

# **Oracle SOA Suite 12c: Essential Concepts**

This Oracle SOA Suite 12c: Essential Concepts Ed 1 training introduces you to Service-Oriented Architecture (SOA) concepts, the SOA approach to development and integration and the functionality of the core components of SOA Suite 12c. Expert Oracle University instructors will help you use Oracle SOA Suite 12c to build enterprise applications that provide solutions to business problems.

#### Learn To:

- Integrate business services using SOA approach.
- Describe the functionality and features of core service components in Oracle SOA Suite 12c.
- Explain the context of using each core service component of SOA Suite.
- Address business challenges.
- Understand how a SOA composite application is constructed in JDeveloper.

#### Benefits to You

By taking this course, you'll develop the skills to integrate your organization's applications into agile, reusable, service-based connectivity to reduce risk and respond faster to business requirements. Become more knowledgeable about SOA to help support your organization's SOA implementation.

## **Prerequisites**

### **Required Prerequisite**

- XML Fundamentals Ed 1
- Understanding of web service concepts such as WSDL, SOAP

#### **Audience**

- Analyst
- Architect
- Developer

Manager

### **Objectives**

- Describe SOA concepts and technologies
- Describe the business benefits of adopting SOA in your organization
- Describe the functionality and features of core service components in Oracle SOA Suite 12c
- Explain the context of using each core service component, and business challenges they address
- Describe the make-up of a SOA composite application
- Explain how to virtualize and secure services
- Describe how Oracle SOA provides customers real-time insight into their business
- Describe how Oracle SOA simplifies integration with external trading partners and with cloud-based and mobile applications

### **Topics**

- Service-Oriented Architecture Concepts
  - What is SOA?
  - About SOA building blocks
  - How to adopt SOA?
  - Discussing SOA standards
- Getting Started with Oracle SOA Suite 12c
  - About SCA service components supported in Oracle SOA Suite 12c
  - Explaining product components in Oracle SOA Suite 12c
  - Discussing management tools of Oracle SOA Suite 12c
- Building SOA Composite Applications
  - About XML basics
  - Describing composite applications and service components according to Service Component Architecture (SCA)
  - About service design principles
  - o Getting started with SOA composite application implementation in JDeveloper
- Orchestrating Services with BPEL Process Components
  - About BPEL concepts and BPEL process features
  - Discussing basic programming constructs of a BPEL process
  - Communicating message data by using variables in the BPEL process
  - Consuming web services
  - Developing a BPEL process by using the BPEL process template provided by BPEL Process Designer
- Connecting with Binding Components
  - Explaining Binding components
  - Describing JCA adapters
  - Describing REST adapter
- Mediating Messages with Mediator Components
  - Discussing functionality and features of a Mediator component
  - Discussing context of using a Mediator component
  - Configuring a Mediator component with routing rules
- Encapsulating Business Logic with Business Rules Components
  - Defining business rules
  - Using Business Rule service components in SOA Composites
  - Editing business rules by using SOA Composer
- Implementing Human Activities with Human Workflow Components
  - Discussing Human Workflow service concepts
  - About Human Workflow architecture

- Creating and defining Human Tasks
- Integrating the Human Task service component in the BPEL process
- Virtualizing and Securing Services
  - Discussing concepts of Enterprise Service Bus
  - Explaining functions performed by Oracle Service Bus
  - Creating and configuring services in Oracle Service Bus
  - Securing a SOA composite application
- Managing, Monitoring and Troubleshooting Composite Application
  - About SOA composite application management
  - Deploying a SOA application
  - Monitoring composite instances
  - Discussing fault handling
  - Monitoring business activities
- Enabling On-Premises Integration
  - How Oracle B2B is integrated with Oracle SOA to enable electronic document exchange between business partners?
  - How Oracle MFT works with Oracle SOA to handle file transfers?
- Enabling Mobile and Cloud Integration
  - How SOA Suite simplifies mobile integration?
  - How SOA Suite simplifies cloud integration?