Red Hat OpenShift Administration II: Configuring a Production Cluster («DO280»)

Configure, manage, and troubleshoot OpenShift clusters and containerized applications.

Duration: 4 days
Price: 3'600.–
Vendor code: DO280

Content

Red Hat OpenShift Administration II: Operating a Production Kubernetes Cluster (DO280) prepares OpenShift Cluster Administrators to perform daily administration tasks on clusters that host applications provided by internal teams and external vendors, enable self-service for cluster users with different roles, and deploy applications that require special permissions such as such as CI/CD tooling, performance monitoring, and security scanners. This course focuses on configuring multi-tenancy and security features of OpenShift as well as managing OpenShift add-ons based on operators.

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

Course topics:

Declarative Resource Management

- Deploy and update applications from resource manifests that are parameterized for different target environments.

Deploy Packaged Applications

- Deploy and update applications from resource manifests that are packaged for sharing and distribution.

Authentication and Authorization

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

Network Security

- Protect network traffic between applications inside and outside the cluster.

Expose non-HTTP/SNI Applications

- Expose applications to external access without using an Ingress controller.

Enable Developer Self-Service

- Configure clusters for safe self-service by developers from multiple teams and disallow self-service if projects have to be provisioned by the operations staff.

Manage Kubernetes Operators

- Install and update Operators that are managed by the Operator Lifecycle Manager and by the Cluster Version Operator.

Application Security

- Run applications that require elevated or special privileges from the host Operating System or Kubernetes.

OpenShift Updates

- Update an OpenShift cluster and minimize disruption to deployed applications.

Key Learnings

- Deploying packaged applications using manifests, templates, kustomize, and helm
- Configuring authentication and authorization for users and applications
- Protecting network traffic with network policies and exposing applications with proper network access
- Deploying and managing applications using resources manifests
- Enabling developer self-service of application projects
- Managing OpenShift cluster updates and Kubernetes operator updates

Target audience

- System Administrators and Platform Operators interested in the ongoing management of OpenShift clusters, applications, users, and add-ons
- Site Reliability Engineers interested in the ongoing maintenance and troubleshooting of Kubernetes clusters
- System and Software Architects interested in understanding the security of an OpenShift cluster

Requirements

- Red Hat Certified System Administrator, or equivalent Red Hat Enterprise Linux system administration experience
- Complete the following course or have equivalent experience with containers, Kubernetes, and OpenShift basics:

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

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 Certified Specialist in OpenShift Administration Exam («EX280»)
- Red Hat Security: Securing Containers and OpenShift («DO425»)
- Red Hat OpenShift Admin III: Scaling Deployments in the Enterprise («DO380»)
- Red Hat OpenShift Admin III: Scaling Deployments in the Enterprise w/ exam («DO381»)

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-digital-transformation-technologies/cloud/course-red-hat-openshift-administration-ii-configuring-a-production-cluster-do280