

Oracle SOA Suite 11g: Essential Concepts

Duration: 3 Days

Description

This course covers the foundations of SOA-enabled applications and standards that enable SOA implementations. Using an order management business process as the scenario, participants learn how an SOA approach can be implemented, whether starting fresh with new services or reuse existing services provided by the business. Using Oracle SOA Suite 11g components participants explore, modify, execute, and monitor an order-processing composite application implemented using an SOA approach for managing the business process.

Learn To:

Describe SOA concepts and related technology

Explain standards and specifications that enable an SOA approach

Explore an SOA approach for integrating business services by using Oracle SOA Suite 11g

Create a SOA composite application by using JDeveloper 11g

Describe when to use Mediator, BPEL, Business Rules, and Human Task components in a SOA composite application Test and monitor the SOA composite application

Audience

Application Developers
Business Analysts
Consulente tecnico
Project Manager
Responsabili aziendali per l'analisi e la specifica dei dati
Responsabili di progetto
SOA Architect
Sviluppatori di applicazioni
Technical Consultant

Prerequisites

Prerequisiti obbligatori
Oracle 10g: XML Fundamentals

Course Objectives

Explain when to use the Mediator, BPEL, Business Rules, and Human Task components Describe SOA concepts and related technology

Explain standards and specifications that enable an SOA approach

Explain the Oracle SOA Suite 11g product and related technologies

Explain the Service design considerations

Explore an SOA approach for integrating business services

Create an SOA composite application by using JDeveloper

Monitor and test composite applications and their components

Course Topics

Service-Oriented Architecture Concepts

Describe the challenges of enterprise application system integration

Describe the solution for Enterprise Application Integration

Describe Service-Oriented Architecture (SOA)

Explain the role of the Oracle SOA Maturity Model

Identify standards that enable SOA

Identify basic design requirements for an SOA approach

Explain the role of SOA governance

Implementing SOA with Oracle SOA Suite

Discuss Oracle SOA Suite 11g components

Describe the service components

Define a composite application

Explain the role of Enterprise Manager

SOA Governance and Service Life-Cycle Management

Define service life-cycle management

Define service management

Identify the characteristics of service management

Describe the need for managing services

Define the need for and benefits of governance

Describe the SOA governance solution

Designing Services for SOA Implementations

Define a service and its artifacts

Describe the various service layers and their responsibilities

Explain the role of Extensible Markup Language (XML) schemas

Design service interfaces with Web Services Definition Language (WSDL)

Identify the role of adapter technology in implementing services

Creating a Composite Application

Explain the Service Component Architecture (SCA) and its components

Define a composite application

Discuss components of the SCA

Describe Service Data Objects (SDO)

Create an SOA composite application in JDeveloper

Managing and Monitoring SOA Composite Applications

Understand the basic administrative and monitoring tasks related to SOA composites

Work with the Enterprise Manager (EM) Web interface

Manage SOA composite applications from the Enterprise Manager Web interface

Deploy and undeploy SOA composites

Test an SOA composite application

Track message flow through an SOA composite application

Working with Mediator Components

Explain the Mediator component and its features

Define business events and the Event Delivery Network (EDN)

Create and configure a Mediator service component

Create routing rules

Orchestrating Services with a BPEL Component

Describe process orchestration concepts

Define and describe Business Process Execution Language (BPEL) in relation to implementing process orchestration Develop a BPEL process by using the BPEL designer in JDeveloper 11g

Describe activities, partner links, and service invocation in a BPEL process

Working with the Human Task Component

Describe a Human Workflow task and the related concepts

Describe a workflow as a service

Create a Human Task component in an SOA composite and access it from a BPEL process

Create a task form to enable users to interact with a task

Use a Worklist application to perform actions (such as approve or reject) on an assigned task

Implementing a Business Rules Component

Describe the needs for implementing business rules

Define Oracle Business Rules and its features

Create facts, rulesets, and a rule dictionary

Develop a rule-based application by creating a Business Rule component and integrating it into a BPEL process

Securing Services and Composite Applications

Describe Web services security

Identify the need for security for services

Describe Oracle Web Service Manager

Describe the components of the Oracle Web Service Manager architecture

Attach security policies to services