

## Red Hat OpenShift Administration II: Configuring a Production Cluster

Duration: 4 Days    Course Code: DO280    Version: 4.10    Delivery Method: Virtual Learning

### Overview:

Configure, manage, and troubleshoot OpenShift clusters and containerized applications. Red Hat OpenShift Administration II: Operating a Production Kubernetes Cluster (DO280) 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.

### Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

### Target Audience:

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.

### Objectives:

- 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

### Prerequisites:

- Become a Red Hat Certified System Administrator, or demonstrate equivalent Red Hat Enterprise Linux system administration experience
- Complete Red Hat OpenShift I: Containers & Kubernetes (DO180), 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.

### Testing and Certification

Red Hat Certified Specialist in OpenShift Administration (EX280)

## Follow-on-Courses:

- DO380 - Red Hat OpenShift Administration III: Scaling Kubernetes Deployments in the Enterprise
- DO322 - Red Hat OpenShift Installation Lab
- DO326 - Red Hat Openshift Migration Lab

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## Content:

Describe the Red Hat OpenShift Container Platform	Configure application security	Describe cluster updates
Describe the architecture of the Red Hat OpenShift Container Platform (RHOC).	Restrict permissions of applications using security context constraints and protect access credentials using secrets.	Describe how to perform a cluster update.
Verify the health of a cluster	Configure OpenShift networking for applications	Manage a cluster with the web console
Describe OpenShift installation methods and verify the health of a newly installed cluster.	Troubleshoot OpenShift software-defined networking (SDN) and configure network policies.	Manage a Red Hat OpenShift cluster using the web console.
Configure authentication and authorization	Control pod scheduling	Note: Course outline is subject to change with technology advances and as the nature of the underlying job evolves.
Configure authentication with the HTPasswd identity provider and assign roles to users and groups.	Control which nodes a pod runs on.	

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## Additional Information:

### Impact on the organization

This course is intended to develop the skills needed to install, configure, and manage the Red Hat OpenShift Container Platform to deploy containerized applications that are highly available, resilient, and scalable. Red Hat OpenShift Container Platform enables rapid application development and deployment, as well as portability of an application across environments. The platform also offers simplified application scaling, administration, and maintenance of adapted or cloud-native applications.

Red Hat has created this course in a way intended to benefit our customers, but each company and infrastructure is unique, and actual results or benefits may vary.

### Impact on the individual

After completing this course, you should be able to demonstrate the skills to establish a new OpenShift cluster, perform initial configuration of the cluster, and manage the cluster on a day-to-day basis. One major focus of the course is troubleshooting common problems that will be encountered beyond day one.

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## Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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