

## ▼ Introduction to Technology and Strategies for Service-oriented Architectures Minitrack

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Service-oriented architecture (SOA) is becoming an integral part of the IT landscape. An increasing number of organizations are building service-oriented architectures, all major application vendors have incorporated support for technologies related to SOA, and Web services are becoming an important mechanism for business-to-business transactions. The technology for realizing service-oriented architectures is maturing, making initial adoption easier. However, with larger deployments of Web services in organizations, new questions related to implementation strategies, governance approaches, and broader organizational impacts need to be considered.

This minitrack addresses some of these issues in its two sessions. The first session focuses on the technical realization and infrastructure issues in the context of SOA, whereas the second session focuses on the adoption and design of SOA.

The first session starts out with the paper, *An Operational Framework for Service Oriented Architecture Network Security*, proposes an operational framework for security in an SOA context. The framework contributes to the understanding of secure SOA designs by clarifying responsibilities of the different actors involved in orchestrating XML-based services.

The second paper, *Semantic Web Services Monitoring: An OWL-S based Approach*, describes

mechanisms for execution monitoring of semantic Web services based on OWL-S. The authors propose extensions to OWL-S and present an event-based model for monitoring and logging interactions.

The first paper in the second session, *Where to Start with SOA, Criteria for Selecting SOA Projects*, compares project goals to SOA benefits and deduces key decision criteria for projects that are well suited as proof-of-concept implementations.

The second paper, *Service Oriented Architecture: Challenges for Business and Academia*, examines implications of SOA for IT education. It discusses how SOA relates to business process modeling and ERP systems. The authors suggest that changes in the IS curriculum are needed to address the demands of the emerging service-oriented IT landscape.

The final paper for this minitrack, *Software Architectural Reuse Issues in Service-Oriented Architectures*, addresses software reuse issues at the architectural level using examples in UML.

In summary, the topics examined in these six papers reflect the wide range of interests related to the technology and strategies for realizing Service-oriented Architectures. They reveal valuable insights about the current state of SOA adoption in the industry and provide impulses relevant for practitioners and future academic research.