

DO346

Migrating Virtual Machines to Red Hat OpenShift Virtualization with Ansible Automation Platform

Learn the essential skills to migrate virtual machines to Red Hat OpenShift Virtualization.

Migrating Virtual Machines to Red Hat OpenShift Virtualization with Ansible Automation Platform (DO346) provides the essential knowledge to migrate virtual machines to Red Hat OpenShift Virtualization by using carefully selected content from Managing Virtual Machines in Red Hat OpenShift Virtualization (DO316) and Automate and Manage Red Hat OpenShift Virtualization with Ansible (DO336). This course provides a shorter learning path for IT professionals to migrate their virtualized workloads to OpenShift Virtualization.

This course provides the following information and skills:

- An introduction to key OpenShift and Kubernetes concepts, such as nodes, pods, and operators
- Skills to deploy the OpenShift Virtualization operator
- Skills to configure networking and storage for virtual machines
- Strategies to migrate virtual machines from another hypervisor to OpenShift Virtualization by using the migration toolkit for virtualization operator and Ansible Automation Platform

This course is based on OpenShift Container Platform 4.16, OpenShift Virtualization 4.16, and Ansible Automation Platform 2.4.

Course content summary

- Deploying the OpenShift Virtualization operator in an existing Red Hat OpenShift environment
- Configuring node networking to connect virtual machines and nodes to networks outside the cluster by using Multus CNI plug-ins and the NMState operator
- Managing storage and disks for virtual machines in Red Hat OpenShift
- Migrating virtual machines from another hypervisor to Red Hat OpenShift Virtualization by using the migration toolkit for virtualization operator and Ansible Automation Platform

Audience for this course

- **Virtual Machine Administrators** who are interested in moving virtualized workloads from traditional hypervisors to OpenShift Virtualization
- **Kubernetes Administrators (Cluster Administrators and Cluster Engineers)** who are interested in supporting containerized and virtualized workloads in the same OpenShift cluster

Prerequisites for this course

- This course requires no previous experience with containers, Kubernetes, OpenShift, or OpenShift Virtualization; however, learners are encouraged to attend the following courses, before taking DO346:
 - [Containers, Kubernetes and Red Hat OpenShift Technical Overview \(DO080\)](#)
 - [Red Hat OpenShift Virtualization Technical Overview \(DO016\)](#)
 - [Ansible Basics: Automation Technical Overview \(DO007\)](#)
- Although Linux skills are not required for managing OpenShift clusters and OpenShift Virtualization, operating individual Linux VMs requires Linux system administration skills that the following courses provide:
 - [Red Hat System Administration I \(RH124\)](#) and [Red Hat System Administration II \(RH134\)](#) for managing the operating system inside a Linux VM

Outline for this course

- **Red Hat OpenShift Virtualization**
Distinguish Red Hat OpenShift Virtualization from container technologies and from traditional virtual machine technologies. Describe the features and use cases of OpenShift Virtualization. Deploy the OpenShift Virtualization operator in an existing Red Hat OpenShift environment.
- **Configuring Networking for Virtual Machines**
Configure standard Kubernetes network objects for virtual machines and virtual machine-backed applications. Configure node networking to connect virtual machines and nodes to networks outside the cluster by using Multus CNI plug-ins and the NMState operator.
- **Configuring Storage for Virtual Machines**
Manage storage and disks for virtual machines in Red Hat OpenShift by using Kubernetes.
- **Migrating Virtual Machines to Red Hat OpenShift Virtualization**
Migrate virtual machines from a compatible hypervisor to Red Hat OpenShift Virtualization by using the migration toolkit for virtualization (MTV) operator and the Ansible Automation Platform (AAP) operator.

Impact on the individual

IT professionals will learn to migrate virtualized workloads to OpenShift Virtualization.