

WSO2 Micro Integrator 4.6 Developer Fundamentals

OEM: WSO2 • Code: MI46DF

COURSE DESCRIPTION

WSO2 Integrator: MI Developer Fundamentals is a course aimed at training Software Engineers on the features of the product as well as the underlying concepts and standards. The scope of this course will be limited to using all the features of the product to provide a solution related to integration without having to extend the product. Training Type: WSO2 product training and hands-on session. Complexity: Beginner/Intermediate.

AUDIENCE PROFILE

- Software Engineers

PREREQUISITES

- Open Standards

Review the standards for:

- OAuth 2.0

COURSE OBJECTIVES

By the end of this course, participants will be able to:

- This section doesn't contain any content.

COURSE OUTLINE

Module 1: Session 1

Introduction to Micro Integrator

- Working with Micro Integrator
- Introduction to decentralized/centralized architectures
- Introduction to WSO2 Integrator: MI for VS Code Extension
- Introduction to WSO2 Integrator: MI Dashboard and CLI
- WSO2 Integrator: MI 4.6.0 Key Features
- Building Blocks

- Common EIPs (Message Router, Message Splitter/Aggregator, Content Enricher)
- Lab: Getting Started with WSO2 Integrator: MI
- Lab: Getting Started with WSO2 Integrator: MI VS Code Extension

Module 2: Session 2

Triggering Messages in Micro Integrator

- APIs and Proxy Services
 - Lab: Configuring a REST API
 - Lab: Configuring a Proxy service
- Working with Tasks
 - Lab: Periodic Execution of Integration Processes
- Inbound Endpoints
 - Lab: Using Event Listeners

Module 3: Session 3

Mediating Messages

- Message Routing
 - Lab: Message Routing
- Message Transformation
 - Lab: Message Transformation
- Service Orchestration
 - Lab: Service Orchestration

Module 4: Session 4

Using Templates

- Lab: Reusing Mediation Sequences

Asynchronous Messaging

- Lab: Asynchronous Messaging

Protocol Switching

- Lab: Protocol Switching

SaaS and B2B Integration

- Connecting to a SaaS Application
 - Lab: Connecting Web APIs/Cloud Services

Module 5: Session 5

Data Integration

- Data Integration capabilities
- Creating data services
 - Lab: Data Integration

Module 6: Session 6

Debugging Mediation

- Debugging Mediation
 - Lab: Debugging Mediation
- Handle errors in WSO2 Integrator: MI

Building Unit Tests for Artifacts

- Unit Tests
- Mock Services
- Remote Testing
 - Lab: Create a Unit Test Suit

Module 7: Session 7

Management

- CLI Tool
- Integration Control Plane
- Management API
 - Lab: Try the CLI tool and Integration Control Plane
- User Management
 - Lab: Managing users

Artifact Deployment

- Composite Applications (C-Apps)
- Microservices Deployment
- Artifact Governance
- Introduction to CICD

Module 8: Session 8

Observability

- Cloud-Native Observability
 - Lab: Grafana based VM deployment
- Logs
- Monitoring messages

Mediation Best Practices

- Designing the solution
- Using templates
- Using Mediators
- Using Endpoints
- Mediation Best Practices

DELIVERY NOTE

- Hardware Requirement: During the lab session attendees are required to deploy the created samples in multiple middleware products. Participants are required to have a workstation with at least 4GB of memory to run the samples smoothly.
- Software Requirement: JDK 11 or later
- Software Requirement: Other requirements
- WSO2 Product: WSO2 Integrator: MI
- WSO2 Product: Micro Integrator for VS Code
- Other Products Used: cURL Download and install the following for Observability
- Other Products Used: Grafana
- Other Products Used: Prometheus
- Other Products Used: FluentBit
- Other Products Used: Grafana Loki
- Other Products Used: Jaeger
- Other Products Used: Download and install MySQL for user management
- Other Products Used: Set up JAVA on your computer to run the back-end services used for protocol switching exercises