

Anypoint Platform Operations: Runtime Fabric

Summary

Anypoint Runtime Fabric is a container service that automates and orchestrates the deployment of Mule runtimes across Amazon Web Service (AWS), Microsoft Azure, and on-premises data centers that can be managed through a single MuleSoft-hosted control plane. This instructor-led course is for all operations personnel, developers, and architects who want to get hands-on experience installing, configuring, managing, and monitoring customer-hosted Mule runtimes and applications using Runtime Fabric.

Note: This course uses AWS and is for both Mule 3 and Mule 4.

Duration

2 days in-person or online

Objectives

At the end of this course, students should be able to:

- Describe the features, benefits, and architecture of Runtime Fabric.
- Install and configure Runtime Fabric.
- Deploy Mule applications to Runtime Fabric.
- Scale Runtime Fabric deployments for performance and high availability.
- Use Anypoint Runtime Manager and to manage, monitor, and analyze Mule applications.
- Use OpsCenter for dashboarding and monitoring.

Audience

Operations personnel, developers, and architects who want to get hands-on experience with Runtime Fabric

Prerequisites

- A knowledge of system administration and server commands
- A basic understanding of data formats such as XML, CSV, and JSON
- A basic knowledge of working on Linux systems
- A basic understanding of remote connection mechanisms such as SSL and SSH
- (Optional, but useful) A basic understanding of containerization concepts and technologies

Setup requirements

- A computer with at least 2GB available RAM and 500MB available storage
- Unrestricted internet access to port 80 (with > 5Mbps download and > 2Mbps upload)
- An SSH client
- Terraform
- OpenSSL
- OpenJDK 8
- Apache JMeter

A detailed setup document can be downloaded from here: <https://training.mulesoft.com/downloads>.

Outline

Module 1: Introducing Runtime Fabric

- Describe the development lifecycle of Mule applications
- Describe and navigate Anypoint Runtime Fabric
- Distinguish between Anypoint Platform deployment options
- List features and limitations of Runtime Fabric
- Explain relevant concepts and underlying technologies

Module 2: Installing Runtime Fabric

- Explain relevant concepts and underlying technologies
- Install Runtime Fabric to a provisioned AWS environment
- Remotely access the Runtime Fabric environment

Module 3: Enabling Inbound Traffic

- Explain relevant concepts
- List Runtime Fabric security requirements
- Configure Runtime Fabric for inbound traffic

Module 4: Deploying Applications

- Explain relevant concepts and underlying technologies
- List deployment options
- Deploy and undeploy applications
- Update and redeploy applications with zero downtime

Module 5: Configuring Runtime Fabric

- Explain relevant concepts and underlying technologies
- Install a license to Runtime Fabric
- Enable alerting
- Use OpsCenter for monitoring and management

Module 6: Scaling for High Availability and Performance

- Explain relevant concepts and underlying technologies
- Distinguish between horizontal and vertical scaling
- Scale application runtime environments for high availability
- Scale application runtime environments for performance

Module 7: Logging and Monitoring

- Identify logging options for Mule applications and Runtime Fabric
- Set up audit logging
- Retrieve, view, and filter applications logs
- Set up log forwarding to a logging server
- Monitor Runtime Fabric using OpsCenter

Module 8: Securing Runtime Fabric and Mule Applications

- Describe security options in Anypoint Platform
- Secure applications and data
- Secure access to OpsCenter