## The SOA Working Group

Chicago Thursday, July 24, 2008

Tony Carrato, SOA WG Co-Chair



## The SOA Working Group

- The mission of The Open Group SOA Working Group is to develop and foster common understanding of Service-Oriented Architecture in order to facilitate alignment between the business and information technology communities.
- It does this by conducting a work program which will produce definitions, analyses, recommendations, reference models, and standards to assist business and information technology professionals within and outside of the Open Group to understand and adopt SOA.

www.opengroup.org/projects/soa



### **SOA WG Membership & Leadership**

- Open to all Open Group Supplier and Customer Council members (Platinum members, Forum Buyout members, and Silver members)
- More than 300 participants from over 50 companies

- Forum Director
  - Dr Chris Harding, The Open Group
    - c.harding@opengroup.org
- Steering Committee
  - Mats Gejnevall, CapGemini, Co-Chair
    - mats.gejnevall@capgemini.com
  - Tony Carrato, IBM, Co-Chair
    - acarrato@au1.ibm.com
  - Chris Greenslade, CLARS, former Co-Chair
    - ChrisG@clars-global.com
  - Jorge Diaz, IBM
    - ildiaz@us.ibm.com



## **Initial Work Program**

- Formed in October 2005
- Three initial deliverables:
  - Definition of SOA
  - SOA Case Studies
  - Value that The Open Group can Add



## **Initial Work Program - Status**

- Formed in October 2005
- Three initial deliverables:
  - Definition of SOA Completed
  - SOA Case Studies Maintenance Mode
  - Value that The Open Group can Add Completed



## **How the Work Program Develops**

- Any Working Group member can propose a project
- A proposed project must
  - Be within the Working Group's scope
  - Be achievable with Working Group resources
- Project proposals are approved by vote of the Working Group
- Several project proposals have been approved, based on "Value" team recommendations and other inputs



## **Completed Projects**

- Definition of SOA
- SOA Case Studies
- Value that The Open Group Can Add



#### **Definition of SOA**

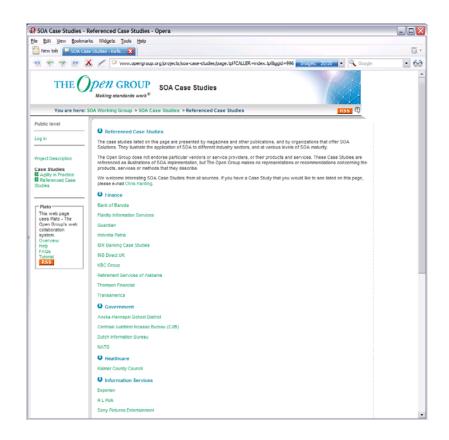
#### An architectural style that supports service orientation

- Service orientation
  - A way of thinking in terms of services and service based development and the outcomes that services bring
- Service
  - A logical representation of a repeatable business activity that has a specified outcome (e.g., check customer credit; provide weather data, consolidate drilling reports), is self-contained and may be composed of other Services. It is a black box to consumers of the Service
- Architectural Style
  - The combination of distinctive features in which Enterprise Architecture is done, or expressed
- The SOA Architectural style's distinctive features:
  - Based on the design of the services comprising an enterprise's (or inter-enterprise) business processes. Services mirror real-world business activity
  - Service representation utilizes business descriptions. Service representation requires
    providing its context (including business process, goal, rule, policy, service interface and
    service component) and service orchestration to implement service
  - Has unique requirements on infrastructure. Implementations are recommended to use open standards, realize interoperability and location transparency.
  - Implementations are environment specific, they are constrained or enabled by context and must be described within their context.
  - Requires strong governance of service representation and implementation
  - Requires a "Litmus Test", which determined a "good services"



#### **SOA Case Studies**

- Now in "maintenance mode".
- Framework for publishing studies in place
- Additions will be made as and when new studies are submitted



www.opengroup.org/projects/soa-case-studies



#### Value that The Open Group can Add

- The main goal of the subgroup was to establish a set of areas which the Open Group could benefit the industry in the context of SOA.
- There were 10 recommendations selected.
  - Definition of SOA (completed project)
  - SOA Case Studies (existing project, in maintenance mode)
  - SOA Maturity Model (existing, board-level project)
  - SOA Reference Architecture (existing project)
  - SOA Practical Guide Relationship to TOGAF (existing project)
  - Business-Driven SOA
  - Legacy Evolution to SOA (project now forming)
  - SOA Governance (existing project)
  - Ontologies for SOA (existing project)
  - SOA Key Performance Indicators



## **Current Work Program**

- Ontologies for SOA
- SOA Governance
- SOA/TOGAF Practical Guide
- SOA Reference Architecture
- Service-Oriented Infrastructure
- SOA and Security



