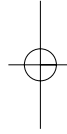
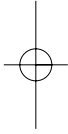


TOP or CAP
END

TOP or CAP
END

SIEMENS

ICSE 2008
LEIPZIG
Co-located Workshops





Compilation E-Proceedings of the Thirteenth
International Conference on Software Engineering
Co-located workshops
 May 10-18, 2008 ♦ Leipzig, Germany

Main Page	
ICSE'08 Organization	
APSO'08	PROMISE'08
AST'08	ROA'08
BiPi'08	SAM'08
CHASE'08	SDG'08
CVSM'08	SDSOA'08
EA'08	SEAMS'08
GRaMoT'08	SEESE'08
IWAAPF'08	SESS'08
IWMSE'08	SHARK'08
LMSA'08	ULSSIS'08
MiSE'08	WEUSE IV
MSR'08	WoSQ'08
Author Index	

These E-proceedings are a cross-platform medium which allows Windows and Mac users to share the same directory structure and access a common set of files. To navigate this E-proceedings a graphical web browser is required. The full-text content on this disk is in Adobe PDF format. A version of Adobe Acrobat Reader is required to view the content. Please be sure you have the latest version and updates of [Adobe Acrobat Reader](#) installed.



Copyright © 2008 by the Association for Computing Machinery, Inc. (ACM). Permission to make digital or hard copies of portions of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyright for components of this work owned by others than ACM must be honored. Abstracting with credit is permitted. To copy otherwise, to republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee. Request permission to republish from: Publications Dept., ACM, Inc. Fax +1 (212) 869-0481 or permissions@acm.org

For other copying of articles that carry a code at the bottom of the first or last page, copying is permitted provided that the per-copy fee indicated in the code is paid through the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

Notice to Past Authors of ACM-Published Articles

ACM intends to create a complete electronic archive of all articles and/or other material previously published by ACM. If you have written a work that has been previously published by ACM in any journal or conference proceedings prior to 1978, or any SIG Newsletter at any time, and you do NOT want this work to appear in the ACM Digital Library, please inform permissions@acm.org, stating the title of the work, the author(s), and where and when published.

ISBN: 978-1-60558-029-6

Additional copies may be ordered prepaid from:
 ACM Order Department
 General Post Office
 P.O. Box 30777, New York, NY 10087-0777

ACM Order Number 592081



Foreword

Welcome to the 2nd *International Workshop on Systems Development in SOA Environments — SDSOA 2008*. The overall goal of this workshop is to provide a forum for a concerted effort to develop a long-term community-wide research agenda for the successful development of service-oriented systems. We hope to bring together researchers and practitioners in this area that represent various strands of research activity and practical methodologies, so that we can collaboratively identify open research issues and continue addressing SOA research issues of interest to the community.

During 2007, the Software Engineering Institute, in collaboration with a team of researchers, developed a taxonomy of SOA research topics that would improve SOA adoption and the development of service-oriented systems. The taxonomy is divided into research issues pertaining to the business, engineering and operation aspects of service-oriented systems, plus a set of cross-cutting aspects. A specific objective of this workshop is to identify new challenges that can be used to evolve the research agenda.

We received 20 papers from Africa, Australia, Canada, Europe and the United States. These papers covered important SOA research topics such as dynamic service composition; designing SOA-based systems for qualities such as usability, reusability and performance; runtime monitoring and adaptation of SOA-based systems; application of known software engineering methodologies in an SOA context; and examples of how SOA can support business process management (BPM). The program committee accepted 14 of these papers, representative of the challenges related to service-oriented systems development. Many thanks to all the authors that submitted position papers for the workshop, as well as the program committee for their thorough reviews.

We hope that you will find the selected papers interesting and that they trigger ideas for future work and research in service-oriented systems development.

Kostas Kontogiannis

National Technical University of Athens, Greece

Grace A. Lewis

Software Engineering Institute, USA

Marin Litoiu

IBM CAS Toronto, Canada

Dennis B. Smith

Software Engineering Institute, USA



Compilation E-Proceedings of the Thirteenth
International Conference on Software Engineering
Co-located workshops
 May 10-18, 2008 ✦ Leipzig, Germany

SDSOA'08 Proceedings Table of Contents

Main Page	
APSO'08	PROMISE'08
AST'08	ROA'08
BiPi'08	SAM'08
CHASE'08	SDG'08
CVSM'08	SDSOA'08
EA'08	SEAMS'08
GRaMoT'08	SEESE'08
IWAAPF'08	SESS'08
IWMSE'08	SHARK'08
LMSA'08	ULSSIS'08
MiSE'08	WEUSE IV
MSR'08	WoSQ'08
Author Index	



[\(Return to Top\)](#)

[\(Return to Top\)](#)

Foreword

Kostas Kontogiannis (*National Technical University of Athens*)
 Grace A. Lewis (*Software Engineering Institute*)
 Marin Litoiu (*IBM CAS Toronto*)
 Dennis B. Smith (*Software Engineering Institute*)

SDSOA'08 Workshop Organization

Opening Talk

A Research Agenda for Service-Oriented Architecture (Page 1)
 Kostas Kontogiannis (*National Technical University of Athens*)
 Grace A. Lewis (*Software Engineering Institute*)
 Dennis B. Smith (*Software Engineering Institute*)

