TECHNOLOGY TRANSFER PRESENTS

Rome, May 12-14 2010
Residenza di Ripetta
Via di Ripetta, 231

INTERNATIONAL
CONFERENCE
2010

SOA

MAKING SOA WORK

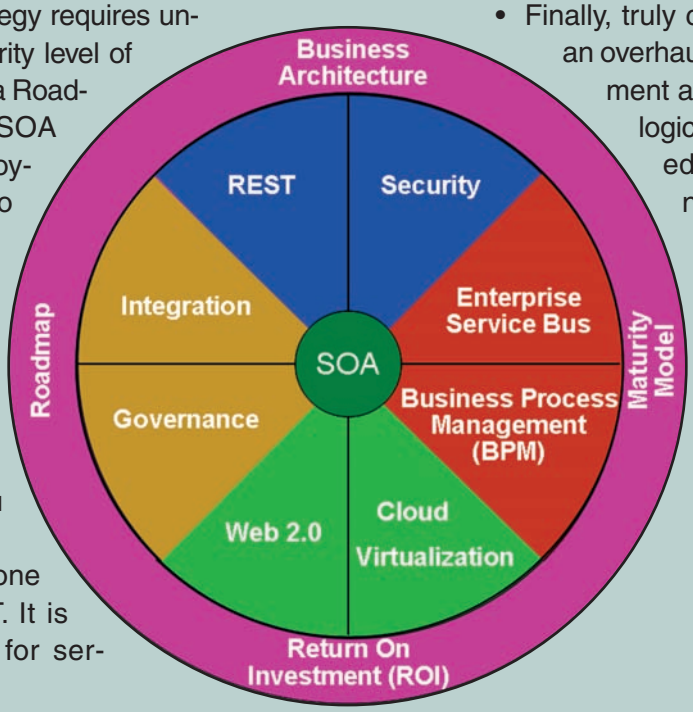
ABOUT THE CONFERENCE

There has been a lot of talk about unsuccessful SOA projects during the last couple of years. Some analysts have gone as far as pronouncing SOA dead. The truth is there is nothing wrong with SOA, but it has often been the victim of "identity theft": Web Services technologies and Middleware products pretend to be the architectural blueprint for your SOA. However, SOA's true identity lies in the Best Practices for Service Orientation, architecture, and development processes that we can rely on to achieve predictable results.

TTI's International SOA Conference 2010 will answer key questions on how to make SOA work. A lineup of experienced practitioners will present on topics that are crucial for any organization that wants to move beyond small scale projects and apply SOA across projects, across the Enterprise, extend it to the Cloud and to Business partners.

Join us when we discuss:

- Is SOA the Holy Grail that will finally allow us to align Business and IT? We will look at the transition from a Business Architecture to a SOA and how they can be linked together
- While the numbers of failed SOA projects are still high it is important to arm yourself with hard facts before you meet your Business sponsors. ROI calculations can convince even the most skeptical CFO
- Moving from a grass roots approach for building services to an Enterprise strategy requires understanding the SOA maturity level of your organization, defining a Roadmap for the evolution of SOA to the next level, and employing the right Governance to the implementation of your Roadmap
- REST-based architectures seem to compete with the traditional approaches to building a SOA – but do they really, or is it just another flavor, and how do you decide when to use what?
- Web 2.0 continues to be one of the hottest topics in IT. It is more than a pretty face for services; and we must understand its implications on how we architect services and connect them to Rich Internet Application clients
- The Web continues to evolve well beyond its original design, what type of Enterprise applications will be running over the Web and what is required to make it happen?
- 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" (a.k.a. "integration spaghetti")?
- Enterprise Service Buses can be an essential tool to integrate and virtualize your services, but they should not be confused with an architecture blueprint
- Most companies are using server virtualization to consolidate hardware and save cost; however, this is typically driven by data center operations and not in line with the SOA that Enterprise architects are concerned with – but it should be, and Cloud Computing is the next step that has to fit under the SOA umbrella
- Security – while often an afterthought, it becomes more critical in a SOA environment. Traditional Web Applications have well understood and straight forward security requirements and proven solutions. Some of these solutions can be reused for SOA, but the security in a SOA is much more difficult to comprehend and implement, since we are faced with more "moving parts"
- Finally, truly capitalizing on 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



