



# Multicluster Management with Red Hat OpenShift Platform Plus

**Duration: 4 Days** Course Code: DO480

## Overview:

Enhance container management capabilities with automation, governance, and security across clusters.

Multicluster Management with Red Hat OpenshiftPlatform Plus teaches the skills required to maintain a diverse portfolio of applications, running across a fleet of OpenShift clusters. Applications follow placement rules determined by capacity and criticality; cluster configurations comply with governance and security policies; all automated according to Devops principles.

This course is based on Red Hat OpenShift Container Platform 4.10 and Red Hat Advanced Cluster Management 2.4.

## **Target Audience:**

System Administrators, Developers, Site Reliability Engineers, and IT Architects interested in managing and automating the management of a fleet of OpenShift clusters, possibly in different data centers and cloud providers.

## Objectives:

- Deploy Red Hat Advanced Cluster Management for Kubernetes (RHACM) in a hub cluster
- Add a managed cluster to RHACM (configure a cluster to be managed by RHACM)
- Define and apply cluster configuration policies
- Detect and correct non-conformance to cluster configuration policies
- Visualize and compare cluster settings between different clusters

- Define and apply application placement policies
- Identify and compare application resources from multiple clusters
- Deploy Red Hat Quay in the hub cluster
- Deploy Red Hat Advanced Cluster Security for Kubernetes (RHACS) in the hub cluster
- Integrate Red Hat Quay and RHACS with RHACM.

# Prerequisites:

### Required:

Completing Red Hat OpenShift Administration II: Operating a Production Kubernetes Cluster (DO280) and Red Hat Certified OpenShift Administrator Certification (EX280) are strongly encouraged, or possessing equivalent basic Kubernetes and OpenShift administration skills

## Recommended and optional:

- Red Hat OpenShift Administration III: Scaling Kubernetes Deployments in the Enterprise (DO380) is a course teaching cluster-wide configuration, logging, and monitoring, Ansible automation with OpenShift
- Red Hat OpenShift Installation Lab (DO322) teaches you how to install OpenShift using IPI and UPI
- Understand Ansible basics, including, writing and running simple playbooks or equivalent experience

#### **Technology considerations**

BYOD and Internet access is required.

### **Testing and Certification**

Red Hat Certified Specialist in MultiCluster Management exam (EX480)

#### Content:

Manage a Multicluster Kubernetes Architecture

Describe multicluster architectures and use Red Hat OpenShift Platform Plus to solve their challenges.

Inspect Resources from Multiple Clusters Using the RHACM Web Console

Describe and navigate the Red Hat Advanced Cluster Management for Kubernetes (RHACM) web console. Configure role-based access control (RBAC) and search for resources across multiple clusters by using the RHACM search engine.

Deploy and Manage Policies for Multiple Clusters with RHACM

Deploy and manage policies in a multicluster environment by using Red Hat Advanced Cluster Management for Kubernetes (RHACM) governance. Install and Customize the RHACM Observability Stack

Gain insight into the fleet of managed clusters by using Red Hat Advanced Cluster Management for Kubernetes (RHACM) observability components.

Deploy Applications Across Multiple Clusters with RHACM

Deploy and manage applications in a multicluster environment with Red Hat Advanced Cluster Management for Kubernetes GitOps.

Install and Configure Red Hat Quay

Install and configure Red Hat Quay on Red Hat OpenShift Container Platform (RHOCP).

Integrate Red Hat Quay with Red Hat OpenShift and RHACM

Describe Red Hat Quay use cases in a multicluster environment, and use Red Hat Advanced Cluster Management for Kubernetes (RHACM) to deploy applications and control the image sources allowed in the cluster fleet.

Install and Configure RHACS

Install and configure Red Hat Advanced Cluster Security for Kubernetes (RHACS) and learn how it can help organizations with security in multicluster environments.

Multicluster Operational Security Using RHACS

Manage the operational security of a Kubernetes cluster fleet using Red Hat Advanced Cluster Security for Kubernetes (RHACS), and integrate RHACS with external services.

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### Additional Information:

#### Impact on the organization

Multicluster Management with Red Hat OpenShift Platform Plus supports IT Operations and Development teams whose organizations are expanding and accelerating their Container Adoption Journeys. The curriculum enables companies to securely and consistently apply governance, security, and application placement policies across multiple Kubernetes clusters. Organizations will benefit through increased automation of cluster and application lifecycles at scale.

Red Hat has created this course in a way intended to benefit our customers, but each company and infrastructure is unique, and actual results or benefits may vary.

# Impact of this training

Multicluster Management with Red Hat OpenShift Platform Plus teaches the advanced skills required to take control of multiple OpenShift clusters using the suite of tools included with the product bundle. Students will learn how to combine the capabilities and workflows of Advanced Cluster Manager with Advanced Cluster Security and Quay Enterprise to automate and validate deployment of infrastructure and application security.

# **Further Information:**

For More information, or to book your course, please call us on Head Office Tel.: +974 40316639

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