

Lecture Notes in Business Information Processing

144

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Enterprise Interoperability

5th International IFIP Working Conference, IWEI 2013
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Proceedings



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Volume Editors

Marten van Sinderen
Steven Bosems
University of Twente, Enschede, The Netherlands
E-mail: {m.j.vansinderen, s.bosems}@utwente.nl

Paul Oude Luttighuis
Novay, Enschede, The Netherlands
E-mail: paul.oudeluttighuis@novay.nl

Erwin Folmer
University of Twente, Enschede, The Netherlands
E-mail: erwin.folmer@gmail.com

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Preface

Several developments are expected to change the nature and affect the operation of enterprises in the near future. These developments are not new, and their influence when considered in isolation may not be decisive, but combined they represent important challenges as well as opportunities. Globalization, as one of the most important drivers of modern times, continues to influence enterprises and makes the boundaries for enterprise operation increasingly disappear. Constant and rapid change in technological capabilities, consumer demands, and legal/regulatory constraints push enterprises to become more agile and adaptive. The ability to create and offer value-added services by anyone to anyone has blurred the distinction between the consumer role and producer role, and between the employee role and employer role. One conclusion to be drawn from these developments is that the success of an enterprise more and more depends on its ability to interoperate with other enterprises, of any size and in any place. Enterprises have to function in dynamic networks, with value being created in both directions, in order to stay competitive and achieve their business goals.

The design of information, services, and processes is of key importance for enterprises in an increasingly interoperation-demanding economy and society. Information that is exchanged needs to be correctly understood at the recipient end; processes that receive, process, and send information need to do this in a way that realizes the interoperation goals; and services need to properly represent such interoperation goals to customers as well as to remote processes. This poses important challenges, including achieving societal acceptance, embedding in real-world practices, overcoming differences between collaboration partners, exploiting opportunities, adapting to change, and providing open solutions on top of various technologies.

IWEI is the International IFIP Working Conference covering all aspects of enterprise interoperability with the purpose of achieving flexible cross-organizational collaboration through integrated support at business and technical levels. It provides a forum for discussing ideas and results among both researchers and practitioners. Contributions to the following areas are highlighted: scientific foundations for specifying, analyzing, and validating interoperability solutions; architectural frameworks for addressing interoperability challenges from different viewpoints and at different levels of abstraction; maturity models to evaluate and rank interoperability solutions with respect to distinguished quality criteria; and practical solutions and tools that can be applied to interoperability problems to date.

This year's IWEI – IWEI 2013 – was held during March 27–28, 2013, in Enschede, The Netherlands, following previous events in Stockholm, Sweden (2011), Valencia, Spain (2009), Munich, Germany (2008), and Harbin, China (2012). The theme of IWEI 2013 was “Information, Services and Processes for

the Interoperable Economy and Society,” thus especially soliciting submissions and discussions related to the three previously mentioned interrelated areas for enterprise interoperability.

IWEI 2013 was organized by the IFIP Working Group 5.8 on Enterprise Interoperability in co-operation with INTEROP-VLab. The objective of IFIP WG5.8 is to advance and disseminate research and development results in the area of enterprise interoperability. IWEI provides an excellent platform for discussing the ideas that have emerged from IFIP WG5.8 meetings, and, reversely, to transfer issues identified at the conference to the IFIP community for further contemplation and investigation.

The proceedings of IWEI 2013 are contained in this volume. Out of 35 submissions, a total of 15 full papers were selected for oral presentation and publication. The selection was based on a thorough review process, in which each paper was reviewed by at least three experts in the field. The papers are representative of the current research activities in the area of enterprise interoperability. The papers cover a wide spectrum of enterprise interoperability issues, ranging from foundational theories, frameworks, architectures, methods and guidelines to applications and case studies.

The proceedings also include an invited paper and the abstracts of two keynotes. The invited paper by Lea Kutvonen, professor at the University of Helsinki, addresses the need of further maturing open service systems and inter-enterprise collaboration. The keynotes were given by Richard Mark Soley, chairman and chief executive officer of OMG, and Manfred Reichert, professor at the University of Ulm and author of the book *Enabling Flexibility in Process-Aware Information Systems*. Dr. Soley talked about the phenomenon of information explosion and the challenge it brings to enterprise interoperability. Prof. Reichert’s keynote explored collaboration and interoperability support for agile and networked enterprises.

