

## VMware vSphere: What's New

**Duration: 2 Days**    **Course Code: VMWN**    **Version: 8.0**

### Overview:

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.

#### Product Alignment

- VMware ESXi 8.0
- VMware vCenter Server 8.0

### Target Audience:

System architects, system administrators, IT managers, VMware partners, and individuals responsible for implementing and managing vSphere architectures who want to deploy vSphere 8.0 into their existing vSphere environment.

### Objectives:

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

### Prerequisites:

This course requires completion of one of the following courses, or equivalent knowledge, plus administration experience with ESXi and vCenter Server:

- VMware vSphere: Install, Configure, Manage
  - VMware vSphere: Optimize and Scale
  - VMware vSphere: Fast Track
  - VMware vSphere: Troubleshooting
  - Experience with working at the command line is helpful.
- 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 VMware vSphere VMFS datastore
- Use a content library template to create a virtual machine
- Modify a virtual machines hardware
- Migrate a virtual machine with VMware vSphere vMotion and VMware vSphere Storage vMotion
- Configure and manage a VMware vSphere Distributed Resource Scheduler cluster
- Configure and manage a VMware vSphere High Availability cluster
- Use VMware vSphere Lifecycle Manager to 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 [V8] course.

- VSICM - VMware vSphere: Install, Configure, Manage [V7.0]
- VSOS - VMware vSphere: Optimize & Scale [V7.0]
- VSFT - VMware vSphere Fast Track Program [V7.0]
- VST - VMware vSphere: Troubleshooting [V7.0]

## Content:

### 1 Course Introduction

- Introductions and course logistics
- Course objectives

### 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

### 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

### 4 vSphere and vCenter Management

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

### 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

### 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

### 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

### 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

### 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

### 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

### 11 Auto Deploy

- Manage custom host certificates using Auto Deploy

### 12 vSphere with Tanzu

- Describe the features of the Tanzu Kubernetes Grid 2.0 offering

### 13 Announcing vSphere+

- Describe the functionality and benefits of vSphere+

## Further Information:

For More information, or to book your course, please call us on 00 20 (0) 2 2269 1982 or 16142

[training@globalknowledge.com.eg](mailto:training@globalknowledge.com.eg)

[www.globalknowledge.com/en-eg/](http://www.globalknowledge.com/en-eg/)

Global Knowledge, 16 Moustafa Refaat St. Block 1137, Sheraton Buildings, Heliopolis, Cairo