The SOA Working Group

San Francisco

Thursday, January 31, 2008

Tony Carrato, SOA WG Co-Chair

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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

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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 56 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
    - jldiaz@us.ibm.com

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Initial Work Program

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

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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

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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

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Completed Projects

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

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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"

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SOA Case Studies

- ❑ Now in "maintenance mode".
- ❑ Framework for publishing studies in place
- ❑ Additions will be made as and when new studies are submitted
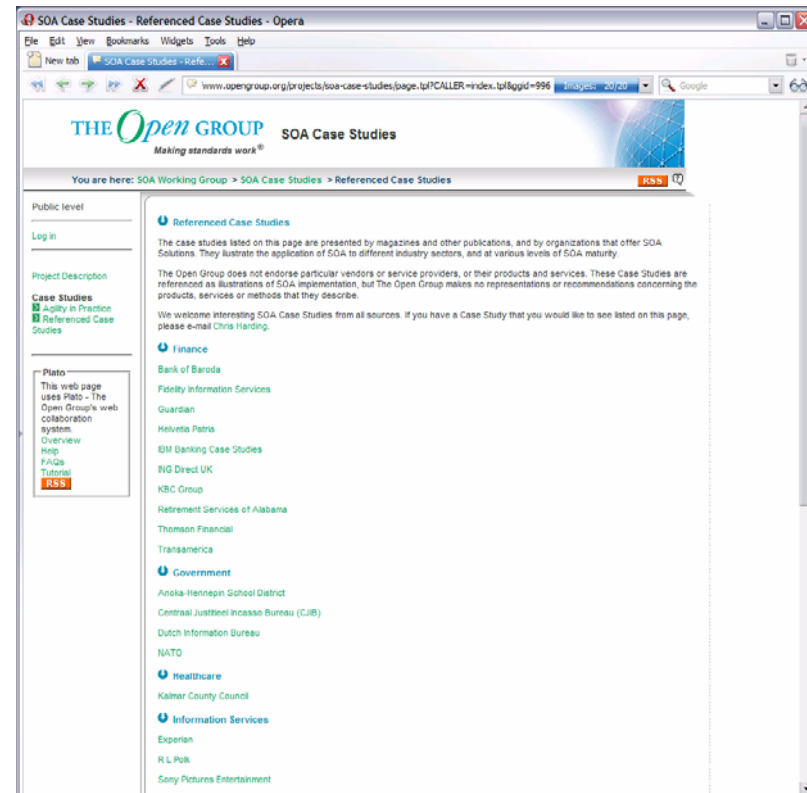
www.opengroup.org/projects/soa-case-studies

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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
    - SOA Governance (existing project)
    - Ontologies for SOA (existing project)
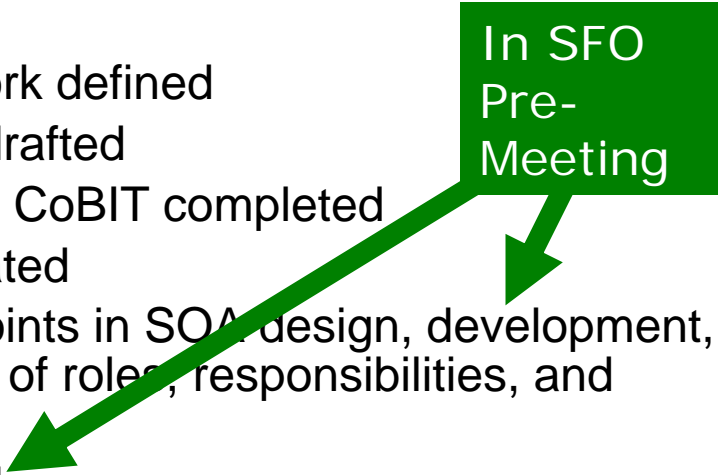   - SOA Key Performance Indicators

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Current Work Program

- Ontologies for SOA

- SOA Governance

- SOA/TOGAF Practical Guide

- SOA Reference Architecture

- Service-Oriented Infrastructure

- SOA and Security

- SOA Maturity Model (Board Project)

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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
  - Concepts to be included identified and understood by project team
  - Some ideas "Socialised" by presentations to OMG and SICoP/SOACoP, and exposure to OASIS and W3C
  - Examples and diagrams developed
  - Now being written up as formal OWL ontology (draft > 50% complete)
- Next Steps
  - Complete the formal standard
  - Further "socialisation"
  - Open Group Company Review

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SOA Governance

- Background
  - Governance widely recognized as crucial for SOA
- Objectives
  - Reference model and framework for SOA Governance
- Current State
  - Structure of model and framework defined
  - Definition of SOA Governance drafted
  - Mapping of SOA Governance to CoBIT completed
  - Lists of principles and KPIs created
  - Drafts created of governance points in SOA design, development, deployment, and operation, and of roles, responsibilities, and organizational structure.
  - SOA Governance model agreed
- Next Steps
  - Progress and complete discussion of above topics
  - Develop framework to transform generic SOA-G for enterprise

In SFO Pre-Meeting

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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
- Current State
  - Initial conclusion: TOGAF ADM is valid for SOA
  - Working through steps of TOGAF ADM to evaluate impact of SOA
  - Phases A-D will be main focus
- Next Steps
  - Review A-D and cycle back through all phases again
  - Document conclusions in written Guide

14:00 Thurs

Phases A-D presented in SFO

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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 from Applied Technology Solutions, BEA, CGI, Infosys, the SOA Alliance, and Wipro being compared against base
- Next Steps
  - Complete comparison of base document with other inputs
  - Define reference architecture components (models, architectural building blocks, layers, etc.)

