

Building Resilient Microservices with Istio and Red Hat OpenShift Service Mesh

Duration: 3 Days Course Code: DO328

Overview:

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

Red Hat 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.

Modern organizations are adopting complex application architectures that include microservices, virtual machines, and AI integration. While offering benefits like scalability, these introduce operational and developmental challenges.

With Red Hat OpenShift Service Mesh, organizations have a platform ready to manage critical aspects of service communication, including routing, observability, security, and resilience.

Red Hat OpenShift Service Mesh facilitates managing service interaction, providing service tracing, and creating a visual representation of communication pathways.

Building Resilient Microservice Applications with Red Hat OpenShift Service Mesh (DO328) teaches students service monitoring, management, and resilience with Red Hat OpenShift Service Mesh.

This course is based on Red Hat OpenShift Service Mesh 3.1, and Red Hat OpenShift 4.18.

Note : Starting January 1, 2026, Red Hat introduces RHLS-Course — a flexible subscription model now included with this catalog offering. This replaces the previous direct virtual class enrollment from Global Knowledge.

When you purchase this item, you'll receive an RHLS subscription at the course level, giving you the freedom to choose the schedule that works best and self-enroll in your selected class.

Your RHLS subscription includes:

- One live, instructor-led virtual session
- 12 months of self-paced learning access
- One certification exam with a free retake

Onsite Classroom-based sessions and closed course options remain unchanged.

Updated Jan2026

Target Audience:

Developers and platform engineers who need to manage and secure reliable microservices communication in a Red Hat OpenShift-based environment.

Objectives:

- After this course participants should be able to:
- Introduce OpenShift Service Mesh
- Observe OpenShift Service Mesh
- Manage Traffic with OpenShift Service Mesh
- Secure OpenShift Service Mesh
- Consolidate and validate the understanding of Red Hat OpenShift Service Mesh

Prerequisites:

- Red Hat OpenShift Developer II: Building and Deploying Cloud-native Applications (DO288), or demonstrate equivalent experience with Red Hat OpenShift.
- Red Hat Cloud-native Microservices Development with Quarkus (DO378), or demonstrate equivalent experience in creating microservice applications, is recommended, but not required. Take Red Hat free assessment to gauge whether this offering is the best fit for your skills [Red Hat Skills Assessment](#)
- DO180 - Red Hat OpenShift Administration I: Operating a Production Cluster

Testing and Certification

- Red Hat Certified Specialist in Building Resilient Microservices exam (EX328)

- DO283 - Red Hat Application Development: Building Microservices with Quarkus
- DO288 - Red Hat OpenShift Developer II: Building and Deploying Cloud-native Applications
- EX288 - Red Hat Certified Specialist in OpenShift Application Development Exam

Follow-on-Courses:

None

Content:

Introducing OpenShift Service Mesh

- Describe the basic concepts of microservice architecture and how Red Hat OpenShift Service Mesh provides observability, security, and traffic management for distributed applications.

Observing the OpenShift Service Mesh

- Trace and visualize a Red Hat OpenShift Service Mesh with Red Hat OpenShift observability.

Managing Traffic with OpenShift Service Mesh

- Manage, control, and test application traffic in Red Hat OpenShift Service Mesh by applying routing strategies, resiliency policies, and fault injection techniques to build safer and more reliable distributed systems.

Securing the OpenShift Service Mesh

- Design, implement, and validate a comprehensive zero-trust security posture in Red Hat OpenShift Service Mesh, ensuring all traffic is secured, authenticated, and authorized.

Comprehensive Review

- Consolidate and validate the understanding of Red Hat OpenShift Service Mesh.

Additional Information:

Official course book provided to participants

Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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