International Workshop on

Domain Engineering

DE@CAiSE'2010

Hammamet, Tunisia, 8 June 2010

In conjunction with the CAISE'10
22nd International Conference on Advanced Information Systems Engineering

Workshop Proceedings

Editors

DE@CAiSE'2010 Chairs

Iris Reinhartz-Berger
University of Haifa, Israel

Arnon Sturm
Ben Gurion University of the Negev, Israel

Yair Wand
University of British Columbia, Canada

Jorn Bettin
Sofismo, Switzerland

Tony Clark
Thames Valley University, UK

Sholom Cohen
Software Engineering Institute, Carnegie Mellon University, USA

CAiSE'10 Workshop Chairs

Jolita Ralyté
University of Geneva, Switzerland

Pierluigi Plebani
Politecnico di Milano, Itally

Workshop DE@CAiSE'2010

Proceedings

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Preface

Domain Engineering, also referred to as product line engineering, deals with developing reusable assets that can be adjusted and adapted to families of applications, rather than to particular systems. A domain in this context can be defined as an area of knowledge that uses common concepts for describing phenomena, requirements, problems, capabilities, and solutions. The purpose of domain engineering is to identify, model, construct, catalog, and disseminate artifacts that represent the commonalities and differences within a domain, as well as to provide mechanisms, techniques, and tools to reuse these artifacts in the development of particular applications and systems.

Although being applicable to different engineering disciplines, domain engineering methods and domain specific languages (DSL) receive nowadays special attention from the information systems and software engineering communities who deal with artifact reuse, application validation, and domain knowledge representation: different kinds of reuse mechanisms, such as customization, configuration, specialization, and template instantiation, are introduced; ways to capture and manage variability are developed; and guidelines for creating consistent and correct applications and systems in certain domains are emerged. The aims of all these up-and-coming methods and techniques is to help reduce time-to-market, product cost, and projects risks on one hand, and help improve product quality and performance on a consistent basis on the other hand.

As an interdisciplinary field, domain engineering deals with various topics such as conceptual foundations, semantics of domains, development and management of domain assets, lifecycle support, variability management, consistency validation, and theoretical and empirical evaluation of domain engineering techniques. The purpose of this series of workshops is to bring together researchers and practitioners in the area of domain engineering in order to identify possible points of synergy, common problems and solutions, and visions for the future of the area. In particular, the specific workshop focuses on the use of domains for improving development processes in these domains.

The workshop will start with an invited talk entitled "Domain Engineering: What is it?" and given by Arne Sølvberg. This talk will be followed by 4 accepted papers dealing with domain semantics and profile-based development:

Domain Semantics:

1. Wolf Fischer and Bernhard Bauer, Domain Dependent Semantic Requirement Engineering.

Profile-based Development:

2. Jugurta Lisboa-Filho, Gustavo Breder Sampaio, Filipe Ribeiro Nalon, and Karla A. de V. Borges, A UML Profile for Conceptual Modeling in GIS Domain.
3. Saoussen Rekhis, Nadia Bouassida, Rafik Bouaziz, Bruno Sadeg. A UML-Profile for domain specific patterns: Application to real-time

4. Oded Kramer and Arnon Sturm, Bridging Programming Productivity, Expressiveness, and Applicability: a Domain Engineering Approach.

Iris Reinhartz-Berger, Arnon Sturm, Yair Wand,
Jorn Bettin, Tony Clark, and Sholom Cohen
DE@CAiSE'2010 Organizers

For more information on the workshop, see our website http://www.domainengineering.org/, or contact Iris Reinhartz-Berger (iris@mis.haifa.ac.il) or Arnon Sturm (sturm@bgu.ac.il)

Organization

DE@CAiSE'10 Organizers

Iris Reinhartz-Berger University of Haifa, Israel	Arnon Sturm Ben Gurion University of the Negev, Israel	Yair Wand, University of British Columbia, Canada
Jorn Bettin Sofismo, Switzerland	Tony Clark Thames Valley University, UK	Sholom Cohen, Software Engineering Institute, Carnegie Mellon University, USA

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