

## VMware vSphere: Optimize and Scale [V7]

**Course Duration: 40 Hours**

**Course Code: VM-VSOS7**

### 1. Course Overview

The **VMware vSphere: Optimize and Scale [V7]** course is designed to provide advanced knowledge and hands-on skills to configure and maintain a highly available and scalable virtual infrastructure. It covers performance monitoring, optimization techniques, resource management, and advanced troubleshooting. By the end of this training, learners will be able to effectively manage large and complex vSphere environments, ensuring performance, scalability, and reliability.

### 2. What You'll Learn?

After completing this course, you will be able to:

- Configure and manage vSphere infrastructure for efficiency and scalability.
- Optimize CPU, memory, storage, and network resources.
- Implement advanced vSphere security features.
- Perform advanced troubleshooting of vSphere components.
- Use vSphere tools for monitoring and performance tuning.
- Apply best practices for resource management in large environments.

### 3. Target Audience

This course is ideal for:

- Experienced system administrators
- System engineers
- Data center administrators
- IT professionals responsible for optimizing vSphere infrastructures

## 4. Pre-Requisites

To get the most out of this course, participants should have:

- Completion of **VMware vSphere: Install, Configure, Manage [V7]** or equivalent knowledge
- Hands-on experience with vSphere deployment and administration
- Understanding of virtualization concepts

## 5. Course Content

### Module 1: Course Introduction

- Introduction to the course structure and objectives

### Module 2: vSphere Monitoring and Performance

- Tools for monitoring vSphere performance
- Analyzing CPU, memory, storage, and network performance

### Module 3: Advanced vSphere Configurations

- Advanced host and cluster configurations
- Configuring and managing vSphere clusters

### Module 4: Resource Management

- Allocating and managing CPU and memory resources
- Resource pools and shares management

### Module 5: Storage Optimization

- Storage policies and datastore management
- Storage I/O control and optimization

### **Module 6: Network Optimization**

- Network I/O control
- Optimizing vSphere networking for performance

### **Module 7: Advanced Security in vSphere**

- Implementing and managing vSphere security features
- Role-based access and encryption

### **Module 8: Troubleshooting and Scalability**

- Troubleshooting vSphere clusters and resources
- Scaling vSphere environments for enterprise needs

### **Module 9: Best Practices and Case Studies**

- Real-world optimization scenarios
- Best practices for scalability and performance