

## Red Hat Enterprise Virtualization (RH318)

### Course Outline

#### Documents Conventions

Notes and Warnings

#### Introduction

Red Hat Enterprise Virtualization

Orientation to the Classroom Environment

Internationalization

#### 1. Red Hat Enterprise Virtualization Overview

Virtualization in Linux

Quiz: Virtualization in

Linux RHEV Architecture

Quiz: RHEV Architecture

Lab: Preparing the Classroom Environment

Summary

#### 2. Installing, Configuring and Testing RHEV Manager

Installing, and Testing RHEV Manager

Practice: Installing and Configuring RHEV Manager

Managing Users, Roles and Permissions

Practice: Managing Users, Roles and Permissions

Troubleshooting RHEV Manager

Practice: Updating RHEV Configuration Values with RHEV Configuration Tool

Lab: Installing, Configuring and Testing RHEV Manager

Summary

#### 3. Installing and Configuring RHEV Hypervisor Hosts

Installing RHEV Hypervisor

Practice: Installing RHEV Hypervisor

Automating RHEV Hypervisor Installation

Quiz: Automating RHEV Hypervisor Installation

Upgrading RHEV Hypervisor

Practice: Upgrading RHEV Hypervisor

Troubleshooting RHEV Hypervisor

Practice: Troubleshooting RHEV Hypervisor

Lab: Installing and Configuring RHEV Hypervisor Hosts

Summary

#### 4. Creating RHEV Data Centers and Clusters

RHEV Resources

Quiz: RHEV Resources

Creating Datacenters Practice:

Creating Datacenters Creating Clusters

Practice: Creating Clusters

Lab: Creating RHEV Data Centers and Clusters

Summary

## 5. Creating and Maintaining RHEV

**Storage** Creating Storage Domains

Practice: Creating a Data Storage Domains

Integrating Storage with OpenStack

Quiz: Integrating Storage with OpenStack

Lab: Creating and Maintaining RHEV Storage

Summary

## 6. Creating RHEV Logical Networks

Creating Logical Networks Practice:

Creating Logical Networks Integrating

Networking with OpenStack

Quiz: Integrating Networking with OpenStack

Lab: Creating RHEV Logical

Networks Summary

## 7. Deploying RHEV Virtual Machines

Installing a New Virtual Server

Practice: Installing a Red Hat Enterprise Linux Guest

Managing Virtual Machines

Practice: Managing Virtual Machines

Installing Paravirtualized Drivers and Guest Agents

Quiz: Installing Paravirtualized Drivers and Guest Agents

Lab: Deploying RHEV Virtual Machines

Summary

## 8. Managing VM Snapshots and Images

Creating and Using Image Snapshots

Practice: Creating and Using Image Snapshots

Sharing and Editing Images

Practice: Sharing and Editing Images

Quiz: Managing VM Snapshots and Images

Summary

## 9. Automating VM Deployment

Templating Process

Quiz: Templating Process

Creating RHEL VMs with Template Images

Practice: Creating RHEL VMs with Template Images

Windows VMs with Template Images

Quiz: Windows VMs with Template Images

Creating and Managing Pools Practice:

Creating and Managing Pools

Automating RHEL Deployment with

**cloud-init**

Practice: Automating RHEL Deployment with **cloud-init**

Summary

## 10. Monitoring and Reporting of RHEV

Monitoring RHEV

Practice: Monitoring RHEV with the search Bar and Tags

Generating Reports

Practice: Generating Reports (Prebuilt)

Lab: Monitoring and Reporting of RHEV  
with Ad Hoc Reports

Summary

## **11. Advanced RHEV Topics**

Backing Up and Restoring RHEV

Practice: Backing Up and Restoring  
RHEV

Creating a Highly Available RHEV  
Manager

Quiz: Creating a Highly Available  
RHEV Manager

Exploring Application Programming  
Interfaces

Quiz: Exploring Application  
Programming Interfaces

Summary

## **12. Installing and Configuring RHEL Hosts**

Converting RHEL to Be a RHEV Hosts

Practice: Converting RHEL to Be a RHEV  
Hosts

Quiz: Installing and Configuring RHEL  
Hosts

Summary

## **13. Migrating VMs and Configuring High Availability**

Migrating a Virtual Machine

Practice: Migrating a Virtual Machine

Automating Migration

Practice: Moving Host into Maintenance  
Mode

Configuring High Availability Practice:

Configuring High Availability

Quiz: Migrating VMs and Configuring  
High Availability

Summary

## **14. Comprehensive Review**

Comprehensive Review

Comprehensive Review: Installing

Comprehensive Review:

Troubleshooting

Comprehensive Review:

Management Summary