

5 Days

## VMware vSphere: Optimize and Scale [V6.7]

This course will help you learn advanced skills to configure and maintain a highly available and scalable virtual infrastructure. You will be able to configure and optimize the VMware vSphere® 6.7 features to build scalable infrastructure, learn advanced features and controls that would benefit the organization. The course is aligned with product ESXi 6.7 and vCenter Server 6.7.

### Course Objective:

On completion of this course, you will be able to

- Configure and manage vSphere networking and storage
- Use VMware vSphere® Client™, VMware vSphere® Web Client, and VMware vSphere® ESXi™ Shell to manage vSphere.
- Monitoring and analyzing of key performance indicators
- Optimize the ESXi and VMware vCenter Server
- Harden the vSphere environment
- Encrypt virtual machines for additional security

## Course Details

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### Course Outline

#### 1 Course Introduction

- Introduction, course logistics, and objectives
- Identify additional resources and other VMware Education offerings

#### 2 Network Scalability

- Configure and manage vSphere distributed switches
- Explanation of Features

#### 3 Storage Scalability

- VMware vSphere® Storage APIs
- Virtual machine storage policies
- The configuration of VMware vSphere® Storage DRS™ and VMware vSphere® Storage I/O Control

#### 4 Host and Management Scalability

- Content libraries
- Use of host profiles
- VMware vSphere® ESXi™ Image Builder CLI and vSphere Auto Deploy

#### 5 CPU Optimization

- CPU scheduler operation, NUMA support, and other features

- Monitor key CPU performance metrics with the use of esxtop

## 6. Memory Optimization

- Ballooning, memory compression, and host-swapping techniques
- Monitor key CPU performance metrics with the use of esxtop

## 7 Storage Optimization

- Storage queue types and other factors
- Monitor key CPU performance metrics with the use of esxtop

## 8 Network Optimization

- Features of network adapters and vSphere networking
- Monitor key CPU performance metrics with the use of esxtop

## 9 vCenter Server Performance Optimization

- vCenter Server performance factors
- VMware vCenter® Server Appliance™ resource usage

## 10 vSphere Security

- The configuration of vSphere, ESXi host access, and authorization
- Securing ESXi, vCenter Server, and virtual machines
- Use of VMware Certificate Authority for configuring vSphere certificate management

## Who Should Attend

- System administrators
- System engineers
- System integrators

## Pre Requisite

The participant must complete one of the following prerequisites:

- Understanding of concepts presented in the VMware vSphere: Install, Configure, Manage [V6.7] course
- Equivalent knowledge and administration experience with ESXi and vCenter Server

## Certifications

This course prepares you for the following certification:

- VMware Certified Professional 6.5 – Data Center Virtualization (VCP6.5-DCV)

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