

Red Hat OpenShift Administration II: Configuring a Production Cluster

Duration: 90 Days Course Code: DO280 Version: 4.14

Overview:

Configure and manage OpenShift clusters to maintain security and reliability across multiple applications and development teams.

Red Hat OpenShift Administration II: Configuring a Production 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.

As a result of attending this course, students will be able to perform the set of tasks that OpenShift cluster administrators are expected to perform in their daily jobs for on-premises, cloud-based, and vendor-managed clusters, including enabling add-on operators. Students will also be able to manage multi-tenant permissions for different roles and configure applications that require privileged access to cluster and host resources.

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 4.14.

Following course completion, hands-on lab access will remain available for up to 45 days for any live course that includes a virtual environment.

Note: This course is offered as a four day in classroom, a five day virtual class or self-paced.

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e-Learning

Interactive self-paced content that provides flexibility in terms of pace, place and time to suit individuals and organisations. These resources also consist of online books, educational podcasts and vodcasts, and video-based learning.

Target Audience:

Platform Administrators, System Administrators, Cloud Administrators, and other infrastructure-related IT roles who are responsible for managing and maintaining infrastructure for applications Enterprise Architects, Site Reliability Engineers, DevOps Engineers, and other application-related IT roles who are responsible for designing infrastructure for applications

Objectives:

- After this course participants should be able to:
- Deploy packaged applications using manifests, templates, kustomize, and helm.
- Configure authentication and authorization for users and applications.
- Protect network traffic with network policies and exposing applications with proper network access.
- Deploy and managing applications using resources manifests.
- Enable developer self-service of application projects.
- Manage OpenShift cluster updates and Kubernetes operator updates.

Prerequisites:

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- Red Hat OpenShift Administration I: Operating a Production Cluster (DO180), or equivalent skills deploying and managing Kubernetes applications using the OpenShift web console and command-line interfaces.

Significant experience with Linux System Administration is not needed for this course.

Testing and Certification

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- Basic skills operating a Bash shell, manipulating files and processes, and verifying system confirmations such as network addresses are necessary and sufficient. Students are encouraged to take Getting Started with Linux Fundamentals (RH104) before enrolling in DO280

Follow-on-Courses:

- Red Hat OpenShift Administration III: Scaling Kubernetes Deployments in the Enterprise (DO380)
- Introduction to Red Hat OpenShift Service on AWS (CS120)
- Introduction to Microsoft Azure Red Hat OpenShift (DO121)
- DO380 - Red Hat OpenShift Administration III: Scaling Deployments in the Enterprise
- DO322 - Red Hat OpenShift Installation Lab
- DO326 - Red Hat Openshift Migration Lab

Content:

Declarative Resource Management	Network Security	Manage Kubernetes Operators
Deploy and update applications from resource manifests that are parameterized for different target environments.	Protect network traffic between applications inside and outside the cluster.	Install and update Operators that are managed by the Operator Lifecycle Manager and by the Cluster Version Operator.
Deploy Packaged Applications	Expose non-HTTP/SNI Applications	Application Security
Deploy and update applications from resource manifests that are packaged for sharing and distribution.	Expose applications to external access without using an Ingress controller.	Run applications that require elevated or special privileges from the host Operating System or Kubernetes.
Authentication and Authorization	Enable Developer Self-Service	OpenShift Updates
Configure authentication with the HTPasswd identity provider and assign roles to users and groups.	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.	Update an OpenShift cluster and minimize disruption to deployed applications.

Additional Information:

Official course book provided to participants.

Further Information:

For More information, or to book your course, please call us on Head Office Tel.: +974 40316639

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