

# Red Hat OpenShift Administration II: Configuring a Production Cluster

Course code: D0280

Configure, manage, and troubleshoot OpenShift clusters and containerized applications. Red Hat OpenShift Administration II: Operating a Production Kubernetes Cluster (D0280) teaches you how to configure, troubleshoot, and manage Red Hat® OpenShift® Container Platform. This hands-on, lab-based course shows you how to verify the successful installation of a cluster, manage it on a day-to-day basis, and troubleshoot the deployment of containerized applications. This course is based on OpenShift Container Platform 4.10.

## Who is the course for

This course is designed for system administrators, system architects, and developers who want to install and configure Red Hat OpenShift Container Platform.

- System and Software Architects interested in understanding features and functionality of an OpenShift cluster.
- System Administrators interested in the ongoing management of clusters and containerized applications.
- Cluster Operators interested in managing access to cluster resources by users and applications.
- Site Reliability Engineers interested in the ongoing maintenance and troubleshooting of a cluster.

## What we teach you

- Describe the Red Hat OpenShift Container Platform cluster installation and update processes
- Troubleshoot application deployments
- Configure authentication using local users
- Control access to projects using role-based access control (RBAC)
- Expose applications to clients external to the cluster using TLS encryption
- Configure network isolation between services and applications using network policies
- Configure application scheduling using labels and selectors
- Limit compute resource usage of applications with resource limits and quotas
- Manage a cluster and deployed applications with the Web Console
- Install Kubernetes Operators with the Web Console

## Required skills

- Become a Red Hat Certified System Administrator, or demonstrate equivalent Red Hat Enterprise Linux system administration experience
- Complete Red Hat OpenShift I: Containers & Kubernetes (D0180), or demonstrate equivalent experience with containers, Kubernetes, and OpenShift basics
- Take our
- free assessment
- to gauge whether this offering is the best fit for your skills.

## Course outline

### Describe the Red Hat OpenShift Container Platform

- Describe the architecture of the Red Hat OpenShift Container Platform (RHOC).

### Verify the health of a cluster

- Describe OpenShift installation methods and verify the health of a newly installed cluster.

### Configure authentication and authorization

- Configure authentication with the HTTPBasic identity provider and assign roles to users and groups.

### Configure application security

- Restrict permissions of applications using security context constraints and protect access credentials using secrets.

### Configure OpenShift networking for applications

- Troubleshoot OpenShift software-defined networking (SDN) and configure network policies.

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## Control pod scheduling

- Control which nodes a pod runs on.

## Describe cluster updates

- Describe how to perform a cluster update.

## Manage a cluster with the web console

- Manage a Red Hat OpenShift cluster using the web console.

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

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