

# Second Call for Papers International Workshop on Fact-Oriented Modeling (ORM 2008)

Monterrey, Mexico  
November 12-14, 2008

Held in conjunction with OTM'08 (Nov 9-14)  
<http://www.cs.rmit.edu.au/fedconf>

Proceedings will be published by Springer Verlag

**Paper Submission Deadline: 2008 June 30**  
(abstracts due June 15)

## Background:

Following successful workshops held in Cyprus (2005), France (2006) and Portugal (2007), this is the fourth 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 semantics 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.

Though less well known than ER and object-oriented 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. In December 2007, the Semantics of Business Vocabulary and Business Rules (SBVR) proposal was adopted by the Object Management Group, becoming the latest 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, and the FCO-IM tool CaseTalk. Free ORM tools include InfoModeler and Infagon, as well as various academic prototypes. DogmaStudio is an ORM-based tool for specifying ontologies. NORMA, an open-source plug-in to Visual Studio, is currently under development to provide deep support for second generation ORM. Various SBVR tools are also currently under development. General information about fact-orientation and SBVR, respectively, may be found at [www.ORMFoundation.org](http://www.ORMFoundation.org) and [http://omg.org/technology/documents/bms\\_spec\\_catalog.htm#SBVR](http://omg.org/technology/documents/bms_spec_catalog.htm#SBVR).

## 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.)
- 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
- Fact orientation, communication and understandability
- Industrial experience with fact-oriented modeling
- Fact-orientation and terminology science and practice
- 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
- Agent-oriented extensions to fact-oriented modeling
- Tools to support fact-oriented modeling and business practice
- Fact-orientation and verbalization of business rules
- Fact-orientation and validation of business rules
- Fact-oriented query languages
- Transforming fact-based models to/from attribute-based 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  
Neumont University  
USA

Sjir Nijssen  
PNA  
The Netherlands

## Important Dates (2008):

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|--------------------------|-----------------|
| Abstracts due:           | June 15         |
| Papers due:              | June 30         |
| Acceptance Notification: | August 13       |
| Camera-ready copies:     | August 25       |
| Registration due:        | TBA             |
| OTM Conferences:         | November 9 - 14 |

### Submission Guidelines:

All submitted papers will be evaluated by at least three members of the program committee, based on originality, significance, technical soundness, and clarity of expression. Submissions must be in English, and may be of two kinds: Full Papers or Short Papers, both of which may discuss industrial experience or academic research. Full Papers should not exceed 5,000 words (excluding references and appendices), and should not exceed 10 pages in the final camera-ready format (see later). Short papers should not exceed 5 pages in the final camera-ready format. Full papers are normally allocated 45 minutes for presentation. Short papers are normally allocated at most 30 minutes for presentation. Only electronic submissions in Adobe PDF format are acceptable. The paper submission site will be announced later.

On the original submission, include a cover page with title of paper as well as the authors' names, affiliations, phones, faxes, and email addresses. The total number of words in the paper (excluding cover page, tables, and references) should be indicated on the cover page. The second page should begin with the title of the paper followed by an abstract of no more than 150 words.

The proceedings will be published by Springer Verlag in their LNCS (Lecture Notes in Computer Science) series. The final paper (if accepted) should be formatted using the Springer LNCS style, see <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:

|                      |  |
|----------------------|--|
| Roel Baardman        | BonusAdvies, The Netherlands                       |
| Guido Bakema         | HAN University of Applied Science, The Netherlands |
| Herman Balsters      | University of Groningen, The Netherlands           |
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| Anthony Bloesch      | Microsoft Corporation, USA                         |
| Scott Becker         | Orthogonal Software, USA                           |
| Peter Bollen         | Maastricht University, The Netherlands             |
| Lex Bruil            | ING Netherlands                                    |
| Andy Carver          | Neumont University, USA                            |
| Don Baisley          | Microsoft Corporation, USA                         |
| Donald Chapin        | Business Semantics, UK                             |
| Dave Cuyler          | Sandia National Laboratories, USA                  |
| Olga De Troyer       | Vrije Universiteit Brussel, Belgium                |
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| Gordon Everest       | University of Minnesota, USA                       |
| Ken Evans            | ORM Foundation, United Kingdom                     |
| John Hall            | Model Systems, UK                                  |
| Pat Hallock          | InConcept, USA                                     |
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| Hank Hermans         | Statistics Netherlands, The Netherlands            |
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| Mike Jackson         | Birmingham City University, United Kingdom         |
| Mustafa Jarrar       | University of Cyprus, Cyprus                       |
| Elisa Kendall        | Sandpiper Software, USA                            |
| Mark Linehan         | IBM, USA   |
| Inge Lemmens         | PNA, The Netherlands                               |
| Bodil Madsen         | Copenhagen Business School, Denmark                |
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|                       |  |
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| Sjir Nijssen          | PNA, The Netherlands                               |
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| Baba Piprani          | SICOM, Canada                                      |
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| Bob Quast             | City of The Hague, The Netherlands                 |
| Ron Ross              | Business Rules Solutions, USA                      |
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