

Course Code: 9999

DO380 - Plan, implement, and manage OpenShift clusters at scale

Plan, implement, and manage OpenShift clusters at scale

Red Hat OpenShift Administration III: Scaling Kubernetes Deployments in the Enterprise (DO380) expands upon the skills required to plan, implement, and manage OpenShift® clusters in the enterprise.

You will learn how to configure and manage OpenShift clusters at scale to address increasing and special demands from applications and ensure reliability, performance, and availability.

This course is based on Red Hat® OpenShift Container Platform 4.14.

Note: This course is offered as a five day virtual class or self-paced.

What You'll Learn

After completing this course, learners should be able to:

- Manage OpenShift cluster operators and add operators.
- Implement GitOps workflows using OpenShift GitOps operator.
- Integrate OpenShift with enterprise authentication.
- Query and visualize cluster-wide logs, metrics, and alerts.
- Backup and restore application settings and data with OpenShift APIs for Data Protection (OADP).
- Manage machine pools and machine configurations.

Who Needs to Attend

- Primary: Platform Engineers, System Administrators, Cloud Administrators, and other infrastructure-related IT roles who are responsible for implementing and managing infrastructure for applications.
- Secondary: Enterprise Architects, Site Reliability Engineers (SRE), DevOps Engineers, and other application-related IT roles who are responsible for designing infrastructure for applications.

Prerequisites

- Complete Red Hat OpenShift Administration II: Operating a Production Kubernetes Cluster(DO280) and become a Red Hat Certified Specialist in OpenShift Administration.
- Complete Red Hat System Administration II (RH134) and become a Red Hat Certified System Administrator.
- Recommended, but not required: become a Red Hat Certified Systems Engineer or a Red Hat Certified Specialist in Ansible Automation.
- Basic knowledge about writing and running Ansible playbooks is desired.

Confirmation of the correct skill set knowledge can be obtained by passing the online skills assessment at Red Hat Skills Assessment



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CLASSROOM LIVE

\$4,700 USD

4 Day

Classroom Live Outline

Move from Kubernetes to OpenShift

• Demonstrate that OpenShift is Kubernetes by deploying Kubernetes-native applications on OpenShift.

Introduce automation on OpenShift

 Automate OpenShift administration tasks using bash scripts and Ansible playbooks.

Manage operators with OpenShift

• Deploy Kubernetes Operators and configure OpenShift cluster operators.

Implement GitOps with Jenkins

• Implement a GitOps workflow using containerized Jenkins to administer an OpenShift cluster.

Configure enterprise authentication

Integrate OpenShift with enterprise identity providers.

Configure trusted TLS certificates

 Configure OpenShift with trusted TLS certificates for external access to cluster services and applications.

Configure dedicated node pools

 Add nodes to an OpenShift cluster with custom configurations tuned for special workloads.

Configure persistent storage

Configure storage providers and storage classes to ensure cluster user access

to persistent storage.

Manage cluster monitoring and metrics

• Configure and manage the OpenShift monitoring stack.

Provision and inspect cluster logging

• Deploy, query, and troubleshoot cluster-wide logging.

Recover failed worker nodes

• Inspect, troubleshoot, and remediate worker nodes in a variety of failure scenarios.



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VIRTUAL CLASSROOM LIVE

\$4,700 USD

5 Day

Virtual Classroom Live Outline

1. Authentication and Identity Management

 Configure OpenShift clusters to authenticate by using LDAP and OIDC enterprise identity systems and to recognize groups that those systems define.

2. Backup, Restore, and Migration of Applications with OADP

 Backup and restore application settings and data with OpenShift APIs for Data Protection (OADP).

3. Cluster Partitioning

 Configure a subset of cluster nodes to be dedicated to a type of workload.

4. Pod Scheduling

 Configure workloads to run on a dedicated set of cluster nodes and prevent other workloads from using those cluster nodes.

5. OpenShift GitOps

• Deploy OpenShift GitOps for managing clusters and applications.

6. OpenShift Monitoring

 Troubleshoot performance and availability issues with applications and clusters.

7. OpenShift Logging

 Deploy OpenShift logging and query log entries from workloads and cluster nodes.

Virtual Classroom Live Labs

· Labs are provided by RedHat for this course

Sep 8 - 12, 2025 | 11:00 AM - 5:00 PM EDT

Dec 8 - 12, 2025 | 11:00 AM - 5:00 PM EST

Feb 2 - 6, 2026 | 11:00 AM - 5:00 PM EST

Mar 16 - 20, 2026 | 11:00 AM - 5:00 PM EDT



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ON-DEMAND

\$3,995 USD

On-Demand Outline

1. Authentication and Identity Management

 Configure OpenShift clusters to authenticate by using LDAP and OIDC enterprise identity systems and to recognize groups that those systems define.

2. Backup, Restore, and Migration of Applications with OADP

 Backup and restore application settings and data with OpenShift APIs for Data Protection (OADP).

3. Cluster Partitioning

 Configure a subset of cluster nodes to be dedicated to a type of workload.

4. Pod Scheduling

• Configure workloads to run on a dedicated set of cluster nodes and prevent other workloads from using those cluster nodes.

5. OpenShift GitOps

• Deploy OpenShift GitOps for managing clusters and applications.

6. OpenShift Monitoring

 Troubleshoot performance and availability issues with applications and clusters.

7. OpenShift Logging

 Deploy OpenShift logging and query log entries from workloads and cluster nodes.

On-Demand Labs

Labs are provided by RedHat for this course



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PRIVATE GROUP TRAINING

4 Day

Visit us at www.globalknowledge.com or call us at 1-866-716-6688.

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