

# Mulesoft Integration Architect Training

COURSE CONTENT

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#### **About Multisoft**

Train yourself with the best and develop valuable in-demand skills with Multisoft Systems. A leading certification training provider, Multisoft collaborates with top technologies to bring world-class one-on-one and certification trainings. With the goal to empower professionals and business across the globe, we offer more than 1500 training courses, which are delivered by Multisoft's global subject matter experts. We offer tailored corporate training; project Based Training, comprehensive learning solution with lifetime e-learning access, after training support and globally recognized training certificates.

#### **About Course**

The MuleSoft Integration Architect Training by Multisoft Systems is designed for IT professionals seeking to master the art of enterprise integration and API-led connectivity. This comprehensive program equips learners with the skills required to design scalable and efficient integration solutions using MuleSoft's industry-leading tools.



#### **Android Automotive OS First Steps**

- ✓ Introduction to features
- ✓ Comparison with traditional systems

#### Module 1: Introducing integration solution architectures

- ✓ Describe the objectives of enterprise integration solution
- ✓ Summarize how to architect for success with Anypoint Platform
- ✓ Describe how integration solutions using Anypoint Platform are documented
- ✓ Start using an architecture template for the course case study

### Module 2: Identifying Anypoint Platform components and capabilities

- ✓ Identify and document the overall design intentions of Anypoint Platform
- ✓ Summarize Anypoint Platform capabilities and high-level components
- ✓ Identify and distinguish between Anypoint Platform infrastructure and deployment options
- ✓ Choose Anypoint Platform components to be used to meet the functional and non-functional requirements of an integration use case

# Module 3: Designing integration solutions using Mule applications

- ✓ Explain the typical uses of Mule components (including connectors, transformers, routers, and error handlers) in Mule applications
- ✓ Describe the differences between Mule 4 and Mule 3 applications
- ✓ Choose appropriate Mule application components to design an integration use case
- ✓ Summarize how class loading isolation is implemented in Mule runtimes



### Module 4: Choosing appropriate Mule 4 event processing models

- ✓ Distinguish between Mule 4 blocking, non-blocking, parallel, and reactive event processing options
- ✓ Identify the event processing models used in various Mule 4 scopes and components
- ✓ Describe Mule 4 streaming options and behaviors
- ✓ Describe the event processing options for JMS and VM connectors
- ✓ Select appropriate event processing for an integration use case
- ✓ Design batch, near real-time, and real-time data synchronization integration use cases

# Module 5: Choosing appropriate message transformation and routing patterns

- ✓ Describe reusable ways to transform and process events
- ✓ Explain how to simplify and decouple complex data mappings using common data models
- ✓ Design transformations between data models
- ✓ Choose the best event transformation, data validation, and event routing patterns
  to an integration use case

#### Module 6: Designing Mule application testing strategies

- ✓ Describe possible testing strategies for Mule applications
- ✓ Document a testing strategy for an integration use case
- ✓ Define the types of MUnit tests required for an integration use case and document the code coverage
- ✓ Design integration and performance tests for Mule applications



#### Module 7: Choosing and developing a deployment strategy

- ✓ Distinguish between various Anypoint Platform runtime service models
- ✓ Distinguish between various Anypoint Platform deployment models
- ✓ Select the best deployment and runtime service options for an integration use case

### Module 8: Designing with appropriate state preservation and management options

- ✓ Select the best deployment and runtime service options for an integration use case
- ✓ Explain how to store Mule application state using Object Store v2
- ✓ Decide when to manage storage of Mule application state using persistent VM queues
- ✓ Decide when to use Mule application provided caches to store Mule application state
- ✓ Design an integration solution to avoid duplicate processing of previous records using Mule connector watermarks
- ✓ Design the best storage and state management options for an integration use case

#### Module 9: Designing effective logging and monitoring

- ✓ Describe auditing and logging options for Mule applications
- ✓ Design logging strategies for Mule applications
- ✓ Choose logging policies for Mule application log files
- ✓ Describe integration options with third-party log management systems
- ✓ Specify Anypoint Platform monitoring, alerting, notification, visualization, and reporting options for APIs and integration solutions
- ✓ Choose the best monitoring, alerting, and notification options for an integration use case

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# Module 10: Designing an efficient and automated software development lifecycle

- ✓ Design to manage property files for Mule applications across different environments
- ✓ Design to manage Anypoint Platform environments for Mule application deployments
- ✓ Describe how to implement continuous integration and continuous delivery (CI/CD) for an organization
- ✓ Describe how to automate deployment and management with Anypoint Platform

### Module 11: Designing transaction management in Mule applications

- ✓ Identify why and when transactions are supported in Mule applications
- ✓ Identify resources that participate in transactions in Mule applications
- ✓ Describe how to manage a transaction using a transaction manager or the Saga pattern
- ✓ Describe how to demarcate transaction boundaries in Mule applications
- ✓ Choose the correct transaction type based on the participating resources

#### Module 12: Designing for reliability goals

- ✓ Identify and distinguish between reliability patterns for Mule application and their deployments
- ✓ Design to effectively balance competing non-functional requirements
- ✓ Clarify and validate reliability goals for an integration use case
- ✓ Design Mule applications and their deployments to meet reliability goals
- ✓ Design to effectively balance reliability goals with other project goals



#### Module 13: Designing for high availability goals

- ✓ Identify various types of high availability (HA) goals for Mule applications
- ✓ Identify ways to achieve HA in CloudHub and on-premises deployments
- ✓ Identify HA aware connectors and their design tradeoffs
- ✓ Describe how clustering and load balancing work in CloudHub and on-premises deployments
- ✓ Design to effectively balance HA goals with other project goals and requirements

# Module 14: Optimizing the performance of deployed Mule applications

- ✓ Clarify performance goals for Mule applications
- ✓ Identify the need for performance optimization and associated tradeoffs
- ✓ Describe ways to search for and locate performance bottlenecks
- ✓ Describe how to design, architect, design, and implement for performance
- ✓ Describe ways to measure performance
- ✓ Describe methods and best practices to performance tune Mule applications and Mule runtimes
- ✓ Design to effectively balance performance goals with reliability and HA goals

# Module 15: Designing secure Mule applications and deployments

- ✓ Describe Anypoint Platform security concepts and options
- ✓ Explain how to secure APIs on Anypoint Platform
- ✓ Differentiate between MuleSoft and customer responsibilities related to Anypoint Platform security
- ✓ Evaluate security risks for Mule applications
- ✓ Describe how to secure Mule application properties and data in transit



# Module 16: Designing secure network communications between Mule applications

- ✓ Describe Anypoint Platform network security options and architectures
- ✓ Identify MuleSoft-owned and customer-owned roles and responsibilities related to Anypoint Platform network security
- ✓ Describe how to secure Mule applications using Java key stores
- ✓ Design TLS communication and other network security options for an integration use case
- ✓ Properly size an Anypoint VPC to support deployment of all expected Mule applications