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EMOI - INTEROP'05

Open INTEROP Workshop on
"Enterprise Modelling and Ontologies for Interoperability"

Workshop at

CAiSE'05

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Advanced Information Systems Engineering
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EMOI - INTEROP'05 Workshop Organization

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Preface

This volume collects the papers of the Second Open INTEROP Workshop on Enterprise Modeling and Ontologies for Interoperability – EMOI 2005, held in Porto (Portugal), on 13 and 14 June 2005. The workshop is promoted and supported by INTEROP, a Network of Excellence of the 6th Framework Program of the European Community, aimed at creating a Europe-wide research network on the themes supporting solutions for enterprise interoperability, from the technological, to methodological, organizational, and cultural perspectives.

This second edition of EMOI Workshop series capitalizes on the experience of the previous edition, confirming the validity of its mission and scope, but at the same time refining the scientific organization and the addressed topics. As for the latter, it is possible to see the steps forward of the main research directions, as documented by the papers included in these Proceedings. We believe that a workshop should be able to present a wealth of innovative ideas, even if sometimes in a preliminary form, to allow early results to be exposed and debated. Along this line, EMOI 2005 will be of good use for the researchers and practitioners facing the considerable problems still open, specially when interoperability is addressed together with semantics and enterprise modeling.

World-class competitiveness of European enterprises, including SMEs, will strongly depend, in the future, on their ability to massively and rapidly concretise on networked dynamic organisations. New Technologies and Methodologies for Interoperability, within and between enterprises, have to emerge to radically solve the recurrent difficulties - largely due to the lack of conceptual approaches - encountered to structure and interlink enterprises' systems (information, decision, action, production).

Today, research on interoperability of enterprise applications does not exist as a defined discipline. INTEROP, has entered in its second year of activities, reorganizing its program in order to enhance the integration among the three key thematic areas:

- **Ontology** to identify interoperability semantics in enterprises
- **Enterprise Modelling** to define interoperability requirements and models
- **Architectures and Enabling technologies** to provide implementation frameworks

Within this frame, we are confident that the Second Open EMOI-INTEROP Workshop, co-located in Porto (Portugal) with CAiSE'05, will be an event capable of providing interesting suggestions, and an opportunity for the participants to fruitfully exchange interesting research problems and, sometimes, solutions.

Main topics

The topics of the workshop are mainly those coming from the three research domains indicated above: Enterprise Modeling, Ontologies and the modeling issues related to

Architectures and Platforms, in the perspective of interoperability among Enterprise Software Applications (ESA).

Furthermore, emphasizing that this is an Open Workshop, external contributions have been invited and approximately one forth of the papers comes from researchers (currently) not in INTEROP. The addressed topics belong to the main themes of the CAiSE conference, in the light and with the specificity of the workshop: Enterprise Modeling and Ontologies for Interoperability.

The CfP have invited papers addressing (but not exclusively) the following topics:

- Ontology languages and reasoning for interoperability
- Ontology management for interoperable systems
- Ontology-based Search and Discovery of digital resources
- Practical impact of ontologies on ESA interoperability
- Ontology interoperability (i.e., mapping, transformation, fusion, …)
- Requirements Engineering for ontologies, and enterprise applications
- Methodologies, Models, and Tools for ontology building
- Use of ontologies in enterprise and software application modelling
- Ontologies and Service Oriented Architectures
- Ontologies and Model Driven Development of enterprise software applications
- Enterprise Modelling Methods and Tools, in light of achieving interoperability
- Interoperable Inter-enterprise Workflow Systems
- Knowledge Management, Metadata and Ontologies
- Ontology-based semantic annotation
- Enterprise Application Analysis and semantic divergence detection
- Languages and Protocols for ontology-based interoperability
- Semantic Web and its impact to interoperability

Thirty-one papers (including both full and short ones) were submitted and carefully reviewed, allowing the Scientific Committee to build a very interesting scientific programme.

Organization

The workshop covers two days programme, giving sufficient space for a wide and open debate on new, emerging ideas to take place in the cross-fertilizing area of ontology, enterprise and software applications modelling. The workshop is organised in five sessions, suitably balanced, with different aims:

- Tutorial session: that will consist of two presentations focused on Ontologies and Business Modelling
- Full papers session, organized with highly interactive style
- Panel session
- Poster session
- Open discussion session

In concluding, I wish to remind that the Workshop had an important support from the NoE INTEROP and its Governing Committee. Furthermore, I wish to acknowledge a particular thanking to Jaelson Castro (Univ. Federal de Pernambuco, Brasil) and Ernest Teniente (Univ. Politécnica de Catalunya, Spain), who strongly supported us in all the preliminary phases and made a wonderful job for the success of the event.

Michele Missikoff
Steering Committee Coordinator

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