Red Hat OpenShift Administration II: Configuring a Production Cluster (DO280)

Duration: 40 Hours (5 Days)

Overview

The Red Hat OpenShift Administration II: Configuring a Production Cluster (DO280) course is an advanced training program designed to help system administrators, developers, and IT professionals configure and manage a production-grade OpenShift cluster. Throughout the course, participants will gain in-depth knowledge about the Components of the Red Hat OpenShift Container Platform and how they interact, ensuring a strong foundation for managing complex Kubernetes environments.Through hands-on exercises, learners will verify cluster health, configure authentication with various identity providers, implement Role-based access controls, manage secrets, and understand OpenShift networking. The OpenShift administration training also covers Pod scheduling, Scaling clusters, Performing updates, and Utilizing the web console for cluster management.Upon completing the course, students will have honed their abilities to efficiently manage and troubleshoot an OpenShift cluster, making the DO280 essential for those looking to excel in OpenShift administration. This comprehensive review ensures that learners are equipped with the skills necessary to maintain a robust, secure, and scalable OpenShift environment.

Audience Profile

The Red Hat OpenShift Administration II course is designed for IT professionals managing enterprise Kubernetes environments with OpenShift.

- System Administrators
- DevOps Engineers
- IT Architects
- Cloud Administrators
- Developers with an interest in deployment and operations
- Site Reliability Engineers (SREs)
- Technical Account Managers
- Product Support Specialists in enterprise environments
- Infrastructure Automation Engineers
- Application Administrators responsible for managing application life cycle and integration

Course Syllabus

Declarative Resource Management

- Deploy and update applications from resource manifests that are
- parameterized for different target environments.

Deploy Packaged Applications

- Deploy and update applications from resource manifests that are
- packaged for sharing and distribution.

Authentication and Authorization

- Configure authentication with the HTPasswd identity provider and assign

- roles to users and groups.

Network Security

- Protect network traffic between applications inside and outside the cluster.

Expose non-HTTP/SNI Applications

- Expose applications to external access without using an Ingress controller.

Enable Developer Self-Service

- Configure clusters for safe self-service by developers from multiple
- teams and disallow self-service if projects have to be provisioned by
- the operations staff.

Manage Kubernetes Operators

- Install and update Operators that are managed by the Operator Lifecycle
- Manager and by the Cluster Version Operator.

Application Security

- Run applications that require elevated or special privileges from the host
- Operating System or Kubernetes.

OpenShift Updates

- Update an OpenShift cluster and minimize disruption to deployed applications.