

**Unit Testing in MuleSoft**

**Course Number:** MULE-114
**Duration:** 2 days

**Overview**

This Unit Testing in Mule training course teaches attendees how to create, design, and run automated tests for Mule applications. Students use the Anypoint Studio tool to write Mule code, minimize manual testing, mock and spy processors, verify processor calls, and generate coverage reports.

**Prerequisites**

Students must be proficient in Anypoint Studio and Anypoint Platform. Some experience in creating unit testing is helpful but not required.

**Materials**

All students receive comprehensive courseware.

**Software Needed on Each Student PC**

Students will not need to install any software on their computers for this class. The class will be conducted in a remote environment. Students need a local computer with a web browser (preferably Chrome), stable internet, two monitors, and a headset/microphone.

**Objectives**

* Explain the components of MUnit and the MUnit Tools
* Define MUnit test scopes and processors
* Create an MUnit test from a Mule flow
* Create an MUnit test from a blank test
* Create an MUnit test using the Test Recorder component
* Run an MUnit test or suite
* Ignore an MUnit test or suite
* Understand MUnit failures and test coverage results

**Outline**

* MUnit Introduction and Processors
	+ MUnit Modules
	+ MUnit Scopes
	+ Database Utils
	+ FTP Utils
	+ Processors – MockWhen, ThenReturn, AssertThat, AssertWhen
	+ Spy, Validate
* MUnit Test from a Flow
	+ Use Case 1
	+ Create an MUnit Test from a Mule Flow
	+ Run MUnit Test
	+ Run MUnit Suite
	+ Test Results Analysis
	+ Coverage Report
	+ Review Logs
	+ MUnit Errors
* MUnit Blank Test
	+ Use Case 2
	+ Create an MUnit Test from Blank Test
	+ Run MUnit Test
	+ Run MUnit Suite
	+ Test Results Analysis
	+ Coverage Report
	+ Review Logs
	+ MUnit Errors
* MUnit Recorder
	+ Use Case 3
	+ Create an MUnit Test from Blank Test
	+ Run MUnit Test
	+ Run MUnit Suite
	+ Test Results Analysis
* CI/CD Pipeline
	+ MUnit Tests in CI/CD Pipeline
	+ Test Report Percentage Settings
	+ Failed Deployments
* Conclusion