

ORACLE SOA with OSB

1. Introduction and Concepts of SOA

- Definition of SOA
- Standards and Specifications that make SOA
- Describe SOA Reference Architecture
- Understanding SOA Suite 12c Product
- Understanding Service Design Considerations and different Service Components

2. Understanding SOA 12c

- List SOA 12c Components
- Describe Service Components
- Define Composite Application
- Describing Enterprise Manager
- Concepts of Oracle Weblogic Server
- Introduction to Oracle Jdeveloper 12c

3. Providing Services for SOA

- Defining a Service
- Describing key Service Artifacts
- Reviewing Web Service Concepts and Architecture
- Reviewing Concepts of XML schema, XSLT and WSDL Documents
- Introduction to Adapter Framework

4. Introduction and Concepts of SCA (Service Component Architecture)

- Explain SCA and its components
- Defining Composite Application
- Creating SOA Composite in Jdev

5. Managing and Monitoring SOA Composite Application

- Basics of Administrating and Monitoring the SOA Composite
- Working with Enterprise Manager
- Deploying, Undeploying and Testing SOA composite
- Debugging SOA Composite

6. Introduction to Concepts BPEL

- Understanding Orchestration
- Getting Started with Oracle BPEL Process Manager
- Overview of Oracle BPEL Process Manager Components
- Overview of BPEL Designer Environments
- Overview of Activities.
- Concepts of Partner Links and Service Invocations

7. BPEL Concepts In-depth

- Invoking WebServices using BPEL

8. Sharing Functionality

- Using the Design-time Meta Data Services

- Interaction patterns in BPEL (Synchronous/Asynchronous)
- Concepts of Variables and uses in BPEL
- Implementing Parallel flows in BPEL
- Conditional Branching in BPEL
- Suspending threads in BPEL
- Manipulating and Transforming XML Data in BPEL using XSLT
- Explaining Data Manipulation and XPath/XQuery Standards
- Explaining Adapter concepts and Framework
- Explaining different types of Adapter
- Implementing Adapters using BPEL
- Debugging BPEL Processes
- Concepts of Fault Handling in BPEL

9. Designing and Managing Business Events

- Describing the Event Delivery Network
- Creating a Business Event
- Publishing an Event
- Subscribing to an Event
- Managing Events in Oracle Enterprise Manager

11. Mediators

- Introduction to mediators.
- Working with mediators.
- Event driven networks via mediator
- Schematronfiles , parallel flows, sequential flows
- Fault handling in the Mediator
- Transaction handling in the Mediators

13. Business Rules

- Concepts of Business Rules Component
- Implementing Business Rules Component

- (MDS) Repository to share files
- Introducing Templates
- Creating and Using Project, Service Component, and Scope Activity Templates
- Introducing BPEL Subprocesses
- Creating and Using Standalone Subprocesses
- Creating and Using Inline Subprocesses
- Describing the Differences Between Templates and Subprocesses

10. Using the REST Adapter

- Introducing REST Services
- Comparing REST and SOAP Web Services
- Creating and Configuring a REST Adapter

12. Human Tasks

- Concepts of Human Task
- Implementing Human Task Components in SOA

14. BAM (Business Activity Monitoring)

- Concepts of BAM
- Implementing BAM

15. Securing Services and Composite Applications

- Explaining Security for Services
- Describing the Fusion Middleware Security Architecture
- Attaching Security Policies at Design Time in JDeveloper
- Attaching Security Policies Post-Deployment in Enterprise Manager

16. Other topics

- Oracle Service Bus (OSB)
- Concepts of Oracle Service Bus
- Virtualizing Services using OSB
- Concepts of Business and Proxy Services in OSB
- Designing and Implementing Business and Proxy services using OSB Calling Services in OSB
- Definition of OSB
- SOA Verses OSB
- OSB Verses Mediator
- OSB11g Verses OSB 12c
- New Features of OSB 12c
- Real time Scenarios – SOA, OSB and BPM