

# Containers, Kubernetes, and Red Hat OpenShift Development II with exam (DO296)

## Course Outline

### **Introduction to container technology**

Describe how software can run in containers orchestrated by Red Hat OpenShift Container Platform.

### **Create containerized services**

Provision a server using container technology.

### **Manage containers**

Manipulate prebuilt container images to create and manage containerized services.

### **Manage container images**

Manage the life cycle of a container image from creation to deletion.

### **Create custom container images**

Design and code a Dockerfile to build a custom container image.

### **Deploy containerized applications on OpenShift**

Deploy single container applications on OpenShift Container Platform.

### **Troubleshoot containerized applications**

Troubleshoot a containerized application deployed on OpenShift.

### **Deploy and manage applications on an OpenShift cluster**

Use various application packaging methods to deploy applications to an OpenShift cluster, then manage their resources.

### **Design containerized applications for OpenShift**

Select a containerization method for an application and create a container to run on an OpenShift cluster.

### **Publish enterprise container images**

Create an enterprise registry and publish container images to it.

### **Build applications**

Describe the OpenShift build process, then trigger and manage builds.

### **Customize source-to-image (S2I) builds**

Customize an existing S2I base image and create a new one.

**Create applications from OpenShift templates**

Describe the elements of a template and create a multicontainer application template.

**Manage application deployments**

Monitor application health and implement various deployment methods for cloud-native applications.

**Perform comprehensive review**

Create and deploy cloudnative applications on OpenShift.