



This course let you learn advanced skills for configuring and maintaining a highly available and scalable virtual infrastructures.

Through complete hands-on labs, you can configure and optimize the VMware vSphere® 7 features that build a foundation for a truly scalable infrastructure.

After completion of this course you will be eligible to take below certification exam:

VMware Certified Professional 7.0 – Data Center Virtualization (VCP-DCV)

VMware course Objectives:

- Configure and manage vSphere networking and storage.
- Use VMware vSphere Client to manage certificates
- Use Identity Federation to configure VMware vCenter Server® to use external identity sources
- Use VMware vSphere® Trust Authority™ to secure the infrastructure for encrypted VMs
- Use host profiles to manage VMware ESXi™ host compliance
- Create and manage a content library for deploying virtual machines
- Manage VM resource usage with resource pools
- Monitor and analyze key performance indicators for compute, storage, and networking resources for ESXi hosts
- Optimize the performance in the vSphere environment, including vCenter Server

Eligibility:

System administrators, system engineers, and system integrators, software developers, desktop engineers, Technical support engineers.

Course Topics:

1 Course Introduction

- Introductions and course logistics
- Course objectives

2 Network Scalability

- Configure and manage vSphere distributed switches
- Describe how VMware vSphere® Network I/O Control enhances performance
- Explain distributed switch features such as port mirroring and NetFlow

3 Storage Scalability

- Explain why VMware vSphere® VMFS is a high-performance, scalable file system
- Explain VMware vSphere® Storage APIs - Array Integration, VMware vSphere® API for Storage Awareness™, and vSphere APIs for I/O filtering
- Configure and assign virtual machine storage policies
- Create VMware vSAN™ storage policies
- Recognize components of the VMware vSphere® Virtual Volumes™ architecture
- Configure VMware vSphere® Storage DRS™ and VMware vSphere® Storage I/OControl

4 Host and Management Scalability

- Use the vSphere Client to manage vSphere certificates
- Describe identity federation and recognize its use cases
- Configure identity federation to allow vCenter Server to use external identity provider
- Describe the benefits and use cases of vSphere Trust Authority
- Configure vSphere Trust Authority
- Use host profiles to manage ESXi configuration compliance
- Create a local content library and subscribe to a published content library
- Deploy VMs from a content library
- Create and manage resource pools in a cluster
- Describe how scalable shares work

5 CPU Optimization

- Explain the CPU scheduler operation and other features that affect CPU performance
- Explain NUMA and vNUMA support
- Use esxtop to monitor key CPU performance metrics

6 Memory Optimization

- Explain ballooning, memory compression, transparent page sharing, and host-swapping techniques for memory reclamation when memory is overcommitted
- Use esxtop to monitor key memory performance metrics

7 Storage Optimization

- Describe storage queue types and other factors that affect storage performance
- Discuss vSphere support for NVMe and iSER technologies
- Use esxtop to monitor key storage performance metrics

8 Network Optimization

- Explain performance features of network adapters
- Explain the performance features of vSphere networking
- Use esxtop to monitor key network performance metrics

9 vCenter Server Performance Optimization

- Describe the factors that influence vCenter Server performance
 - Use VMware vCenter® Server Appliance™ tools to monitor resource use
- Supplemental Content

Appendix A: vSphere Auto Deploy

- Explain the purpose of VMware vSphere® ESXi™ Image Builder CLI
- Explain the purpose of VMware vSphere® Auto Deploy™
- Describe how an auto deployed ESXi host boots
- Configure a vSphere Auto Deploy environment

Appendix B: vSphere Security

- Configure ESXi Host Access and Authentication
- Recognize strategies for securing vSphere components, such as vCenter Server, ESXi hosts, and virtual machines
- Describe vSphere support for security standards and protocols
- Describe virtual machine security features
- Describe the components of a VM encryption architecture
- Create, manage, and migrate encrypted VMs
- Encrypt core dumps
- List VM encryption events and alarms

Enroll today to get below benefits:

1. 40 Hrs of blended learning
2. Delivered by VMware Certified Instructor (VCI)
3. Exam voucher (Re-take/ 2 attempts to clear exam)
4. 30 Hrs of VMware Lab access
5. Authorized e-Books
6. Access to VMware premium portal

Thank You