

Information Systems - Special Issue on “Vocabularies, Ontologies and Rules for Enterprise and Business Process Modeling and Management”

Vocabularies, ontologies, and business rules are key components of a model-driven approach to enterprise computing in a networked economy. Enterprise vocabularies, ontologies, and business rules do not exist in isolation but serve to support business processes. While many have recognized the importance of vocabularies, ontologies, and business rules in business process modeling and management, there are many open research challenges to be addressed. These challenges can be approached from different perspectives. Fundamental research explores ontological foundations and languages and methods for enterprise and business process modeling. It also covers ontological evaluation of enterprise systems and their interoperability, and ontological analysis of business process modeling. Applied research looks into enhancing business rule engines and business process management systems by ontologies. Business process modeling research aims to define how process modeling and execution languages, such as Business Process Modeling Notation and Business Process Execution Language, relate to business ontologies and rules. Enterprise integration and collaboration research addresses ontology-based service description technologies for inter-enterprise collaboration. This special issue solicits papers focussed on the described research areas. The topics to be covered by submissions include but are not limited to the following:

- Conceptual modeling
 - Ontological foundations for enterprise and business process modeling
 - Languages and methods for business vocabularies, terminologies, and taxonomies
 - Modeling of enterprise information integration and interoperability
 - Languages for conceptual modeling (for example, OWL and UML)
 - Agent-oriented conceptual modeling
- Business rule and business process modeling
 - Analysis of and experiences with OMG’s Semantics of Business Vocabularies and Rules (SBVR)
 - Rule modeling and rule markup
 - Rule-based approaches to Web service policies and choreographies
 - Agent-based business rule and process management
 - Integrating business rules with business process modeling and execution languages (for example, BPMN and BPML)
- Ontologies for enterprise systems
 - Ontological approaches to content and knowledge management
 - Ontologies for e-business registries/repositories
 - Web service ontologies
 - Ontological evaluation of enterprise systems
 - Ontology-based enterprise architectures
 - Ontology-based software engineering for enterprise solutions
- Model-driven engineering approaches in enterprise systems
 - Modeling and architecture frameworks
 - Domain engineering
 - Domain-specific business information and system engineering
 - Model transformations in enterprise and business process modeling

Important Dates

Submission Deadline	May 1st, 2008
Reviews Completed:	September 1st, 2008
Major Revisions Due:	October 15th, 2008
Re-reviews Completed:	December 1st, 2008
Final recommendations:	January 1st, 2009
Final Manuscripts Due:	February 1st, 2009
Publication Date:	TBD (2009)

Guest editors

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Submission Guidelines

All manuscripts should be compliant with the submission guidelines and policies of the Information Systems journal (<http://www.elsevier.com/locate/infosys>). All manuscripts will be subject to the high standards of peer review, and must be submitted via the online submission system at <http://ees.elsevier.com/is>, with “SI-Business Proc. Modeling” selected as the Article type.