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TRAINING CENTER

VMware vSphere: What's New [V6.7 to V7]

Code:	EDU-VSWN7
Length:	3 days
URL:	[View Online](#)

In this three-day, hands-on training course, you explore the new features and enhancements in VMware vCenter Server® 7 and VMware ESXi™ 7. Real-world use-case deployment scenarios, hands-on lab exercises, and lectures teach you the skills that you need to effectively implement and configure VMware vSphere® 7.

- This course is recommended for customers who want to deploy vSphere 7 in their existing vSphere environment.

Skills Gained

By the end of the course, you should be able to meet the following objectives:

- List and describe the importance of key features and enhancements in vSphere 6.7 update releases and Sphere 7

- Determine the proper upgrade path for a vCenter Server instance and upgrade VMware vCenter® Server Appliance™ to version 7

- Migrate a Windows vCenter Server system to vCenter Server Appliance 7

- Manage and update VM templates located in content libraries

- Use Identity Federation to configure vCenter Server to use Microsoft ADFS

- Use the VMware vSphere® Client™ to manage certificates

- Describe vCenter Server, VMware ESXi™, storage, network, virtual machine, and security enhancements in vSphere 7

- Use VMware vSphere® Trust Authority™ to secure the infrastructure for encrypted VMs

- Demonstrate the Quickstart feature of the ESXi cluster

- Recognize improvements to VMware vSphere® Distributed Resource Scheduler™

- Use vSphere Lifecycle Manager to manage vSphere deployments, updates, and configurations

- Discuss the purpose and capabilities of VMware vSphere® with Kubernetes and how it fits into the VMware Tanzu™ portfolio

Who Can Benefit

System architects, system administrators, IT managers, VMware partners, and individuals responsible for implementing and managing vSphere architectures.

Prerequisites

This course requires completion of one the following courses or equivalent knowledge and administration experience with ESXi and vCenter Server: VMware vSphere: Install, Configure, Manage, VMware vSphere: Optimize and Scale, VMware vSphere: Fast Track, or VMware vSphere: Troubleshooting. The course material presumes that you can perform the following tasks with no assistance or guidance before enrolling in this course:

- Install and configure ESXi

- Install vCenter Server

- Create vCenter Server objects, such as data centers and folders

- Create and manage vCenter Server roles and permissions

- Create and modify a standard switch

- Create and modify a distributed switch

- Connect an ESXi host to NAS, iSCSI, or Fibre Channel storage

- Create a VMFS datastore

- Use a content library template to create a virtual machine

- Modify a virtual machine's hardware

- Migrate a virtual machine with VMware vSphere® vMotion® and VMware vSphere® Storage vMotion®

- Configure and manage a vSphere DRS cluster

- Configure and manage a VMware vSphere® High Availability cluster

- Use VMware vSphere® Update Manager™ to apply patches and perform upgrades to ESXi hosts and VMs

- If you cannot complete these tasks, VMware recommends that you instead take the VMware vSphere: Install, Configure, Manage [V7] course.

Course Details

Product Alignment

- ESXi 7
- vCenter Server 7

Outline
Course Introduction

- Introductions and course logistics
- Course objectives

Installation and Upgrade

- Describe the new vCenter Server Appliance deployment model
- Upgrade a vCenter Server Appliance instance to vCenter Server Appliance 7
- Migrate a Windows vCenter Server instance to vCenter Server Appliance 7
- Describe the enhancements to vCenter Server Appliance

Management Enhancements

- Identify the scaling and performance improvements for vCenter Server Appliance

- Describe the support provided for dynamic DNS

- Recognize how to change the IP address or FQDN of vCenter Server

- Describe prefix-based MAC address allocation

- Perform a VM template in-place update in Content Library

- Describe identity federation and recognize its use cases

- Configure identity federation

- Manage certificates using the vSphere Client

- Identify VMware NSX-T™ logical switches and their properties in the vSphere Client

- Explain the benefits of using VMware Skyline™ to proactively monitor your environment

ESXi Enhancements

- Upgrade an ESXi host to version 7

- List the enhancements introduced with ESXi 7

- Describe new device support for ESXi hosts

- Describe support for Precision Time Protocol

VM Enhancements

- Discuss the new functionality, virtual devices, and VM maximums supported by VM compatibility version 17

- Describe the enhancements to guest customization

- Perform a vSphere vMotion migration of VMs with remote devices

Storage Enhancements

- Describe the enhancements to NVMe support

- Describe the enhancements to VMware Pluggable Storage Architecture

- Describe the purpose of the High-Performance Plug-in

- Describe the support for iSER

- Recognize the changes made to the ESXi system storage layout

- Describe the support for CAB deployment of WSFC in vSphere 6.7 and later

- List the enhancements made to vSAN

Security Enhancements

- Describe the enhancements to the VM encryption feature

- Describe the enhancements to cloning, migration, and encryption operations

- Describe the benefits and use cases of vSphere Trust Authority

- Configure vSphere Trust Authority

Cluster Enhancements

- Demonstrate the Quickstart feature of the ESXi cluster

- Recognize improvements to vSphere DRS

- Describe use cases for scalable shares

vSphere Lifecycle Management

- Use vCenter Server Update Planner to run vCenter Server upgrade prechecks

- Compare vSphere Lifecycle Manager to vSphere Update Manager

- Manage and update ESXi hosts using vSphere Lifecycle Manager

Introduction to vSphere with Kubernetes

- Differentiate between containers and virtual machines

- Identify the parts of a container system

- Recognize the basic architecture of Kubernetes

- Describe a basic Kubernetes workflow

- Describe the purpose of vSphere with Kubernetes and how it fits into the VMware Tanzu portfolio

- Explain the vSphere with Kubernetes supervisor cluster

- Describe the Tanzu Kubernetes grid service