11:00 Thurs

Face-to-Face Feb 15-17

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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
    - Drafts of Definition of SOI, Service classification, Service characteristics, Service Publication and Exposure
- Next Steps
    - Complete framework sections outlined above
    - Address framework sections on other aspects of infrastructure service implementation and operation

Face-to-Face
Mar 18-19

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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

  14:00 Thurs

  - Lead authors identified for White Papers to develop understanding, and for Architects Guide to SOA and Security
  - Skeletons and some initial text developed for these documents
- Next Steps
  - Develop the White Papers and the Guide

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The Open Group Service Integration Maturity Model (OSIMM)

- Background
  - The industry needs a collaborative maturity model for SOA adoption
  - Special project of The Open Group Board, supported by the SOA Working Group
- Objectives
  - Basis for assessing enterprise's actual and desired levels of SOA maturity
  - And helping to define SOA development path for enterprise
- Current State
  - Base document input by IBM
  - Some discussion of base document and comparison with other models
- Next Steps
  - Refine the model in the light of the discussions

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Information Architecture for SOA

- ❑ Not a SOA WG project – work in Semantic Interoperability WG of interest to SOA WG

- ❑ SOA brings need for Semantic Interoperability into focus

- ❑ Information an essential aspect of any architecture – especially one that is service-oriented

- ❑ Aim to develop reference models and guidance

- ❑ Progress in SFO workshop (Weds)

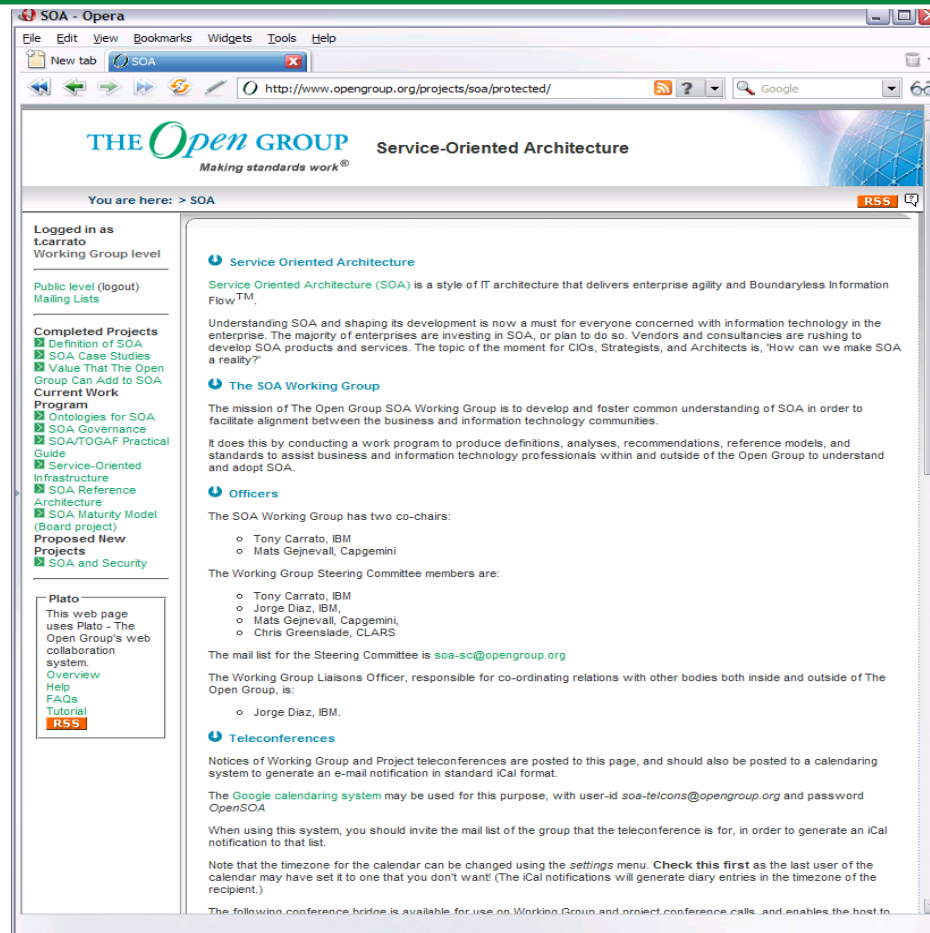- ❑ Now need to start collating ideas and formalizing models

09:00
Fri

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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

❑ Next step – firm up on initial ideas

14:00
Fri

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SOA WG Website

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