## **Ontologies for SOA**

- Background
  - Need to improve understanding of SOA concepts
  - Ontologies can provide formal conceptual framework and also be basis for model-driven implementation
- Objectives
  - Formal OWL ontology for SOA
  - Documented so as to be generally understandable
- Current State
  - Complete draft of the ontology
  - Reviewed by project team
  - Being "socialized" by exposure to OMG, OASIS and W3C
- Next Steps
  - Complete the formal standard
  - Open Group Company Review



#### **SOA Governance**

- Background
  - Governance widely recognized as crucial for SOA
- Objectives
  - Reference model and framework for SOA Governance
- Current State
  - Structure of document defined
  - > 50% of text drafted
- Next Steps
  - Progress and complete discussion of topics
  - Complete and review document



#### **SOA/TOGAF Practical Guide**

- Background
  - Relation of SOA to EA/TOGAF perceived as highest value the WG can add for SOA
  - Joint project of SOA WG and Architecture Forum
- Objectives
  - Practical guide to enable a trained TOGAF practitioner to use TOGAF 8 and the SOA adjustments 'out of the box' to develop a SOA
  - Phases A-D are main focus
- Current State
  - No barriers to use of TOGAF for SOA discovered
  - Strategic, segment and solution architectures must be explored separately
  - Good understanding of strategic and segment, more work needed on solution level
- Next Steps
  - Complete draft
  - Update for TOGAF 2008 Revisions
  - Review for publication



#### **SOA Reference Architecture**

- Background
  - An SOA Reference Architecture will assist information technology professionals to understand and adopt SOA,
  - And can be used as an artefact in SOA development
- Objectives
  - One or more non-vendor-specific SOA reference architectures that are appropriate for use with TOGAF
- Current State
  - Underlying principles and use cases agreed
  - Base document input from IBM
  - Other input compared against base, resulting in agreed outline reference architecture
  - Candidate building blocks identified
- Next Steps
  - Agree building blocks and complete draft
  - Review and publish
  - Identify appropriate certification programs



#### **Service-Oriented Infrastructure**

- Background
  - SOA is usually about applying the principle of service orientation to applications
  - But service orientation can also be applied to their infrastructure
- Objectives
  - Framework for Service-Oriented Infrastructure
  - Technical Guide
  - White Paper describing evolution of SOI
- Current State
  - Structure of framework document defined
  - Meeting in early April agreed basic model for SOI
- Next Steps
  - Complete framework document
  - Review for publication



## **SOA and Security**

- Background
  - SOA and security experts agree on the need to understand how to achieve security in SOA
  - Joint initiative of SOA Working Group and Security Forum
- Objectives
  - Guide for enterprise architects on Security and SOA
  - Based on understanding of use-cases, threat profiles, services required for security in SOA, and changes required to existing practice
- Current State
  - Lead authors identified for White Papers to develop understanding, and for Architects Guide to SOA and Security
  - Skeletons and some text developed for these documents
- Next Steps
  - Develop the White Papers and the Guide



# Information Architecture for SOA - Not yet a SOA WG project

- Background
  - Work in Semantic Interoperability WG of interest to SOA WG
  - SOA brings need for Semantic Interoperability into focus
- Objectives
  - Information architecture framework
  - Compatible with TOGAF
- Current State
  - Meeting in Glasgow created material for base document
- Next Steps
  - Discuss further with Architecture Forum in Chicago



# Legacy Evolution to SOA - Not yet a SOA WG project

- Background
  - Most enterprises have existing architectures from which they must migrate if they want to adopt SOA
- Objectives
  - Produce guidance on legacy migration to SOA
- Current State
  - Initial draft charter created
  - Project team identified
- Next Steps
  - Establish project
  - Start work



#### SOA - The Book

- Open Group book to describe overall framework for SOA
- Not a project simply a joint work by authors
- Leveraging work of project teams
- To be published end 2008
- Table of contents and some section material in place
- Next step develop initial complete draft

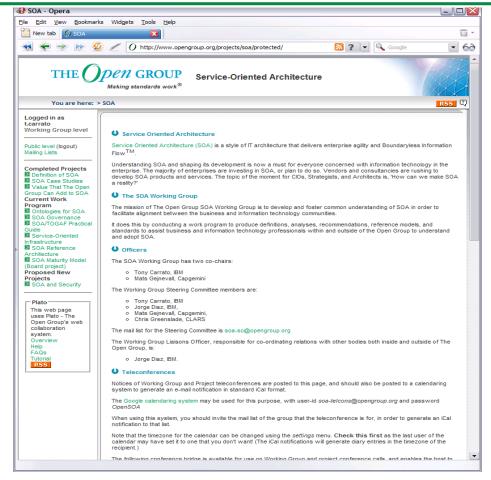


## **SOA WG Japan**

- Interest in SOA in Japan
- The Open Group Japan has forming an SOA Working Group
- Initial meeting in Tokyo May 15
- Interest in translating English SOA material, and developing SOA Security framework
- The SOA Working Group will provide input



#### **SOA WG Website**



www.opengroup.org/projects/soa