### WEB SERVICES INTEROPERABILITY ORGANIZATION

## WS-I PROFILES FOR BASIC WEB SERVICES

The fulfillment of Web services' business promise depends on the consistent and reliable interoperability of deployed Web services. To that end, WS-I has published the Basic Profile 1.1, the Attachments Profile 1.0 and the Simple SOAP Binding Profile 1.0 to support basic Web services interoperability. A WS-I profile establishes the Best Practices to ensure the secure interoperability of Web services created according to a designated set of specifications and standards.

#### **Basic Profile 1.1**

The Basic Profile 1.1 describes how the core Web services specifications, SOAP 1.1, WSDL 1.1 and UDDI 2.0, should be used together to develop interoperable Web services. Specifically, the document identifies a set of nonproprietary Web services standards and specifications and provides clarifications, refinements, interpretations and amplifications of them that promote interoperability.

#### Attachments Profile 1.0

The Attachments Profile 1.0 complements the Basic Profile 1.1 to add support for conveying interoperable message attachments using the SOAP Messages with Attachments (SwA) specification. SwA defines a MIME multipart/related structure for packaging attachments with SOAP messages. Web services that use attachments may be tested for WS-I conformance against the composition of the Basic Profile 1.1 and the Attachments Profile 1.0.

### Simple Soap Binding Profile 1.0

The Simple SOAP Binding Profile 1.0 mandates the use of the HTTP binding for SOAP 1.1 defined in the SOAP 1.1 and WSDL 1.1 specifications and places certain constraints on its use. Web services that do not use attachments may be tested for WS-I conformance against the composition of Basic Profile 1.1 and Simple SOAP Binding Profile 1.0.

### **Profiled Specifications**

With the intent to promote interoperability, the WS-I Basic Profile and the associated deliverables provide constraints and clarifications to the following Web services specifications and standards:

### WEB SERVICES INTEROPERABILITY ORGANIZATION

### WS-I PROFILES FOR BASIC WEB SERVICES

- Extensible Markup Language (XML) 1.0
- Hypertext Transfer Protocol (HTTP) 1.1 over TLS
- Secure Sockets Layer Protocol Version 3.0
- SOAP 1.1
- Universal Description, Discovery and Integration (UDDI) 2.0
- Web Services Description Language (WSDL) 1.1
- XML Schema 1.0 Part 1: Structures
- XML Schema 1.0 Part 2: Data types

### **Additional Resources**

In addition to developing these profiles, WS-I develops resources such as sample applications, use cases, usage scenarios and testing tools to support developers in developing interoperable Web services.

The WS-I Sample Application 1.0 uses a supply chain management (SCM) example to demonstrate the effectiveness of applications that conform to WS-I profiles. Implementations of the same application on multiple platforms, languages and development tools demonstrate interoperability in action and provide readily usable resources for the Web services practitioner.

Use cases and usage scenarios capture business and technical requirements for the use of Web services. These requirements reflect the classes of real-world requirements that support Web services solutions and provide a framework that demonstrates the guidelines described in WS-I profiles.

Testing tools are used to monitor and to analyze interactions with a Web service to determine whether or not the WSDL descriptions, UDDI registration entries, and SOAP messages exchanged conform to WS-I profile guidelines. These tools provide developers with the confidence they need to successfully deploy Web services in heterogeneous environments.

#### **About WS-I**

WS-I (www.ws-i.org) is an open industry organization chartered to establish Best Practices for Web services interoperability, for selected groups of Web services standards, across platforms, operating systems and programming languages.

WS-I comprises a diverse community of Web services leaders from a wide range of companies and standards development organizations (SDOs). WS-I committees and working groups create Profiles and supporting Testing Tools based on Best Practices for selected sets of Web services standards. The Profiles and Testing Tools are available for use by the Web Services community to aid in developing and deploying interoperable Web services.

# FOR MORE

For general inquiries, please e-mail: info@ws-i.org

For membership inquiries, please e-mail membership@ws-i.org

For all other inquiries, please contact: Janice Carroll, WS-I Membership Coordinator, +1 (781) 876-6228.

### www.ws-i.org