MuleSoft

MuleSoft Course overview

MuleSoft provides the most widely used integration platform (Mule ESB & CloudHub) for connecting SaaS & enterprise applications in the cloud and on-premise.

MuleSoft makes it easy to unify data to deliver a single view of the customer, automate business processes, and build connected experiences. By using a modern API-led approach, each integration becomes a reusable building block.

API is the acronym for Application Programming Interface, which is a software intermediary that allows two applications to talk to each other. Each time you use an app like Facebook, send an instant message, or check the weather on your phone, you're using an API.

The power of Mule runtime engine hosted and managed in the cloud. CloudHub is the platform as a service (PaaS) component of Anypoint Platform™ — a global, fully-managed, multi-tenanted, secure, and highly available platform for APIs and integrations.

MuleSoft Syllabus

Introduction
  - Integration and Its History
  - Integrations Before and After Middleware
  - What is Middleware and Top Middleware Tools
  - Mulesoft Integration Platform - Advantages and Prerequisites

Setting up Computer - Running First Mule Application
  - 1) Anypoint Studio
  - Introduction to Studio
  - Download and Install
  - 2) Exercise-01:Building First Mule Application
  - 3) Introduction to
  - Mule Applications
  - Mule Flows
  - 4) Running a Mule Application

Debugging First Application Connector - File
  - 1) Exercise-02 Debugging of First Mule Application
  - 2) File Connector Operations -
  - Exercise-03 : New or Update File
  - 3) Mule Event Model (Event, Payload)

Mule Event Model File Connector Examples
1) Example-04 : Read and move the file, File Names will come as Http Query parameter
  - 2) Mule Event Model (attributes, variable, error)

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Metadata Data Sensing Transform File Write
- ➢ 3) Exercise-05 : New Or Update File to write file
- ➢ 4) Transform Event Processor
- ➢ 5) Data Sensing & Meta data editor

Flow - Sub Flow - Private Flow
- ➢ 1) Flow reference Calling sub flow and private flow from flow
- ➢ 2) payload, variable usage between flows and sub flows
- ➢ 3) Async scope
- ➢ 4) Exercise -06 : Calling a sub flow / pvt flow using flow reference. Behaviour of payload and variables in parent and child flows
- ➢ 5) Introduction to Postman, Sending Payload to flow

Rest Service
- ➢ 1) HTTP Protocol Basics
- ➢ 2) Rest Services - Basics
- ➢ 3) Introduction to XML

Rest Service
- ➢ 1) Introduction to JSON
- ➢ 2) Exercise Rest Service with All methods (Employees/Students)
- ➢ 3) Testing Rest Service from postman

Rest Service
- ➢ 1)Exercise Rest Service with All methods(Student)
- ➢ 2) Rest service returning XML response
- ➢ 3) Testing Rest Service from postman

Database connector
- ➢ 1) Data base Connector introduction
- ➢ 2) Database Installation
- ➢ 3) Connector operation (Insert, Select)
- ➢ 4) Continuation of Rest service example with the Database connector
- ➢ 5) Database connector operation (Update, Delete)
- ➢ 6) Continuation of Rest service example with the Database connector

Http Connector - Request
- ➢ 1) Invoking a Rest service with XML and JSON payload
- ➢ - With Query Parameters
- ➢ - With URI Params
- ➢ - XML and JSON data

VM/JMS Connector
- ➢ 1) Update slides remove VM connection image in JMS connector

- ➢ 2) Write few lines about Apache MQ

Configuration Properties, Secure Configuration Properties
- ➢ 1) Properties File
- ➢ 2) YAML File
- ➢ 3) Secure configuration properties

Mule FTP connector
- ➢ 1) File Zilla Setup
- ➢ 2) FTP Connector

Error Handling
- ➢ 1) Basic Information about Error Handling
- ➢ Default Error Handling
- ➢ Error information & Its Hierarchy
- ➢ Error Hierarchy
- ➢ 2) Error handlers
- ➢ On Error Continue & On Error Propagate

Error Handling
- ➢ 1) Handling Errors
- ➢ Specific Type Of Errors
- ➢ Errors at application level
- ➢ Errors at flow level
- ➢ Processor level (Try block)
- ➢ 2) Mapping errors to Custom Error Types
- ➢ Handling System Errors
- ➢ Reconnection Strategy
- ➢ 3) Raise Error

Any Point Platform
- ➢ What is an API ?
- ➢ 1) Any Point Platform
- ➢ Registration
- ➢ Any Point Platform Introduction (All Modules)
- ➢ 2) Cloud hub Introduction
- ➢ Deploying application to cloud hub using Studio
- ➢ Deploying a jar file into cloud hub
- ➢ 3) Any Point Studio
- ➢ Exporting a Jar from Studio
- ➢ Importing a Jar into Studio

Any Point Platform
- ➢ Designer

- Exchange
- Implementation
- API manager
- Simple example end to end (Visual Mode)

API Manager
- 1) API Creation
- - Basic End Point
- - Proxy with Application
- - Policies (Basic Auth, Rate limiting, SLA based Rate limiting, Client Id, Client Secret)

API Led Connectivity
- What is a API led connectivity
- How Any point Platform Supports API Led connectivity

RAML
- 1) RAML
- - Resources
- - Types
- - Examples
- 2) Creating the Students Service from mainly using RAML

RAML
- 1) Advanced concepts of RAML
- - Resource Types
- - Traits
- - libraries

Data Weave
- Part 1
- Part 2
- Part 3

SOAP Services
- WSDL
- SOAP
- Mule Soap Kit Router
- Mule Soap Consumer

Batch Processing
- For each
- Bulk Insert
- Batch Processing – Basic

SFDC Connector
- SFDC integration

Misc
- Scheduler Service
- Choice
- Untill Successful
- Object Store
- Scatter Gather

Deployment Models
- 1) Setting up on premise server
- 2) Using Domain project
- 3) Deployment Models
- - Controle Plane - Runtime Plane

MUNIT

Maven
- Maven Basics
- Mule Maven Plugin

Git
- Version controle

Jenkins
CI CD with Jenkins