Managing Virtual Machines with Red Hat OpenShift Virtualization (DO316)

Duration: **3 Days**

Prerequisites:

- Take our free assessment to gauge whether this offering is the best fit for your skills.
- Red Hat OpenShift I: Containers & Kubernetes (DO180) and is recommended but not required**.**

Course Description:

Managing Virtual Machines with OpenShift Virtualization teaches the essential skills required to create and manage virtual machines (VM) on OpenShift using the Red Hat OpenShift Virtualization operator. This course does not require previous knowledge of containers and Kubernetes.

This course provides:

- Skills required to create, access, and manage VMs on OpenShift clusters.
- Skills required to control usage and access of cpu, memory, storage, and networking resources from VMs using the same Kubernetes features that would also control usage and access to these resources for containers.
- Sample architectures to manage High Availability (HA) of VMs using standard Kubernetes features and extensions from OpenShift Virtualization.
- Strategies to connect VMs on OpenShift to data center services outside of their OpenShift cluster, such as storage and databases.

Intended Audience:

- Virtual Machine Administrators interested in moving virtualized workloads from traditional Hypervisors to OpenShift Virtualization.
- Kubernetes Administrators (Cluster Administrators, Clusters Engineers) interested in supporting containerized and virtualized workloads in the same OpenShift cluster.
- Site Reliability Engineers interested in using GitOps and Ansible Automation to manage Virtual Machines on OpenShift.

Course Outlines:

Introduction to OpenShift Virtualization

- Describe the features and use cases of OpenShift Virtualization.

Run and access Virtual Machines

- Create, manage, inspect, and monitor virtual machines in Red Hat OpenShift Virtualization.

Configure Kubernetes network for Virtual Machines

- Configure standard Kubernetes network objects and external access for VMs and virtual machine-backed applications.

Connect Virtual Machines to external networks

- Configure node networking to connect virtual machines and nodes to networks outside the cluster.

Configure Kubernetes storage for Virtual Machines

- Manage storage and disks for VMs in Red Hat OpenShift.

Virtual Machine template management

- Create and manage templates to provision virtual machines.

Advanced Virtual Machine management

- Snapshot, clone, and live migrate a virtual machine and initiate node maintenance.

Configure Kubernetes high availability for Virtual Machines

- Configure Kubernetes resources to implement high availability for virtual machines.