

## Red Hat OpenShift Developer II: Building and Deploying Cloud-native Applications with Exam

**Duration: 5 Days    Course Code: DO289    Delivery Method: Closed Events**

### Overview:

#### **Design, build, and deploy containerized applications on Red Hat OpenShift**

Red Hat OpenShift Development II: Containerizing Applications with exam (DO289) teaches you how to design, build, and deploy containerized software applications on an OpenShift cluster. Whether you are migrating existing applications or writing container-native applications, you will learn how to boost developer productivity powered by Red Hat® OpenShift Container Platform, a containerized application platform that allows enterprises to manage container deployments and scale their applications using Kubernetes.

The skills you learn in this course can be applied using all versions of Red Hat OpenShift, including Red Hat OpenShift on AWS (ROSA), Azure Red Hat OpenShift (ARO), and Red Hat OpenShift Container Platform.

This course is based on Red Hat OpenShift 4.12. The Red Hat Certified OpenShift Application Developer Exam (EX288) is included in this offering

#### 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:

Enterprise application developers DevOps site reliability engineers

### Objectives:

- Features for developers in the Red Hat OpenShift web console
- Building and publishing container images for Red Hat OpenShift
- Managing container deployments on Red Hat OpenShift
- Create and deploy multi-container applications on Red Hat OpenShift
- Deploy multi-container applications using Helm Charts and Kustomize
- Create health checks to monitor and improve application reliability
- Creating CI/CD Workflows using Red Hat OpenShift Pipelines

### Prerequisites:

#### Recommended for this course

- Complete Red Hat OpenShift I: Containers & Kubernetes (DO188), or have equivalent knowledge.

#### Technology considerations

- This course uses a lab environment provisioned in the Red Hat Online Learning (ROL) cloud.
- Internet access is required to run the exercises and labs.

## Follow-on-Courses:

### Recommended next exam or course

- Red Hat Certified Specialist in OpenShift Application Development exam (EX288)
- Building Resilient Microservices with Istio and Red Hat OpenShift Service Mesh (DO328)
- Red Hat Cloud-native Microservices Development with Quarkus (DO378)
- Developing Applications with Red Hat OpenShift Serverless and Knative (DO244)
- Introduction to Red Hat OpenShift Service on AWS (DO120)
- Introduction to Microsoft Azure Red Hat OpenShift (DO121)

## Content:

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|--|---|---|
| Red Hat OpenShift Container Platform for Developers  | Build, deploy and manage the lifecycle of container images by using a container registry.                     | Deploying Multi-container Applications  |
| Define the Red Hat OpenShift architecture, concepts and terminology, and set up the developer environment. | Managing Red Hat OpenShift Builds   | Deploy multi-container applications by using Red Hat OpenShift templates, Helm charts, and Kustomize.               |
| Deploying Simple Applications  | Describe the Red Hat OpenShift build process and build container images.                                      | Continuous Deployment using Red Hat OpenShift Pipelines   |
| Deploy simple applications by using the Red Hat OpenShift web console and command-line tools.              | Managing Red Hat OpenShift Deployments  | Implement CI/CD workflows by using Red Hat OpenShift Pipelines.   |
| Building and Publishing Container Images   | Describe the different Red Hat OpenShift deployment strategies and how to monitor the health of applications. | Note: Course outline is subject to change with technology advances and as the nature of the underlying job evolves. |

## Additional Information:

### Impact on the organization

This course provides application developers with the essential skills to design, build, and deploy containerized applications, whether they are migrating existing applications to OpenShift, or creating new cloud-native applications. It provides the gateway to organizational and digital transformation by demonstrating the potential of DevOps using a container-based architecture.

As developers seek ways to improve application time to market for minimum viable products, containers and OpenShift have quickly become the de facto solution for agile development and application deployment. A container-based architecture, orchestrated with Kubernetes and OpenShift, improves application reliability and scalability while decreasing developer overhead and facilitating continuous deployment. Red Hat OpenShift provides the ability to consistently develop and deploy these applications in AWS using Red Hat OpenShift Service on AWS (ROSA), in Microsoft Azure using Azure Red Hat OpenShift, or as a self-managed Red Hat OpenShift Container Platform running in public cloud or customer datacenter environments.

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

You will learn about the fundamental concepts behind containerizing, scaling, deploying, and managing applications in Red Hat OpenShift Container Platform. You will acquire these skills: Design container images to containerize applications. Different ways to build, deploy and manage containers. Deploy multi-container applications. Implement health checks to improve system reliability. Create and run automated pipelines for continuous delivery.

## Further Information:

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

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