

**Module Title : RH318: Red Hat Virtualization**

**Duration : 4 days**

## Overview

Red Hat Virtualization (RH318) helps IT professionals acquire the skills needed to deploy, administer, and operate virtual machines in their organization using Red Hat® Virtualization. Through numerous hands-on exercises, you will deploy and configure Red Hat Virtualization and use it to provision and manage virtual machines. This course also prepares you for the Red Hat Certified Specialist in Virtualization certification exam.

### Course content summary

- Installing and configuring Red Hat Virtualization
- Configuring networking and storage for use with Red Hat Virtualization
- Managing user accounts and access to the Red Hat Virtualization environment
- Installing and managing virtual machines in Red Hat Virtualization
- Using templates for rapid virtual machine deployment
- Managing virtual machine snapshots and images
- Backing up and upgrading Red Hat Virtualization
- Migrating virtual machines and exploring high availability options

## Audience

Linux system administrators and virtualization administrators interested in deploying and managing large-scale virtualization solutions managing virtual servers in their datacenters, based on the Red Hat Virtualization open virtualization management platform.

## Prerequisites

Red Hat Certified System Administrator (RHCSA®) certification or equivalent experience

## Outline

### Red Hat Virtualization overview

Explain the purpose and architecture of Red Hat Virtualization.

### Installing and configuring Red Hat Virtualization

Install a minimal Red Hat Virtualization environment and use it to create a virtual machine.

#### **Creating and managing datacenters and clusters**

Organize hypervisors into groups using datacenters and clusters.

#### **Managing user accounts and roles**

Configure user accounts using a central directory service.

Assign access to resources based on job responsibilities using roles.

#### **Adding physical hosts**

Add additional Red Hat Virtualization hosts automatically, and move and remove hosts from datacenters as needed.

#### **Managing Red Hat Virtualization networks**

Separate network traffic into multiple networks on one or more interfaces to improve the performance and security of Red Hat Virtualization.

#### **Managing Red Hat Virtualization storage**

Create and manage data and ISO storage domains.

#### **Deploying and managing virtual machines**

Operate virtual machines in the Red Hat Virtualization environment.

#### **Migrating virtual machines**

Migrate and control automatic migration of virtual machines.

#### **Managing virtual machine images**

Manage virtual machine snapshots and disk images.

#### **Automating virtual machine deployment**

Automate deployment of virtual machines by using templates and cloud-init.

#### **Backing up and upgrading Red Hat Virtualization**

Back up, restore, and upgrade Red Hat Virtualization.

#### **Exploring high-availability practices**

Explain procedures to improve resilience and reliability of Red Hat Virtualization by removing single points of failure and implementing high-availability features.

#### **Comprehensive review**

Demonstrate skills learned in this course by installing and configuring Red Hat Virtualization, using it to create and manage virtual machines, and by backing up and updating components of Red Hat Virtualization.

### **Recommended next exam or course**

Red Hat CloudForms Hybrid Cloud Management (CL220)

Red Hat Certified Virtualization Administrator Exam (EX318)

## Impact if this training

### Impact on the organization

This course is intended to develop the skills needed to improve efficiency within a virtualization environment. Expected results include reducing IT infrastructure costs by virtualizing more workloads on less hardware while avoiding vendor lock-in. This class will train virtualization administrators to work more efficiently by using Red Hat Virtualization to deploy, manage, and monitor virtualization environments. Doing so will result in faster response times for users requesting and using virtualized resources.

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 on the individual

As a result of attending this course, you should be able to create and deploy Red Hat Virtualization and virtual servers. Using a single, full-service management interface, Red Hat Virtualization Manager, you will be able to configure, manage, and migrate systems within the virtualization environment.