



TECHNOLOGY TRANSFER PRESENTS

Rome, June 24-26 2009
Residenza di Ripetta
Via di Ripetta, 231

INTERNATIONAL
CONFERENCE
2 0 0 9

SOA

TAKING SOA TO THE NEXT LEVEL

A B O U T T H E C O N F E R E N C E

TTI's international Conference on SOA will answer key questions on how to bring your SOA to the next level. A lineup of experienced practitioners will present on topics that are crucial for any organization that wants to move beyond small scale projects and capitalize on SOA across projects, across the Enterprise, as well as Business partners.

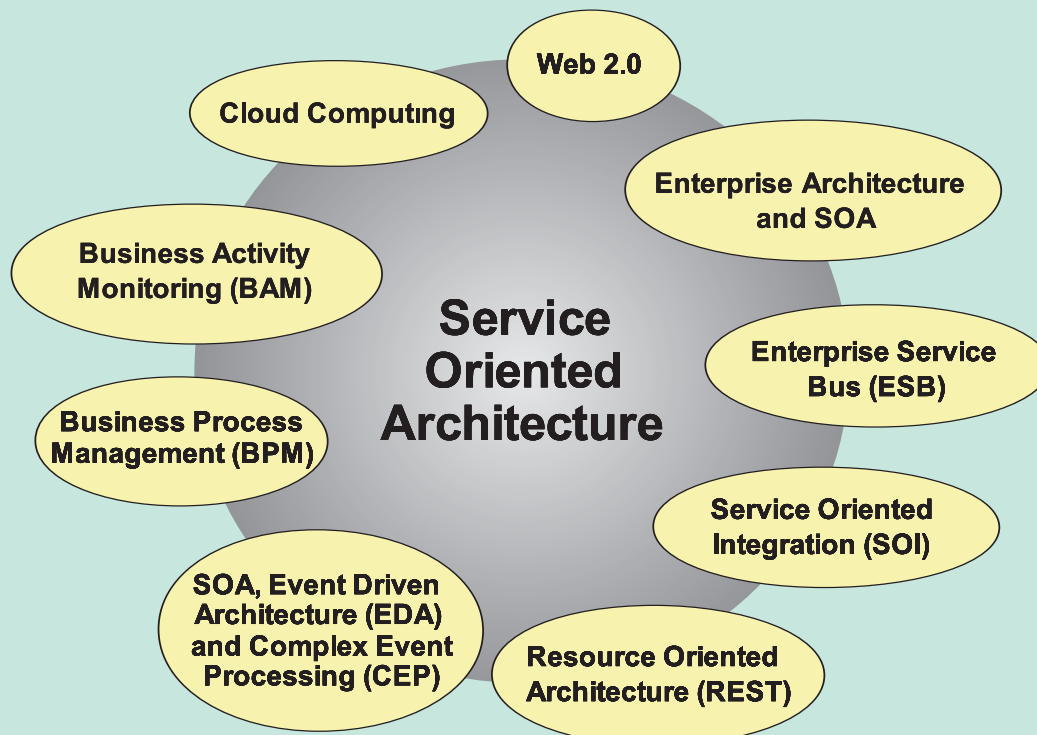
There are many questions to ask and critical decisions to make: you have been building a SOA based on the more traditional Client/Server concept, but when should you use an Event Driven Architecture (EDA), and for which applications are REST-based Web Services the preferred approach? What are the Web 2.0 technologies that will drive some of these decisions? Services have started to proliferate throughout your organization – how do you put a structured integration approach in place before your SOA spins out of control like we have witnessed with point-to-point integration “quick fixes”? Are you considering to take advantage of Cloud Computing – then you need to understand why SOA is a cornerstone for deriving maximum value from the cloud. How can you capitalize on the new killer applications that can turn IT into a competitive weapon for your Business, i.e. technologies that live on top of a SOA and require well architected services in order to provide the benefits they promise? These applications include Business Activity Monitoring (BAM), which lets your Business users see in Real-Time how their Key Perfor-

mance Indicators (KPI) are doing, and Complex Event Processing (CEP), which applies Business rules to correlate Real-Time Business events in order to detect important Patterns – either to forewarn of potential threats or to increase the velocity of the Business.

