

# Oracle Service Bus 12c: New Features

## 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