1. WORKSHOP OVERVIEW

The initial promise of service-oriented computing (SOC) was a world of globally cooperating services being loosely coupled to flexibly create dynamic business processes and agile applications that may span organisations and heterogeneous computing platforms but can nevertheless adapt quickly and autonomously to changes of requirements or context. Business process modelling and management, Web2.0-style applications, human computing, context-aware systems, and cloud computing emerged mainly due to the paradigm shift towards SOC. Nevertheless, there is still a strong need to merge technology with an understanding of business processes and organizational structures.

While the need for middleware support for SOC is evident and there have been important past research achievements and industry products, the current approaches and solutions still do not sufficiently address issues such as service discovery, re-use, re-purpose, composition and aggregation support, service management, monitoring, and deployment and maintenance of large-scale, heterogeneous, and possibly dynamic infrastructures and applications. Moreover, quality properties (in particular dependability, security, and performance) need to be addressed not only by interfacing and communication standards, but also in terms of actual mechanisms, protocols, and algorithms. Challenges are the administrative heterogeneity, the loose coupling between coarse-grained operations and long-running interactions, high dynamicity, and the required flexibility during run-time. Recently, massive-scale and mobility were added to the challenges for SOC middleware.

2. WORKSHOP PROGRAM

This is the 6th Middleware for Service Oriented Computing (MW4SOC) workshop, organized annually at the ACM/IFIP/USENIX International Middleware Conference. Each received research paper submission was peer-reviewed (with blinded author data) by four or five members
of the international Program Committee or additional expert reviewers. After the review and selection process, four research papers have been accepted for the workshop (from eight received submissions). The four papers are:

• Eventual Consistency: How Soon is Eventual? An Evaluation of Amazon S3’s Consistency Behavior.
• Business Activity Management for Service Networks in Cloud Environments.
• Experimental Evaluation of Distributed Middleware with a Virtualized Java Environment.
• Addressing QoS Issues in Service Based Systems through an Adaptive ESB Infrastructure.

In addition to the peer-reviewed papers, the workshop program this year contains the keynote “Middleware for the NOSQL Generation: Challenges and Opportunities” by José Orlando Pereira from the University do Minho in Braga, Portugal.

We thank the authors of all submitted papers, the Program Committee members and the additional expert reviewers for their commitment to the quality of the workshop program.
6th Workshop on Middleware for Service Oriented Computing
(MW4SOC 2011)

Workshop Organization

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