Max Dolgicer

He is a Managing Director at International Systems Group (ISG), a leading consulting firm that specializes in IT Strategy and development and integration of large-scale distributed applications using Service-Oriented Architectures, and a Senior Consultant with Cutter's Enterprise Architecture practice. Mr. Dolgicer has been involved in leading management and technical roles in the major engagements for ISG's clients including 3M, United States Patent Office (USPTO), New York Stock Exchange (NYSE), Credit Suisse, Federal Reserve of San Francisco, MetLife, Cigna, CitiGroup, Morgan Stanley, Delta Airlines, Goldman Sachs, and McKenzie Financial Corporation. Mr. Dolgicer is a recognized speaker, instructor and lecturer. Mr. Dolgicer has more than twenty years of management and technical experience in development and support of mission-critical Business applications and software products. Mr. Dolgicer's academic background includes a Master in Computer Science from Technion, Israel Institute of Technology.

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. Mr. Greco's 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.

Gerhard Bayer

He is a Senior Consultant with International Systems Group (ISG), Inc. He has more than 25 years of industry experience, working for software vendors in a number of different positions as well as for consulting firms. He is currently focusing on large-scale application development and integration projects as Enterprise architect, mentor and teacher of IT seminars, planning consultant and program manager. Mr. Bayer's industry experience includes Fortune 500 companies in finance, insurance, government, and other industry segments. In one of his most recent projects he has assisted the asset management department of a client with the definition and implementation of a layered services model that followed Best Practices for a Service Oriented Architecture (SOA) that provides a consistent technical framework to achieve a reduction in application portfolio complexity, a higher degree of reuse of Enterprise services, separation of Business process management from traditional programming, and increased agility to support new Business relationships. Mr. Bayer holds a MS degree in Physics and a BS degree in Computer Science.

SPEAKERS

Mike Rosen
Max Dolgicer
Gerhard Bayer
David Koosis
Frank Greco
Gabriele Pellegrinetti

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

Who should Attend

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.

PARTICIPATION FEE

Euro 1600

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.
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within April 27, 2010

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.

EARLY REGISTRATION

The participants who will register 30 days before the seminar are entitled to a 5% discount.

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

May 12-14 2010
Residenza di Ripetta
Via di Ripetta, 231

Registration fee
Euro 1600

SEMINAR TIMETABLE

3 days: 9.30 am - 1.00 pm
2.00 pm - 5.00 pm

SOA Conference

first name _____

surname _____

job title _____

organisation _____

address _____

postcode _____

city _____

country _____

telephone _____

fax _____

e-mail _____

Stamp and signature

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.

David Koosis

He is Chief Information Officer and Deputy Commissioner of the New York City Department of Correction for the Bloomberg administration. He is a leader in NYC data integration efforts and national data standards efforts for government. Prior to public service, Mr. Koosis consulted to firms including Goldman Sachs, Morgan Stanley, IBM, and Sun, on software and Web technologies. He is co-author of the first best-selling primer on Java "**Java Programming for Dummies**", as well as various articles. His teams, projects, and products have built Businesses, earned customers, and won awards including the PC Week Best Practices Award and the NYC Technical Excellence award.

Gabriele Pellegrinetti

He is a Senior Consultant at Tecnet Dati, an Italian Company that provides IT professional services including education and training. He has spent over 15 years in Information Technology and has developed sound skills on multimedia technology, Web application development and SOA. He is graduated in Computer Science at Turin University and authored more than 30 courses, most recently on Web 2.0 and SOA. He has been collaborating with some of the leading Italian Company to design their SOA security infrastructure and develop Enterprise 2.0 Applications. During all those activities, Mr. Pellegrinetti co-wrote standard and Best Practices documents with an holistic approach in order to mitigate the impacts of new technologies on the Customer IT organizations.

