



RED HAT TRAINING

Red Hat Container Openshift Overview

Gain a comprehensive overview of Red Hat OpenShift, exploring containerization and Kubernetes. Understand its core concepts and practical applications.

DURATION

24 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 Container OpenShift Overview course provides a foundational yet comprehensive introduction to containerization and the Red Hat OpenShift platform, a leading enterprise Kubernetes distribution. In today's rapidly evolving IT landscape, understanding how to build, deploy, and manage applications using containers and orchestration tools like Kubernetes is crucial. This course demystifies these concepts, offering participants a clear understanding of the core principles behind container technology, the advantages of microservices architectures, and how OpenShift enhances developer productivity and operational efficiency.

Participants will explore key features of Red Hat OpenShift, including its robust architecture, integrated developer tools, and advanced capabilities for automating application lifecycle management. You'll learn how to deploy and scale applications, manage projects, and interact with the OpenShift cluster using practical, hands-on examples. By the end of this training, you will be equipped with the essential knowledge to confidently navigate and leverage OpenShift for modernizing IT infrastructure and accelerating cloud-native development initiatives within your organization. This expertise is invaluable for IT professionals seeking to enhance their skill set in cloud computing, DevOps, and enterprise-grade container platforms.

Duration	24 hours
Level	Intermediate
Vendor	Red Hat

COURSE CURRICULUM

01 Module 1: Introduction to Containers and Kubernetes

- Understanding Containerization: Docker vs. Virtual Machines
- Key Container Concepts: Images, Containers, Registries
- Introduction to Kubernetes: Architecture, Objects (Pods, Deployments, Services)
- The Need for Container Orchestration in Modern IT

02 Module 2: Exploring Red Hat OpenShift Architecture

- OpenShift as Enterprise Kubernetes: Key Differentiators
- OpenShift Cluster Components: Master, Worker Nodes, etcd
- OpenShift Project Structure and Namespaces
- Accessing OpenShift: Web Console, Command-Line Interface (oc command)

03 Module 3: Deploying Applications on OpenShift

- Building Container Images with Source-to-Image (S2I)
- Deploying Applications from Existing Images
- Managing Application Lifecycle: Scaling, Updates, Rollbacks
- Exposing Applications with Routes and Services

04 Module 4: Managing OpenShift Resources

- Understanding OpenShift Objects: Pods, Deployments, DeploymentConfigs
- Working with Persistent Storage: Persistent Volumes (PVs), Persistent Volume Claims (PVCs)
- Configuring Application Settings with ConfigMaps and Secrets
- Implementing Resource Quotas and Limit Ranges

Module 5: Networking and Security in OpenShift

- 05**
- OpenShift Software-Defined Networking (SDN) Overview
 - Managing Network Policies for Application Communication
 - Introduction to OpenShift Security Context Constraints (SCCs)
 - User and Group Management in OpenShift

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **DevOps Engineer specializing in container orchestration with OpenShift**
- > **Cloud Native Application Developer utilizing OpenShift for scalable microservices deployment**
- > **Kubernetes/OpenShift Platform Administrator responsible for cluster management and operations**

FREQUENTLY ASKED QUESTIONS

Q: What foundational knowledge or experience is recommended before enrolling in the Red Hat Container OpenShift Overview course?

This intermediate-level course assumes a basic understanding of Linux command-line operations and familiarity with application development concepts. Prior exposure to containerization technologies like Docker or a general understanding of cloud computing principles would be beneficial but is not strictly required, as the course will cover fundamental concepts of containers and Kubernetes.

Q: How will this OpenShift Overview course specifically enhance my ability to deploy and manage applications in a modern cloud-native environment?

This course focuses on practical skills for deploying, scaling, and managing containerized applications on Red Hat OpenShift. You will learn how to leverage OpenShift's integrated tools for image building (S2I), manage application lifecycle, configure persistent storage, and expose services reliably. This directly translates to expertise in automating deployments, ensuring application high availability, and optimizing resource utilization within a robust enterprise-grade container platform.

Q: Beyond the overview, what advanced Red Hat OpenShift certifications or learning paths can I pursue after completing this introductory course?

Upon successfully completing the Red Hat Container OpenShift Overview, you'll have a strong foundation for more specialized Red Hat certifications. You can progress towards roles like Red Hat Certified Specialist in OpenShift Application Development (EX288) or Red Hat Certified Specialist in OpenShift Administration (EX280), which delve deeper into advanced application deployment strategies and comprehensive OpenShift cluster management, respectively.

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+

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Take the next step in your technology career.

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