



RED HAT TRAINING

Red Hat OpenShift Developer II (DO288)

Develop advanced containerized applications on Red Hat OpenShift. Master deployment strategies and prepare for your DO288 certification.

DURATION

2 hours

LEVEL

Intermediate

FORMAT

Instructor-Led

-
- Globally Recognized Certification
 - Expert-Led Hands-On Training
 - Flexible Scheduling

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COURSE OVERVIEW

The Red Hat OpenShift Developer II (DO288) course is designed for experienced developers eager to master the advanced capabilities of Red Hat OpenShift, the industry-s leading enterprise Kubernetes platform. This certification equips you with the skills to efficiently build, deploy, scale, and manage cloud-native applications using modern development practices. You will delve into advanced deployment strategies, integrate robust CI/CD pipelines, optimize application performance, and secure your deployments within the OpenShift ecosystem. This course is crucial for anyone looking to transition traditional applications or develop new microservices architectures with increased agility and reliability.

By completing this course, you will gain hands-on experience with critical tools and concepts essential for high-performance development on OpenShift. You'll explore topics like Helm for packaging applications, leveraging GitOps for declarative deployments, building event-driven applications with Knative, and implementing service meshes for complex microservices. The practical skills acquired will not only enhance your productivity but also position you as a key contributor in organizations adopting containerization and DevOps methodologies, enabling you to build scalable and resilient applications that meet enterprise demands.

Duration	2 hours
Level	Intermediate
Vendor	Red Hat
Exam Code	DO288

COURSE CURRICULUM

01 Module 1: Advanced Application Deployment on OpenShift

- Reviewing OpenShift Architecture and Core Concepts
- Deploying Applications with Source-to-Image (S2I) and Custom BuildConfigs
- Managing Application Configurations with ConfigMaps and Secrets
- Packaging and Deploying Applications using Helm Charts
- Implementing Advanced Deployment Strategies (Blue/Green, Canary, Rolling Updates)

02 Module 2: CI/CD Pipelines and GitOps Integration

- Designing and Implementing CI/CD Pipelines with OpenShift Pipelines (Tekton)
- Integrating External CI/CD Tools (Jenkins, GitLab CI/CD) with OpenShift
- Leveraging GitOps Principles for Declarative Deployments with Argo CD
- Automating Application Updates and Rollbacks
- Managing Application Lifecycle from Development to Production

03 Module 3: Scaling, Resilience, and Service Management

- Horizontal Pod Autoscaling (HPA) and Vertical Pod Autoscaling (VPA)
- Implementing Pod Disruption Budgets (PDBs) for High Availability
- Managing Network Policies and Egress Control
- Exploring OpenShift Service Mesh (Istio) for Microservices Communication
- Load Balancing and Traffic Management with Routes and Ingress Controllers

04 Module 4: Serverless and Event-Driven Architectures

- Introduction to Serverless Computing on OpenShift with Knative
- Deploying and Managing Knative Services and Event Sources

- Building Event-Driven Applications with Apache Kafka on OpenShift
- Integrating External Event Sources and Cloud Services
- Monitoring and Debugging Serverless Workloads

05 Module 5: Security, Monitoring, and Troubleshooting

- Implementing Security Context Constraints (SCCs) and Role-Based Access Control (RBAC)
- Managing Image Security and Vulnerability Scanning
- Monitoring Application Performance with Prometheus and Grafana
- Centralized Logging with EFK Stack (Elasticsearch, Fluentd, Kibana)
- Troubleshooting Common Application Deployment and Runtime Issues

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Senior Cloud-Native Application Developer**
- > **Kubernetes Platform Engineer**
- > **DevOps Automation Specialist**

FREQUENTLY ASKED QUESTIONS

Q: What are the essential prerequisites for enrolling in the Red Hat OpenShift Developer II (DO288) course?

This is an intermediate-level course, and it is highly recommended that participants have a solid understanding of Linux command-line tools, container concepts (Docker/Podman), and Kubernetes fundamentals. Prior experience with developing applications, source code management (Git), and continuous integration concepts is also beneficial. Completion of the Red Hat OpenShift Developer I (DO280) course or equivalent experience is strongly advised to ensure you can fully grasp the advanced topics covered.

Q: How will this course specifically enhance my ability to deploy and manage complex microservices architectures on OpenShift?

DO288 focuses on advanced patterns and tools crucial for microservices. You'll learn to package and deploy complex applications using Helm, automate their lifecycle with CI/CD pipelines and GitOps (Argo CD), manage inter-service communication with OpenShift Service Mesh, and implement robust scaling and resilience strategies. This holistic approach empowers you to design, implement, and maintain highly available and scalable microservices on a production-grade OpenShift cluster, significantly reducing operational overhead.

Q: Beyond core OpenShift features, what specific third-party or ecosystem tools will I gain practical experience with in DO288?

This course provides practical experience with several key tools integral to the OpenShift ecosystem. You will gain hands-on exposure to Tekton for building pipelines, Argo CD for implementing GitOps workflows, Helm for application packaging and deployment, Knative for developing serverless applications, and foundational concepts of Istio within OpenShift Service Mesh for advanced traffic management. Additionally, you'll work with standard monitoring tools like Prometheus and Grafana, and logging with the EFK stack.

ABOUT COMPUTER PRIDE



East Africa's Premier IT Training Center

With over 15 years of excellence, Computer Pride delivers globally recognized certification programs from leading technology vendors. Located on Kenyatta Avenue in Nairobi's CBD, our state-of-the-art facilities and expert instructors have empowered thousands of professionals across East Africa.

15+

Years of Excellence

10,000+

Professionals Trained

50+

Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

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