

# Building Resilient Microservices with Istio and Red Hat OpenShift Service Mesh with exam (EX328) (DO329)

**ID DO329** **Price** 3,168.— €excl. tax **Duration** 3 days

## Course Objectives

### Impact on the organization

Microservice architectures with OpenShift and Service Mesh enable Organizations to improve application resilience and scalability, while decreasing developer overhead. This leads organizations to improved time to market as well as improved insight into their microservice architecture by being able to visualize and trace data flow throughout their applications. These insights can dictate better resource allocation for applications as well as more quickly identifying defects in specific microservices.

### Impact on the individual

Students will be able to use the concepts in this course to simplify and more efficiently manage their service interactions. Students will learn how to install and configure Service Mesh to define, monitor, and manage service interaction within their microservice architecture. This course is intended to illustrate the ease of Service Mesh's "sidecar" approach and to highlight the benefits of service resilience and monitoring that the product provides.

## Course Content

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

OpenShift created an enterprise-ready, multi-tenant 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 becomes increasingly difficult. Red Hat OpenShift Service Mesh comprises three products, Istio, Jaeger, and Kiali that facilitate managing service interaction, provide service tracing, and create a visual representation of communication pathways. This offering is an introduction to Red Hat OpenShift Service Mesh that teaches students installation, service monitoring, service management, and

service resilience with Red Hat OpenShift Service Mesh.

The [Red Hat Certified Specialist in Service Mesh for Resilient Microservices Exam \(EX328\)](#) is included in this offering.

### Course content summary

- Install Red Hat OpenShift Service Mesh on an OpenShift cluster.
- Apply release strategies by controlling service traffic.
- Build service resilience with load balancing and failovers.
- Test service resilience with chaos testing.
- Enforce service security.
- Observe, measure, and trace network traffic with OpenShift Service Mesh.

### Detailed Course Outline

#### Introduction to Red Hat OpenShift Service Mesh

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

#### Install Red Hat Service Mesh

Deploy Red Hat Service Mesh on 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 Red Hat Service Mesh.

#### Release Applications with Service Mesh

Releasing applications with canary and mirroring release strategies.

#### Test Service Resilience with Chaos Testing

Test the resiliency of an OpenShift Service Mesh with Chaos Testing.



### **Build Resilient Services**

Leverage OpenShift Service Mesh strategies for creating resilient services.

### **Secure an OpenShift Service Mesh**

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

# About Fast Lane



Fast Lane is a global, award-winning specialist in technology and business training as well as consulting services for digital transformation. As the only global partner of the three cloud hyperscalers- Microsoft, AWS and Google- and partner of 30 other leading IT vendors, Fast Lane offers qualification solutions and professional services that can be scaled as needed. More than 4,000 experienced Fast Lane professionals train and advise customers in organizations of all sizes in 90 countries worldwide in the areas of cloud, artificial intelligence, cyber security, software development, wireless and mobility, modern workplace, as well as management and leadership skills, IT and project management.



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