# International Workshop on SOA Migration and Evolution (SOAME 2010)

Grace Lewis
Software Engineering Institute at
Carnegie Mellon University
Pittsburgh, PA, USA
glewis@sei.cmu.edu

Filippo Ricca
DISI, Universitá di Genova,
Genova, Italy
filippo.ricca@disi.unige.it

Andreas Winter
Software Engineering
University of Oldenburg
Oldenburg, Germany
winter@informatik.uni-oldenburg.de

Ulrike Steffens
Matthias Postina
Software Engineering for
Business Information Systems
OFFIS - Institute for Information Technology
Oldenburg, Germany
ulrike.steffens|matthias.postina@offis.de

***Abstract*—For many enterprises, introduction and maintenance of service orientation is still a daunting task and there is often no distinct idea of how to approach respective projects.**

**Especially the migration of legacy systems functionality into a new service-oriented environment - the SOA enabling - is key to the success of SOA projects. Another challenge arises for enterprises having SOA already introduced. Here, the focus lies on maintaining and evolving existing SOA environments - SOA maintenance.**

**The SOAME workshop (soame2010.eu) will bring together researchers and practitioners in these areas to present and discuss state-of-the-art techniques as well as real-world experiences.**

## I. Workshop Description

In recent years, the perception of service-oriented architecture (SOA) has undergone a remarkable change. Today, SOA is no longer considered a technical solution combining web services over standardized interfaces and protocols. Instead, SOA is conceived as a conceptual approach in order to align enterprise IT systems with the business strategies and processes they are supposed to support. The notion of "service" as the lowest common denominator of business and IT seems to offer an adequate starting point for consolidating IT application landscapes according to business needs ([1], [2]). Combining services in ever new service choreographies promises a flexible, easily adaptable and thus sustainable IT support.

SOA success stories in large enterprises indicate that service orientation is an effective way to integrate legacy systems as reusable building blocks into a flexible enterprise architecture. Forward engineering approaches like in [2] have to be complemented by reengineering approaches like in [3]. Process engines have been installed on the top of this legacy layer and build up a flexible framework for service orchestration and process development. Content (services and processes) is growing fast in such environments, so evolution and maintenance of service-oriented architectures will be the challenge of the near future [4].

However, especially for small and medium sized enterprises, SOA is a far cry from being already implemented as mainstream. So strategies for initiating SOA in enterprises are still subject of interest. Reengineering and migration approaches have to be considered when legacy systems functionality will be made available to be used inside workflow-engines. The SOAME workshop focuses on both subjects – SOA enabling by reusing legacy systems and SOA maintenance and evolution.

## II. Goals and Objectives

The SOAME workshop will bring together researchers and practitioners in the areas of SOA enabling and SOA maintenance to present and discuss state-of-the-art techniques as well as real-world experiences to stimulate further SOA engineering research activities. We aim to encourage the development of a broad community of interest in this area.

## III. Topics for the Workshop

According to the *SOA Research Taxonomy* presented in [4] and developed in the *International Workshops on a Research Agenda for Maintenance and Evolution of Service-oriented Systems (MESOA)* [1] the SOAME 2010 workshop[2] will focus on the engineering branch of the taxonomy to consolidate SOA engineering activities and elaborate further on the research agenda for this branch.

The MSI workshop series combined *MDD, SOA and IT-Management* [3] and workshop results are indicating common ground in the fields of MDD and SOA.

In a nutshell, the MESOA workshop series has developed the research agenda for maintenance and evolution of service-oriented systems, whereas the MSI workshop series has identified the need for model-driven techniques for SOA migration

[1] see www.sei.cmu.edu/workshops/mesoa/2009/
[2] see www.soame2010.eu
[3] see www.msi2009.de

and evolution. SOAME 2010 wants to condense the results of both areas and discuss them on a more technical basis.

