

# **2010 14th IEEE International Enterprise Distributed Object Computing Conference**

**(EDOC 2010)**

**Vitoria, ES, Brazil  
25 – 29 October 2010**



**IEEE Catalog Number: CFP10107-PRT  
ISBN: 978-1-4244-7966-5**

# 2010 14th IEEE International Enterprise Distributed Object Computing Conference

## *EDOC 2010*

# Table of Contents

<b>Message from General Chair</b> .....	viii
<b>Message from Program Co-chairs</b> .....	x
<b>Organizing Committee</b> .....	xii
<b>Steering Committee</b> .....	xiii
<b>Program Committee</b> .....	xiv
<b>Additional Reviewers</b> .....	xvii
<b>Keynote Abstracts</b> .....	xix

---

### **Enterprise Architecture**

IT Portfolio Valuation - Using Enterprise Architecture and Business Requirements Modeling.....	3
<i>Dick Quartel, Maarten W.A. Steen, and Marc Lankhorst</i>	
Enterprise Architecture Meta Models for IT/Business Alignment Situations .....	14
<i>Jan Saat, Ulrik Franke, Robert Lagerström, and Mathias Ekstedt</i>	
Supporting Change Propagation in the Evolution of Enterprise Architectures .....	24
<i>Hoa Khanh Dam, Lam-Son Lê, and Aditya Ghose</i>	

### **Services and Enterprise Architecture**

An EA-approach to Develop SOA Viewpoints .....	37
<i>Matthias Postina, Jörn Trefke, and Ulrike Steffens</i>	
What is Different in Quality Management for SOA? .....	47
<i>Dirk Voelz and Andreas Goeb</i>	
Hybrid Probabilistic Relational Models for System Quality Analysis .....	57
<i>Per Närman, Markus Buschle, Johan König, and Pontus Johnson</i>	

## **Business Process**

Typed Business Process Specification .....	69
<i>Colin Atkinson, Dirk Draheim, and Verena Geist</i>	
An Incremental Process Mining Approach to Extract Knowledge from Legacy Systems .....	79
<i>André Cristiano Kalsing, Gleison Samuel do Nascimento, Cirano Iochpe, and Lucinéia Heloisa Thom</i>	
Process Viewing Patterns .....	89
<i>David Schumm, Frank Leymann, and Alexander Streule</i>	
A Framework for Service Outsourcing Using Process Views .....	99
<i>Rik Eshuis and Alex Norta</i>	

## **Ontologies and Data Management**

An Ontology-Based Approach for Semantic Integration .....	111
<i>Rodrigo Fernandes Calhau and Ricardo de Almeida Falbo</i>	
A Model-Driven Approach for Designing E-Services Using Business Ontological Frameworks .....	121
<i>Jelena Zdravkovic and Tharaka Ilayperuma</i>	
Enterprise Application-Specific Data Management .....	131
<i>Jens Krueger, Martin Grund, Alexander Zeier, and Hasso Plattner</i>	

## **Model Transformation and Model Management**

Using Aspect-Oriented Programming to Trace Imperative Transformations .....	143
<i>Bastien Amar, Hervé Leblanc, Bernard Coulette, and Clémentine Nebut</i>	
Can Graph Transformation Make Aspect Languages for BPEL Redundant? .....	153
<i>Roy Grønmo</i>	
Comparing State- and Operation-Based Change Tracking on Models .....	163
<i>Maximilian Koegel, Markus Herrmannsdoerfer, Yang Li, Jonas Helming, and Joern David</i>	

## **Business Rules and Constraints**

A Componentized Architecture for Externalized Business Rules .....	175
<i>Mukundan K. Agaram and Brenda Laird</i>	
Towards a Flexible Service Integration through Separation of Business Rules .....	184
<i>Camlon H. Asuncion, Maria-Eugenia Iacob, and Marten J. van Sinderen</i>	
Modeling Service Choreographies with Rule-Enhanced Business Processes .....	194
<i>Milan Milanović and Dragan Gašević</i>	
OCL Constraints Generation from Natural Language Specification .....	204
<i>Imran Sarwar Bajwa, Behzad Bordbar, and Mark G. Lee</i>	

## **Runtime Control and Adaptability of Enterprise Collaborations**

Runtime Adaptability through Automated Model Evolution .....	217
<i>Adina Mosincat, Walter Binder, and Mehdi Jazayeri</i>	
Cooperative Runtime Monitoring of LTL Interface Contracts .....	227
<i>Sylvain Hallé</i>	
Selection of Business Process for Autonomic Automation .....	237
<i>Luciano D. Terres, José A. Rodrigues Nt, and Jano Moreira de Souza</i>	
IT Support Conversation Manager: A Conversation-Centered Approach and Tool for Managing Best Practice IT Processes .....	247
<i>Hamid R. Motahari-Nezhad, Claudio Bartolini, Sven Graupner, Sharad Singhal, and Susan Spence</i>	
<b>Author Index</b> .....	257