

# State of the SOA in DoD Ground Systems

Maj. Steve Paine  
US Air Force



# SOA End of Life?

- Although the architectural concept of services is timeless, “SOA” is out of fashion
- Introducing Cloud Computing, Web2.0
- Reality: SOA will co-exist with future architecture designs
- Consider: CORBA, socket i/f, shared libraries are still part of our architecture

# Expanding the framework concept

- Encapsulated servers: virtual machines
  - Low impact on the service framework
- Encapsulated services: managed grid/cloud
  - Higher level of interaction with service framework
- It's not just a service framework anymore
- Migration to a Data Center Construct
  - Shared IT compute framework
  - Managed Hosting Environments

# What has worked ...

- Working group structure
  - Align each office's architecture responsibilities with functionally oriented sub-frameworks:
    - TT&C : Mission Management : Data Handling
  - Enterprise-level working group ties it all together
  - Focus teams for security, SOA tools
- Heterogeneous Frameworks
  - Localize and contain high performance/proprietary features
  - Keep licensing costs and complexity down for large installation base
  - Mix of open source and proprietary SOA suites

## ... and What Hasn't

- Program by program transition results in localized implementations and lack of global discovery
- Service life cycle management reflects legacy CM practices—cumbersome IV&T, promotion to operations

## Next Steps

- Introduce Enterprise Security Services
- Build an Enterprise Metadata Catalog
- Federate Registries and Repositories
- Expand Service Busses and Backbones
- Continue SOA refactoring within program scope
- Take a close look at enterprise licensing
  - Facing the “true-up” after incremental buy-in
  - Build a framework; don’t marry the tool