

# JB318: Red Hat Virtualization

## Course 8185 – 32 Hours

### Overview

#### **Deploy, configure, manage, and migrate virtual environments**

Red Hat Virtualization (RH318) teaches you the skills needed to deploy, administer, and operate virtual machines in your organization using Red Hat® Virtualization. Through numerous hands-on exercises, you will demonstrate the ability to deploy and configure the Red Hat Virtualization infrastructure and use it to provision and manage virtual machines. This offering also prepares you for the Red Hat Certified Specialist in Virtualization exam. This course is based on Red Hat Enterprise Virtualization 4.3 and Red Hat Enterprise Linux® 7.6 and 8, as well as Red Hat Hyperconverged Infrastructure for Virtualization 1.6.

### On Completion, Delegates will be able to

- Configure Red Hat Virtualization
- Configure networking and storage for use with Red Hat Virtualization
- Manage user accounts and access to the Red Hat Virtualization environment
- Install and manage virtual machines in Red Hat Virtualization
- Use templates for rapid virtual machine deployment
- Manage virtual machine snapshots and images
- Migrate virtual machines and explore high-availability options

### Who Should Attend

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

### Prerequisites

- Become a [Red Hat Certified System Administrator \(RHCSA®\)](#), or demonstrate equivalent experience
- Being a [Red Hat Certified Engineer \(RHCE®\)](#) is strongly recommended for Ansible® automation comprehension

### Course Contents

#### **Red Hat Virtualization overview**

Explain the purpose and architecture of Red Hat Virtualization.

#### **Install and configure Red Hat Virtualization**

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

#### **Create and manage datacenters and clusters**

Organize hypervisors into groups using datacenters and clusters.

### **Manage user accounts and roles**

Configure user accounts using a central directory service, then use roles to assign access to resources based on job responsibilities.

### **Adding physical hosts**

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

### **Scale Red Hat Virtualization infrastructure**

Add Red Hat Virtualization hosts automatically, configure Red Hat Enterprise Linux hosts when appropriate, and move and remove hosts from data centers as needed.

### **Manage 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.

### **Manage Red Hat Virtualization storage**

Create and manage data and ISO storage domains.

### **Deploy and manage virtual machines**

Operate virtual machines in the Red Hat Virtualization environment.

### **Migrate virtual machines**

Migrate and control automatic migration of virtual machines.

### **Manage 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.

### **Back up and upgrade Red Hat Virtualization**

Back up, restore, and upgrade the software in a Red Hat Virtualization environment.

### **Explore high-availability practices**

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

### **Perform comprehensive review**

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