SOA Comes of Age

Introducing the SOA Source Book
29 April 2009

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The Open Group

- Open Systems
- Interoperability
- Boundaryless Information Flow
Agenda

- SOA In Perspective
  - Why SOA is important
  - Why SOA will continue to be important
- The Source Book
  - What it contains
  - How it will help you use SOA
  - What it contributes to SOA
- Future Developments
  - For SOA
  - For the book
SOA In Perspective
Customer Presentations and Case Studies: Houston, 2005 Q4

Using SOA In An Information Management Product Infrastructure

Jamie Cruise
Halliburton Digital Consulting
Solutions/Landmark

Beyond SOA: What’s Next?

United States Air Force
Integrity - Service - Excellence

Global Combat Support System (GCSS)
U.S. Air Force
Chris R. Adams, MITRE Corporation

Service Orientation Architecture – E&P Information Management

Ravi Nudurumati
17 Oct 2005
Schlumberger

Example Case for SOA on Upstream Oil & Gas

Rusty Foreman – BP
Solutions Architecture
E&P Digital & Communications Technology
Customer Presentations and Case Studies: 2006

SOA implementation in Financial sector – a case of one bank in North America

Abstract: This presentation discusses a case of an SOA implementation in one of the banks in North America. An overview of the problems being addressed using SOA and the approach being used are given. The associated architecture pattern is presented in order to share some of the learnings. Current achievements and target architecture and roadmap is also discussed.

By: Aviel Dico, PhD
Enterprise Architect

Road to SOA:
Case studies in Travel Industry

Kamran Ozair

July 18, 2006

SOA – A New Paradigm

Erik Haahr
Director
IT Architecture & Integration
DSB
Customer Presentations and Case Studies: 2007 - 1

Developing a Corporate Vision and Roadmap for SOA

The Open Group
Enterprise Architecture Practitioners Conference
January 30, 2007

Hong Zhang
Director & Chief Architect
Emerging Technologies
Chief Systems and Technology Office (CSTO)
General Motors

Maximizing ROI of Service-Oriented Architecture (SOA) Implementation Through Application Management

Mitchell International Case Study
Eli Roemer, CIO, Sr. Vice President and General Manager International Operations
January 29, 2007

Service Oriented Maturity Models Comparative Analysis

Enterprise Architecture Practitioners Conference
The Open Group
San Diego January 29-February 2, 2007

Steve Wolf, Senior Enterprise Architect
Enterprise Architecture Group
Information Resources

Moving from Systems to Services — How the U.S. Navy is Transforming to SOA

Brad Mercer
Principal Architect
The MITRE Corporation
San Diego, California

Business Value and Challenges of SOA

Enterprise Architecture Practitioners Conference
Spotlight on SOA

San Diego, January 29, 2007

John Whitridge, VP Enterprise Architecture
Enterprise Architecture Group
Information Resources, Marriott International

SOA – What vs. How
A Travel Industry Perspective

Madhusudhan KM
31 Jan 2007
Intuit’s SOA Journey

Robert Roth
Director, Integration Architecture Solutions

Issues of Global e-commerce and
NEC’s NGN (Next Generation Network) vision

January 29, 2007
Toshiro Kawamura
Executive Advisor, NEC Corporation & Chair of Global Business Dialogue (GBDc)

SOA and the Agile War Fighter:
DoD NCES Program

The Open Group Enterprise Architecture Practitioners
January 29, 2007
David P. Butler
Vice President and SOA Evangelist
Customer Presentations and Case Studies: 2007 - 4

Service Utilization

Dr. Allen S. Jones
The Boeing Company
April 24, 2007

Building an SOA to Power the Smart Grid

Andres Carvallo, CIO
Austin Energy
July, 2007

The Value of Service Oriented Architecture

A Chevron Upstream Prospective

SOA Governance – A practical approach

Hans Eric Klumpen,
Schlumberger Information Solutions
Enterprise Architecture Practitioners Conference
July 23 - 27, 2007

