

## Red Hat OpenShift I: Containers & Kubernetes with exam

**Duration: 5 Days    Course Code: DO181    Delivery Method: Closed Events**

### Overview:

#### Learn to build and manage containers for deployment on a Kubernetes and Red Hat OpenShift cluster

Red Hat OpenShift I: Containers & Kubernetes with exam (DO181) helps you build core knowledge in managing containers through hands-on experience with containers, Kubernetes, and the Red Hat® OpenShift® Container Platform. These skills are needed for multiple roles, including developers, administrators, and site reliability engineers.

This course is based on Red Hat OpenShift Container Platform 4.5. The Red Hat Certified Specialist in Containers and Kubernetes exam (EX180) is included.

#### Company Events

These events can be delivered exclusively for your company at our locations or yours, specifically for your delegates and your needs. The Company Events can be tailored or standard course deliveries.

### Target Audience:

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  
Site reliability engineers who are considering using Kubernetes and Red Hat OpenShift

### Objectives:

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

### Prerequisites:

- Be able to use a Linux terminal session, issue operating system commands, and be familiar with shell scripting
- Have experience with web application architectures and their corresponding technologies
- Being a Red Hat Certified System Administrator (RHCSA) is recommended, but not required

### Follow-on-Courses:

- DO280 - Red Hat OpenShift Administration II: Configuring a Production Cluster
- DO288 - Red Hat OpenShift Developer II: Building and Deploying Cloud-native Applications

## Content:

Introduce container technology	Manage container images	Deploy multi-container applications
Describe how software can run in containers orchestrated by Red Hat OpenShift Container Platform.	Govern the life cycle of a container image from creation to deletion.	Set up applications that are containerized using multiple container images.
Create containerized services	Create custom container images	Troubleshoot containerized applications
Provision a server using container technology.	Design and code a Docker file to build a custom container image.	Regulate a containerized application deployed on Red Hat OpenShift.
Manage containers	Deploy containerized applications on Red Hat OpenShift	Comprehensive review of curriculum
Manipulate pre-built container images to create and manage containerized services.	Use single container applications on Red Hat OpenShift Container Platform.	Demonstrate how to containerize a software application, test it with Podman, and deploy it on a Red Hat OpenShift cluster.

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## Additional Information:

### Business Outcome Statement

Containers and Red Hat OpenShift have quickly become the de facto solution for agile development and application deployment. Administrators and developers are increasingly seeking ways to improve application time to market and improve maintainability. This course provides the gateway to organizational and digital transformation by providing an understanding of the potential of DevOps using a container-based architecture. Orchestrating a container-based architecture with Kubernetes and Red Hat OpenShift improves application reliability and scalability; decreases developer overhead; and facilitates continuous integration and continuous deployment. This course is the starting point for our Red Hat OpenShift curriculum, establishing the foundation needed to advance to Red Hat OpenShift development or administration.

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.

### Student Outcome Statement

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 Podman. Manage containers and container images. Create custom container images. Deploy containerized applications on Red Hat OpenShift. Deploy multi-container applications.

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## Further Information:

For More information, or to book your course, please call us on 00 966 92000 9278

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