

# Red Hat OpenShift Administration II: Configuring a Production Cluster

**Course Duration: 40 Hours**

**Course Code: Do280**

## 1. Course Overview

The **Red Hat OpenShift Administration II: Configuring a Production Cluster** course is designed to provide administrators with the skills and knowledge required to configure, manage, and troubleshoot Red Hat OpenShift clusters in production environments. Building upon foundational OpenShift administration skills, this course focuses on high availability, security, resource management, monitoring, and cluster scaling to ensure a stable and reliable enterprise-grade deployment.

## 2. What You'll Learn?

By the end of this course, you will be able to:

- Configure and manage **Red Hat OpenShift production clusters**.
- Implement **high availability** and ensure cluster resilience.
- Apply **security controls** and configure authentication/authorization.
- Manage **networking and storage** for enterprise workloads.
- Monitor cluster performance and troubleshoot common issues.
- Automate administrative tasks using **Red Hat tools** and best practices.
- Scale applications and clusters to meet business demands.

### 3. Target Audience

This course is best suited for:

- **Cluster administrators** responsible for managing OpenShift in production.
- **Site reliability engineers (SREs)** ensuring uptime and performance.
- **System administrators** transitioning from OpenShift basics to advanced configuration.
- **DevOps engineers** supporting application deployment and scaling in OpenShift.

### 4. Pre-Requisites

Participants should have:

- Completed **Red Hat OpenShift Administration I: Operating a Production Cluster (DO180/DO280 equivalent)**.
- Familiarity with **Linux system administration**.
- Understanding of **Kubernetes concepts** and containerized applications.

### 5. Course Content

#### Module 1: Cluster Configuration and Management

- Configuring OpenShift production clusters
- Managing cluster nodes and resources
- Scaling clusters and workloads

#### Module 2: High Availability and Reliability

- Setting up redundant components
- Ensuring disaster recovery readiness

- Load balancing strategies

### **Module 3: Security and Authentication**

- Configuring role-based access control (RBAC)
- Securing communication and data
- Integrating authentication providers

### **Module 4: Networking and Storage in OpenShift**

- Managing network policies and routing
- Configuring persistent storage solutions
- Securing applications with TLS and certificates

### **Module 5: Monitoring and Troubleshooting**

- Monitoring cluster performance and health
- Common issues and troubleshooting approaches
- Using Red Hat tools for diagnostics

### **Module 6: Automation and Best Practices**

- Automating administration tasks
- Applying operational best practices
- Ensuring compliance and governance