Finally, moving to the next generation SOA requires an overhaul of your application development approach – Business process logic that needs to be implemented or changed quickly should not be coded in the traditional way. Business Process Management (BPM) has a synergy with SOA that can provide the needed flexibility to make alignment of Business and IT a reality.

Topics that will be covered include:

- From Enterprise Architecture to SOA
- SOA, Event Driven Architecture (EDA), and Complex Event Processing (CEP)
- SOA + Business Process Management (BPM) = A strategy for agility
- The battle between pure Web Services (WS*) and the Resource Oriented Architecture, a.k.a REST
- Web 2.0 - the new face of SOA
- Service Oriented Integration (SOI)
- SOA as an enabler for Cloud Computing
- How SOA facilitates the Real-Time Enterprise through Business Activity Monitoring (BAM)
- Enterprise Service Bus (ESB) deployment scenarios



**Max
Dolgicer**



He is an internationally recognized expert and Managing Director at International System Group (ISG), Inc, a leading consulting firm that specializes in IT Strategy and development and integration of large-scale distributed applications using Service-Oriented Architectures. Mr. Dolgicer has been involved in leading management and technical roles in many of the major engagements for ISG's clients including 3M, Carey International, United States Patent Office (USPTO), New York Stock Exchange (NYSE), CSFB/Donaldson Lufkin Jenrette (DLJ), Federal Reserve of San Francisco, Allstate Insurance, Financial Times Interactive, MetLife, Principal Financial Group, Cigna, CitiGroup, Morgan Stanley, Delta Airlines, Goldman Sachs, McKenzie Financial Corporation.

**Frank
Greco**



He has over 15 years of experience in the Enterprise computing industry providing technology expertise and strategies to global financial institutions on Wall Street and emerging technology startups. He has been involved with Service-based Architecture (SOA), Grid Computing and High Performance Computing (HPC) since the early 90's. His current focus is on Technology/Business strategies for Cloud Computing, resilient IT infrastructures and new development models for multi-core and parallel programming. Mr. Greco founded the very first Java User Group, the NYJavaSIG, which is the largest Java user group in North America. The NYJavaSIG currently has over 6,000 members and meets monthly at Google's Engineering offices in New York. He remains very active in the evolving global Java community and has chaired the group for over 10 years.

**Roger
Sessions**



He is the CTO of ObjectWatch, a company he founded thirteen years ago. He has written seven books including "Simple Architectures for Complex Enterprises" and dozens of articles. His specialty is IT Complexity Analysis and he consults with private and public sector clients around the world. He holds multiple patents in software and architectural methodology. He is on a Fellow of the International Association of Software Architects, Editor-in-Chief of the Perspectives of the International Association of Software Architects, and a Microsoft recognized MVP in Enterprise Architecture. He has given talks in more than 30 countries, 70 cities and 100 conferences on the topic of IT Complexity and Enterprise Architecture. He lives in Chappell Hill, Texas.

SPEAKERS

Mike Rosen
Max Dolgicer
Roger Sessions
Frank Greco
Frank Cohen
Gerhard Bayer

REGISTRATION FORM



Once filled to be given to:
Technology Transfer
Piazza Cavour, 3 - 00193 Roma
Tel. 06-6832227
Fax 06-6871102
www.technologytransfer.it
info@technologytransfer.it

The Conference is for IT Executives, Managers and Architects who wish to take a detailed and practical look at the opportunities and challenges of next generation SOA implementations.

Mike Rosen



He is Director of Cutter Consortium's Enterprise Architecture practice and Senior Consultant with its Business-IT Strategies practice. He has more than 20 years' technical leadership experience architecting, designing, and developing software products and applications. Mr. Rosen was Chief Enterprise Architect at IONA Technologies, PLC, where he was engaged in the development of the overall product architecture for IONA's next generation Web services platform and in the creation of the reference architecture for building applications on that platform. Prior to joining IONA, Mr. Rosen was Chief Enterprise Architect at Genesis Development Corporation where he provided architecture consulting on large-scale applications and infrastructure for Global 1000 clients in insurance, finance, and telecommunications. While at Genesis, he led the development and formalization of a generic Enterprise architecture and software development practices used throughout the company. Before joining Genesis, Mr. Rosen was a product architect, technical leader, and developer for numerous commercial Middleware products for vendors including BEA and Digital. His involvement in product development includes Web services, Java, CORBA, COM, Messaging, Transaction Processing, DCE, networking, and operating systems.

