

Enterprise Information Systems

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Special Issue Call for Papers

"Information Systems for Enterprise Integration, Interoperability and Networking: Theory and Applications"

Guest Editors:

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Background and Motivation

Today, enterprises can be characterized by various key facets: globalization, distributed manufacturing, data and knowledge management, advanced automation and robotics, virtual engineering, rapid response to market and more. In today's competitive economy, enterprises need to collaborate using Information Technology (IT) and other tools to succeed in this dynamic and heterogeneous business environment. Enterprise integration, interoperability and networking are some of the major disciplines that are enabling companies to improve collaboration and communication in the most effective way. In this direction, the enterprise information systems engineering process aims to develop information systems to respond to increasingly complex objectives, to align these information systems with business goals and processes of the company, or simply to adapt and improve them when facing given requirements or rapidly changing opportunities. As enterprise information systems models become more ubiquitous, the sharing of best-in-class models becomes more desirable. Interoperability between dissimilar systems in sharing information is important, but other aspects are also required in the sharing of enterprise systems knowledge. First, this process is based on the need for collaboration, sharing and mutual understanding of the needs of each stakeholder i.e. each persons involved or affected by the future information system, at each stage of its development. Second, this process follows principles which highlight the need for formal semantics definition of these models to facilitate this work, at various abstraction levels ranging from specification to implementation on site. There is a need to also couple new theoretical results with applied methods and tools supporting existing business reconfiguration and transformation both locally and globally.

Goals and Topics

The aim of this issue is to bring together researchers and practitioners in areas of Information Systems theory and practice, contributing to the problem of systems integration and interoperability, within enterprises or between networked enterprises. Papers on the following topics are expected to be appropriate for the Issue:

- Enterprise interoperability as a science
- Advanced technology and science in enterprise interoperability engineering
- Semantic enrichment of enterprise models
- Enterprise Integration Modelling, Approaches, and Methodologies
- Model-Based Systems Engineering
- Best Enterprise Interoperability Design Principles
- Architectures for Integration of Enterprise Information Systems
- Ontology for Interoperability of Enterprise Applications
- Interoperability in the context of collaborative networked organizations
- Enterprise reference models and their verification, validation, and accreditation
- Reference models for interoperability
- Enterprise models repository
- Virtual Engineering based approaches for distributed collaboration
- Data and models mining and warehousing for enterprise integration
- Networked Business Models and Agility
- Enterprise Integration / Enterprise Architecture and Service Oriented Architecture
- Product and process oriented enterprise interoperability
- Scalability for systems interoperability

Tentative Schedule

Submission of abstracts:15 May 2011Notification of acceptance for submission of full paper:15 June 2011Submission of full papers:30 September 2011First decision notification:31 November 2011Submission revised papers:31 January 2012Final decision notification:31 March 2012Estimated publication date:Late Summer 2012

Submission Procedure

Submission of an extended abstract (max 2 pages): The abstract main text should have the following structure:

- Specific topic/s of the Issue addressed by the paper.
- Purpose: Theoretical background, motivating issues, research questions, objectives and/or hypotheses.
- Design/methodology/approach: How are the objectives achieved? Describe the methodology and approaches adopted to answer to the research question or pursue the objectives.
- Findings: Presentation and discussion of the achieved or expected results.
- Relevance/contribution: Highlight achieved or expected original contribution to the theory, and/or practice

Please send this abstract, as soon as possible, to both Guest editors, by email.

Submission of full papers: only those extended abstracts which adhere to the scope of the Issue and have a satisfactory description of the single requested items will be accepted for full paper submission. The full papers will be then subjected to a double blind review (or to a second round of review if necessary). The full paper version shall follow the Journal author's guidelines and been submitted to the to the journal website (<u>http://mc.manuscriptcentral.com/teis</u>) indicating that the paper is submitted to the "Enterprise Integration, Interoperability and Networking: Theory and Applications Special Issue".