

Oracle Service Bus 12c: New Features Ed 1

Duration: 2 Days

What you will learn

This Oracle Service Bus 12c: New Features Ed 1 training covers the new features and capabilities of Service Bus 12c as compared to the OSB 11g product version. Other administration topics are covered to acquaint new 12c users to the Enterprise Manager Fusion Middleware Control web application, which now augments the Oracle Service Bus Console web application.

Learn To:

Describe the new features of Oracle Service Bus 12c.

Understand how, when and why to use the new features of Oracle Service Bus 12c.

Use the new features of Oracle Service Bus 12c to become more productive as a developer.

Benefits to You

By taking this course, you'll have a seamless transition from Service Bus 11g to 12c. Be it related to the IDE or the usage of Fusion Middleware Control, this course has coverage. You'll get the chance to apply new knowledge and skills through hands-on exercises that give you actual experience developing in the new JDeveloper IDE. Walk away with the ability to troubleshoot and debug tasks as well.

Audience

Developer
Functional Implementer
J2EE Developer
SOA Architect
Technical Consultant

Related Training

Required Prerequisites

Oracle Service Bus 11g Design and Development Experience

XML Programming Experience

Suggested Prerequisites

Experience using JDeveloper

Oracle SOA Suite 11g : Build Composite Applications

SOA Adoption and Architecture Fundamentals

Course Objectives

Become familiar with the new features of Oracle Service Bus 12c

Describe the differences between the three Quick Start Domain options

Understand the basic usage of JDeveloper for creating Oracle Service Bus projects and resources

Populate MDS repository with source data

Access the Fusion Middleware Control Console and identify its various Service Bus options

Describe the message flow process

Monitor the health of your service bus

Editing the Oracle Diagnostics Log (ODL) configuration

Use the new Disable/Enable feature for stages & actions

Debug SB message flows from within JDeveloper

Describe the role of XPath, XQuery, and XSLT in the way Service Bus handles data

Describe JCA transport and adapters

Migration of OSB 11g projects to SB 12c

Explain how Oracle MFT works with SB to handle large message transfers

Use the new REST binding wizard for creating REST-ful SB services

Course Topics

Overview

Context of Service Bus within SOA Suite 12c

Differences between 11g and 12c installation

Overview of course lessons and topics

Overview of Service Bus development and administration tools

Quick Start for Developers

Leveraging the Quick Start Installer for 12c

Starting JDeveloper

Configuring Integrated and Stand-Alone domains

Creating Application Server connections

Getting Familiar with SB 12c & JDeveloper

Understanding the 12c topology and architecture

Using JDeveloper to create SB Projects

Using the Service Bus Test console

Introduction to Pipeline Message Flow Component

Leveraging the new Dependency Explorer
Configuring and using the new File-based design-time MDS repository

Service Bus Administration & Management Tools

Using the new Enterprise Manager Fusion Middleware Control for monitoring Service Bus projects and resources
Understanding unique and overlapping capabilities between the Service Bus Console and the EM FMW Control
Using the new Service Bus Console
Understanding session management
New Service Bus security roles for 12c

Shared Variables, Pipelines and Templates

Creating and using Pipeline Message Flow components
Creating and using user-defined shared context variable across multiple pipeline components
Creating and using the new Pipeline Template
Unlinking template-based Pipeline components

Monitoring, SLA Alerts and Reports

Creating alert destinations
Defining SLAs with EM FMW Control
Viewing reports with EM FMW Control
Monitoring service metrics with EM FMW Control

Testing and Debugging

Configuring and leveraging the new Oracle Diagnostic Log for troubleshooting and debugging
Enabling and disabling message flow stages and actions
Exploring the Test console options in JDeveloper
Using the new Service Bus 12c debugger tool in JDeveloper

Message Transformations

Transforming messages with the new XSLT Mapper tool
Creating XQuery transformations with JDeveloper
Creating nXSD transformations with the Native Format Builder wizard
Using the new nXSD Translate action in message flows

Adapters & Transports

Understanding JCA adapters and SB transports
Using the SOA-DIRECT transport with SOA composite application services
Creating REST-ful proxy services using the new REST binding wizard
Virtualizing external REST-ful services using the new REST binding wizard

Additional Topics

How to migrate OSB 11g projects and resources to Service Bus 12c
Understanding OWSM policy support for Service Bus 12c
Understanding MFT and Service Bus integration use cases
Configuring and using the new SB Resequencer for 1-way pipeline components
Leveraging the Service Bus Maven plugin for SB projects

Appendix A: Split-Join Message Flow Component

Understanding split-join patterns
Creating Split-Join Message Flow Components in JDeveloper

Appendix B: Production Installation of Service Bus 12c

Supported configurations

Using the Installation wizard

Using the Repository Creation Utility (RCU)

Creating Service Bus 12c production domains