DO328

# Building Resilient Microservices with Istio and Red Hat OpenShift Service Mesh

## Duration: 4 Days

## Course description

**Create and manage virtual machines on OpenShift using the Red Hat OpenShift Virtualization operator**

**Control, manage, trace, monitor, and test your microservices with Red Hat OpenShift Service Mesh**

Building Resilient Microservices with Istio and Red Hat OpenShift Service Mesh (DO328) is an introduction to Red Hat OpenShift Service Mesh that teaches students installation, service monitoring, service resilience, and service security with Red Hat OpenShift Service Mesh.

Red Hat OpenShift created an enterprise-ready, multitenant platform that made deploying and scaling microservice applications efficient and repeatable. But as these architectures become larger and more complex, defining how these services interact with each other is increasingly difficult. Red Hat OpenShift Service Mesh comprises three products: Istio, Jaeger, and Kiali, facilitating a zero-trust network for managing secure service interactions, providing service tracing, and creating a visual representation of communication pathways.

This course is based on Red Hat OpenShift® Container Platform 4.6 and Red Hat OpenShift Service Mesh 2.0

## Outline for this course

Introduction to Red Hat OpenShift Service Mesh
    Describe the basic concepts of microservice architecture and
    OpenShift Service Mesh.

Install Red Hat OpenShift Service Mesh

Deploy Red Hat OpenShift Service Mesh on Red Hat OpenShift Container Platform.

Observe a service mesh

Trace and visualize an OpenShift Service Mesh with Jaeger and Kiali.

Control service traffic

Manage and route traffic with OpenShift Service Mesh.

Release applications with service mesh

Release applications with canary and mirroring release strategies.

Test service resilience with chaos testing

Gauge the resiliency of Red Hat OpenShift Service Mesh with chaos testing.

Build resilient services

Use OpenShift Service Mesh strategies to create resilient services.

Secure services with OpenShift Service Mesh

Secure and encrypt services in your application with Red Hat OpenShift Service Mesh.