
Contents

Part I Service-oriented Interoperability Approaches

Development of Dynamic Composed Services Based on the Context <i>F.J. Nieto, L. Bastida, M. Escalante and A. Gortazar</i>	3
Semantics of Interoperable and Outsourced Information Systems <i>H. Balsters and G.B. Huitema</i>	13
A Platform Independent Model for Service Oriented Architectures <i>G. Benguria, X. Larrucea, B. Elvesater, T. Neple, A. Beardsmore and M. Friess</i>	23

Part II Enterprise Interoperability Architecture

Formalizing Analysis of Enterprise Architecture <i>P. Johnson, L. Nordström and R. Lagerström</i>	35
To Adapt or Not to Adapt, That is the Question: Towards a Framework to Analyze Scenarios for Aligning Legacy and Business Components <i>W.-J. van den Heuvel</i>	45
Value object analysis and the transformation from value model to process model <i>H. Weigand, P. Johannesson, B. Andersson, M. Bergholtz, A. Edirisuriya and T. Ilayperuma</i>	55
Activity Diagram Based Process Family Architectures for Enterprise Application Families <i>A. Schnieders and M. Weske</i>	67

Part III Model-driven Approaches to Interoperability

An Integrated Model-driven Service Engineering Environment <i>J.P.A. Almeida, M.-E. Jacob, H. Jonkers, M. Lankhorst and D. van Leeuwen</i>	79
UML for Enterprise Modelling: basis for a Model-Driven Approach <i>R. Grangel, J.-P. Bourey, R. Chalmeta and M. Bigand</i>	91
Solving Problems in the Parameterisation of ERPs Using a Model-Driven Approach <i>R. Grangel, J.-P. Bourey, and A.J. Berre</i>	103
A Decentralized Broker Architecture for Collaborative Business Process Modelling and Enactment <i>B. Bauer, J.P. Müller and S. Roser</i>	115

Part IV Methods, Models, Languages and Tools for Enterprise Interoperability

Discretization of Continuous Features by Using a Kernel <i>L. González, F. Velasco, F.J. Cuberos, J.A. Ortega and C. Angulo</i>	129
Designing and Implementing Cross-Organizational Business Processes - Description and Application of a Modelling Framework <i>U. Greiner, S. Lippe, T. Kahl, J. Ziemann and F.-W. Jäkel</i>	137
Quality Criteria for Enterprise Modelling in the Context of Networked Enterprises <i>T. Knothe and R. Jochem</i>	149
The UEML Approach to Modelling Construct Description <i>A.L. Opdahl</i>	159
A Roadmap for UEML <i>A.L. Opdahl and G. Berio</i>	169
An Interoperable Platform to Implement Collaborative Forecasting in OEM Supply Chains <i>R. Poler, A. Ortiz, F.C. Lario and M. Alba</i>	179
Service- and Process-Matching – An Approach towards Interoperability Design and Implementation of Business Networks <i>D. Vanderhaeghen, D. Werth, T. Kahl and P. Loos</i>	189

Achieving Enterprise Model Interoperability Applying a Common Enterprise Metamodel <i>J. Ziemann, O. Ohren, F.-W. Jaekel, T. Kahl and T. Knothe</i>	199
--	-----

Interoperability Characterization Using Enterprise Modeling and Graph Representation <i>S. Blanc, Y. Ducq and B. Vallespir</i>	209
---	-----

Part V Semantics and Ontology-based Interoperability

Semantic Service Modeling: Enabling System Interoperability <i>S. Pokraev, D. Quartel, M.W.A. Steen and M. Reichert</i>	221
--	-----

Supporting Scientific Collaboration in a Network of Excellence Through a Semantically Indexed Knowledge Map <i>P. Velardi, A. Cucchiarelli and M. Petit</i>	231
--	-----

Mapping XML Schema to OWL <i>N. Ancic, N. Ivezic and Z. Marjanovice</i>	243
--	-----

Extending OWL-S to Solve Enterprise Application Integration Issues <i>S. Izza, L. Vincent, P. Burlat, P. Lebrun and H. Solignac</i>	253
--	-----

Practical Issues in Ontology Modeling: The Case of Defence Conceptual Modeling Framework-Ontology <i>A. De Nicola, V. Kabilan, M. Missikoff and V. Mojtahed</i>	265
--	-----

Digital Resource Discovery: Semantic Annotation and Matching Techniques <i>D. Bianchini, S. Castano, F. D'Antonio, V. De Antonellis, M. Harzallah, J. David, M. Missikoff and S. Montanelli</i>	275
--	-----