O U T L I N E

Opening Remarks

Max Dolgicer

SOA has been pronounced dead by a few analysts. That got them in the headlines for a while, but when you look at the root of the argument, the revelations are not that earth shattering: everybody agrees we should have services (in the broadest sense), there has to be an architecture that fosters longevity, and a Best Practices based approach that achieves efficiency. What should be dead by now is to mistake Web Service technologies and Middleware products for an architectural blueprint that defines your SOA. This TTI Conference will show you what it means to really make SOA work and how the Conference is structured around the key topics. Mr. Dolgicer will address:

- The mistaken SOA – how do we make it work as promised?
- Navigating the Conference

Session 1

Web 2.0 - More than a pretty face for SOA

Gabriele Pellegrinetti

Web 2.0 has brought new life to the Internet, providing a more interactive user experience that is comparable to fat client desktop applications. Web 2.0 introduces new types of services that are designed to share presentation and multimedia objects (presentation services) and give the ability to develop a new application by combining services from different sites or applications (e.g. through Mashups). One of the popular components of today's Web 2.0 is Rich Internet Applications (RIAs). They include new features to process information and interactive user interfaces based on Ajax, Flex, JavaFX, Silverlight, etc. The user no longer has to wait for a new page to load whenever he makes a request; some information retrieval now happens asynchronously in the background while the user is interacting with the GUI, while other requests can be managed by logic that runs on the client without requiring calls over the Internet to the server side. However, what users see is merely a facade. It is powered by server-side distributed Business services that process data according to client requests. The question then becomes how services should be designed to support the requirements of RIA clients. We will look at RIA support services that are included in a SOA infrastructure and are managed through SOA governance tools.

- Web 2.0 – new opportunities are knocking
- What are Rich Internet Applications (RIA)?
- Relationship of RIA clients and services
- Synergy between Web 2.0 and SOA
- Web 2.0 development tools and SOA compliance
- RIA and the REST vs. SOAP debate
- Security of Web 2.0 SOA services – extending the service contract to meet the new requirements
- Guidelines for designing SOA Services according to Web 2.0 standards

Session 2

From Service Virtualization to Server Virtualization and the Cloud

Gerhard Bayer

The evolution of how companies employ SOA can be broken down into three phases: the initial phase focuses on migrating from previous approaches like component based applications to services and the Best Practices around building services. The focus of a second phase SOA shifts to reusability, securing how a growing number of clients access the services, assuring that Service Level Agreements (SLAs) are met, etc. Service virtualization plays a key role in this phase, which provides a decoupling of clients and services and replaces non-Business logic in services with configuration in Middleware that acts as intermediaries, like Enterprise Service Buses and SOA Appliances. While Enterprise architects focus on SOA, the data center and operations managers have Server Virtualization on their agenda as a top priority to increase efficiency and reduce cost. These two efforts have not been treated synergistically by most companies, but they should. The provisioning of virtual servers should be done using a SOA based service infrastructure paradigm and the Business services should automatically be mapped onto infrastructure resources in order to implement on-demand resource provisioning to better meet SLAs. This approach to the second phase in the SOA evolution positions a company for a natural progression into phase three, where services move into the Cloud. Regardless whether we move to an Enterprise Cloud or one that is hosted by an external provider, everything we have learned and implemented in the first two phases of SOA applies – even more so, since issues like security and integration become more complex in the Cloud and SOA Governance plays an even bigger role.