Gerhard Bayer



He is a Senior Consultant of International Systems Group, Inc. (ISG), a leading consulting firm that specializes in IT Strategy and development and integration of large-scale distributed applications using Service-Oriented Architectures. His work includes design of architectures for Service Oriented Integration and e-Business application development, as well as development of ISG's comprehensive SOA training curriculum. Mr. Bayer holds a MS degree in Physics and a BS degree in Computer Science.

Frank Cohen



He is the leading authority for testing and optimizing software developed with Web, SOA, RIA, AJAX, Flash/Flex, and REST designs and implementations. Frank Cohen is CEO and Founder of PushToTest and inventor of TestMaker, the Open-Source test automation tool. He is author of several books on optimizing information systems, and is an experienced instructor in areas relating to designing and testing Web applications, SOA, REST, and AJAX. Frank was also a featured speaker at JavaOne, SOA World 2007, STARWest, PSQT, and has been a guest of SYS-CON.TV.

PARTICIPATION FEE

SOA International Conference 2009
Euro 1600 • Rome, June 24-26, 2009

Special fee for the delegates who attend both seminar "SOA Governance" and "Conference 2009": Euro 2200

The fee includes all seminar documentation, luncheon and coffee breaks.

HOW TO REGISTER

You must send the registration form with the receipt of the payment to:
TECHNOLOGY TRANSFER S.r.l.
Piazza Cavour, 3 - 00193 Rome (Italy)
Fax +39-06-6871102

PAYMENT

Wire transfer to: Technology Transfer S.r.l.
Banca Intesa Sanpaolo S.p.A.
Agenzia 4815 - Rome
Iban Code:
IT 34 Y 03069 05039 048890270110

within June 9, 2009

GROUP DISCOUNT

If a company registers 5 participants to the same seminar, it will pay only for 4. Those who benefit of this discount are not entitled to other discounts for the same seminar.

CANCELLATION POLICY

A full refund is given for any cancellation received more than 15 days before the seminar starts. Cancellations less than 15 days prior the event are liable for 50% of the fee. Cancellations less than one week prior to the event date will be liable for the full fee.

CANCELLATION LIABILITY

In the case of cancellation of an event for any reason, Technology Transfer's liability is limited to the return of the registration fee only.

ROME

**Residenza di Ripetta
Via di Ripetta, 231**

SEMINAR TIMETABLE

3 days: 9.30 am - 1.00 pm

2.00 pm - 5.00 pm

first name _____

surname _____

job title _____

organisation _____

address _____

postcode _____

city _____

country _____

telephone _____

fax _____

e-mail _____

Stamp and signature _____

O U T L I N E

Opening Remarks

Max Dolgicer

This introductory session will provide an overview of the state of SOA in terms of its mainstream adoption. While SOA today facilitates reusability of Business functionality across Business processes and allows for a standards based approach to integration, we are only at the beginning of its evolution. SOA is not dead, it will rather evolve to become broader, shedding some of its early constraints. No longer are Web Services with SOAP and WSDL the default implementation, but REST is becoming an alternative for more and more solutions. Similarly, the notion of Client/Server SOA is giving way to an architecture that can support Business events. In addition, we are now moving beyond just focusing on architecture and services and start exploiting our SOA with higher value tools like BPM, BAM, CEP, the myriad ways of connecting people to services through Web 2.0, and there is the vision of thousands of development organizations placing millions of services into a cloud so that they can be used by billions of people. This Technology Transfer Conference will show you what it means to take SOA to the next level and how the Conference is structured around the key topics.

- The state of SOA – where do we go from here?
- Navigating the Conference

Session 1

Selling SOA to the Enterprise

Roger Sessions

The first, and most critical step, to a successful SOA strategy is selling the idea of an SOA. This selling needs to occur at numerous levels within an organization, and each role requires a different strategy. To make matters more confusing, each role may be filled with people who have very different personalities and different technical backgrounds. In addition, each organization has its own backdrop of ghosts, dragons, and political realities. To be successful selling the concept of SOAs within your organization, you need to understand technology, psychology, Business processes, personal dynamics, and organizational structure. This talk gives a roadmap to understanding the treacherous terrain you must traverse when trying to introduce SOAs into your organization.