Session 1: Dynamic Service Composition

Towards a Methodology for Lifelong Validation of Service Compositions (Page 7)
 Domenico Bianculli (*University of Lugano*)
 Carlo Ghezzi (*Politecnico di Milano*)

Service Oriented System for Business Cooperation (Page 13)

Anca Daniela Ionita (*SIVICO*)
 Alessandra Catapano (*ELSAAGDATAMAT*)
 Stelian Giuroiu (*SIVICO*)
 Monica Florea (*SIVICO*)

Context-Aware Service Composition: A Methodology and a Case Study (Page 19)

Leire Bastida (*European Software Institute*)
 Fco. Javier Nieto (*European Software Institute*)
 Roberto Tola (*Centro Ricerche Fiat*)

Session 2: Design for System Qualities

SOA Service Reuse by Design (Page 25)

Asit Dan (*IBM Software Group*)
 Robert D. Johnson (*IBM Software Group*)
 Tony Carrato (*IBM Software Group*)

Usability Evaluation for Enterprise SOA APIs (Page 29)

Jack Beaton (*Carnegie Mellon University*)
 Brad A. Myers (*Carnegie Mellon University*)
 Jeffrey Stylos (*Carnegie Mellon University*)
 Sae Young Jeong (*Carnegie Mellon University*)
 Yingyu Xie (*Carnegie Mellon University*)

Business Transformation to SOA: Aspects of the Migration and Performance and QoS Issues (Page 35)

Liam O'Brien (*NICTA*)
 Paul Brebner (*NICTA*)
 Jon Gray (*NICTA*)

Session 3: Runtime Monitoring and Adaption

Towards Process-based Composition of Self-Managing Service-Oriented Systems (Page 41)

Min'an Tan (*University of New South Wales and NICTA*)
 Yan Liu (*NICTA*)
 Liming Zhu (*NICTA*)

Scalable Adaptive Web Services (Page 47)

Marin Litoiu (*IBM CAS Toronto and IBM USA Somers*)
 Mircea Mihaescu (*IBM USA Somers*)
 Bogdan Solomon (*University of Ottawa, SITE*)
 Dan Ionescu (*University of Ottawa, SITE*)

Session 4: Application of Software Engineering Methodologies in an SOA Context

Research Challenges in the Tension Between Features and Services (Page 53)

Sven Apel (*University of Passau*)
 Christian Kästner (*University of Magdeburg*)

Christian Lengauer (*University of Passau*)

Understanding Features in SOA: Some Experiences from Distributed Systems (Page 59)

Norman Wilde (*University of West Florida*)

Sharon Simmons (*University of West Florida*)

Michael Pressel (*Northrop Grumman Corporation*)

Joseph Vandeville (*Northrop Grumman Corporation*)

Can Design Pattern Detection Be Useful for Legacy System Migration Towards SOA? (Page 63)

Francesca Arcelli (*Università degli Studi di Milano-Bicocca*)

Christian Tosi (*Università degli Studi di Milano-Bicocca*)

Marco Zanoni (*Università degli Studi di Milano-Bicocca*)

Session 5: SOA Supporting Business Process Management (BPM)

Multi-Layer Perspectives and Spaces in SOA (Page 69)

Adrian Mos (*INRIA Grenoble*)

Alain Boulze (*INRIA Grenoble*)

Samuel Quaireau (*INRIA Grenoble*)

Claude Meynier (*EBM Websourcing*)

Exploiting SOA within eMaintenance (Page 75)

Ramin Karim (*Luleå University of Technology*)

Mira Kajko-Mattsson (*Stockholm University and Royal Institute of Technology*)

Peter Söderholm (*Luleå University of Technology*)

2nd International Workshop on Systems Development in SOA Environments—Workshop Organization

General Chairs: Kostas Kontogiannis (*National Technical University of Athens, Greece*)
Grace A. Lewis (*Software Engineering Institute, USA*)
Marin Litoiu (*IBM CAS Toronto, Canada*)
Dennis B. Smith (*Software Engineering Institute, USA*)

Program Committee: Mike Bauer (*University of Western Ontario, Canada*)
Boualem Benatallah (*University of New South Wales, Australia*)
Fabio Casati (*University of Trento, Italy*)
Asit Dan (*IBM Software Group, USA*)
Gerald C. Gannod (*Miami University of Ohio, USA*)
Robert Johnson (*IBM Software Group, USA*)
Anna Liu (*Microsoft Corporation, Australia*)
Nicolas Lopez (*University of Los Andes, Colombia*)
Hanan Lutfiyya (*University of Western Ontario, Canada*)
John Mylopoulos (*University of Toronto, Canada*)
Liam O'Brien (*NICTA, Australia*)
Stefan Schuster (*European Software Institute, Spain*)
Tarja Systä (*Tampere University of Technology, Finland*)
Ladan Tahvildari (*University of Waterloo, Canada*)
Yannis Vassiliou (*National Technical University of Athens, Greece*)
Chris Verhoef (*Free University, The Netherlands*)

Additional Reviewers: Paul Brebner
Peter Kampstra
Dennis Joosten
Adam Vanya
Niels Veerman