SOA at Deutsche Bank

Abhijit Gupta
Enterprise Architect and SOA Programme Lead, Deutsche Bank
23 July 2007

Addressing Enterprise Business Needs through SOA and TOGAF

By: Afed Dico
Enterprise Architect
Afed.dico@btbc.co.com
July 2007

Applying Patterns, Platform Intelligence and Products to ESB Deployments

A Lightweight Approach to Service Design Specifications

The Open Group Enterprise Architecture Practitioners Conference July 2007

Dan Hughes
Principal Consultant, Systems Flow, Inc
Graham Williams
Manager - Integration Architecture & Design Team, Vice President, Citizens Bank Financial Group

Case Studies:
- Company X - Insurance company
- Company Y - Health Care Provider

From SOAP to Nuts

Case Study: SOA and the Electricity Reliability Council of Texas

29 April 2009
Customer Presentations and Case Studies: 2008 - 1

Delivering SOA with TOGAF

By: Awel Dico, PhD
Enterprise Architect

Enterprise-architecture and the service-oriented enterprise
Tom Graves, Tetradian Consulting
TOGAF Glasgow, April 2008

Legacy SOA
Bringing SOA Into the Real World

SOA Governance in Practice
A Case Study at BP

Josh Street
Treasury & Payments Services Technology Strategy & Architecture
Bank of America
Charlotte, NC
Customer Presentations and Case Studies: 2008 - 2

SOA Role in Enterprise Architecture and Architecture Framework
Martin Hromek, DHL IT Services, Prague, April 22, 2008
18th Enterprise Architecture Practitioners Conference in Glasgow

Presenting eSOA to IT Management
Tamas Szirtes (tamas.szirtes@intenzz.nl)

Pinaki Ghosh, Lead Architect Specialist
The Dow Chemical Company
Developing Enterprise Business Object Libraries
to support SOA
Customer Presentations and Case Studies: 2009

Direct Energy

Service Oriented Business Applications: Road towards Agile Enterprise
Date: 29/04/2009
Tarmo Ploom

SOA, Hard Times & Hockey
Presented by: Bruce Miner
SOA Is

- An architectural style that supports service orientation
  - A way of thinking in terms of services . .
As Opposed To

- A way of thinking in terms of applications . .
  - What IT architecture was 5 years ago
- A way of thinking in terms of objects . .
  - Object orientation is the architectural basis of many software programs today
- A way of thinking in terms of resources . .
  - The basis of REST and WOA
- A way of thinking in terms of . .
A Service

- Has a clear description
- Has a provider
- Delivers value to its consumers
- Is the subject of a contract between provider and consumer

Repeatability  Reliability  Value

- Essential for business operation
A Good Service

- Provides encapsulation
- Is loosely-coupled
- Can be re-used

Just like a good object or resource
Service-Oriented Enterprise Architecture
Benefits of SOA

- Improved information flow
- Ability to expose internal functionality
- Organizational flexibility
- Lower software development and management costs
- Configuration flexibility
- Ability to optimize performance, functionality, and cost
- Easier introduction of system upgrades
- ...
The SOA Source Book
What’s In The Book

- **SOA**
  - What is SOA? – SOA and EA – SOA and Boundaryless Information Flow – SOA Features and Benefits – Maturity Model
- **The SOA Reference Architecture**
  - Conceptual Building Blocks – High-Level Perspective – Detailed Building Blocks – SOA Infrastructure
- **Service-Oriented Infrastructure**
  - Overview – SOI Reference Model – Infrastructure Services – Virtualized Services
- **SOA and TOGAF**
  - TOGAF for Enterprise SOA – TOGAF for SOA Solutions – Stakeholder Concerns in SOA – Information Architecture for SOA
- **SOA Governance**
  - Introduction – SOA Governance Reference Model – SOA Governance Vitality Method
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SOA and Boundaryless Information Flow

Internal Space
- Assembling
- Manufacturing
- Legal
- Finance

External “In” Space
- Procuring

External “Out” Space
- Customer Support

The Web or ESB
- Online Services
- Design Services
- ERP Services
- Requirements Services

