



RED HAT TRAINING

Openshift Red Hat

Master Red Hat OpenShift to deploy, manage, and scale containerized applications. Gain hands-on skills for enterprise-grade Kubernetes.

DURATION

40 hours

LEVEL

Intermediate

FORMAT

Instructor-Led

- Globally Recognized Certification

- Expert-Led Hands-On Training

- Flexible Scheduling

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COURSE OVERVIEW

This intermediate-level Red Hat OpenShift course provides a comprehensive deep dive into Red Hat's enterprise Kubernetes platform. Participants will gain hands-on experience in deploying, managing, and scaling containerized applications using OpenShift, mastering its powerful features for orchestration, automation, and developer productivity. The curriculum is designed to equip IT professionals with the essential skills to leverage OpenShift for modernizing infrastructure, accelerating application delivery, and implementing robust DevOps practices within any organization. By understanding the core technologies like Kubernetes, containerization, and the OpenShift ecosystem, attendees will be able to design and maintain highly available and scalable cloud-native environments. This certification is crucial for anyone looking to bridge the gap between development and operations, fostering a culture of efficiency and innovation.

Duration	40 hours
Level	Intermediate
Vendor	Red Hat

COURSE CURRICULUM

01 Module 1: Introduction to OpenShift and Container Fundamentals

- Understanding Containers and Docker
- Introduction to Kubernetes Architecture
- OpenShift Architecture and Core Components
- Installing and Configuring the OpenShift CLI (oc)
- Basic OpenShift Project Management

02 Module 2: Deploying Applications on OpenShift

- Creating and Managing Builds (Source-to-Image and Dockerfile Builds)
- Deploying Applications using DeploymentConfigs and Deployments
- Managing Services and Routes for External Access
- Working with Templates and Parameters
- Scaling Applications (Manual and Horizontal Pod Autoscalers)

03 Module 3: OpenShift Networking and Storage

- OpenShift Software-Defined Networking (SDN) Concepts
- Managing Internal and External Traffic with Routes and Ingress
- Understanding Persistent Storage (Persistent Volumes and Claims)
- Configuring Storage Classes and Dynamic Provisioning
- Integrating with External Storage Solutions

04 Module 4: Managing OpenShift Resources and Security

- Managing Users, Groups, and Role-Based Access Control (RBAC)
- Resource Quotas and Limit Ranges
- Security Context Constraints (SCCs)
- Secrets and ConfigMaps for Application Configuration
- Monitoring OpenShift Clusters (Prometheus, Grafana)

05 Module 5: Advanced OpenShift Operations and Automation

- Introduction to OpenShift Operators
- Implementing CI/CD Pipelines with OpenShift Pipelines (Tekton)

- Troubleshooting Applications and Cluster Issues
- Logging and Event Management within OpenShift
- Cluster Maintenance and Upgrades Best Practices

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **DevOps Engineer (OpenShift Specialist)**
- > **Kubernetes Administrator**
- > **Cloud Platform Engineer (Red Hat Technologies)**

FREQUENTLY ASKED QUESTIONS

Q: What are the recommended prerequisites for effectively undertaking this Red Hat OpenShift certification course?

To get the most out of this OpenShift course, participants should have a foundational understanding of Linux command-line operations, basic networking concepts, and experience with application development or system administration. Familiarity with containerization concepts (like Docker) and basic Kubernetes knowledge will also be highly beneficial, though the course covers essential container fundamentals.

Q: How will this course specifically help me in migrating existing monolithic applications into a containerized, cloud-native OpenShift environment?

This course will equip you with practical skills to strategize and execute the migration of monolithic applications. You'll learn to containerize applications using Dockerfiles, understand how to deploy them effectively on OpenShift using DeploymentConfigs, manage persistent storage for stateful components, and expose services securely. The curriculum covers the tools and best practices necessary to refactor and operate legacy applications within the OpenShift ecosystem.

Q: Beyond basic application deployment, what advanced automation and CI/CD integration skills will I master for an OpenShift platform?

You will master crucial advanced automation and CI/CD integration. This includes configuring Source-to-Image (S2I) builds for streamlined developer workflows, implementing robust continuous delivery pipelines using OpenShift Pipelines (Tekton) for automated testing and deployment, and understanding how to leverage OpenShift Operators for automating complex application lifecycle management tasks. You'll also learn to integrate external CI/CD tools and manage application configurations dynamically.

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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