling methods to meet, and exchange research and implementation ideas and results. It also provides this group of practitioners/researchers an opportunity to present their research papers and experience reports, and to take part in open discussions. Relevant topics include (but are not limited to) theoretical and/or empirical exploration of fact-oriented modeling methods, as well as case studies and experience reports related to:

- Theory/principles of fact-oriented modeling (ORM, CogNIAM, SBVR, FCO-IM etc.)
- Industrial experience with fact-oriented modeling
- Application of fact-oriented modeling to data warehousing and business intelligence
- Fact-oriented integration of business information, processes and events
- Fact-oriented modeling of ontologies
- Metamodels for fact-oriented modeling and business practice
- Fact-oriented metamodeling best practices
- Textual languages for declaration and/or verbalization of fact-oriented models
- Fact-orientation and validation of business rules
- Fact-oriented application generation
- Educational experience with fact-oriented modeling
- Fact-oriented modeling and business rules
- Temporal issues in fact-oriented modeling
- Fact-oriented modeling and business service modeling
- Fact-oriented modeling and workflow modeling
- Fact-oriented modeling and data integration
- Agent-oriented extensions to fact-oriented modeling
- Tools to support fact-oriented modeling and business practice
- Fact-oriented query languages
- Transforming fact-based models to/from other models
- Comparing fact-orientation with other approaches

### Intended Audience:

The workshop is primarily aimed at researchers and practitioners interested in conceptual modeling approaches for the analysis and design of information systems and ontologies, including modeling of data, processes and events. Attendees familiar with fact-oriented approaches have the opportunity to update and deepen their knowledge and expertise in this area. Attendees less familiar with fact-oriented approaches have an ideal opportunity to learn about the approach from world experts in the area, and adopt or adapt the many benefits of the approach.

### Workshop co-chairs:

Terry Halpin  
INTI International University, Malaysia

Herman Balsters  
University of Groningen, The Netherlands

### Important Dates (2014):

Abstracts due:	June 1
Papers due:	June 15
Acceptance Notification:	July 31
Camera-ready copies:	September 1 (firm deadline)
Registration due:	September 1 (firm deadline)
OTM Conferences:	October 27-31

### Submission Guidelines:

Submitted papers will be evaluated by at least three program committee members, based on originality, significance, technical soundness, and clarity of expression. Submissions must be in English. The first page should begin with the paper title followed by author names and affiliations and an abstract of at most 150 words. Papers may be standard or short. Standard papers may discuss industrial experience and/or academic research, should be of at most 5,000 words (excluding references), and should not exceed 10 pages in the final camera-ready format. Short papers of at most 5 pages in the final format may relate to a software tool demonstration, describe a small case study, or explore preliminary ideas about a relevant topic. Typically, standard papers are allocated 45 minutes for presentation, and short papers 30 minutes. Accepted papers of both kinds will be included in the Springer proceedings. Only electronic submissions in Adobe PDF format are acceptable. Abstracts and papers should be submitted to the following site:

<https://www.easychair.org/conferences/?conf=orm2014>

The proceedings will be published in Springer's LNCS (Lecture Notes in Computer Science) series. The final paper format is the Springer LNCS style, as described at <http://www.springer.de/comp/lncs/authors.html>. Failure to commit to presentation at the workshop automatically excludes a paper from the proceedings.

### Program committee:

Herman Balsters	University of Groningen, The Netherlands
Linda Bird	Independent Contractor, Australia
Anthony Bloesch	Microsoft Corporation, USA
Peter Bollen	Maastricht University, The Netherlands
Andy Carver	INTI International University, Malaysia
Matthew Curland	ORM Solutions, USA
David Cuyler	Sandia National Laboratories, USA
Ken Evans	ORM Foundation, UK
Gordon Everest	University of Minnesota, USA
Enrico Franconi	Free University of Bozen-Bolzano, Italy
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Terry Halpin	INTI International University, Malaysia
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Serge Valera	European Space Agency, The Netherlands
Theo van der Weide	Radboud University, Nijmegen, The Netherlands
Jan Pieter Wijbenga	TNO, The Netherlands
Jos Vos	ABP/AMC, Heerlen, The Netherlands

**For more information on the workshop, please contact:** Dr Terry Halpin (e-mail: [t.halpin@live.com](mailto:t.halpin@live.com))