

Anypoint Platform Development: Advanced (Mule 3)

Summary

This instructor-led course is for developers and architects interested in advancing their application development skills beyond those taught in the *Anypoint Platform Development: Fundamentals* course or the self-study *MuleSoft.U Development Fundamentals* course.

Duration

3 days in-person or 4 days online

Objectives

At the end of this course, students should be able to:

- Manage Mule project development with Maven.
- Achieve continuous integration and use test driven development with MUnit.
- Develop custom elements.
- Implement design patterns and tune application performance.
- Work with state.
- Secure communication with SSL.

Prerequisites

- Completion of the instructor-led *Anypoint Platform Development: Fundamentals* course, the self-study *MuleSoft.U Development Fundamentals* course, or equivalent knowledge from 6+ months Mule development experience and passing of the *MCD - Integration and API Associate exam*
Note: If you have not taken one of these courses or passed the exam, you will be contacted to confirm your qualifications.
- Experience with Java or another object-oriented language
- Ability to navigate a command-line interface

Setup requirements

- A computer with at least 4GB available RAM, 2GHz CPU, and 4GB available storage and a minimum screen resolution of 1024x768
- Internet access to ports 80, 3306, and 61616 (with > 5Mbps download and > 2Mbps upload)
- The latest version of Firefox or Chrome or Internet Explorer 10 or newer
- An Anypoint Platform account
<http://anypoint.mulesoft.com>

- JDK 1.8
<http://www.oracle.com/technetwork/java/javase/downloads/index.html>
- Anypoint Studio with embedded Mule 3.9 runtime
<https://www.mulesoft.com/lp/dl/studio/previous>
- Mule 3.9 standalone runtime
<https://www.mulesoft.com/lp/dl/studio/previous>
- Apache Maven 3.x
<https://maven.apache.org/download.cgi>
- Git
<https://git-scm.com/book/en/v2/Getting-Started-Installing-Git>
- A GitHub account
<https://github.com/>

A detailed setup document can be downloaded from here: <https://training.mulesoft.com/downloads>.

Outline

PART 1: Team Development

Module 1: Managing Mule Projects with Maven

- Use a software project management tool
- Manage dependencies

Module 2: Managing Mule Code

- Maintain Mule source code
- Develop with best practices

Module 3: Achieving Continuous Integration

- Create a CI job
- Trigger the builds
- Automate deployments

Module 4: Driving Development with MUnit

- Create acceptance criteria
- Fail and pass tests
- Refactor test cases
- Refactor Mule applications

PART 2: Advanced Application Development

Module 5: Developing Custom Elements

- Use the Mule API
- Create custom transformers, processors, and beans

Module 6: Implementing Design Patterns

- Enrich data with Mule
- Create scalable parallel processing in Mule

Module 7: Tuning Application Performance

- Understand SEDA architecture
- Analyze threading profiles

Module 8: Working with State

- Impact design with clustering
- Cache outbound requests
- Work with object stores

Module 9: Securing Communication with SSL

- Implement one-way SSL
- Implement two-way SSL