

DO285

Containers, Kubernetes, and Red Hat OpenShift

Administration II Course overview

Through an introduction to Docker, Kubernetes, and Red Hat OpenShift Platform, this course helps you understand one of the key tenets of the DevOps movement: continuous integration and continuous deployment. Containers have become a key technology for the configuration and deployment of applications and microservices. Kubernetes is a container orchestration platform that provides foundational services in Red Hat OpenShift Container Platform, which allows enterprises to manage container deployments and scale their applications using Kubernetes.

Course outline

Describe container technology

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

Create containerized services

Provision a server using container technology.

Manage containers

Manipulate pre-built 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 multi-container applications

Deploy applications that are containerized using multiple container images.

Install OpenShift Container Platform

Install OpenShift and configure the

cluster. **Explore OpenShift**

networking concepts

Describe and explore OpenShift networking concepts.

Deploy containerized applications on OpenShift

Deploy single container applications on OpenShift Container Platform.

Deploy multi-container applications on OpenShift

Deploy applications that are containerized using multiple container images on an OpenShift cluster.

Execute commands

Execute commands using the command-line interface.

Control resource access

Control access to OpenShift

resources. **Allocate persistent**

storage Implement persistent

storage.

Manage application deployments

Manipulate resources to manage deployed applications.

Install the metrics subsystem

Install and configure the metrics gathering system.

Manage OpenShift Container Platform

Manage and monitor OpenShift resources and software.