

## Red Hat Virtualization (RH318)

### Overview

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In this course you will develop 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.

### Prerequisites

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- Red Hat Linux System Administration (RH131)

### Prerequisite Comments

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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.

### Target Audience

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Experienced Linux system administrators responsible for managing enterprise servers who are interested in learning how to manage large numbers of servers or virtual machines using Red Hat Enterprise Virtualization.

### Course Objectives

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Red Hat® Enterprise Performance Tuning is designed to teach senior Linux® system administrators the methodology of performance tuning for Red Hat Enterprise Linux. This course discusses system architecture with an emphasis on understanding the implications of system architecture on system performance, methods for testing the effects of performance adjustments, open source benchmarking utilities, methods for analyzing system and networking performance, and tuning configurations for specific application loads.

### Course Outline

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#### 1 - Red Hat Enterprise Virtualization overview

Understand general virtualization, KVM concepts, and Red Hat® Enterprise Virtualization platform.

## 2 - Red Hat Enterprise Virtualization Manager

Install, test, remove, and troubleshoot Red Hat Enterprise Virtualization Manager.

## 3 - Red Hat Enterprise Virtualization Hypervisor

Install, configure, upgrade, and troubleshoot Red Hat Enterprise Virtualization Hypervisor.

## 4 - Red Hat Enterprise Virtualization environment configuration

Create and configure datacenters, clusters, storage domains, and logical networks.

## 5 - Red Hat Enterprise Virtualization for Servers

Install, perform basic management of, and troubleshoot virtual servers and images.

## 6 - Red Hat Enterprise Virtualization for Desktops

Install virtual desktops and configure paravirtualized drivers.

## 7 - Virtual machine templates

Create Microsoft Windows and Red Hat Enterprise Linux® virtual machines with template images.

## 8 - Pools and users

Use pools and deploy the user portal with multilevel administrative roles.

## 9 - Monitoring and reports

Monitor Red Hat Enterprise Virtualization and create custom reports.

## 10 - Advanced Red Hat Enterprise Virtualization

Back up and restore Red Hat Enterprise Virtualization; CLI and API interfaces.

## 11 - Red Hat Enterprise Linux hosts

Red Hat Enterprise Linux hosts

## 12 - Migration and high availability

Migrate a virtual machine and explore high availability

**13 - Comprehensive review**

Apply the performance objectives learned throughout the course

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