- SOA Phase 1: Proliferation of services and the role of SOA Governance
- SOA Phase 2: Service Virtualization & Server Virtualization – how does SOA relate?
- SOA Phase 3: Moving into the Cloud

Session 3

Securing a SOA takes more than traditional Web security

Gabriele Pellegrinetti

In a Service Oriented Architecture, Security plays a very important role and the standard tools used for developing Web Applications are often not sufficient. Furthermore, the technologies for managing the security of Web Services (e.g. WS-Security, WS-Policy, etc.) are not always able to meet the Business needs, especially when they implement a SOA based on heterogeneous technologies (i.e. SOAP, CORBA, JMS, etc). The advent of Web 2.0 and Cloud Computing further emphasize the need for efficient and effective management of service Security. SOA Security must be configured as a distributed service,

accessible from all applications within the Enterprise, Business processes and services. One solution is to implement security as a service.

- The SOA security need
- SOA Security compared with Web application Security
- The SOA security infrastructure
- Security as a service (centralized security services)
- SOA Security for SOA based on Web Services technologies
- Security for SOA based on heterogeneous technologies
- SOA appliance (hardware based security solutions)
- Security and Governance
- Case study and example

Session 4

Defining SOA Roadmap based on SOA Maturity Model

Max Dolgicer

There are several SOA Maturity Models available today, mostly provided by vendors. The idea is to define a number of levels that a company would progress through in order to achieve a higher level of maturity. The Maturity Model shows the goals and characteristics for each level, and the prerequisites that have to be met so that one can advance to the next level. With each new level the solutions that the IT organization produces based on the SOA should yield a higher Business impact. After explaining one of the current Maturity Models, the presentation will then illustrate how to develop a Roadmap that is customized for your SOA. The goal of a SOA Roadmap is to guide the evolution of an IT organization through the stages of increasing SOA maturity. It provides guidance to set SOA vision and a benchmark to measure progress. It may appear that the Maturity Model is the Roadmap, but this is not the case. Each IT organization is at a different stage, and it has different priorities and timelines to address key elements of the SOA evolution, like for example service reuse, Enterprise wide security, governance, service management, moving from static to dynamic binding, intermediation, Business process implementation, etc. The Maturity Model and Roadmap will be illustrated through a project example.

- What SOA Maturity Models exist today?
- Walkthrough of the levels and key elements of each level
- Developing a custom SOA Roadmap
- Project example for mapping a Maturity Model to a Roadmap

Session 5

Business Architecture for SOA

Mike Rosen

Architecture seems to have finally emerged as an important IT discipline. Business Architecture and Service Oriented Architecture are just a few we regularly hear about. Business Architecture describes the strategies, goals, objectives, tactics, and structure of an organization. SOA is an architectural style where 'Business aligned' services are the fundamental unit of analysis, design and implementation of Enterprise solutions. Clearly, these ought to be related. So, what is a Business aligned service? Where does the Business context come from? How is it described? How is it implemented in a service? How can this be traced back to requirements, tactics, strategies or goals of the Business? This session starts with an overview of SOA architectural concepts: architecture; services, Business processes, and semantics. Then, it explores the relationship between SOA and Business Architecture, including the definition of what Business Architecture is and isn't. Having elaborated the architectural context of SOA, and the requirements, it provides specific methods for applying Business Architecture to the identification, analysis and design of SOA services. Delegates will gain an overall understanding of SOA architectural requirements and the link between Business architecture and service analysis and design.

- Get introduced to the basics of Business Architecture
- Learn the link between Business Architecture and SOA
- Examine methods for applying Business Architecture to SOA design
- Demonstrate the linkage between services and Business strategy

Session 6

Less is More – Developing Simple Services, Getting Big Results

David Koosis

The Business applications that pre-date the era of Web Services were complete, self-contained entities. Web Services, on the other hand, are almost always intended as building blocks, to be combined, "mashed up" or integrated as part of a larger software solution. And in many cases the provider of the service and the team that make use of it from within their systems are different. Whether your Web Services are intended for integrating data or applications within your organization, or as an API that customers can access over the Internet, or for trading partners in your industry, it is of little value if people find it cumbersome to use. Web Services become popular if they are easy to use – this is the driving force behind the services and APIs provided by Amazon and Google, to name just two of the widely successful companies. Design choices you make will have a profound impact on whether your colleagues, your customers, or your Business partners will use your Web Services and succeed. One key design consideration is the technologies you chose – when would you want to "go heavy" with an implementation based on SOAP, WSDL and potentially other WS-* standards based technologies, and when would it be better to provide a simple API via a RESTful solution? In this presentation we will explore the factors that make services easy to use, with a particular focus on why REST has become so successful. After these factors have been defined, we will show how they have been applied in a Case Study.

