

Red Hat OpenShift Administration III: Scaling Kubernetes Deployments in the Enterprise

Category: Infrastructure & IT Operations | **Vendor:** Red Hat

Duration: 32.00 hours (4 days) **26.0 CPD Hours** **Rating:** ★ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

Red Hat OpenShift Administration II teaches you how to build robust clusters that provide high availability and the ability to run large numbers of applications. You will learn about OpenShift integration with datacenter infrastructure such as load balancers, identity management, monitoring, proxies, and storage. You will also develop more troubleshooting and Day 2 operations skills in this course.

This course is based on Red Hat® OpenShift Container Platform 3.6.

About This Course

You will design an OpenShift HA cluster, then build and test it. You will use this cluster to examine more advanced topics in the administration and operation of a robust OpenShift cluster in the remainder of the course.

Course summary

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- Learn OpenShift cluster features, architecture, and sizing.
- Investigate OpenShift cluster installation methods.
- Configure storage providers and storage classes.
- Manage OpenShift certificates.
- Configure GlusterFS container-native storage.
- Diagnose cluster health.
- Scale OpenShift clusters.
- Manage OpenShift resources.

Who Should Attend

This course is designed for Linux® system administrators who want to deploy and manage a large-scale Red Hat® OpenShift Container Platform environment in their datacenters.

Prerequisites & Entry Requirements

General Prerequisites:

Red Hat recommends these prerequisites:

- Become a Red Hat Certified System Administrator, or demonstrate equivalent experience
- Attend Red Hat OpenShift Administration I: Operating a Production Cluster (DO180) or demonstrate equivalent experience with containers, Kubernetes, and OpenShift
- Attend Red Hat OpenShift Administration II: Configuring a Production Cluster (DO280) or demonstrate equivalent experience with OpenShift
- Recommended, but not required: become a Red Hat Certified OpenShift Administrator Exam (EX280)

Learning Outcomes

Upon successful completion of this course, participants will be able to:

Impact on the organization

This course is intended to develop the skills needed to administer and operate large, fault-tolerant OpenShift clusters. You will design and implement a highly available and high-performance OpenShift cluster. These skills will allow the organization to provide and maintain a resilient platform on which developers can deploy production-scale containerized applications.

Red Hat has created this course in a way intended to benefit our customers, but each company and infrastructure is unique, and actual results or benefits may vary.

Impact on the individual

As a result of attending this course, you should be able to design, install, and configure a highly available and high-performance OpenShift cluster. You will learn how to adapt the OpenShift cluster to work with existing infrastructure, such as security and storage providers. You should be able to perform various Day 2 operational procedures intended to maintain an efficient OpenShift cluster. You should be able to demonstrate these skills:

- Design and install a highly available cluster.
- Provision persistent storage using dynamic allocation.
- Install the GlusterFS Container Native Storage solution on an OpenShift cluster.
- Enable log aggregation across the cluster.
- Perform diagnostics on the cluster.
- Back up and restore critical data for the cluster.
- Manage OpenShift and operating system resources to keep the cluster running efficiently.
- Configure the LDAP security provider.
- Describe and install the Open vSwitch multitenant software-defined networking provider.

Detailed Course Outline

Design a highly available cluster

Design an OpenShift cluster that supports high availability and resiliency.

Prepare to install an HA cluster

Configure the advanced installer and prepare the cluster environment for HA installation.

Configure OpenShift to use custom certificates

Configure the OpenShift cluster to use custom certificates.

Build an HA cluster

Use the advanced installation method to build an HA OpenShift cluster.

Provision persistent storage

Describe storage providers, configure a provider, create a storage class, and test the configuration.

Enable log aggregation

Consolidate useful data for analysis by enabling the log aggregation feature.

Maintain an OpenShift cluster

Perform recurring maintenance activities on an OpenShift cluster.

Manage system resources

Manage operating system and cluster resources for optimal performance.

Configure security providers

Configure security providers and advanced security options.

Configure networking options

Configure various advanced networking features and options.

Skills You Will Learn:

Impact on the organization

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Frequently Asked Questions

Q: What delivery options are available for Red Hat OpenShift Administration III: Scaling Kubernetes Deployments in the Enterprise?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
 - Traditional Instructor-Led Classroom Training (ILT)
 - On-site delivery at your offices anywhere in United Kingdom
 - Private dedicated courses customized for your team
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Q: How many CPD hours does this course provide?

The 4-day Red Hat OpenShift Administration III: Scaling Kubernetes Deployments in the Enterprise course provides up to 26.0 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Red Hat OpenShift Administration III: Scaling Kubernetes Deployments in the Enterprise training?

The training takes place over 4 day(s), with each day lasting approximately 32.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Red Hat OpenShift Administration III: Scaling Kubernetes Deployments in the Enterprise?

Yes, we provide corporate training, dedicated training, and closed classes for Red Hat OpenShift Administration III: Scaling Kubernetes Deployments in the Enterprise. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: Red Hat OpenShift Administration III: Scaling Kubernetes Deployments in the Enterprise, OpenShift Administration, DO380

Q: Why choose Nexus Human for Red Hat OpenShift Administration III: Scaling Kubernetes Deployments in the Enterprise?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Red Hat OpenShift Administration III: Scaling Kubernetes Deployments in the Enterprise training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

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