Janis Osis and
Oksana Nikiforova (Eds.)

Model-Driven Architecture and
Modeling Theory-Driven
Development

Proceedings of the
2nd International Workshop on
Model-Driven Architecture and Modeling
Theory-Driven Development
MDA & MTDD 2010

In conjunction with ENASE 2010
Athens, Greece, July 2010

SciTePress
Portugal
# Table of Contents

Foreword .......................................................... iii

Workshop Chairs .................................................... v

Invited Speakers ..................................................... v

Program Committee .................................................. v

## Full Papers

Object Interaction as a Central Component of Object-oriented System Analysis .......................... 3

*Oksana Nikiforova*

Platform Independent Model Development by Means of Topological Class Diagrams .................... 13

*Janis Osis and Uldis Donins*

Computation Independent Models: Bridging Problem and Solution Domains ............................. 23

*Erika Asnina and Janis Osis*

Transforming Textual Use Cases to a Computation Independent Model ........................................ 33

*Janis Osis and Armands Šlihte*

Generation Mechanisms in Graphical Template Language ..................................................... 43

*Elina Kalnina, Audris Kalnins, Edgars Celms, Agris Sostaks and Janis Iraids*

Towards a Structure for the Computation Independent Model .................................................. 53

*Kherraf Samir, Alexandre Moïse, Éric Lefebvre and Witold Suryn*

An Outline of Conceptual Framework for Certification of MDA Tools ........................................ 60

*Antons Cernickins, Oksana Nikiforova, Kristaps Ozols and Janis Sejans*
Transformations of Software Process Models to Adopt Model-Driven Architecture .......................... 70
Vladimirs Nikulsins

Realizing Use Cases for Full Code Generation in the Context of fUML ........................................ 80
Ioan Lazar, Simona Motogna, Bazil Pârv and Codrut-Lucian Lazar

Short Papers

Efficiency Requirements in PIM to PSM Transformations ... 93
Dariusz Gall

A New Application of Domain Specific Modeling Towards Implementing an Early Warning Service .... 99
Syed Imran, Ioannis Dokas, John Feehan and Francin Foping

Author Index ........................................... 105