Procurement Services
Features and Benefits

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefits</th>
<th>Supporting Infrastructure</th>
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<tbody>
<tr>
<td>Service</td>
<td>Improved information flow</td>
<td></td>
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<tr>
<td></td>
<td>Ability to expose internal functionality</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Organizational flexibility</td>
<td></td>
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<tr>
<td>Service Re-use</td>
<td>Lower software development and management costs</td>
<td>Service repository</td>
</tr>
<tr>
<td>Messaging</td>
<td>Configuration flexibility</td>
<td>Messaging service</td>
</tr>
<tr>
<td>Message Monitoring</td>
<td>Business intelligence</td>
<td>Activity monitor</td>
</tr>
<tr>
<td></td>
<td>Performance measurement</td>
<td></td>
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<tr>
<td></td>
<td>Security attack detection</td>
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Maturity Model
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Reference Architecture
Detailed Model - Virtualization
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## Concerns, Stakeholders and Models

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<thead>
<tr>
<th>Area of Concern</th>
<th>Stakeholders</th>
<th>Models and Phases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost and ROI of operational systems</td>
<td>System Operations – Application Management</td>
<td>Service/Applications Matrix C</td>
</tr>
<tr>
<td>Use of Applications</td>
<td>Project Organization – Product Specialists and Technical Specialists System Operations – Application Management</td>
<td>Service/Applications Matrix C</td>
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<td>Service component functionality</td>
<td>Project Organization – Technical Specialists System Operations – Application Management</td>
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Future Developments
Future Developments for SOA

- Organic enterprise architecture
- Open Services Market
Using Nature as our basis for design, a building or design must grow, as Nature grows, from the inside out. Most architects design their buildings as a shell and force their way inside. Nature grows from the idea of a seed and reaches out to its surroundings. A building thus, is akin to an organism and mirrors the beauty and complexity of Nature.

http://www.organicarchitect.com/organic/
Organic Enterprise Architecture

- Architecture that treats the enterprise as a living organism
- Emphasizes the principles and guidelines governing the design of the system and its evolution over time
- Architecture and implementation projects share artifacts and develop them jointly
- Incremental rather than waterfall development
- Governance is crucial
- Development environment is crucial

*SOA lends itself to an organic approach*
Integrated Development Environment

- Eclipse Process Framework Plugin for TOGAF™ 9
  - Contains all the content of TOGAF 9 in a structured and editable form
  - www.opengroup.org/architecture/togaf9/downloads.htm
Cloud Computing
Open Services Market

- Providers compete
- Services improve
- The market grows
- Enterprises focus on what they do best
Future Developments for The SOA Source Book

- The SOA Work Group is producing standards and guides
  - Governance
  - Ontology
  - Reference Architecture
  - Practical Guide
  - Service-Oriented Infrastructure
  - . . .
- The Source Book will evolve to reflect this body of work
In Conclusion
What the Analysts Say

- **Burton Group: SOA is Dead**
  - SOA efforts have made things worse, not better: costs are higher, projects take longer, and systems are more fragile than ever.

- **Forrester: SOA is Mainstream**
  - In large measure, the truth has lived up to the hype. SOA extends the life of legacy systems, improves application flexibility, and delivers business agility.

- **Gartner: SOA Is Emerging from the Trough**
  - SOA is emerging from the Trough of Disillusionment, and it is climbing the Slope of Enlightenment. It will be inevitable for most organizations, despite some high-profile failures.
What The Open Group Says

- SOA has come of age.
  - SOA is now a mature style of enterprise architecture.
  - It is effective and delivers real benefits.
  - But it is not easy to use.
The SOA Source Book

- Enterprise architecture perspective on SOA
  - TOGAF
- A practical resource to help architects do SOA
- Best practice
  - From the SOA Work Group
The Future

- The value of SOA will grow
  - Organic enterprise architecture
  - Open services market
- The Source Book will evolve
Helping Enterprise Architects do SOA for Open Systems

- Open Systems
- Interoperability
- Boundaryless Information Flow

SOA Comes of Age

Thank You!