Practical Guide to Federal SOA  Version 1.2

http://smw.osera.gov/pgfsoa/index.php/Welcome

- Introduction & Status Update
- Draft Guidance

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Everware-CBDI
Independent Insight for Service Oriented Practice

Corporate Site:  www.everware-cbdi.com
SOA Research:  www.cbdiforum.com
PGFSOA - Objectives

**Primary Objective**

Provide sound, practical guidance in support of agencies’ efforts to adopt SOA into their business, IT, and EA practices.

**Secondary Objectives**

- Collaborative effort by knowledgeable individuals within government and industry.
- Broad-based distribution for open review and comment period.
- Final release by CIO Council in 2008
Core Ideas

1. **Written for Chief Architects:**
   - To inform conversations with CIOs and Program Execs
   - To influence architecture and investment planning

2. **Reference established external bodies of knowledge**

3. **Focus on what is unique about the (Federal) government**

4. **Use Federal and private sector examples to anchor**
1. Exec Summary and Introduction
2. Articulate the rationale
3. Put forward a concrete target / vision
   - Service Oriented Infrastructure
   - Service Oriented Architecture
   - Service Oriented Enterprise
4. Keys for Implementation – limiting factors to be addressed
5. Provide a roadmap with concrete actions across SOI, SOA, and SOE
Definition of SOA

"Let's start at the beginning. This is a football. These are the yard markers. I'm the coach. You are the players."

Service Oriented Architecture is a paradigm for organizing and utilizing distributed capabilities that may be under the control of different ownership domains.

-- OASIS SOA Reference Model version 1.0
Proposed Federal Government SOA Objectives are to achieve:

- Continuous innovative IT asset re-capitalization
- Cross-domain/cross-agency trust, data access, and semantic interoperability
- Leverage IT investments across federal agencies and share best practices
- *Enhance mission effectiveness*

**Theme:** SOA enables you to achieve your mission objectives.
SO Target Architecture (Vision)

Objectives of the SO Target Architecture Section:

- Provide a foundation for SOA terminology and its use within the Federal Government.
- Present a vision for a federal SOA that can be applied at all levels of the Federal Government.
- Demystify SOA.

Theme: A service oriented framework for agility.
Anatomy of a Target Federal SOA
SOA Keys to Implementation

Theme: These are the critical things to focus on.

Objectives of the SOA Keys to Implementation Section:

- Help federal Chief Architects understand where to focus their resources.
- Present best practices.
- Elaborate on SOA challenges unique to the federal government.
Some Keys to Implementing the SOE

1. Treat SOA adoption as an organizational change initiative
2. Build community processes and collaborative platforms
3. Establish Federated Governance
4. Establish service funding and charging mechanisms
5. Service based SDLC with incremental development
6. Shift to service based procurement
7. Advance institutional knowledge and capture best practices
Keys to Implementing the SOA

7. Use EA to align with business objectives
8. Introduce Services as a First-Order Concept in your EA
   - Establish a Service Based Target Architecture
   - Adopt model based architecture and pattern based design
   - Enable automatic compliance
9. Leverage legacy assets to enable evolutionary progress
Keys to Implementing the SOI

10. Focus on enterprise security, scalability, and interoperability

11. Establish discovery and trust mechanisms
   - Repositories/Registries
   - Adaptive and collaborative testing and certification

12. Establish an adaptive and collaborative testing and certification environment
SOA Roadmap Planning Process

**Theme:** “managed” adoption achieves the objectives of the organization more quickly and at a higher level of maturity.

**Definition:** “A SOA Roadmap is a structured plan that addresses the critical factors for successful SOA adoption.”
SOA Roadmap – Six Dimensions of SOA Maturity

- **Service Oriented Architecture** –
  - **Services Architectural process and alignment** – Creation and ongoing management of the Service Architecture and Service Portfolio; Architecture framework and repeatable processes that enable trust, interoperability, and governance in a federated environment
  - **Services Life-Cycle Management** – Consistent reference architecture with tools and platforms to manage the service lifecycle

- **Service Oriented Infrastructure** –
  - **Services Infrastructure** – Integrated runtime environment with a common policy implementation and effective management and monitoring tools

- **Service Oriented Enterprise** –
  - **Initiative Management** – Management policies and processes and including vision, funding strategy, charging approach, and performance measurement and monitoring tools
  - **Organization** – Defined organizational responsibilities to execute federated solutions
  - **Collaboration** – Strategy, planning and execution to enable mutual development and reuse of services
PGFSOA – Next Steps

- Draft Version (0.9) reviewed during Dec 07 – Jan 08
  - Traditional comment collect/review/disposition process
- Draft Version (1.1) currently in review
  - Wiki open process
  - Anonymous comments or attributed (using myopenid - [www.myopenid.com](http://www.myopenid.com))
- Next Draft (1.2) to be produced from current set of inputs
- CIO Council Review & Approval (June 2008)
  - Architecture & Infrastructure Committee (AIC)
  - OMB Review & Approval
    - “Approved” guidance
- Wiki site to remain open – living document
- Other documents to follow (CIOC/AIC)
  - Governance approaches
  - Reference architectures
PGFSOA Overview Complete

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Questions?

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