

Red Hat OpenShift Admin I: Operating a Production Cluster («DO180»)

Deploy, manage, and troubleshoot containerized applications running as Kubernetes workloads in OpenShift clusters.

Duration: 5 days

Price: 3'650.–

Vendor code: DO180

Content

Red Hat OpenShift Admin I: Operating a Production Cluster (DO180) prepares OpenShift cluster administrators to manage Kubernetes workloads and to collaborate with developers, DevOps engineers, system administrators, and SREs to ensure the availability of application workloads. This course focuses on managing typical end-user applications that are often accessible from a web or mobile UI and that represent most cloud-native and containerized workloads. Managing applications also includes deploying and updating their dependencies, such as databases, messaging, and authentication systems.

The skills that you learn in this course apply to all versions of OpenShift, including Red Hat OpenShift on AWS (ROSA), Azure Red Hat OpenShift, and OpenShift Container Platform.

Course topics:

Introduction to Kubernetes and OpenShift

- Identify the main Kubernetes cluster services and OpenShift platform services, and monitor them from the web console.

Kubernetes and OpenShift Command-Line Interfaces and APIs

- Access an OpenShift cluster from the command line, and query its Kubernetes API resources to assess the health of a cluster.

Run Applications as Containers and Pods

- Run and troubleshoot containerized applications as unmanaged Kubernetes pods.

Deploy Managed and Networked Applications on Kubernetes

- Deploy applications and expose them to network access from inside and outside a Kubernetes cluster.

Manage Storage for Application Configuration and Data

- Externalize application configurations in Kubernetes resources, and provision storage volumes for persistent data files.

Configure Applications for Reliability

- Configure applications to work with Kubernetes for high availability and resilience.

Manage Application Updates

- Manage reproducible application updates and rollbacks of code and configurations.

Key Learnings

- Managing OpenShift clusters from the command-line interface and from the web console
- Troubleshooting network connectivity between applications inside and outside an OpenShift cluster
- Connecting Kubernetes workloads to storage for application data
- Configuring Kubernetes workloads for high availability and reliability
- Managing updates to container images, settings, and Kubernetes manifests of an application

Target audience

- System administrators and platform operators who are interested in managing OpenShift clusters and containerized applications
- Site Reliability Engineers who are interested in maintaining and troubleshooting containerized applications on Kubernetes
- System and software architects who are interested in learning and using the features and functions of an OpenShift cluster
- Developers and Site Reliability Engineers that are new to container technology should enroll in [Red Hat OpenShift Development I: Introduction to Containers with Podman \(DO188\)](#)

Additional information

This course is based on OpenShift Container Platform 4.12.

Learn the benefits of containers, Docker, Kubernetes, and Red Hat OpenShift with our free, technical overview [Deploying Containerized Applications Technical Overview \(DO080\)](#).

Further courses

- [Red Hat OpenShift Administration II: Configuring a Production Cluster \(«DO280»\)](#)
- [Red Hat OpenShift Development II: Containerizing Applications \(«DO288»\)](#)
- [Red Hat Certified Specialist in OpenShift Administration Exam \(«EX280»\)](#)
- [Building Resilient Microservices with Istio and Red Hat OpenShift Service Mesh \(«DO328»\)](#)
- [Red Hat OpenShift Admin II: Configuring a Production Cluster w/ exam \(«DO281»\)](#)
- [Red Hat OpenShift Admin III: Scaling Deployments in the Enterprise \(«DO380»\)](#)
- [Red Hat OpenShift Admin III: Scaling Deployments in the Enterprise w/ exam \(«DO381»\)](#)
- [Red Hat OpenShift Development II: Containerizing Applications with Exam \(«DO289»\)](#)

Any questions?

We are happy to advise you on +41 44 447 21 21 or info@digicomp.ch. You can find detailed information about dates on www.digicomp.ch/courses-it-provider/red-hat/red-hat-open-shift/course-red-hat-openshift-admin-i-operating-a-production-cluster-do180