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Sign up

RHV Training: Virtual Desktop Infrastructure by Red Hat

PREPARING FOR RHCVA CERTIFICATION   5 days
(35 hours)

Presentation

Our Red Hat Virtualization or RHV (formerly Red Hat Entreprise Virtualization) training course will enable you to reduce your workload costs by virtualizing your IT infrastructure. Opting for Red Hat for this VDI (Virtual Desktop Infrastructure) process will guarantee modern, high-performance management of your virtualized workloads. We'll teach you how to quickly install system images within your virtual machines, as RHV is an open-source tool that can be easily integrated with a range of different hardwares. This versatility also extends to GPU management and the integration of Singularity containerization technologies.
During our RHV training course, you'll learn how to install the system, manage GPUs and virtual machines, and use the CLI. You'll also learn how to use Singularity containers with RHV. Afterwards, you'll have a solid foundation on which to build your RHCVA certification.

Objectives

- Managing GPUs and virtual machines
- Install and configure Red Hat Virtualization
- Understanding and using CLI
- Managing Singularity containers

Target audience

- Network administrators
- Operators
- Network architects
- System administrators
- Virtualization administrators

Prerequisites

- Knowledge of network infrastructures
- Red Hat administration experience

RHV training program

Introduction to RHV

- A reminder of virtualization
- Understanding VDI (Virtual Desktop Infrastructure)
- The benefits of VDI
- When should you use virtual office infrastructures?
- RHV features
- VMware vs VirtualBox vs Citrix vs RHV
- KVM (Kernel-based Virtual Machine)
- Architectural overview

Installation

- FQDNs (Fully Qualified Domain Names)
- Package installation
- Configuration
- Deploying the hypervisor
- Network logic
- Storage domains

Virtual machine management

- Virtual machines on RHV
- Creating virtual machines
- Using design templates
- Creating virtual machine snapshots

Advanced features

- Managing high availability
- Shared disks
- Direct Logical Unit Number (LUN) mapping
- Resize virtual disk

- Live storage migration
- VNIC Qos
- Manage users
- Installing Red Hat Identity Management

Command lines

- Install CLI
- TSL/SSL certification
- Configuration .ovirtshellrc
- Create your virtualization environment using command lines
- Main requests

Network Accessible Storage

- NFS (Network File Server) settings
- Configuring Server Message Blocks with Samba

GPU management

- What is GPU pass-through?
- Assigning and detaching virtual GPUs on virtual machines
- VGPUs
- Assigning and detaching virtual GPUs on virtual machines
- Enable GPU pass-through
- Measure the performance of different graphics processors

Using Singularity containers

- Installing Singularity
- Good usage practices
- Command lines
- Create your container
- The definition file
  - Header
  - Sections
  - Apps
  - Services
- Network
  - --dns
  - --hostname
  - --net
  - --network
  - --netwok-args

- Resource limitations

Troubleshooting

- Log manager overview
- Analyze hypervisor logs
- Guest agent logs
- SPICE logs
- Log collector utility

Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.