SDS-SOA 2009 Workshop Chairs' Message

Konstanty Haniewicz[1], Monika Kaczmarek[1], Maciej Zaremba[2],
and Dominik Zyskowski[1]

[1] Poznań University of Economics, al. Niepodległości 10,
60-875 Poznań, Poland
`{k.haniewicz,m.kaczmarek,d.zyskowski}@kie.ue.poznan.pl`
[2] National University of Ireland, Lower Dangan,
Galway, Ireland
`maciej.zaremba@deri.org`

We are very pleased to present the proceedings of the First Workshop on Service Discovery and Selection in SOA Ecosystems (SDS-SOA 2009). The workshop was held on the premises and with support of Poznan University of Economics, Poznan, Poland, on the 29th April 2009. The workshop was organized in conjunction with 12th International Conference on Business Information Systems (BIS 2009).

The main aim of the workshop was to gather researchers and practitioners to present their original work in the topics of service interactions within service ecosystems with a special focus on the interactions such as dynamic service discovery and selection.

Service oriented architectures enable service compositions and facilitate business processes reengineering. What is more, the SOA paradigm also enables a multitude of service providers to offer on service markets loosely coupled and interoperable services at different quality levels. This creates a unique opportunity for businesses to dynamically discover and select, in a cost-effective manner, services that meet their business and quality needs. However, outsourcing of IT services to external vendors causes dependency and introduces new challenges. In particular, this applies to the quality of outsourced services. If a mission-critical service is sourced out to an external vendor, provisioning of the required service and its quality is beyond immediate control of the service customer. Therefore, the success of the companies depends heavily on the ability to discover and select the best services in the given context for the needs of business processes. Viable choice has to take into account both functional and non-functional characteristic of a service.

Three papers from a set of excellent submissions were selected for publication by the Program Committee in a peer review process and reflect truly international interest in Web service interactions and SOA ecosystems. We would like to thank all members of the Program Committee for their thoughtful and detailed reviews of the papers and fruitful collaboration.

The topics of the accepted papers cover a broad spectrum of topics starting from SLA issues, to Web services selection methods.

The first paper focuses on reliable description of service non-functional properties. Namely, André Ludwig and Marek Kowalkiewicz in their paper "Supporting Service Level Agreement Creation with Past Service Behavior Data" propose an interesting approach of utilizing data from past service behavior to enrich and refine definitions

of SLAs. This work describes the method of utilizing service profiling mechanism deriving information on services based on monitoring data as a source of information for analysis and prediction of SLA attributes. The obtained service description may be then utilized during service discovery and selection.

The selection of services for the needs of business processes based on service description is the main topic of the second paper. In their paper on "QoS-Aware Peer Services Selection Using Ant Colony Optimisation" Jun Shen and Shuai Yuan present a new approach to Web service selection problem. The authors propose to apply Ant Colony Optimization algorithm to identify the optimal configuration of services. Also, a study of algorithm's efficiency is presented giving reader a great opportunity for observing how hive-wise optimization can be applied in the domain of Web services.

The selection algorithm operating on a service description available in service registries like e.g. UDDI was the main topic of the third paper. Colin Atkinson, Philipp Bostan, Gergana Deneva and Marcus Schumacher present in their paper titled "Towards High Integrity UDDI Systems" an extension of UDDI architecture. The paper explains the failure of public UDDI registries by showing three main shortcomings of that technology. Authors propose appropriate extensions in order to address the lack of automated management of UBR content, lack of QoS monitoring of registered Web services and over simplicity of search process within UDDI. They show enhanced UDDI architecture and present an implementation of it based on well known and publicly available tools.