

# Enterprise Modelling and Information Systems Architectures

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Special Issue on Label Quality Assurance for  
Business Process Models



German Informatics  
Society

**The participants ...**

- ... will get an overview of approaches to enterprise modelling.
- ... will learn how to develop and use enterprise models for different purposes – including managerial analyses and software development.
- ... will get to know a tool environment for enterprise modelling.
- ... will be presented with an approach to method engineering that is based on languages for enterprise modelling.
- ... will meet students and researchers from Germany, Sweden, Poland, Austria, Australia, Mexico, USA, India and all over the world.
- ... will experience the cultural highlights of the Ruhr Metropolitan Area.
- ... will have a lot of fun with Professor Frank and his team.

For further information on the International Summer School Enterprise Modelling

[www.is-link.org/summer](http://www.is-link.org/summer)

## Enterprise Modelling International Summer School 2011 in Essen/Germany with Professor Ulrich Frank June 26<sup>th</sup> – July 8<sup>th</sup>



Open your mind, embrace the difference.

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## Editorial Preface

Event-Driven Process Chains (EPCs) are still a widely used notation for modelling business processes. In 1997, the working group on 'Formalization and Analysis of Event-Driven Process Chains' was founded as discussion meeting for researchers and practitioners. Five years later, the 'informal' working group was transformed into the GI working group 'Business Process Management with Event-Driven Process Chains (WI-EPK)'.

In the first years, the discussions at the EPC workshops were characterised by the formal control flow analysis and extensions of the EPC notation e.g. for reference models. The workshop 'EPK 2009' added the interesting subject, how the textual content of the symbols (labels of functions and events) can be analysed and checked and thus the quality of business process models be increased. The results can be directly transferred to other modelling languages for business processes.

This special issue features extended contributions based on selected papers originally presented at the 8th Workshop 'Business Process Management with Event-Driven Process Chains' (EPK 2009). The workshop took place in November 2009 in Berlin and was a 2-day event featuring 12 presentations from academia and practise. The selected papers were thoroughly reviewed by at least two experts resulting in the following accepted contributions:

1. The contribution by *Volker Gruhn and Ralf Laue* discusses the detection of common errors in Event-Driven Process Chains by label analysis. Error patterns that can frequently found in EPCs can be detected by using a pattern-matching approach for the labels of events and functions in EPCs. The pattern-based label analysis has been integrated in the open-source modelling tool *bflow\** *Toolbox* and has been used to analyse a repository of over 1200 EPCs.
2. In their paper on recognising activity labeling styles in business process models, the authors *Henrik Leopold, Sergey Smirnov and Jan Mendling* propose an algorithm for detecting different labeling styles in a process repository. As a result spurious labels can be identified and suggested for correction. For the evaluation of the algorithm the recognition of label styles in the SAP Reference Model by the algorithm and by human experts is compared.
3. The paper by *Nicolas Peters and Matthias Weidlich* addresses the use of process model collections for automatic generation of glossaries for process modelling support. The presented algorithm for the glossary generation, which takes also structural and control flow aspects into account, is evaluated within two case studies, a glossary based on the SAP Reference Model and a glossary for a Health Insurance Company.

This special issue is expanded by a contribution by Ulrich Frank on the conception of a presentation development and management system, which has run through the regular review process of the EMISA Journal.

I would like to thank the reviewers for their valuable feedback, which helped us to compile this high-quality special issue.

**Frank Rump**

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