

## Hard Problems in SOA Workshop


Software Engineering Institute  
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Pittsburgh, PA 15213


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## Software Engineering Institute

Department of Defense R&D Laboratory FFRDC  
Created in 1984  
Administered by Carnegie Mellon University  
Headquartered in Pittsburgh, PA;  
offices and support worldwide



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## SEI Technical Program

### Networked Systems Survivability

- Survivable Systems Engineering
- Survivable Enterprise Management
- CERT Coordination Center
- Network Situational Awareness
- Practices Development and Training

### Product Line Systems

- Product Line Practice
- Software Architecture Technology
- Predictable Assembly from Certifiable Components

### Dynamic Systems

- Integration of Software-Intensive Systems
- Performance-Critical Systems
- Software Assurance

### Software Engineering Process Management

- Capability Maturity Model Integration
- Team Software Process
- Software Engineering Measurement and Analysis

### Acquisition Support

### Other Research

- Independent R&D
- Software Engineering for Computational Science and Engineering
- Ultra-Large-Scale Systems
- Mission Success in Complex Environments



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## The People of the SEI



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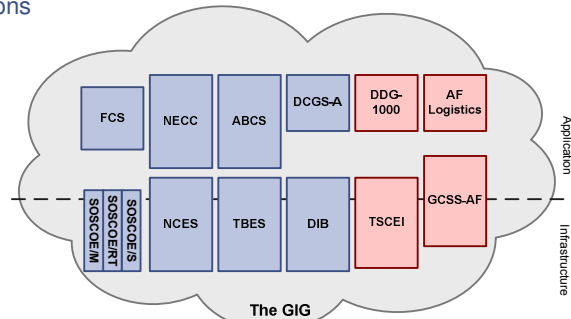
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## Is SOA Applicable to DoD ?

DISA and all DoD services are actively involved in developing SOA-based systems

- Mature SOA implementations represent a key for implementing the vision of net-centric warfare
- The technology to support SOA is currently available for enterprise applications



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## Our View on SOA<sub>1</sub>

SOA is real

- Many successful case studies, mainly in commercial enterprises
- Main goal for adoption of SOA is internal integration and business process improvement
- Main adoption barriers are lack of governance and finding people with the right skills

SOA is not just a buzzword

- Currently the best option available for loosely coupled systems integration and leverage of legacy systems
- The technologies to implement SOA will change over time, but the concepts are here to stay

–SOA is much broader than its most popular instantiation (Web Services)



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## Our View on SOA<sub>2</sub>

SOA is more than just an architectural style

- It is a way of developing systems
- It requires a change of mindset
- It requires alignment with business (or mission) goals and processes to be of value

In many cases, SOA adoption is being slowed down by business and operations issues, rather than engineering issues

- Business case for SOA adoption
- SOA governance
- Metrics for measuring alignment between SOA strategy and implementation
- Lack of people with the adequate skills



## Goal of Today's Workshop

The goal of today's workshop is to look at aspects that are still making SOA adoption challenging

- SOA Governance
- Strategy and Justification of SOA Projects
- Security for SOA Systems
- SOA System Design, Development & Deployment : Methods and Tools

Expectation is that participants will share experiences and concerns in these areas and identify opportunities for research and collaboration