- The first rule of selling an SOA: don't sell an SOA
- Selling to the CXO level
- Selling to the Business Side
- Selling to the Technical Side
- Selling to the Project Managers

Session 2

The Synergy of SOA, Event-Driven Architecture (EDA), and Complex Event Processing (CEP)

Gerhard Bayer

Most companies are faced with a growing complexity of their Business relationships and transactions. In addition, they are flooded with an ever increasing number of Business events as they move closer to conducting their Business in Real-Time. Approaches like Service Oriented Architecture (SOA) and Event Driven Architecture (EDA) are important steps towards capturing

events and efficiently implementing Business processes that handle them. However, there are an increasing number of Business Cases where humans cannot deal with the speed and complexity of Business events in terms of analyzing them to deduce the best action. Complex Event Processing (CEP) allows applying Business rules to streams of Real-Time events, including temporal correlations, thereby automating the event analysis process beyond what humans are capable of. The presentation explains the concepts and architectures of CEP and shows how SOA can enable this new approach to Business Event Management.

- Contrasting a typical Client/Server approach to SOA vs. an Event-Driven Architecture (EDA)
- The Business Case for CEP
- CEP requirements and solutions
- Example CEP application

Session 3

Managing Complexity– The Key to scaling SOA to the next level

Roger Sessions

Complexity is the single biggest problem in IT in general and in SOAs in particular. Complexity causes systems to be delivered late, over budget, and failing to meet the needs of the Business. It is a multi-trillion dollar problem. When SOAs were first introduced, many believed they would solve the problem of IT complexity. In fact, they often make the problem worse. They frequently introduce convoluted workflow and organizational mazes that are difficult to understand, implement, and support. This talk explores the nature of complexity as it relates to SOAs. It discusses the common misconceptions about complexity and introduces a rigorous, mathematically based model for understanding how complexity relates to SOAs. It then shows how this model can drive processes that result in SOAs that embrace simplicity as a key design attribute.

- Complexity is the killer of SOAs
- Complexity is governed by mathematics
- All partitions are not equal
- Simplicity is the key to success in SOAs
- Simplicity requires intentionality

Session 4

Guiding Principles for Modeling and Designing Reusable Services

Max Dolgicer

Over the recent years, many Fortune companies have started to embrace a SOA for initial development and integration projects. However, just utilizing technologies like Web Services and the latest generation of development tools are not sufficient for successful implementation of an Enterprise SOA. What is required is a consistent approach to architecture, modeling and design that takes a cross-project view on services, providing guidance to critical concepts like service layering and design for reusability. At the same time, traditional Object-Oriented development methodologies such as Rational Unified Process (RUP) need to be significantly adapted, making sure your services are more than just objects with a Web Services interface.

- Key architectural guidelines for Service Oriented design
- Important characteristics of Loosely Coupled architectures
- How to modify a typical Object-Oriented application development methodology so that it is suitable for implementing services
- The service layer model and how it facilitates reusability

Session 5

SOA and BPM Together: Hype or Helpful?

Mike Rosen

We keep hearing about the synergy between BPM and SOA. They are like a match made in Heaven, or somewhere at least. BPM helps us define, manage and monitor Business processes while SOA provides the underlying capabilities to do so. But where does BPM leave off and SOA begin? What is the intersection and overlap between them? How do we avoid repeating the mistakes of the past and keep BPM from becoming a next generation, silo building technology? We are told that SOA can provide a more agile, flexible Enterprise environment, but only if correctly matched with an Enterprise view of BPM. This session will describe the relationship, intersection and synergy of BPM and SOA and describe how to use that relationship to maximize the value of both technologies.

- Explore the relationship between BPM and SOA
- Learn how to use Business process decomposition to identify Business services
- Elaborate the requirements of Business service interfaces
- Understand the role and importance of Enterprise semantics in BPM/SOA solutions

Session 6

Retooling for next generation SOA

Frank Cohen

Enterprise managers see the success of social networking Web sites like Facebook and mySpace, the usability of Ajax applications like Google Maps, and the flexibility of Mashups that use REST interfaces like Amazon and Flickr combinations, and tell their software developers, I want that too! Implementing all these features requires a new base of technology, including tools, platforms, and technology for implementing Service Oriented Architect (SOA), Business Process Management (BPM), Complex Event Processing (CEP), and Service Virtualization (SV) technology. This presentation provides an overview of the key issues, it discusses workarounds, patterns, and anti-patterns that are common when using software development tools and platforms to architect and build SOA, BPM, and CEP applications.

