

DO316

Red Hat OpenShift Virtualization Administration Rapid Track course

Course Description

Create and manage virtual machines on OpenShift by using the Red Hat OpenShift Virtualization operator.

Red Hat OpenShift Virtualization Administration Rapid Track course features the Red Hat OpenShift Virtualization operator for those who already have experience with Red Hat OpenShift administration. This accelerated course combines essential content from Red Hat OpenShift Virtualization Administration I (DO156) and Red Hat OpenShift Virtualization Administration II (DO256) to teach students the skills required to create and manage production-ready virtual machines and their supporting Kubernetes and OpenShift resources in Red Hat OpenShift Virtualization.

This course is based on Red Hat OpenShift Virtualization 4.18.

Course Outline

Outline for this course

- **Introduction to Red Hat OpenShift Virtualization**
Deploy the OpenShift Virtualization operator and examine the configuration options for the operator.
- **Creating, Managing, and Monitoring Virtual Machines in Red Hat OpenShift Virtualization**
Create, manage, and monitor virtual machines in Red Hat OpenShift Virtualization.
- **Managing Virtual Machine Networking in Red Hat OpenShift Virtualization**
Use comprehensive and flexible networking for virtual machines within an OpenShift environment.
- **Managing Storage for Virtual Machines in Red Hat OpenShift Virtualization**
Configure and manage persistent storage for virtual machines, protect VM data through snapshots, export and import virtual machine images, and efficiently create golden images for virtual machines by using cloning within a Red Hat OpenShift Virtualization environment
- **Authentication and Authorization for Virtual Machines to Red Hat OpenShift Virtualization**
Understand OpenShift OAuth server concepts and custom resources, including their function in Kubernetes authentication, and define and implement role-based access controls and user permissions.
- **Advanced Networking for Virtual Machines in Red Hat OpenShift Virtualization**
Enable comprehensive and flexible networking for nodes and virtual machines within an OpenShift environment.
- **Migrating Virtual Machines to Red Hat OpenShift Virtualization**
Migrate virtual machines from another hypervisor to Red Hat OpenShift Virtualization by using the migration toolkit for virtualization (MTV) operator.
- **Creating and Restoring Backups of Virtual Machines in Red Hat OpenShift Virtualization**
Back up and restore virtual machines by using the OpenShift APIs for Data Protection (OADP) operator.
- **Creating Custom Instance Types, Templates, and Boot Sources in Red Hat OpenShift Virtualization**
Control the placement of virtual machines on cluster nodes by using Kubernetes resources, and rebalance virtual machine workloads across cluster nodes by enabling descheduler evictions.
- **Configuring High Availability for Virtual Machines in Red Hat OpenShift Virtualization**
Implement high-availability virtual machines that are resilient to failures, planned maintenance, and cluster upgrades by configuring Kubernetes resources.