

## A Foreword from the MITRE Corporate Chief Engineer

Service-Oriented Architecture (SOA) is a promising approach for developing networked, agile, service-based systems, and it has the potential to yield significant advantages in some circumstances. However, the SOA approach presents new planning and portfolio management challenges for those responsible for information technology (IT) decision making. This approach requires changes to the way organizations leverage IT and is much more transformative than the acquisition of a traditional system.

Special considerations arise when employing SOA in the Federal IT domain space. The Federal Community is faced with exceptionally large enterprises, many stakeholders, and a diversity of constraints that are unique to the Federal domain, including acquisition and funding models, unique cultural characteristics, and security needs that frequently exceed standard commercial practices. Many Federal programs are already experiencing these challenges.

In the MITRE SOA Series of white papers, we have addressed many of these issues to help Federal leaders understand the benefits along with the challenges. We offer insight to help senior leaders put their organizations on a course to realize the benefits of SOA while minimizing the risks. The series includes the following papers:

- *Leveraging Federal IT Investment Using SOA* explores the history of SOA and how it can fit within the overall enterprise—including legacy systems—and deliver value.
- *A Perspective on Emerging Industry SOA Best Practices* describes several key concepts for successfully implementing an SOA-based system.
- *Seven Significant Challenges for Federal Leaders Employing SOA* details a selection of important SOA challenges, such as demonstrating value and testing services.
- *SOA Characterization Framework* provides a perspective for understanding the technology choices service providers will need to make based upon their requirements and organizational context.
- *Service-Oriented Acquisitions* explores methods and challenges with acquiring services in the Federal domain.
- *Information Assurance for SOA* provides a survey of SOA information assurance issues and explores options for securing an SOA-based system.

The efforts to address the challenges of SOA-based systems are significant. MITRE is collaborating with industry and other organizations supporting the Federal Government, along with leveraging lessons learned and our own research, to provide the best advice possible. We hope that you find the materials helpful, and if you have feedback or suggestions, please provide these back to the authors at [soa-list@lists.mitre.org](mailto:soa-list@lists.mitre.org).

Sincerely,

A handwritten signature in black ink that reads "Louis A. Metzger". The signature is written in a cursive style with a large, sweeping flourish at the end.

Dr. Louis S. Metzger  
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