- Impact of Rich Internet Application Technology On SOA Development
- Architectural Goals of Modern Web Applications
- BPM, CEP, SOA in Web Application Delivery
- Development Patterns and AntiPatterns
- Building for Testability and Monitoring

Session 7

BAM in SOA Environments – A Case Study

Frank Greco

Business Activity Monitoring (BAM) is an Enterprise system that tracks, monitors and identifies critical opportunities and risks in an Enterprise to maximize profitability and optimize efficiency. Often, BAM is viewed as one of the “killer

applications” that companies develop on top of a mature SOA implementation to gather live Business intelligence or metrics. BAM systems monitor Key Performance Indicators (KPIs) in a SOA, which are Business metrics that indicate how well the organization is accomplishing its objectives. Many service-based systems feed these KPIs in Real-Time (or near Real-Time) into a BAM system and leverage management dashboards for KPI visualization. Some important KPIs relate to Service Level Agreements (SLAs) of a SOA itself, risk management, compliance and Profit and Loss (P&L). Well defined KPIs can provide invaluable insights into how the organization is accomplishing its objectives. They are critical to the successful management of the services in the Enterprise, which is the real goal of the services monitoring. Furthermore, the information provided by KPIs can enable management to make decisions pertinent to current company performance and make reasonable forecasts regarding future Business plans. This session will discuss in detail a BAM implementation that monitored a large SOA developed at a major financial firm.

- Review strategies employed to build BAM/SOA
- Demonstrate examples of BAM dashboards
- Identify key players in the BAM space
- Review a case study of BAM used with a large SOA from a major financial firm
- Describe tactics to incorporate BAM in an existing SOA

Session 8

The challenges in real life ESB deployment scenarios

Frank Cohen

This presentation discusses some of the key challenges that are typical for many deployment scenarios of SOA workflow, process management, and orchestration solutions using Enterprise Service Bus (ESB) solutions. This session shows the pitfalls that can severely inhibit the successful rollout of an SOA project and how careful planning can minimize the likelihood of a failed project. The presentation is based on an extensive study of Java developer productivity in building applications using IBM, Tibco, Oracle and BEA platforms for SOA. The study consisted of a time/motion analysis of each step of the services lifecycle to reveal the amount of time and effort required to build, integrate, deploy and manage a range of services needed to assemble a composite application. The goal of the study was to compare the cost savings that can be achieved through greater productivity resulting in significantly reduced TCO. Some of the integration activities that were measured include system setup, design, service construction and orchestration, deployment, monitoring and management, as well as Change Management. The study finds that Java developer productivity varied by as much as 49%. We will show how an important aspect of avoiding these issues comes from planning and conducting meaningful tests that cover most of the eventual Use Cases.

- SOA Development Patterns and AntiPatterns
- Comparison of SOA Built With TIBCO, IBM, Oracle, BEA Platforms
- Service Virtualization and Service Composition
- Performance and Scalability Issues and Mitigation in SOA Environments

Session 9

Life on the Web is fast and furious – should we be more RESTful?

Gerhard Bayer

The Business functions that a company exposes to external Business partners as well as a growing number of internal services are being implemented

in form of Web services. This presentation addresses the question if they should be “pure” Web services or REST-based Web services. A “pure” Web service mandates using SOAP and WSDL, and it is not based on the concept of stateless resources that has made the Web ultimately scalable and successful. For some application requirements this introduces unnecessary complexity and adds overhead. Furthermore, it does not align with the general concepts of the World Wide Web. Representational State Transfer (REST) is an architectural style originally developed for distributed hypermedia systems like the WWW. The basic idea is to take advantage of the proven concepts of the Web in order to create the “programmable” Web, i.e. to create services that are not accessed by browser-based clients, but rather by Business applications. The presentation discusses the pros and cons of a RESTful approach compared to pure Web services.

