

Training

Module 5: SOA Technology Languages (1 day)

The "contract first" or "WSDL first" approach to building standardized Web services in support of SOA has become an important industry best practice. To follow this approach requires an organization to move away from Web service interface auto-generation tools in order to take control of the Web service contract design. This, in turn, requires in-house expertise in the Web Services Description Language (WSDL) and related XML Schema proficiency.

This module provides a basic hands-on tutorial for the creation of abstract WSDL definitions and related XML schema definitions. Participants learn the internal structure of service contracts and study the primary elements and constructs of the WSDL and XML schema languages.

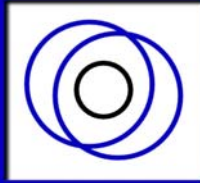
Further provided is an introduction to the fundamental language elements and constructs of the Web Services Business Process Execution Language (WS-BPEL).

Students are guided through the creation of a process definition that orchestrates previously defined services to automate sample business process logic.

Numerous exercises and examples are provided and attendees are expected to complete the session with an understanding of how to interpret Web service contracts and WS-BPEL process definitions, and to further write their own XML schema and abstract WSDL definitions.

The following primary topics are covered:

- Fundamental XML Syntax and Application
- XML Schema Structure
- Fundamental XML Schema Language Elements (complex types, simple types, attributes, xmlns, complexType, element, schema, import, and sequence, etc.)
- WSDL Document Structure
- How WSDL Relates to XML Schema
- Namespaces and XML Schema and WSDL Definitions
- Fundamental WSDL Language Elements (definitions, types, message, part, portType, operation, input, output, binding, service, port, etc.)
- SOAP Message Structure
- Fundamental SOAP Language Elements (Envelope,



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Header, Body, etc.)

- WS-BPEL Process Definition Structure
- Fundamental WS-BPEL Language Elements (process, partnerLinks, partnerLink, and partnerLinkType, variables, sequence, invoke, receive, reply, getVariableData, switch, case, otherwise, assign, copy, from, to, faultHandlers, catch, and catchAll, etc.)

Optionally, coverage of the WS-Policy language can also be provided upon request.

All course materials are printed in full-color and additional reference textbooks are also supplied, as required.

This is also a credit course for the SOA Certification Program and optional testing is available. For more information about certification and for descriptions of additional courses, visit www.soaschool.com or www.soatraining.com.

