DO380

Red Hat OpenShift Administration II: High Availability

Design, build, and test OpenShift HA cluster

Red Hat OpenShift Administration II teaches you how to build robust clusters that provide high availability and the ability to run large numbers of applications. You will learn about OpenShift integration with datacenter infrastructure such as load balancers, identity management, monitoring, proxies, and storage.

Course overview

You will design an OpenShift HA cluster, then build and test it. You will use this cluster to examine more advanced topics in the administration and operation of a robust OpenShift cluster in the remainder of the course.

Course summary

- Learn OpenShift cluster features, architecture, and sizing.

- Investigate OpenShift cluster installation methods.

- Configure storage providers and storage classes.

- Manage OpenShift certificates.

- Configure GlusterFS container-native storage.

- Diagnose cluster health.

- Scale OpenShift clusters.

- Manage OpenShift resources.

Audience for this course

This course is designed for Linux® system administrators who want to deploy and manage a large-scale Red Hat® OpenShift Container Platform environment in their datacenters.

Prerequisites for this course

Red Hat recommends these prerequisites:

- Become a Red Hat Certified System Administrator, or demonstrate equivalent experience

- Attend Introduction to Containers, Kubernetes, and Red Hat OpenShift (DO180) or demonstrate equivalent experience with containers, Kubernetes, and OpenShift

- Attend Red Hat OpenShift Administration I (DO280) or demonstrate equivalent experience with OpenShift

- Recommended, but not required: become a Red Hat Certified Specialist in OpenShift Administration (EX280)

Outline for this course

Design a highly available cluster

Design an OpenShift cluster that supports high availability and resiliency.

Prepare to install an HA cluster

Configure the advanced installer and prepare the cluster environment for HA installation.

Configure OpenShift to use custom certificates

Configure the OpenShift cluster to use custom certificates.

Build an HA cluster

Use the advanced installation method to build an HA OpenShift cluster.

Provision persistent storage

Describe storage providers, configure a provider, create a storage class, and test the configuration.

Enable log aggregation

Consolidate useful data for analysis by enabling the log aggregation feature.

Maintain an OpenShift cluster

Perform recurring maintenance activities on an OpenShift cluster.

Manage system resources

Manage operating system and cluster resources for optimal performance.

Configure security providers

Configure security providers and advanced security options.

Configure networking options

Configure various advanced networking features and options.