

Advanced Web Service Techniques

(3 days hands-on)

This course explores advanced development techniques for Web services. In this course you will learn how to fine-tune services for various data exchange scenarios, use SOAP headers and faults effectively, and secure message contents. You will also learn about the role of Enterprise Service Buses (ESBs) and the Business Process Execution Language (BPEL) in industrial-strength SOA solutions, and find out what RESTful services have to offer.

The course provides numerous examples based on Microsoft .NET, Java, and Oracle tool sets.

Contents:

- **Web Service Technologies:** Web services and SOAP; Microsoft.NET solutions; Java solutions; Related standards and technologies
- **Describing Web Services with WSDL:** Overview of WSDL; SOAP formatting and serialization; Customizing formatting and serialization
- **Web Service Specifications:** Overview of the WS-I Basic Profile; WS-I Basic Profile guidelines; WS-Addressing
- **Web Service Techniques:** Exception handling and SOAP faults; Asynchronous Web services
- **Creating and Using SOAP Headers:** Overview of SOAP headers; Creating SOAP headers; Accessing SOAP headers
- **Designing SOA solutions:** Message exchange patterns; Transferring data objects; Customizing serialization
- **RESTful Web services:** Overview of REST; Examples; REST constraints; Architectural elements
- **Enterprise Service Buses:** Overview of ESBs; Characteristics of ESBs; ESB state of the industry
- **Orchestrating Services:** Achieving orchestration with BPEL; BPEL control flow; Compensation; BPEL state of the industry
- **Securing Services:** Essential security concepts; Message-level security; WS-Security

Who Should Attend:

This training course is aimed at developers and designers tasked with creating Web-service based solutions.

Prerequisites:

Familiarity with Web service concepts, and programming experience in either C#, Visual Basic (.NET), or Java.