

Hands on Training for Designing and Developing SOA that leverages your IT

Customizable instructor lead course with hands on exercises

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Topics help you identify the unique tool among so many "SOA badged" tools available, it can be hard to know where to start looking, or even to know what you should be looking for. Our instructors' impart their real-world experience of implementing SOA in large commercial, retail, manufacturing, utilities, banking & financial organisations in a series of case studies aimed to help you make the right decisions about your SOA strategy. This course is non vendor-specific so you'll get good, impartial advice.

Top Reasons for Attending our Training Engagement

Content

The training content is structured to match your organizations specific business objectives and needs. Based on the course you choose, our training engagement topics make the attendees to completely leverage the Designing and Developing SOA capabilities.

Structure

Our innovative and flexible learning approach consists of instructor-led learning methods, supplemented with hands-on exercises, mentoring including our World-class training material. You have the choice to customize your training plan by choosing from 50 different topics or use our full training engagement (*See our complete course outline on page 2 of the brochure*)

Scheduling

Dates and times are set by you.

Location

We offer flexibility of location. Training can be provided at your company site or you can choose to join us at our world class training facility in Novi, MI location.

Collaboration

Our learning environment and approach promotes team members and encourages team to have a high degree of collaboration and teaming.

Budget

We offer a great value for your money. If the training takes place at your own premises, you will eliminate travel costs and avoid time away from the office (*Any training engagement work is done at your company site will be charged at \$1500-\$2000 per day + Actual Expenses (Unlimited attendee's if training engagement is hosted at your company site, prefer to have 6 - 8 max attendees per session for better hand holding)*)

Pre-Requisites

The attendees should be able to

- Design and Analyze Requirements
- Explain the principles and characteristics of services within SOA, and identify various service types

Our Premium Services

Miracle helped a number of clients in multiple industries successfully adopt SOA. Such engagements have spanned the entire SOA adoption stages like learning, deciding, planning, deploying, and evolving. Based on the knowledge we have accumulated through these engagements, we can help you avoid common pitfalls and put in place best practices that will help you successfully adopt SOA.

Course Objective

- Design SOA Solutions and Apply Project, Technical, and Operational Governance.
- SOA design principles, patterns, and methodologies.
- Service Oriented Methodologies & Patterns
- SOA Analysis & Design
- Business Process Implementation

Course Duration

A full-length engagement spans over 5 business days (1 Week). Course outline and duration can also be customized based on your time and need

Audience

Business Analysts, Sales Consultants, Technical Consultants, SOA Architects, Development Leads, Designers

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Learn about how the resources can be available to other participants in the network through the nodes that came into existence through SOA environment and act as an independent services (for instance WebServices) and accessed in a standardized way.

Typical Course Outline

In this course, participants will learn how to design and develop an effective SOA Solution based on standards, pre-defined models and best practices that can leverage their IT ROI. The Course promises you the complete Designer and Developer Experience.

Service Oriented Methodology & Patterns

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

Talk through WSDL & SOAP

- Sample WSDL Document Structure
- One-way , Request-Response
- Solicit-Response , Syntax
- SOAP Binding Example
- WSDL SOAP Binding Extensions
- SOAP In Protocol Stack
- Header Attributes, SOAP Body, SOAP Fault
- Details of the Wrapped Style

Service Oriented Analysis & Design

- Objectives
- Stages of SOAD
- Identifying services
- Producing service specifications
- Functional areas of the business.

Enterprise Service Bus (ESB)

- Objectives
- Service Invocation
- Legacy System Integration
- Web Services to the Rescue
- The role of ESB in SOA
- Security and ESB

Business Process Implementation

- Business Process Diagram
- Challenges in Process Implementation
- BPEL4WS
- Variables
- Simple Activities
- Invoke Activity
- Structured Activities
- Lifecycle of Process Development
- Follow Integration Patterns
- Example: A Simple Process

Messaging Architecture

- What is messaging and why do we need them?
- How to use messaging in SOA?
- SOAP over JMS details.
- Modeling services well suited for messaging.
- Correlation and why do we need them?
- How to use correlation in SOA.
- How to implement publish subscribe in SOA?
- Sample scenarios

Layered Architecture

- The layers pattern.
- Classic three-tier architecture.
- Connecting to the domain layer.
- Linking to the User interface.
- Using packages to decompose a system.
- Avoiding mutual dependencies.
- What is layering and why we need them?
- Application service layer
- Business service layer
- Orchestration service layer

Transaction Management

- The ACID properties.
- Local vs. distributed transaction.
- New challenges with transaction in SOA.
- Transaction from a specific service call.
- Transaction in a long running business process.
- What is compensation and why do we need them?
- How to implement compensation?

Software Platform for SOA

- Software Tools for SOA
- The Need for a Tool
- SOA Development Life Cycle
- Oracle BP Manager
- WebSphere Application Server/ Process Server
- Rational Application Developer (RAD) / WID
- Key Features
- Web Services Support
- Runtime Products for SOA

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About Miracle Software Systems, Inc.

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Miracle Software Systems, a financially stable private firm founded in 1995, is an end-to-end Business Integration & SOA specialist firm providing services to help both large & mid-sized businesses transition their IT to a service-oriented architecture. We offer both architectural & implementation services. We have deep industry expertise in multiple vertical industries such as insurance, healthcare, utilities, and logistics.

We are well established, having a presence in 5 continents around the globe and been serving the industry for the past 14 years. Given our focus on Integration & SOA, we are more nimble, flexible, and quicker in delivering solutions to our clients and given our deep industry expertise can tailor our services & solutions around your needs. We are also able to support multiple vendor stacks such as IBM, SAP, and Oracle.

Miracle's global development centers located across Canada, USA, UK, India, and Australia that allow us to provide our customers with multiple sourcing & delivery models.

We are a premier business partner and also a SOA specialty partner of IBM. IBM has recognized us several times – we were an IBM Fast Track Award Winner in 2005, and an IBM Beacon Award Nominee in 2006. We host an IBM Business Partner Innovation Center (BPIC) at our Novi, MI Headquarters. This BPIC is only one of the three centers in the US market focusing on IBM WebSphere suite of products. We are an active & committed member of the IBM WebSphere Residency programs to help write IBM Redbooks and also involved in WebSphere product development and support services activities.

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