

DO480

Multicluster Management with Red Hat OpenShift Platform Plus

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

Multicluster Management with Red Hat OpenShift Platform 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.

Course content summary

- 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.

Audience for this course

- 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.

Outline for this course

- **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.

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.

