

# **SIX WEEKS TRAINING IN MULESOFT**



## **Day1: Mule ESB Introduction:**

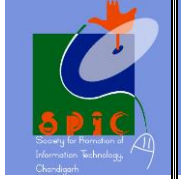
- Problems of Point to Point Integration
- What is an ESB?
- How an ESB helps in solving problems with P2P Integration
- Idea behind an ESB. How it works?
- What is Orchestration?
- What is Mule?
- What is Any-point Platform for Mule?

## **Day 2: Mule Basics**

- What is a mule Flow?
- What is Event Processor?
- How a Mule Event does looks like?
- What is a Transformer, Endpoint?
- Introduction to Any-point Studio
- Describe the structure of new Mule 4 projects and deploy-able archives
- Debugging a mule flow
- Structure of a Mule-Event in detail
- Track event data as it moves in and out of a Mule application
- Introduction to Data-Weave 2 as Mule Expression Language

## **Day 3: Using Java Module**

- Understanding modules in Mule.
- Call static and non static Java methods using the new Java module
- Understanding modules in Mule.
- Call static and non static Java methods using the new Java module



## **Day 4 : Message Passing**

- MULE 4 – MESSAGE STRUCTURE
- Introduction to Anypoint Studio
- Mule 4 Project Structure
- Introduction to Flow, Sub-flow, and a Private Flow

## **Day 5: Connectors – Part 1**

- HTTP – Listener
- Set Payload
- Building a Simple RESTful API – Hands-on
- Debugging an Application in Anypoint
- Studio – Hands-on

## **Day 6: Connectors- Part 2 :**

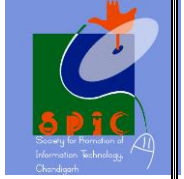
- Flow – Reference – Hands-On
- Attributes and Variables
- SET VARIABLE and Attributes – Hands-On
- TRANSFORM MESSAGE
- LOGGER
- SCOPE OF ATTRIBUTES , PAYLOAD AND VARIABLES- Hands-On
- CONFIGURATION PROPERTIES

## **Day 7: Connectors- Part 3:**

- For-Each
- Batch Processing
- ASYNC
- UNTIL-SUCCESSFUL – Hands-On
- SCHEDULER
- EMAIL
- SEND EMAIL VIA GMAIL

## **Day 8: Deploying applications Standalone Mule Server and Using Run-time Manager**

- Starting Stand alone mule Server.
- Understanding various configurations in Standalone Server



- Deploying applications manually to standalone server
- Registering a standalone server in Any-point Run-time Manager
- Deploying Application to standalone server using Run-time Manager

## **Day 9 : Understanding Http Listener and Http Request Configuration in detail and Consuming SOAP web service.**

- Consuming a Restful Web-service
- Passing arguments to Restful Web-service

## **Day 10 Connecting Salesforce:**

- Consuming Restful Web-service
- Using Http Listener and Process
- Connecting AWS Services – Hands-On
- Connecting Salesforce – Hands-On

## **Day 11: Soap Web Services:**

- Consuming SOAP Web-services
- Using Web-service Consumer
- Understanding WSDL language
- Passing Parameters To Soap

## **Day 12: Design**

- Create API Spec using RAML – Hands-On
- Create API Spec using RAML for Multiple Resources
- Using !include, types and type in RAML –
- Publish API specification to Exchange

## **Day 13: File Endpoint**

- Configuring file connector
- Trigger a flow when a new file is added to a directory
- Writing a file to file system
- Reading data from file
- Append data in file

## **Day 14: Database Endpoint and externalization of properties**

- Configuring Database Connector



- Configure the Database Select operation
- Externalizing configuration to yaml file.
- Add secure properties to Mule4 applications
- Migrating between environments

## **Day 15: Routing:**

- Scatter-Gather router
- Choice Router
- First Successful
- Until Successful

## **Day 16: JMS Endpoint:**

- Configuring Jms Connector
- Sending JMS Message to a queue using Publish endpoint of JMS Module
- Receiving JMS Message from a queue using JMS Listener endpoint of JMS Module
- Using Jms Selectors
- Using Publish Consume to send Jms message and receive JMS reply
- Setting Jms Headers

## **Day 17: DataWeave**

- Dataweave – 2.0
- Dataweave – The Power Of Preview Feature
- Understanding Array And Object
- Transforming One Data Type To Other
- Map And Map Object
- Dataweave In Other Components
- Dataweave – Input Output Mapping
- Dataweave – Functions

## **Day 18: Transformers:**

- Introduction to Data Weave data transformation Language
- Writing Data-Weave expressions
- Adding Sample data to view
- Previewing transformations in studio
- Externalizing Data weave expressions into DWL file

## **Day 19 : Data-Weave Transformation**

- Writing Expressions for XML , JSON and JAVA
- Writing Expressions for transforming XML to JSON and vice-versa
- Using Message Variables in DWL
- Creating multiple transformations to create Flow variables,
- Session variables and Outbound
- Properties in Transform Message transformer

## **Day 20: Transformations for JSON, XML and Java**

- Transforming complex data structures using DWL
- Working with collections in DWL using map operator
- Using \$\$ and \$

## **Day 21: Transforming Complex Data-Structures**

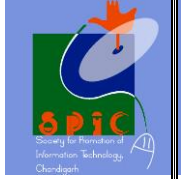
- Using Various Data-Weave Operators
- Custom Data-Types in DWL
- Formatting in DWL
- Conditional Logic Operators in DWL

## **Day 22: Batch Processing**

- 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

## **Day 23 : Processing records using a batch job**

- Record Insert using batch Job
- Data selection from different table
- Data deletion in different table
- Error handling in batch processing



## **Day 24: Handling Errors**

- What happens when exception happens in a flow?
- How to handle System Exceptions??
- Difference between Mule 4 `OnErrorContinue` and `OnErrorPropagate` Scopes
- Handling Errors at application level
- Handle specific types of errors
- Handle errors at the flow level
- Handle errors at the processor level using `try` scope
- Map an error to a custom error type
- Set a reconnection strategy for a connector
- Use `Validations` to throw Mule 4 errors instead of Java exceptions

## **Day 25 – Deployment:**

- Deployment Types
- Cloudhub Deployment
- Cloudhub Deployment Via Anypoint Studio
- Cloudhub Deployment Via Anypoint Platform
- On-Prem Deployment
- On-Prem Deployment Via Apps Folder
- On-Prem Deployment Via Runtime Manager

## **Day 26 – Managing:**

- Api Manager
- Apply Policies Without Creating Proxy Apis
- Apply Policies By Creating Proxy Apis
- Apply Policies – Hands-On

## **Project Work**