

Mule 4 Course Content

Course Duration : 25 Hrs

MODULE : 1

Introduction

- Integration Layer Introduction
- Different Types of integration Tools
- SOA Verses Mule
- Mule 3 Verses Mule 4
- Advantages with MuleSoft
- What API-Led Connectivity is and its benefits
- Over View of Any Point Platform
- Real time Scenario's – Mule 4, SOA

MODULE : 2

SOAP and Rest Services

- Overview of XML, XSD, SOAP
- WebServices Sample Demonstration.
- Understanding WSDL Elements
- Difference between Web Service and API
- Overview of RAML

MODULE : 3

Any Point Studio Introduction

- Any point Studio to create Mule flows graphically
- Connectors used in building application networks
- Flow Design – Creating Basic Integration
- Logging message processors data
- Read and write message properties
- Build, Run, and Test a Mule application

MODULE : 4

Debugging and Troubleshooting Mule Applications

- Debug Mule applications
- Use breakpoints to inspect a Mule event during runtime
- Install missing Maven dependencies
- Read and decipher Mule log error messages.

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Connectors

- Accessing and Modifying Mule Messages
- Create variables, payload, attributes
- Write expressions with Mule Expression Language (MEL)
- VM Module – Publish, Consume

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Mule Connectors

- Data Base
 - Insert
 - Update
 - Delete
 - Select
- Create parameterized SQL queries for the Database connector
- Bulk insert.

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Structuring Mule Applications

- Create and reference flows, Sub flows and Private flows.
- Message Propagation through flows.
- Encapsulate Global Elements in Separate Configuration Files.
- Explore the files and folder structure of a Mule project.
- Define and manage application metadata

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Consuming WebServices

- Consume RESTful web services with and without parameters.
- Consume RESTful web services that have RAML definitions.
- Consume SOAP web services.
- Use DataWeave to pass parameters to SOAP web services.

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Routing Events

- Use the Choice router to route events based on conditional logic.
- Use the Scatter-Gather router to multicast events. - **Run the Service**

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Handling Errors

- Handle messaging errors at the application, flow, and processor level.
- Handle different types of errors.
- Use different error scopes to either handle an error and continue execution of the parent flow or propagate an error to the parent flow
- Set the success and error response settings for an HTTP Listener.

- Set reconnection strategies for system errors.

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Triggering Flows

- Read and write files
- Trigger flows when files are added, created, or updated with in the folder.
- Trigger flows when new records are added to a database table.
- Schedule flows to run at a certain time or frequency.
- Persist and share data in flows using the Object Store.
- FTP Module Walkthrough

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DataWeave Expression Language

- Write Data Weave expressions for basic to extensive XML,JSON transformations
- Write Data Weave transformations for complex data structures with repeated elements
- Define and use global and local variables and functions
- Read and write files using data weave scripts
- Use DataWeave functions
- Define and use custom data types
- Call Mule flows from DataWeave expressions
- Transform base type to destination types.

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Processing Records

- Process items in a collection using the For Each scope.
- Process records using the Batch Job scope.
- Use filtering and aggregation in a batch step.

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Designing API's

- Designing API's with RAML
- Mocking Designed API's before Implementation
- API Invocation Using invocation Tools
- Publishing an API to Exchange.
- Create public API portals for external developers.

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Building API's

- Use Any point Studio to build, run, and test Mule applications
- Use a connector to connect to database
- Use the graphical DataWeave editor to transform data

- Create RESTful interfaces for applications from RAML files
- Connect API interfaces to API implementations

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Deploying and Managing APIs

- Describe the options for deploying Mule applications
- Deploy Mule applications to Cloud Hub
- Use API Manager to create and deploy API proxies
- Use API Manager to restrict access to API proxy

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Validation Framework

- Validate Events
- Different types of Validations

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Miscellaneous

- Sales Force Credentials walk through.
- Mule to Sales Force Connectivity.
- Mule to Active MQ Connectivity.
- [Github](#)

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- Certification Questions Overview
- [Best Practices](#)
- [Interview Questions](#)
- [Coding Standards](#)

