VMware vSphere v8 – What's New

Description

In this two-day course, you explore the new features and enhancements following VMware vCenter Server 8.0 and VMware ESXi 8.0. Real-world use-case scenarios, hands-on lab exercises, and lectures teach you the skills that you need to effectively implement and configure VMware vSphere 8.0.

Course Content

Module 1: Course Introduction

- Introductions and course logistics
- · Course objectives

Module 2: Artificial Intelligence and Machine Learning

- Describe how device groups support AI and ML in vSphere 8
- Describe how device virtualization extensions support AI and ML in vSphere 8

Module 3: vSphere Distributed Services Engine

- Describe the benefits of Distributed Services Engine
- Explain how Distributed Services Engine works
- · Recognize use cases for Distributed Services Engine
- Install ESXi on a host equipped with a DPU
- View DPU information in vSphere Client
- Add an ESXi host equipped with a DPU to a cluster
- Update an ESXi host equipped with a DPU using vSphere Lifecycle Manager
- Create a vSphere Distributed Switch for network offloads
- Add a host with a DPU to the vSphere Distributed Switch
- Configure a VM to use Uniform Passthrough Mode

Module 4: vSphere and vCenter Management

- Review the improvements to the communication between vCenter and ESXi hosts
- Review the enhancements to the vCenter recovery process

Module 5: ESXi Enhancements

- Describe the function of the central configuration store in ESXi
- Explain how ConfigStore affects your interaction with ESXi configuration files
- Recognize the supported system storage partition configuration on ESXi 8.0
- Identify devices supported for system storage on ESXi 8.0
- Configure an RDMA host local device on ESXi

Module 6: vSphere Storage

- Describe the vSAN Express Storage Architecture
- Recognize the benefits of using vSAN Express Storage Architecture
- Describe the benefits of using NVMe

Recognize the support for NVMe devices in vSphere

Module 7: Guest OS and Workloads

- Review the enhancements of the latest virtual hardware versions
- Describe the features introduced with virtual hardware version 20
- Create a snapshot of a VM with an NVDIMM device

Module 8: Resource Management

- View energy and carbon emission metrics in vRealize Operations Manager
- Describe the VMware vSphere Memory Monitoring and Remediation (vMMR) functionality
- Describe how vMMR enhances the performance of vSphere DRS

Module 9: Security and Compliance

- Describe how to handle vTPM secrets when cloning a VM
- Manage OVF templates for VMs that are configured with vTPM
- Deploy an OVF template with vTPM
- Describe the enhancements to trusted binary enforcement in ESXi
- Describe ESXi 8 enhanced security features

Module 10: vSphere Lifecycle Manager

- Describe the enhancements to life cycle management of standalone ESXi hosts
- Manage the configuration profiles of ESXi hosts in a cluster with vSphere Lifecycle Manager
- Use Auto Deploy to boot a host with the desired image and configuration specifications
- Upgrade multiple ESXi hosts in a cluster in parallel
- Stage an ESXi host image prior to remediation

Module 11: Auto Deploy

Manage custom host certificates using Auto Deploy

Module 12: vSphere with Tanzu

Describe the features of the Tanzu Kubernetes Grid 2.0 offering

Module 13: Announcing vSphere+

Describe the functionality and benefits of vSphere+

Lab / Exercises

Official VMware Labs

Documentation

Official VMware digital courseware

Participant profiles

- System architects
- System administrators
- IT managers

Prerequisites

- Experience in administration with ESXi and vCenter Server
- Completion of one of the following courses, or equivalent knowledge: "VMware vSphere: Install, Configure, Manage", "VMware vSphere: Optimize and Scale", "VMware vSphere: Fast Track" or "VMware vSphere: Troubleshooting"
- Experience with working at the command line is helpful

Objectives

- Recognize the importance of key features and enhancements in vSphere 8.0
- Describe vCenter Server, VMware ESXi, storage, virtual machine, and security enhancements in vSphere 8.0
- Describe the purpose of vSphere Distributed Services Engine
- Update an ESXi host equipped with a Data Processing Unit (DPU) using vSphere Lifecycle Manager
- Identify devices supported for system storage on ESXi 8.0
- Recognize enhancements to VM hardware compatibility settings
- VMware vSphere Memory Monitoring and Remediation and the improvements to vSphere DRS
- Recognize the new Virtual Non-Uniform Memory Access (vNUMA) topology settings of a VM in vSphere Client
- Use vSphere Lifecycle Manager and Auto Deploy to manage the configuration specifications for the hosts in a cluster
- Recognize the vSphere Lifecycle Manager and Auto Deploy enhancements in vSphere 8.0
- Recognize the cloud benefits that VMware vSphere+ brings to on-premises workloads
- Recognize technology that is discontinued or deprecated in vSphere 8.0

Niveau

Fondamental

Classroom Registration Price (CHF)

1950

Virtual Classroom Registration Price (CHF)

1950

Duration (in Days)

2

Reference

VMW-VSPHWN