A Model for Assessing the Impact of Enterprise Application Interoperability in the Typical European Enterprise <i>Y. Charalabidis, D. Askounis and G. Gionis</i>	287
---	-----

Ontology-based Transformations for Achieving Interoperability in Aml <i>S. Erofeev and X. Larrucea</i>	297
---	-----

Part VI Interoperability of Decision Models

A Decentralized Approach for Inter-Enterprise Business Process Collaboration <i>X. Qiao, J. Wei and T. Huang</i>	309
---	-----

Towards a Conceptualization of Decisional Interoperability <i>N. Daclin, D. Chen and B. Vallespir</i>	321
--	-----

Interoperability and Synergism of Decision, Information and Flexibility to Improve Performances of Enterprise Systems: KM Implications <i>S. Wadhwa, A. Saxena and Y. Ducq</i>	331
---	-----

Part VII Inter-organisational Interoperability

Service Typing in Collaborative Systems <i>T. Ruokolainen and L. Kutvonen</i>	343
--	-----

Decentralized Metadata Development for Open B2B Electronic Business <i>F. van Blommestein</i>	355
--	-----

The TrustCoM Approach to Enforcing Agreements between Interoperating Enterprises <i>M. Wilson, A. Arenas, D. Chadwick, T. Dimitrakos, J. Doser, P. Giambiagi, D. Golby, C. Geuer-Pollman, J. Haller, S. Ketil, T. Mahler, L. Martino, X. Parent, S. Ristol, J. Sairamesh, L. Schubert and N. Tuptuk</i>	365
--	-----

Organisational Inter-operability: Towards Enterprise Urbanism <i>F. Biennier and H. Mathieu</i>	377
--	-----

An Integrated Approach for Organizational Data Interoperability <i>J. Sampson, C. Veres and M. Lanzenberger</i>	387
--	-----

Managing the Lifecycle of Cross-organizational Collaborative Business Processes <i>P. Walter, D. Werth and P. Loos</i>	397
---	-----

Interoperability through Model-based Generation: The Case of the Collaborative Information System (CIS) <i>J. Touzi, J.-P. Lorré, F. Bénaben and H. Pingaud</i>	407
--	-----

A Natural Basis for Interoperability <i>N. Rossiter, M. Heather and D. Nelson</i>	417
--	-----

Designing a Modular Infrastructure for Exploratory Integration of Interoperability Approaches <i>N. Mehandjiev, P. Grefen, I.D. Stalker, R. Eshuis, K. Fessl and G. Weichart</i>	427
---	-----

Part VIII Interoperability of Manufacturing Enterprise Applications

Supply Chain Management System and Interoperability through EAI Platform <i>L. Zhou, X. Xu, T. Huang and S. Deng</i>	441
Enhancing Interoperability of Manufacturing Software Units Using Capability Profiling <i>W. Yu, M. Matsuda and Q. Wang</i>	451
Towards a Product Oriented Process Modelling for Enterprise Applications Synchronisation and Interoperability <i>S. Baïna, H. Panetto and G. Morel</i>	461

Part IX Business Models Interoperability

Developing Interoperable Business Processes Using Web Services and Policies <i>Z. Maamar, D. Benslimane, G.K. Mostéfaoui, S. Sattanathan and C. Ghedira</i> ...	475
Talea: An Extensible Framework for E-Business Integration <i>G. Levi, A. Vagliengo and A. Goy</i>	489
A Complexity Based Approach to Collaborations in the Tool and Die Industry <i>G. Schuh, A. Sauer and S. Döring</i>	499
Modelling Inter-organizational Workflow Security in a Peer-to-Peer Environment <i>A. Nowak, M. Hafner, M. Breu and R. Breu</i>	509
Enterprise Software with Half-Duplex Interoperations <i>M. Johnson</i>	521
e-Proc a TO BE Scenario for Business Interoperability <i>R. Costa, O. Garcia, M.J. Nuñez, P. Maló and R. Goncalves</i>	531

Part X Standards for Interoperability

ICT Standards Development – Finding the Best Platform <i>K. Jakobs</i>	543
Experts on Causes of Incompatibility between Standard-Compliant Products <i>T. Egyedi</i>	553
Achieving Influence on Standardisation Bodies <i>E. Söderström</i>	565

Interoperability in Healthcare: Standards for the French Project of a National
Personal Medical Card
P. Lagouarde, B. Le Blanc and B. Vallespir 575

Index of Contributors 585

Enterprise Interoperability

New Challenges and Approaches

Doumeingts, G.; Müller, J.; Morel, G.; Vallespir, B. (Eds.)

2007, XVI, 587 p., Hardcover

ISBN: 978-1-84628-713-8