- Examples of very large REST implementations
- The characteristics that define a RESTful architecture: resources, the uniform interface, architectural constraints
- Can we live without WSDL and SOAP?
- A sample RESTful solution

Session 10

Web 2.0 Solutions with SOA

Mike Rosen

Wikis, chat, webinars, conferencing, content sharing, and social networking have transformed our lives. Interacting with other people has never been easier or more potentially productive. But for Web 2.0 to realize its potential in the Enterprise, we have to stop thinking about it as informal, unstructured communication and start integrating it into key Enterprise processes—processing orders, servicing customers, hiring employees, etc. This session addresses the architecture, design, and implementation of Enterprise 2.0 solutions. And it’s no surprise that SOA is a key component of these solutions. But we must go well beyond the typical view of SOA. Next generation solutions require new layers in the Enterprise architectures, new services, and new implementation technologies and techniques. This session will highlight the role of SOA in Enterprise 2.0 applications, consider some example approaches, and anticipate the obstacles.

- Understand end-to-end Enterprise 2.0 application architecture
- Explain the role of SOA services in Enterprise applications
- Explore new services for providing application logic
- Describe a service framework for collaborative applications

Session 11

Extending SOA into the Cloud

Frank Greco

Over the next few years, Cloud Computing is projected to be a disruptive force in Information Technology which will fundamentally change how we develop, deploy and manage our software applications. The key component to the success of Cloud Computing is Service-Oriented computing. The combination of a new Business model that allows Service-Oriented Architecture (SOA) models such as utility and grid computing to be created on-demand and dynamically priced is very compelling. But to leverage the many advantages of cloud computing, Business must use and adhere to the Services-Oriented approach in developing and deploying their applications. The services-based approach is a cornerstone for moving select ap-

plications into a cloud. These clouds can be external or internal, public or private. Enterprise applications that leverage SOA need to be designed to take advantages of this new model for economic and for technical benefit, e.g., market agility or “surge” computing. But regardless if the cloud is external or internal to an Enterprise, the growth of cloud computing will have a profound affect on Business models and will dramatically redefine the relationship between customers and vendors. There are already many Cloud Computing providers that offer various aspects of a Business technology “stack” including compute-cycle services, data/persistence, software applications as services, developmental services, monitoring/management, and others. Large international companies such as Google, Amazon, Sun Microsystems, Salesforce, EMC, Intel, Gigaspaces, Arista Networks and others are now offering public and private cloud services. The list of vendors and cloud services continues to grow rapidly. This technology has already started to change how Businesses view their computing needs.

- Highlight the key advantages and potential pitfalls of Cloud Computing
- Identify the key relationships among clouds, SOA, utility and grid/hpc computing
- Describe the early internal clouds that used SOA developed by wall street firms
- Identify key players in the evolving Cloud Computing stack
- Discuss technology trends that affect Cloud Computing architecture
- Offer scenarios on the near-term future of Cloud Computing

Session 12

Building a SOA with infrastructure, application, and orchestration services from the ground up- design decisions illustrated in a B2B Case Study

Max Dolgicer

This presentation uses a Case Study to illustrate how the major principles of Service Oriented Architecture, modeling, and design can be applied. The Case Study is based on a service provider that has built a SOA based software infrastructure to conduct fully automated B2B transactions with several Business partners. Building a SOA that is based on well thought through service layers and service boundaries requires to clearly focus on key service qualities like reusability, statelessness, loose coupling, and composability of services into Business processes. These qualities form a continuous thread throughout the modeling of orchestration services, application services and infrastructure services. The presentation drills down into high level service design and explains the decisions and tradeoffs for determining the “right degree of Service Orientation” - e.g. if WSDL and SOAP are required, and why REST is a viable alternative to “pure” Web Services.

- Overview of a Service Oriented integration architecture
- Defining service layers for optimizing service reuse potential
- How to verify that the key SOA design principles are adhered to
- Examples of service interface design
- Breaking down Schemas into reusable structures
- Different approaches to relate WSDL and Schemas
- Design decisions that led to implementation of REST-like services



TECHNOLOGY TRANSFER

Piazza Cavour, 3 - 00193 Roma
Tel. 06.6832227 - Fax 06.6871102
www.technologytransfer.it
info@technologytransfer.it