

# Red Hat OpenShift Administration I: Operating a Production Cluster

**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

Introduction to Containers, Kubernetes, and Red Hat OpenShift (DO180) introduces building and managing Docker containers for deployment on a Kubernetes cluster. This course helps students build core knowledge and skills in managing containers through hands-on experience with Docker, Kubernetes, and Red Hat® OpenShift Container Platform.

This course is based on Red Hat® OpenShift Container Platform 3.9 and Red Hat® Enterprise Linux® 7.5.

## About This Course

As a result of attending this class, students should be able to containerize simple software applications and services; deploy them with Docker, Kubernetes, and Red Hat OpenShift; test the containerized version; and troubleshoot issues with deployment.

One of the key tenets of the DevOps movement is continuous integration and continuous deployment. Containers have become a key technology for the configuration and deployment of applications and microservices. Kubernetes is a container orchestration platform that provides foundational services in Red Hat OpenShift Container Platform.

#### Course content summary

- Understand container, Docker, and Red Hat OpenShift architecture.
- Create containerized services.
- Manage containers and container images.
- Create custom container images.
- Deploy containerized applications on Red Hat OpenShift.
- Deploy multi-container applications.

## Who Should Attend

- Developers who wish to containerize software applications
- Administrators who are new to container technology and container orchestration
- Architects who are considering using container technologies in software architectures

## Prerequisites & Entry Requirements

### General Prerequisites:

- Be able to use a Linux terminal session and issue operating system commands
- Be a Red Hat Certified System Administrator (RHCSA) , or demonstrate equivalent experience
- Have experience with web application architectures and their corresponding technologies

# Learning Outcomes

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**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 create microservices architectures using OpenShift. Microservices are a new alternative to designing modern applications, focused on working with less hardware resources and, therefore, reducing infrastructure costs. OpenShift is a cloud solution that leverages the usage of microservices running on containers.

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

Impact on the individual

As a result of attending this course, you should be able to perform these basic tasks in Red Hat OpenShift Container Platform:

- Create containerized services using Docker.
- Manage containers and container images.
- Create custom container images.
- Deploy containerized applications on OpenShift.
- Deploy multi-container applications.

## Detailed Course Outline

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Course introduction

Introduce and review the course.

Get started with container technology

Describe how software can run in containers orchestrated by Red Hat OpenShift Container Platform.

Create containerized services

Provision a server using container technology.

Manage containers

Manipulate pre-built container images to create and manage containerized services.

Manage container images

Govern the life cycle of a container image from creation to deletion.

Create custom container images

Design and code a Docker file to build a custom container image.

Deploy containerized applications on Red Hat OpenShift

Deploy single container applications on Red Hat OpenShift Container Platform.

Deploy multi-container applications

Deploy applications that are containerized using multiple container images.

Troubleshoot containerized applications

Troubleshoot a containerized application deployed on Red Hat OpenShift.

Comprehensive review of Introduction to Container, Kubernetes, and Red Hat OpenShift

Demonstrate how to containerize a software application, test it with Docker, and deploy it on a Red Hat OpenShift cluster.

### **Skills You Will Learn:**

Impact on the organization<br><br>This course is intended to develop the skills needed to create microservices architectures using OpenShift. Microservices are a new alternative to designing modern applications, focused on working with less hardware resources and, therefore, reducing infrastructure costs. OpenShift is a cloud solution that leverages the usage of microservices running on containers.<br><br>While Red Hat has created this course in a way intended to benefit our customers, each company and infrastructure is unique, and actual benefits may vary.<br><br>Impact on the individual<br><br>As a result of attending this course, you should be able to perform these basic tasks in Red Hat OpenShift Container Platform:<br><br><br>- Create containerized services using Docker.<br>- Manage containers and container images.<br>- Create custom container images.<br>- Deploy containerized applications on OpenShift.<br>- Deploy multi-container applications.



# Frequently Asked Questions

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## **Q: What delivery options are available for Red Hat OpenShift Administration I: Operating a Production Cluster?**

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 I: Operating a Production Cluster course provides up to 26.0 CPD hours of structured learning. CPD certificates can be provided upon request.

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## **Q: What is the duration of the Red Hat OpenShift Administration I: Operating a Production Cluster training?**

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

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## **Q: Do you provide corporate training for Red Hat OpenShift Administration I: Operating a Production Cluster?**

Yes, we provide corporate training, dedicated training, and closed classes for Red Hat OpenShift Administration I: Operating a Production Cluster. 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.

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## **Q: What related terms do people search for?**

Popular related searches include: Red Hat OpenShift Administration I: Operating a Production Cluster, OpenShift Administration, DO180

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## Q: Why choose Nexus Human for Red Hat OpenShift Administration I: Operating a Production Cluster?

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 I: Operating a Production Cluster training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

### Nexus Human

#### Professional Training & Development

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