

**DO281**

## **Red Hat OpenShift Administration I with exam**

### **Course description**

#### **Create, configure, manage, and troubleshoot OpenShift clusters**

Red Hat OpenShift Administration I (DO280) teaches you how to install and administer the Red Hat® OpenShift® Container Platform . This hands-on, lab-based course shows you how to install, configure, and manage OpenShift clusters and deploy sample applications to further understand how developers will use the platform.

This course is based on Red Hat® Enterprise Linux® 7.5 and OpenShift Container Platform 4.2. The Red Hat Certified Specialist in OpenShift Administration exam is included.

OpenShift is a containerized application platform that allows enterprises to manage container deployments and scale their applications using Kubernetes. OpenShift provides predefined application environments and builds upon Kubernetes to provide support for DevOps principles such as reduced time to market, infrastructure-as-code, continuous integration (CI), and continuous delivery (CD).

### **Audience for this course**

- 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 initial establishment of a cluster.
- Cluster Operators interested in the ongoing maintenance of a cluster.
- Site Reliability Engineers interested in the ongoing maintenance and troubleshooting of a cluster.

### **Technology considerations**

- Internet access is required.

### **Prerequisites for this course**

- Become a Red Hat Certified System Administrator, or demonstrate equivalent Red Hat Enterprise Linux system administration experience
- Complete Introduction to Containers, Kubernetes, and Red Hat OpenShift (DO180), or demonstrate equivalent experience with containers, Kubernetes, and OpenShift basics

## **Outline for this course**

### **Describe the Red Hat OpenShift Container Platform**

Learn the components of Red Hat OpenShift Container Platform and how they interact.

### **Verify a Cluster**

Verify a cluster is installed and healthy.

### **Configure Authentication**

Configure authentication with an identity provider.

### **Control Access to OpenShift Resources**

Define and apply role-based access controls and protect sensitive information with secrets.

### **Configure OpenShift Networking Components**

Identify the components of OpenShift software-defined networking and configure some of the components.

### **Control Pod Scheduling**

Control which nodes a pod runs on.

### **Scale an OpenShift Cluster**

Control the size of an OpenShift cluster.

### **Perform Cluster Updates**

Describe how to perform a cluster update.

### **Manage the Cluster with the Web Console**

Manage the OpenShift cluster using the web console.

### **Comprehensive Review**

Verify, manage, and troubleshoot an OpenShift cluster for enterprise use.

## **Recommended next exam or course**

Red Hat OpenShift Administration II: High Availability (DO380)

Red Hat Security: Securing Containers and OpenShift (DO425)