

# **Oracle SOA Cloud and ICS**

#### **Course Description**

SOA Cloud Service is basically SOA Suite in the cloud and intended for hardcore developers who are used to working with SOA Suite and want to continue leveraging its multiple capabilities like MDS and the ability to achieve very complex integrations. ICS is more of a lightweight service that can be used to achieve simple, lightweight integrations that do not require much complexity

# Oracle SOA Cloud and ICS online training curriculum

#### Introduction to Cloud

- What is Cloud?
- Different types of Cloud ( Iaa<mark>S, Paa</mark>S, iPaaS, SaaS)
- Difference between On-Premise and Cloud
- Understanding of Oracle Cloud offerings
- Understanding of Oracle Cloud Subscription Model

#### Introduction to Oracle Cloud Services

- Introduction to Oracle SOA Cloud
- Introduction to Oracle API Manager Cloud Service
- Introduction to Oracle Managed File Transfer
- Introduction to Integrated Cloud Services (ICS)

#### 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

#### **Understanding SOA 12c**

- List SOA 12c Components (OSB, BPEL, Business Rules, Human Task, SCA)
- Describe Service Components
- Define Composite Application
- Describing Enterprise Manager
- Concepts of Oracle Weblogic Server
- Introduction to Oracle Jdeveloper 12c

#### Concept of SOAP and REST

- Defining a Service
- Describing key Service Artifacts
- Reviewing Web Service Concepts and Architecture
- Reviewing Concepts of XML schema, XSLT and WSDL Documents
- Defining SOAP Service
- Defining REST Service
- Difference between SOAP and REST Services

#### Introduction and Concepts of SCA (Service Component Architecture)

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

#### Administering Oracle SOA Cloud

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

#### **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

#### BPEL Concepts In-depth

- Invoking Web Services using BPEL
- 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 X-Path Standards
- Explaining Adapter concepts and Framework
- Explaining different types of Adapter
- Implementing Adapters using BPEL
- Debugging BPEL Processes
- Concepts of Fault Handling in BPEL

#### Adapters

- Types of Adapters
- Usage of Adapters
- Concept of technology Adapters
- Concept of Cloud Adapters

### **Human Work Flow**

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

#### **Business Rules**

- Concepts of Business Rules Component
- Implementing Business Rules Components

# **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
- Concept of Work manager

# BAM (Business Activity Monitoring)

- Concepts of BAM
- Implementing BAM

# ICS (Integrated Cloud Services)

- Basic architecture & use case overview
- Understanding ICS components & capabilities
- Basic configuration workflow steps
- Understanding ICS built-in adapters
- Transforming data with the ICS mapper
- Understanding content-based routing