

5 Days

## VMware vSphere: Optimize and Scale [v6.5]

The course enables you with the advanced skills to configure and maintain the virtual infrastructure. You will learn to configure and optimize VMware vSphere 6.5 features, effects and how the controls benefit the organization. All these expertise you gain through a perfect blend of lecture and hands-on labs.

### Course Objective:

As you complete the course, you will be able to meet the following objectives

- VMware ESXi™ Network and Storage: Configuration and Management
- vSphere Management
- ESXi host provisioning
- vSphere components: optimization and performance
- Monitor System log with VMware vRealize® Log Insight™
- VMware vCenter® Server Appliance™ deployment
- Secure vSphere environment

## Course Details

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### Course Outline

#### 1. Course Introduction

- Introduction, course logistics, and objectives
- Additional resources and VMware education offerings
- vSphere 6.5 user interfaces description

#### 2. Network Scalability

- Configuration and management of vSphere distributed switches
- Port mirroring, LACP, QoS tagging, and NetFlow

#### 3. Storage Scalability

- VMware vSphere® Storage APIs
- Virtual machine storage policies
- Creation and use of virtual volumes in vSphere

#### 4. Host and Management Scalability

- VMware vCenter® Converter™ uses
- Content libraries and host profiles
- VMware vSphere® ESXi™ Image Builder CLI
- vSphere Auto Deploy

#### 5. CPU Optimization

- CPU scheduler operation and NUMA support
- Monitor key CPU performance metrics with esxtop

#### 6. Memory Optimization

- Ballooning, Memory compression, and host-swapping techniques
- Monitor key CPU performance metrics with esxtop

#### 7. Storage Optimization

- Storage queue types and other related factors
- Monitor key CPU performance metrics with esxtop

#### 8. Network Optimization

- Network adapters, vSphere networking
- Monitor key CPU performance metrics with esxtop

#### 9. Analyzing vSphere

- Virtual machine availability and Proactive DRS
- Use of vRealize Log Insight

#### 10. vCenter Server Availability and Performance

- vCenter Server and VMware Platform Services Controller™
- VMware vCenter Server® High Availability and uses
- vCenter Server performance
- Migration of Windows vCenter Server 5.5 to vCenter Server Appliance 6.5 system

#### 11. vSphere Security

- Configuration of ESXi host access and its authorization
- Secure ESXi, vCenter Server, and virtual machines
- vSphere certificate management
- Encrypt virtual machines, core dumps, and VMware vSphere® vMotion® migrations

## Who Should Attend

- System administrators

- System engineers
- System integrators

## Pre Requisite

The participant must have completed either one of the mentioned prerequisites

- VMware vSphere: Install, Configure, and Manage [v6.5] course
- Equivalent knowledge and administration experience with ESXi and vCenter Server

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Date - May 20, 2026