- Overview of the Business Case
- Design choices related to the Business requirements

- What are the factors that make a Web Service easy to use?
- Pros and cons of SOAP/WSDL vs. RESTful solutions
- Case Study and lessons learned

Session 7

Why the Cloud needs Service Oriented Architectures

Frank Greco

The Business model of Cloud Computing has started to extend beyond the "simple" applications like email and could soon dramatically change the way IT is responding to the demands of the Business. Companies are beginning to put Business applications into the Cloud that are considered core to their operations. This requires careful planning how these applications are architected in order to take advantage of the Cloud capabilities. Furthermore, integration requirements between Cloud-based applications and those that are not in the Cloud (or in other Clouds) are playing a significant role in this scenario. This all seems to fit well with the benefits that can be achieved with a well thought-through SOA. However, it is not enough to master SOA, we must also understand the particular concepts, advantages and pitfalls of Cloud Computing, the current state of cloud technology, who the key players in this space are, and how we can map SOA to this environment.

- An overview of Cloud Computing and key issues to watch out for
- How to map the concepts of SOA to those of the Cloud
- Key technologies and major Cloud providers
- Where cloud computing can be applied today and in the near future

Session 8

ESB: when to deploy it and when to avoid it?

David Koosis

There is a plethora of integration technologies, tools, and approaches that have evolved over time: EAI tools for application integration, ETL (Extract, Transform, Load) tools for bulk data conversion and integration on the data level as well as messaging technologies for near Real Time application integration. However, with time the lines of the Middleware landscape have blurred, which makes it challenging to differentiate the technologies and to find the best solution for your requirements. In addition, thanks to vendors, the ESB has been positioned as a one-stop solution for ALL your integration needs, i.e. universal solution for all your integration problems. This Case Study contrasts the requirements with a number of potential solutions that had been considered: do we really need an ESB, or can we simply employ some bulk data transfers supported by an ETL tool? Or should we wrap the legacy systems as Web Services and expose them to the other applications? However, at the same time we also need non-invasive legacy integration tools for applications that cannot be changed. This presentation explores the value of the ESB as compared to other integration technologies and approaches, including the decision criteria when and how to use an ESB with minimal complexity and maximum value. At the end of this session the capabilities of IT organization are discussed in order to determine which toolset is most appropriate.

- An overview of the integration requirements of the Case Study
- Comparing the integration landscape: ETL, Messaging with add-on tools, roll out yourself Web Services, ESB
- When to chose the ESB over other integration technologies
- Is your organization ready for the tool you choose?
- How to determine the complexity cut-off point to minimize cost and avoid failures

Session 9

Services without SOA, or SOA without Services? Try REST!

Gerhard Bayer

SOA has been pronounced dead – so what is the alternative? Should we build our Business applications based on a Resource Oriented Architecture and abandon the notion of services altogether? However, designing systems based on the concept of resources if very different from implementing services and programming clients that invoke them. Furthermore, the analysts that have spoken against SOA are still in favor of services. A "pure" Web Service based design mandates using SOAP and WSDL, and often doesn't follow the concept of stateless resources that has made the Web ultimately scalable and successful. With REST, on the other hand, we can take advantage of the proven concepts of the Web, like hyperlink based addressing, caching, the HTTP protocol, etc. This presentation discusses the differences between the two approaches and explains where the strength and weaknesses are. It also illustrated some very popular REST implementations that have gained a large following of developers that use these systems.

- What kind of architecture can be called "RESTful"?
- What are the drawbacks of a "pure" Web Services based architecture?
- Where does REST fall short – and how to work around it in typical application architectures.
- Examples of high profile REST implementations.

