



GLOBAL STANDARD SETTING 2007
An Interactive Discussion



WEB SERVICES
INTEROPERABILITY
ORGANIZATION

Open Standards + Profiles = Interoperability

Presented by

Michael Bechauf

**President and Chairman of the Board, WS-I
Vice President, Industry Standards, SAP AG**

Open Forum for Standards Developers
June 20, 2007

Overview

Agenda

- ▶ WS-I and Web services
- ▶ Web Services Interoperability Organization
- ▶ International Reach
- ▶ Challenges to achieving Global Recognition
- ▶ New Organization starting out

Additional Information

- ▶ Web services standards set
- ▶ WS-I deliverables
- ▶ Why are Profiles necessary?
- ▶ Progress to date
- ▶ Work in progress
- ▶ Stay in touch with WS-I

WS-I and Web services

- **The Web services adoption and support cycle**
 - ▶ Vendors will need to deliver more and better support as adoption increases
 - ▶ As more common services become available the pace of adoption will accelerate
 - ▶ Web services succeed in direct proportion to the **technologies that support them**
- **Web services must interoperate to be effective**
 - ▶ An enterprise typically consists of tools and solutions from multiple providers
 - ▶ Customers want and need quality, modularity, evolve-ability, etc.
 - ▶ **Interoperability is a critical requirement to make Web services work**
- **Interoperability is more than Open standards**
 - ▶ Standards Development Organizations (OASIS / W3C) build standalone standards
 - ▶ Products use groups of standards
 - ▶ Interoperability places new requirements on standards
 - ▶ **WS-I compliments the work done by OASIS, W3C, etc.**

Web Services Interoperability Organization

- **An open industry effort**
 - ▶ Advancing Web services interoperability
- **Broad participation**
 - ▶ 180+ companies
 - Software Vendors, Consultants, Industry Organizations, etc.
- **Establish best practices for achieving interoperability**
 - ▶ Based on existing open standards

International Reach

- **Global Membership**
 - ▶ BT Group, Deutsche Telecom, Ericsson, France Telecom, Fujitsu, Hitachi, Kantega, Microfocus, NEC, Nokia, SAP, Software AG, etc.
- **WS-I Board representation**
 - ▶ President and chairman of the board – SAP
 - ▶ Board members – World's largest technology companies invested in Web Services (BEA, Fujitsu, HP, IBM, Intel, Microsoft, Oracle, Sun Microsystems, WebMethods)
- **PAS submission to ISO**
 - ▶ WS-I Basic Profile 1.1
 - Approval anticipated 2H07
 - ▶ WS-I Basic Security Profile 1.0 to be submitted
- **Collaboration with the EU**
 - ▶ Leverage Web Services to achieve Enterprise Interoperability across EU

Challenges to achieving Global Recognition

- **Global Recognition**

- ▶ Broad adoption for WS-I deliverables in vendor products
- ▶ Interoperability as a key success factor for Web Services
- ▶ Customers request WS-I compliant technologies
- ▶ Analyst organizations recognize value of deliverables

- **Challenges**

- ▶ Speed of adoption determined by broad consensus across technology vendors on the WS-I board
 - Alignment of product roadmaps takes time
- ▶ Balance user and vendor interests

- **Outreach**

- ▶ Presence at key conferences
 - User
 - Analyst (Gartner / Burton Catalyst)
- ▶ Update key analyst firms – Worldwide
- ▶ Press releases
 - Supporting new deliverables
 - Achievements
- ▶ Interop events