The scope of SOAME 2010 includes, but is not restricted to the following topics:

**SOA Migration:**

- Tools and methods for SOA migration
- Service and service component identification in legacy systems
- Service component extraction by reverse engineering
- Migration process models, roadmaps and transition architectures
- Model-driven techniques for SOA migration
- Appraisal of migration potential of legacy systems
- Consideration of standard software in SOA migration
- Design principles and patterns for SOA migration
- Experience reports on SOA migration

**SOA Maintenance and Evolution**

- Tools and methods SOA maintenance and evolution
- Tools for Service Lifecycle Management
- Change management in SOA environments
- Reference Models for SOA definition and evolution
- Process Models for SOA evolution
- Evolution Patterns for SOA evolution
- Ensuring service level agreements
- Experience reports on SOA evolution

## IV. Submission

If no general CSMR Workshop reader is provided, it is planned to publish SOAME papers in a separate volume (with ISBN). All papers must be in English and are to be submitted online in Adobe Acrobat (PDF) format via the EasyChair submission site. They have to adhere to the Springer LNCS format. Full papers may not exceed 10 pages. Exceeding submissions will be rejected without review.

### A. Dates

| | |
|---|---|
| **Abstract Submission** | January 29, 2010 |
| **Submission Deadline** | February 05, 2010 |
| **Author Notification** | February 19, 2010 |
| **Camera-ready paper submission** | February 26, 2010 |
| **Workshop** | March 15, 2010 |

## V. Organization

The SOAME 2010 workshop will be held on March 15, 2010, right before the CSMR 2010 main conference as a full day workshop. It is intended to invite a renown speaker [4] to give an invited talk at SOAME 2010 and to also participate in the afternoon panel discussion on future tends in SOA evolution.

With SOAME 2010, we would like to organize a workshop in the real sense of the word. Thus, the event will not primarily focus on mere paper presentations but will hopefully supplement them with many lifely moderated discussions around the subject of SOA migration and evolution.

[4]subject to the final approval of sponsorship

## VI. Workshop Program Committee

- Ali Arsanjani, IBM Global Services, Maharishi University of Management, Fairfield, USA.
- João Paulo A. Almeida, Federal University of Esprito Santo, Brazil.
- Egidio Astesiano, DISI, Universitá di Genova, Italy.
- Leire Bastida, European Software Institute, Spain.
- Andrea De Lucia, Universitá di Salerno, Italy.
- Serge Demeyer, University of Antwerp , Belgium.
- Erdogan Dogdu, TOBB University of Economics and Technology, Turkey.
- Rainer Gimnich, IBM Frankfurt, Germany.
- Shihong Huang, Florida Atlantic University, USA.
- Rainer Koschke, University Bremen, Germany.
- Kostas Kontogiannis, National University Athens, Greece.
- Patricia Lago, VU University Amsterdam, The Netherlands.
- Marc Lankhorst, Novay, The Netherlands.
- Alessandro Marchetto, FBK-irst, Italy.
- Christof Momm, FZI, Germany.
- Ralf Reussner, University of Karlsruhe, Germany.
- Giuseppe Scanniello, Universitá Della Basilicata, Italy.
- Sibylle Schupp, Technical University Hamburg-Harburg, Germany.
- Dirk Slama, Inubit AG, Germany.
- Mike Smit, University of Alberta, Canada.
- Harry Sneed, Anecon GmbH, Austria.
- Eleni Stroulia, University of Alberta, Canada.
- Werner Teppe, Amadeus Germany, Germany.
- Norman Wilde, University of West Florida, USA.
- Johannes Willkomm, sd+m Research, Germany.
- Joost Visser, SIG Amsterdam, The Netherlands.

## References


[1] G. Engels, A. Hess, B. Humm, O. Juwig, M. Lohmann, J.-P. Richter, M. Voß, and J. Willkomm, *Quasar Enterprise: Anwendungslandschaften serviceorientiert gestalten*, 1st ed. Heidelberg: dpunkt.Verl., 2008.

[2] A. Arsanjani, S. Ghosh, A. Allam, T. Abdollah, S. Ganapathy, and K. Holley, "SOMA: A method for developing service-oriented solutions," *IBM Systems Journal*, vol. 47, no. 3, pp. 377–396, 2008.

[3] T. Horn, A. Fuhr, and A. Winter, "Towards applying model-transformations and -queries for soa-migration," in *MSI 2009: Proceedings of the 3rd Workshop on MDD, SOA and IT Management*. Berlin: Gito, 2009, pp. 81–95.

[4] K. Kontogiannis, G. A. Lewis, and D. B. Smith, "A research agenda for service-oriented architecture," in *SDSOA '08: Proceedings of the 2nd international workshop on Systems development in SOA environments*. New York, NY, USA: ACM, 2008, pp. 1–6.