We would like to take this opportunity to express our gratitude to all those who contributed to the IWEI 2013 working conference. We thank the authors for submitting content, which resulted in valuable information exchange and stimulating discussions; we thank the reviewers for providing useful feedback to the submitted content, which undoubtedly helped the authors to improve their work; and we thank the attendants for expressing interest in the content and initiating relevant discussions. We are indebted to IFIP TC5 as well as INTEROP-VLab for recognizing the importance of enterprise interoperability as a research area with high economic impact, and acting accordingly with the establishment of WG5.8. Finally, we are grateful to the University of Twente and Novay for hosting the working conference.

January 2013

Marten van Sinderen
Paul OudeLuttighuis
Erwin Folmer
Steven Bosems

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IWEI 2013 was organized by IFIP Working Group 5.8 on Enterprise Interoperability, in cooperation with INTEROP VLab.

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Table of Contents

Keynotes

Modeling Enterprise Interoperability: Taming the Information Explosion	1
<i>Richard Mark Soley</i>	

Collaboration and Interoperability Support for Agile Enterprises in a Networked World: Emerging Scenarios, Research Challenges, Enabling Technologies	4
<i>Manfred Reichert</i>	

Invited Paper

Enhancing the Maturity of Open Service Ecosystems and Inter-enterprise Collaborations	6
<i>Lea Kutvonen</i>	

Enterprise Service Interoperability

An Interoperability Points Based Interoperability Approach for SaaS Applications	22
<i>Yanyan Han, Lei Wu, Shijun Liu, and Xiangru Meng</i>	

Similarity Evaluation Based on Intuitionistic Fuzzy Set for Service Cluster Selection as Cloud Service Candidate	36
<i>Jorick Lartigau, Xiaofei Xu, Lanshun Nie, and Dechen Zhan</i>	

Enterprise Interoperability in Sectors

Achieving Flexible Process Interoperability in the Homecare Domain through Aspect-Oriented Service Composition	50
<i>Duc Viet Bui, Maria Eugenia Iacob, Marten van Sinderen, and Alireza Zarghami</i>	

On the Extended Clinical Workflows for Personalized Healthcare	65
<i>Milan Zdravković and Miroslav Trajanović</i>	

Cross-Organizational Business Processes Modeling Using Design-by-Contract Approach	77
<i>Malik Khalfallah, Nicolas Figay, Parisa Ghodous, and Catarina Ferreira Da Silva</i>	

Interoperability Methodology

Fit for Purpose: Toward an Engineering Basis for Data Exchange Standards	91
<i>Arnon Rosenthal, Len Seligman, M. David Allen, and Adriane Chapman</i>	

P ² AMF: Predictive, Probabilistic Architecture Modeling Framework	104
<i>Pontus Johnson, Johan Ullberg, Markus Buschle, Ulrik Franke and Khurram Shahzad</i>	

Business Model Risk Analysis: Predicting the Probability of Business Network Profitability	118
<i>Pontus Johnson, Maria Eugenia Iacob, Margus Välja, Marten van Sinderen, Christer Magnusson, and Tobias Ladhe</i>	

Interoperability for Specific Application Types

Linked Services for Enabling Interoperability in the Sensing Enterprise	131
<i>Matthias Thoma, Alexandru-Florian Antonescu, Theano Mintsi, and Torsten Braun</i>	

Business Rules Management Solutions: Added Value by Effective Means of Business Interoperability	145
<i>Martijn Zoet and Johan Versendaal</i>	

Behavioural Evaluation of Reputation-Based Trust Systems	158
<i>Sini Ruohomaa and Lea Kutvonen</i>	

Strategic and Tactic Aspects of Enterprise Interoperability

Mass Customization Oriented and Cost-Effective Service Network	172
<i>Zhongjie Wang, Xiaofei Xu, and Xianzhi Wang</i>	

Toward a Methodology to Control Interoperability Improvement Projects Execution	186
<i>Abderrahim Taoudi, Bouchaib Bounabat, and Badr Elmir</i>	

Ontology-Based Interoperability

A Panorama of the Semantic EAI Initiatives and the Adoption of Ontologies by these Initiatives	198
<i>Julio Cesar Nardi, Ricardo de Almeida Falbo, and João Paulo A. Almeida</i>	
Using Metamodels and Ontologies for Enterprise Model Reconciliation	212
<i>Sabina El Haoum and Axel Hahn</i>	
Author Index	225