

Red Hat OpenShift Administration II: Operating a Production Kubernetes Cluster

Course description

Configure, manage, and troubleshoot OpenShift clusters and containerized applications

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 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.

This course is based on OpenShift Container Platform 4.12.

Outline for this course

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 HTTPasswd 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.