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MuleSoft Integration Architect Training

4 days (28 hours)

Presentation

Our Mulesoft Developer training course is aimed at developers and integration professionals wishing to acquire complete mastery of the MuleSoft platform and its [Anypoint Studio](#) development environment. MuleSoft is a powerful integration solution that connects applications, data and devices across different environments, whether on-premise, in the cloud or hybrid.

During this program, participants will learn how to design, develop, deploy and manage integration applications with MuleSoft, while respecting best practices in the field.

The course is structured to offer a balance between theory and practice, enabling participants to immediately apply the concepts acquired in practical exercises.

Like all our training courses, it will be run on the latest version of the tool: [Mule Engine 4](#).

Objectives

- Understand MuleSoft's architecture and components at an advanced level.
- Design scalable, high-performance integration solutions with MuleSoft.
- Define and implement an API management strategy within the company.

Target audience

- Software developers
- Integration engineers
- Corporate architects
- System administrators
- Technical project managers
- IT Consultants

Prerequisites

- Significant experience in systems development and integration.
- In-depth knowledge of service-oriented architecture (SOA), APIs (REST, SOAP) and cloud platforms.
- Previous experience with MuleSoft is strongly recommended.

Software requirements

- At least 16 GB RAM and a multi-core processor
- A good Internet connection
- Have Anypoint Studio installed and an Anypoint Platform account
- Correctly configured development and infrastructure management tools (JDK, Maven, Docker, Kubernetes).

MuleSoft Integration Architect training program

Introduction to MuleSoft architecture

- Overview of MuleSoft architecture: ESB, API-led Connectivity, Microservices
- Roles and responsibilities of a MuleSoft architect
- Enterprise integration models with MuleSoft

Designing integration solutions

- Design principles for scalable and maintainable integration solutions
- API architecture: design, slicing, and lifecycle management
- Introduction to API-led Connectivity: System, Process, and Experience APIs

Integration flow modeling

- Identification of integration requirements and flow modeling
- Using Integration Patterns with MuleSoft
- Introduction to API contracts and dependency management

API and Mule flow security

- Implementation of security standards: OAuth 2.0, JWT, SSL/TLS
- Strategies for securing MuleSoft APIs and applications
- User and access management with Anypoint Platform

API and service governance

- Setting up API governance: cataloguing, versioning and monitoring
- Using API Manager for centralized API management
- Monitoring and reporting with Anypoint Monitoring and Anypoint Analytics

CloudHub 2.0 architecture

- Understanding CloudHub 2.0: architecture, networks and environment management
- Advanced deployment on CloudHub 2.0: worker cloud, scalability, and resilience
- Manage multi-cloud and hybrid environments with Anypoint Platform

Optimizing the performance of MuleSoft solutions

- Mule flow optimization strategies for enhanced performance
- API performance analysis and optimization
- Proactive monitoring with Anypoint Monitoring and bottleneck management

Introduction to CI/CD with MuleSoft

- Integrating MuleSoft into CI/CD pipelines with Maven, Jenkins, and GitLab
- Automated deployments and versioning on CloudHub 2.0
- Rollback and configuration management strategies

Environment and deployment management

- Configuration and management of development, test and production environments
- Managing application properties and secrets in MuleSoft environments
- Strategies for migrating and updating environments

Case studies and practical exercises

- Analysis of real-life integration projects: challenges and solutions
- Design workshop: creating an integration architecture for a concrete case study
- Risk assessment and planning of integration projects

Aligning integration solutions with corporate strategy

- Understand business needs and translate them into technical requirements.
- Integrating MuleSoft into the company's digital transformation.
- Best practices for successful integration projects.

Closing the course and next steps

- Summary of key concepts and best practices.
- Q&A session to go deeper into complex topics.
- Discussion of MuleSoft certifications and career opportunities.

Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.