Session 10

SOA and BPM: The Best of Both Worlds

Mike Rosen

SOA and BPM are often mentioned together, and for good reason. BPM helps us define, manage and monitor Business processes while SOA provides the underlying capabilities to do so. But, how do we combine them so that the result is greater than the sum of the parts? What other advantages can we achieve: flexibility, agility, manageability, alignment, quality, cost reductions, time to market, more? We all know that techno-

logy alone does not solve Business problems. But used intelligently, it can provide better solutions that enable an agile and flexible Business, built on well defined and managed processes, based on robust Business capabilities, implemented as services. This session will describe the role of BPM and SOA in an overall Enterprise, illustrated with Case Studies, and explain how to use them together to maximize value and flexibility.

- Understand the roles and relationship of BPM and SOA in the Enterprise
- Learn how Business Process Modeling is used to identify Business services
- Understand the role of Business Activity Monitoring in process improvement and agility
- Learn about next generation Collaborative Business Processes

Session 11

Web 2.0 and SOA – The Missing Link

Frank Greco

Web applications have typically been implemented through a HTML-based presentation layer that provides thin clients with access to Business applications. SOA hasn't changed much – we have services now, but the way we connect them to the clients is still the same. We do have SOAP, but it's essentially just a tunneling mechanism through HTTP to get through the firewall. Rich Internet Applications (RIAs) have introduced a new user experience that is more like a desktop application, including some asynchronous interaction between the RIA client and the SOA services, but they still depend on the limits of the current Internet infrastructure. The Web now needs to provide full Enterprise application functionality using all the advantages of a ubiquitous Web infrastructure both within the corporate firewall and also in external Cloud Computing centers. Companies such as Google, Apple, Amazon, Opera, Mozilla, Palm, Oracle/Sun, Microsoft, etc, are already moving in this direction. This will change with a new Web standard called HTML5. Major sections of this standard have already been implemented by most browsers. It includes new types of Web forms, offline caching/database, sophisticated graphics capability, and a new communication protocol called Web Sockets. The latter provides several orders of magnitude performance advantages over current pseudo Real-Time communication techniques and enables true asynchronous interaction between Web 2.0 clients and SOA services. Combined with other HTML5 capabilities like Web Forms and offline caching, new Web applications can be built that rival the user experience of rich (fat) clients and push the limits of Web 2.0 as we know it today.This session will discuss how SOA services can interact with rich Web 2.0+ clients using Web Sockets and other HTML5 features.

- Introduction of the basic concepts of HTML5
- Comparison of HTML5 features with Flash/Flex, Silverlight and Java/JavaFX
- Best Practices and code examples for connecting Web 2.0+ clients to SOA services
- Key attributes of Web Sockets and how they compare with current polling techniques
- Use cases that show the role of HTML5 in Cloud Computing, including the highly scalable SOA of Amazon's EC2, and advanced features for Facebook
- Strategies for developing Client/Server SOA services using these new tools

Session 12

A ROI calculator for SOA - Let the numbers do the talking

Max Dolgicer

There are many pro and very few con arguments from an engineering perspective that make us believe that SOA is a superior approach for most application development and integration projects. However, nowadays we typically won't get away with brilliant technical arguments to justify the transition to SOA. In most cases we will have to convince the CFO that there is a positive bottom line result. This presentation outlines a ROI model for application development based on service reusability in a SOA. It describes how the cost effect of reuse can be calculated during the development and the maintenance cycle of a portfolio of Service Oriented Business applications. The model is based on metrics that have been widely accepted throughout the IT industry. The model will then be illustrated by a project where multiple Business applications have been developed within a SOA that employs a foundation of reusable services.

- Overview of the Business processes and SOA of the Case Study
- Considerations for service reusability
- The bottom line: code reuse statistics
- Defining an ROI model for software reuse
- Applying the ROI model: from lines of code to $$$ saved
- Keeping track of reuse efficiency

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