



INTERNATIONAL
Systems Group, Inc.

XML and Web Services – from XML 101 to Web Services Platforms

Promise and Reality of Web Services – Setting and Resetting Expectations

XML and Web Service technologies have become the focus of attention as standards for integrating applications across enterprises as well as within the boundaries of one company. Most of the vendor hype surrounding these new standards has been targeted at the promise of “seamless” B2B interactions, allowing companies to dynamically establish new business relationships and processes without the tedious grunt work that is usually involved when incompatible applications need to exchange information.

Now that reality is setting in, it is important to put effort (and \$\$\$) into projects that are realistic, predictable, and achieve bottom line results. Some of the focus has shifted to projects that are confined within the enterprise and as such are more controllable. For these projects, XML and Web Services are utilized for both development and integration centric initiatives. For development centric initiatives, Web Services provide a standards-based approach to implementing a Service Oriented Architecture (SOA), a concept that more and more companies are adopting. For integration centric initiatives, XML and additional standards like XSLT, XPath and XQuery have materialized as widely accepted technologies. Furthermore, Web Services are emerging as a standards-based alternative to utilization of commercial and home-grown proprietary adapters that have been used so far to connect to legacy and packaged applications.

Get the Competitive Advantage at a Special Seminar

This special seminar conducted by ISG will provide you with an in-depth understanding of the promises and the reality of XML and Web Service technologies and how they can be applied to development and integration initiatives within your company.

You will learn about technologies that are available today and you will gain insight into emerging solutions those different vendors and standards groups are promoting. However, it's not just about understanding the technology, it's about knowing how to really apply it. At this seminar, you'll learn how to exploit current and emerging XML and Web Services technologies and products to give your company a competitive advantage.

Benefits of Attending

- Learn how XML and Web Services can transform your business for competitive advantage.
- Distinguish between hype and reality so that you can put the technology to its optimal use in your organization.
- Discover the role of standards for XML and Web Services and see how these technologies tie or not in with other types of Middleware.
- Define a roadmap for creating a Service-Oriented Architecture (SOA) for development and integration of your application portfolio.
- Learn how Web Services can enable and facilitate integration of applications within your enterprise and to be used outside of your enterprise

Who Should Attend

- IT professionals who need to see how XML and Web Services can be applied to development as well as integration projects.
- IT Managers and IT Strategists selecting new standards and products for enterprise architecture
- IT Managers and IT Strategies evaluating feasible strategies for application development and integration.
- Architects and Application Developers who want a detailed look at the different XML and Web Services technologies and products'
- Architects and Application Developers who want to know how these technologies and products can be applied to both, A2A and B2B application integration.
- Architects who want to adopt a Service Oriented Architecture (SOA).
- Consultants who need to recommend and use XML and Web Services.

Prerequisite: This class requires attendees to be knowledgeable in the concepts and technologies covered in ISG's seminars on "Enterprise Application Integration (EAI) and Middleware – From Technologies to Real Solutions" and "Web Enablement for Enterprise Applications – From 101 to Application Servers and Web Services"; however, this seminar does not reference any specific material from those seminars.

Seminar Outline

1. Introduction: the Internet, Intranet, Extranet, and the Web

- A brief history
- Internet vs. Intranet vs. Extranet
- The World Wide Web
- E-Business Evolution: From Web-sites to e-Business integration
- HTTP: The first Web protocol
- HTML: Publishing on the Web
- XML: Bringing order to chaos
- SOAP and beyond – building the Web protocol stack

2. Defining XML

- XML

- DTD
- Name Spaces
- Schema

3. Programming and Manipulating XML

- XML technologies
 - Extensible Style Language (XSL)
 - XML Transformation (XSLT)
 - XPath
 - Xpointer
 - XLink
 - XQuery
 - Document Object Model (DOM)
 - Simple API for XML (SAX)
 - ebXML
- XML best practices
- XML commercial tool support
 - BEA WebLogic Workshop
 - IBM WebSphere Studio
 - Microsoft Visual Studio

4. Web Services and Related Technologies – Part I

- Thin Client Architecture
 - CGI, Servlets, Java Server Pages (JSP)
- B2B Technologies
 - What really drives the B2B market?
 - Requirements for B2B solutions
 - Simple Object Access Protocol (SOAP)

5. Web Services and Related Technologies – Part II

- Web Services – a new approach to the Service Oriented Architecture
- Web Services Definition Language (WSDL)
- Web Service security
- Web Service transactions
- Web Services orchestration
- ebXML

6. Requirements for Development and Integration of Enterprise Applications

- What makes e-Business integration so difficult?
- Requirements for Middleware Services
- Overview of different Middleware platforms

7. Platform Choices for Developing Service-Oriented Applications: J2EE

- Java distributed services
- Enterprise Java Beans
 - Architecture overview
 - Container provided services
 - Sessions Beans vs. Entity Beans
 - State management
 - Security
 - Declarative transaction management
 - Message driven Beans

- Web Services support
- Product examples
 - BEA WebLogic Server
 - IBM WebSphere
 - Oracle
 - JBoss

8. Platform Choices for Developing Service-Oriented Applications: .NET

- Introduction to COM/DCOM
- COM+ overview
- ActiveX overview
- The .NET Framework
 - Common Language Runtime
 - ASP.NET
 - ADO.NET
 - Remote objects
 - Interoperability between COM and .NET

9. Comparing Platform Support

- Basic platform concepts
- Core platform capabilities
- Comparing platform tiers
- Developing Web Services

10. Web Services and Application Integration Middleware

- Middleware is key to application integration
- Combining XML and Middleware
 - XML and Messaging
 - XML and EAI tools
- Wrapping legacy systems and packaged applications as Web Services
- Product examples
 - webMethods
 - Tibco
 - Microsoft BizTalk

11. Real World Case Studies

- Case Study 1
- Case Study 2

12. Market Trends and Directions - Web Services Scenario 2004

- Web Services outlook 2004 – Platform Convergence and Choices
- Application Servers
- Message Brokers
- Pure play Web Services platforms
 - CapeClear
 - Systinet
 - Infravio
 - Killdara
- When to choose what