

ENABLING THE SERVICE ORIENTED ENTERPRISE™

## OBJECTIVES

- ⇒ Understand the basic concepts of SOA.
- ⇒ Learn the different paths to implementing SOA.
- ⇒ Understand the roles and processes used to create Service Oriented Architectures.
- ⇒ Understand an SOA reference architecture.

### Introduction

This course sets the context for describing an SOA from an architectural perspective, coming to grips with the reality of this emerging technology, and providing a detailed understanding of the elements that comprise SOA, as well as techniques and practices for creating organization-wide software integration solutions using SOA concepts.

### Overview

Defining a Service Oriented Architecture (SOA) is the current challenge of many enterprise IT organizations. The emergent popularity of Web services, and the ease of implementation, has muddied the waters, as many have adopted an incremental approach to SOA via Web services, without first thinking through the larger architectural issues.

### Audience

This two-day course is designed principally for the technical and enterprise architect. However, designers and other project team members who are interested in understanding SOA concepts will greatly benefit from this course. It is also beneficial to technical leads and software quality assurance personnel who oversee development of systems and require an understanding of the process and the artifacts being produced.

### Class Size and Duration

This two-day course can accommodate up to 12 students.

### Prerequisites

Prior architectural and high-level design experience.

### Course Outline

1. What is Service Oriented Architecture (SOA)
  - Creating a common understanding of SOA
  - The evolution of SOA
  - Service and SOA concepts
  - Design principles of SOA
  - The relationship between SOA and Web services
  - The advantages and risks of SOA
1. The Business Impact of SOA
  - The benefits of employing SOA
  - Review of common business goals and the way SOA addresses them
  - The risks associated with the SOA approach
  - Evaluating tradeoff strategies

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### 3. Service Enablement

- Basic Web services elements
- Core Web services standards stack
- The importance of WSDL
- The design of SOAP
- The use of registries via UDDI
- The basic concepts of service-oriented

### 4. Distributing Services Across a Network

- Aligning functional and non-functional requirements in a distributed services environment
- The role of intermediaries in Service Networks
- Introduction to WS-\* Extensions
- SOA tenets

### 5. Process Driven Services

- Service layer abstraction
- Introduction to business process layer
- Process patterns
- Orchestration and choreography
- The use of WS-BPEL for process automation

### 6. A Service Oriented Reference Model/Architecture

- Adoption challenges
- Success stories
- SOA strategy and roadmap
- High level impacts on people, process, and technology

### 7. A Service Oriented Methodology

- Introduction to a SOA adoption roadmap
- Service lifecycle
- Three analysis approaches
- Service oriented analysis
- Service oriented design
- Introduction to service oriented patterns and architectural concerns

### 8. Next Steps

- Creating a service oriented enterprise roadmap
- Implementing the business process model
- Understanding the service oriented maturity model



#### MomentumSI

4515 Seton Center Parkway  
Suite 175  
Austin, TX 78759  
Toll Free: 888.886.8560  
Phone: 512.236.1517  
FAX: 512.236.1267

## About MomentumSI

MomentumSI is at the forefront of business and technology consulting, continually setting new standards by designing and implementing integrated solutions that dramatically improve our customers' ability to drive business solutions. To learn how MomentumSI can assist you in building your Service Oriented Enterprise, please visit our Web site at [www.momentumsi.com](http://www.momentumsi.com) or call us at 888.886.8560.

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