

Oracle SOA Suite 12c: New Features and Capabilities Ed 1

Duration: 2 Days

What you will learn

This Oracle SOA Suite 12c: New Features and Capabilities Ed 1 training teaches you about the new features and capabilities of the SOA Suite 12c product release as compared to the SOA Suite 11g product version. Before taking this course, you're expected to have a solid background developing 11g SCA composite applications, especially with using BPEL components; while the SOA Suite 12c product includes a number of different components, the scope of the course is focused on developing SCA composite applications.

Learn To:

Describe the new features of SOA Suite 12c.

Understand how, when and why to use the new features of SOA Suite 12c.

Use the new features of SOA Suite 12c to become more productive as a developer.

Benefits to You

By taking this course, you'll learn to make the most of the new features of Oracle SOA Suite 12c. While the focus is on Oracle SCA application development, you will get chance to explore new wizards and tools available in 12c. You'll get a chance to participate in hands-on exercises to gain real-world experience using new features and new wizards, along with other development tools.

Explore REST Bindings and Correlation Sets

The training covers new wizards for REST bindings and correlation sets, as well as encrypting PII data and creating fault policies. Expert Oracle University instructors will dive into the new SOA debugger, templates, and BPEL subprocesses.

Audience

Application Developers

Developer

Java Developers

SOA Architect

Related Training

Required Prerequisites

Experience using JDeveloper

Oracle SOA Suite 11g Design and Development Experience

XML Programming Experience

Suggested Prerequisites

Oracle SOA Suite 11g: Administration

SOA Adoption and Architecture Fundamentals

Course Objectives

Become familiar with the new features of SOA Suite 12c

Describe the four themes of Oracle SOA Suite 12c

Describe the differences between the three Quick Start Domain options

Describe the new features of the Enterprise Manager Fusion Middleware Control

Migrate SOA 11g Composite Applications to 12c

Manage shared design time artifacts using the design-time MDS Repository

Debug SOA composite applications with the SOA debugger

Create test suites and their test cases with the Create SOA Composite Test Wizard

Create a BPEL correlation set with the Correlation Wizard

Transform external, native format data to XML data that for use within SOA Suite 12c

Describe nXSD translation and XQuery Mapper

Learn how to Encrypt and Decrypt message fields

Define fault policies using the Fault Policy Wizard

Understand the format of REST web services and use the REST Binding Wizard

Describe the Managed File Transfer (MFT) Adapter

Create SOA composite templates and BPEL scope templates

Course Topics

Overview

Understanding the four themes of the 12c release

Reviewing all of the changes and upgraded capabilities for developing SCA composite applications

Becoming familiar with the scope of this course

Quick Start for Developers

Understanding and running the new Quick Start installer

Starting the new JDeveloper 12c IDE

Becoming familiar with Quick Start domain configuration options
Installing both the Integrated WebLogic Server domain as well as the Stand-Alone domain
Creating a new Application Server connection in JDeveloper

Getting Familiar with 12c

Describing the new features of the Enterprise Manager Fusion Middleware Control
Understanding the new Error Hospital
Becoming familiar with the new security features of SOA partitions
Understanding Work Manager groups for SOA partitions
Managing Global Token variables for multiple SOA composite applications
Migrating SOA 11g composites to 12c

JDeveloper Changes

Locating components in the Application Navigator project folders
Viewing the detailed structure of the composite in the Structure window
Configuring the Component Palette list and Icon views
Creating TODO tasks to help organize development and design work
Refactoring and renaming components and artifacts
Managing shared design-time artifacts using the new file-based MDS Repository
Exploring component and artifact dependencies with the new Dependency Explorer

Testing and Debugging

Debugging SOA composite applications with the new SOA debugger
Setting breakpoints and launching the SOA debugger
Creating test suites and test cases with the new Test Suite wizard in JDeveloper
Running test suites and viewing results from within JDeveloper
Viewing and modifying variable values within a debug session
Specifying activity assertions within a BPEL process

BPEL Editor New Features

Editing BPEL activities in the Properties window
Using the new Correlation wizard to create BPEL correlation sets
Exploring additional capabilities within the toolbar and BPEL designer settings
Understanding the new Oracle Enterprise Scheduler Service (OESS)
Adding an OESS Job Activity to a BPEL process

Transformations

Translating native format data within a Mediator routing rule
Translating native format data using the new BPEL Translate activity
Creating an nXSD schema using the Native Format Builder
Using XQuery transformation mapping within a Mediator routing rule
Creating XQuery transformations using the new BPEL XQuery Transform activity

Protecting PII Data

Encrypting and decrypting specific fields of messages within SCA composite applications
Creating a Credential Store Framework (CSF) key
Adding the policy credential to the WebLogic domain

Fault Policy and Encryption/Decryption

Reviewing the capabilities of the Fault Management Framework
Creating a Fault Policy document with the new Fault Policy wizard
Defining and configuring fault policy alerts

Specifying Fault bindings with the new Fault Policy wizard
Accessing a recoverable fault in the Fusion Middleware Control

REST Binding Wizard

Reviewing and understanding the format of REST services
Comparing REST and SOAP
Exposing SOA composite applications as RESTful services
Adding a reference binding to a remote RESTful service
Generating REST mapping XML schemas
Using the REST binding wizard

New Adapters & MFT

Leveraging use cases involving the Managed File Transfer (MFT) adapter for transferring files
Understanding the features of the new LDAP adapter
Becoming familiar with Coherence and the new Coherence adapter
Understanding the SOA Suite Cloud Adapter SDK and the Salesforce Cloud Adapter

Templates & Subprocesses

Creating and using SOA composite templates
Creating and using component templates
Creating and using BPEL scope activity templates
Creating and using BPEL inline subprocesses
Creating and using BPEL stand-alone subprocesses
Managing templates

Additional Enhancements

Understanding additional Event Delivery Network (EDN) features
Become familiar with BPEL business indicators and new built-in process analytics
Editing custom business indicators for BPEL processes
Configuring analytic sampling points for SOA composites and components
Becoming familiar with the new out-of-the-box BAM dashboards for monitoring BPEL processes

Appendix A: Oracle Enterprise Scheduler Service

Describing the basic features and capabilities of OESS
Installing the OESS product
Configuring OESS jobs and related metadata
Administering running and completed OESS jobs
Creating Job Sets and Schedules