



DO288 – Red Hat OpenShift Developer II: Building and Deploying Cloud-native Application

Red Hat

- **Nível:**
 - **Duração:** 30h
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Sobre o curso

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

Red Hat OpenShift Developer II: Building and Deploying Cloud-native Applications (DO288) 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 4.14.

SKILLS ASSESSMENT

- [Take our free assessment](#) to gauge whether this offering is the best fit for your skills.
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Destinatários

- Software developers
 - Software architects
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Objetivos

- 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

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.

Pré-requisitos

- Complete [Red Hat OpenShift I: Containers & Kubernetes \(DO188\)](#), or have equivalent knowledge.
- RHCSA or higher is helpful for navigation and usage of the command line, but it is not required.

Programa

- Red Hat OpenShift Container Platform for Developers
- Deploying Simple Applications
- Building and Publishing Container Images

- Managing Red Hat OpenShift Builds
- Managing Red Hat OpenShift Deployments
- Deploying Multi-container Applications
- Continuous Deployment using Red Hat OpenShift Pipelines

Red Hat OpenShift Container Platform for Developers

- Define the Red Hat OpenShift architecture, concepts and terminology, and set up the developer environment.

Deploying Simple Applications

- Deploy simple applications by using the Red Hat OpenShift web console and command-line tools.

Building and Publishing Container Images

- Build, deploy and manage the lifecycle of container images by using a container registry.

Managing Red Hat OpenShift Builds

- Describe the Red Hat OpenShift build process and build container images.

Managing Red Hat OpenShift Deployments

- Describe the different Red Hat OpenShift deployment strategies and how to monitor the health of applications.

Deploying Multi-container Applications

- Deploy multi-container applications by using Red Hat OpenShift templates, Helm charts, and Kustomize.

Continuous Deployment using Red Hat OpenShift Pipelines

- Implement CI/CD workflows by using Red Hat OpenShift Pipelines.

Note: Course outline is subject to change with technology advances and as the nature of the underlying job evolves.