Red Hat OpenShift Administration II: Configuring a Production Cluster

Duration: 90 Days   Course Code: DO280   Version: 4.10   Delivery Method: Elearning (Self-paced)

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.

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:

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

Content:

Describe the Red Hat OpenShift Container Platform

Describe the architecture of the Red Hat OpenShift Container Platform (RHOCP).

Verify the health of a cluster

Describe OpenShift installation methods and verify the health of a newly installed cluster.

Configure authentication and authorization

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

Configure application security

Restrict permissions of applications using security context constraints and protect access credentials using secrets.

Configure OpenShift networking for applications

Troubleshoot OpenShift software-defined networking (SDN) and configure network policies.

Control pod scheduling

Control which nodes a pod runs on.

Describe cluster updates

Describe how to perform a cluster update.

Manage a cluster with the web console

Manage a Red Hat OpenShift cluster using the web console.

Note: Course outline is subject to change with technology advances and as the nature of the underlying job evolves.

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.

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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