New Organization starting out

- **Critical requirements**

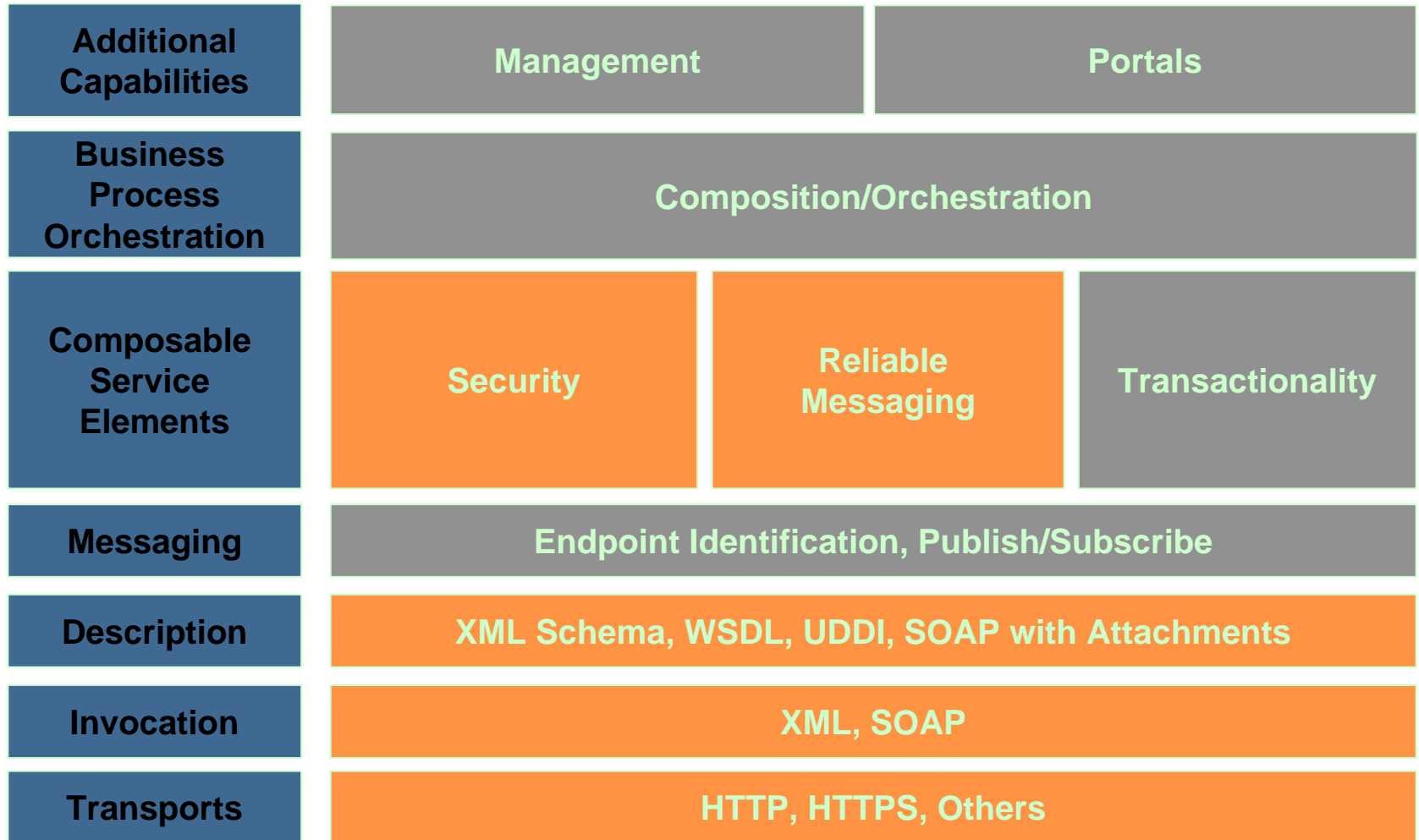
- ▶ Proposed deliverables provide high value to target audiences
- ▶ Organization fully focused on a set of deliverables that fosters the goal of interoperability
- ▶ Core membership
 - ▶ Customers
 - ▶ Vendors
 - ▶ Services Providers
 - ▶ Collaborating Standards Organizations
- ▶ Adapt to change
- ▶ Active participation by membership
 - ▶ Building of deliverables
 - ▶ Promotion of deliverables
- ▶ Clear outreach plan / execution capability
- ▶ Money
 - ▶ To run the organization

Additional Information about WS-I

The Web Services Standards Set

Additional Capabilities	Management	Portals	
Business Process Orchestration	Composition/Orchestration		
Composable Service Elements	Security	Reliable Messaging	Transactionality
Messaging	Endpoint Identification, Publish/Subscribe		
Description	XML Schema, WSDL, UDDI, SOAP with Attachments		
Invocation	XML, SOAP		
Transports	HTTP, HTTPS, Others		

The Web services standards set: WS-I progress to date



WS-I Deliverables

- **Profiles**

- ▶ Selected set of specifications based on customer requirements
- ▶ **Guidelines and conventions** for using a defined set of specifications to ensure interoperability

- **Sample applications**

- ▶ Sample code and applications support multiple environments
- ▶ **Demonstrate interoperability for completed Profiles**

- **Test tools and supporting materials**

- ▶ Supporting documentation
- ▶ **Test profile implementations for conformance**

Why are Profiles necessary ?

WS-I Profile Provides Interoperability Guidance	Example - Reliable Secure Profile (RSP)
<p>Eliminates ambiguity by tightening requirements (MAY, SHOULD → MUST)</p>	<p>Issue 37</p> <p>WS-RM : Receiver SHOULD ignore unrecognized extensions RSP : Receiver MUST ignore unrecognized extension</p>
<p>Avoids difference in interpretations by clarifying semantics</p>	<p>Issue 30</p> <p>Define the semantics of a “one-way” message</p>
<p>Fill the gap created by composing different specifications together</p>	<p>Issue 16</p> <p>WS-RM : Defines protocol elements – headers and body WS-S : Defines how to secure headers and/or body RSP : Requires securing both WS-RM headers and body</p> <p>Issue 29</p> <p>RSP headers : Requires that WS-RM should not mess up WS-A</p>

Progress to Date

- **Final material**

- ▶ Basic Profile 1.0 and 1.1
- ▶ Simple SOAP Binding Profile 1.0
- ▶ Attachments Profile 1.0
- ▶ Security Challenges, Threats and Countermeasures 1.0
- ▶ REL and SAML Token Profiles
- ▶ Basic Security Profile 1.0

- **Work in Process**

- ▶ Basic Security Profile 1.1
- ▶ Basic Profile 1.2 & 2.0
- ▶ Reliable Secure Profile 1.0

Work in Progress

- **Basic Profile 1.2**

- ▶ W3C WS-Addressing
- ▶ SOAP 1.1 Binding for MTOM
 - Target completion – 2H07

- **Basic Profile 2.0**

- ▶ Replace SOAP 1.1 with SOAP 1.2
- ▶ WSDL 1.1 Binding for SOAP 1.2
 - Target completion --- 1H08

Work in Progress (con't)

- **Basic Security Profile 1.1**

- ▶ Replace WS-Security1.0 with WS-Security1.1
 - Target completion – 2H07

- **Reliable Secure Profile 1.0**

- ▶ OASIS WS-Reliable Messaging 1.1
- ▶ OASIS WS-Secure Conversation 1.3
- ▶ Composes with BP1.2 or BP2.0 and BSP1.0
 - Target completion --- 1H08

Stay in touch with WS-I

- Visit WS-I at www.ws-i.org
 - ▶ Deliverables available for free download
- Become a member
 - ▶ User requirements identify future profiles
- **Open Standards => Profiles => Interoperability**