VMware vSphere: What’s New [V8]

VMWare

Com certificação

- **Nível:** Entrada
- **Duração:** 24h

Sobre o curso

In the VMware vSphere: What’s New hands-on training course, you will explore the new features and enhancements in VMware vCenter® 8.0, VMware ESXi™ 8.0, and VMware vSphere® 8.0. Through use-case scenarios, demonstrations, labs, and simulations, you develop skills to implement and configure vSphere 8.0.

Destinatários

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

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Objetivos

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 the purpose of VMware vSphere® Distributed Services Engine™
- Use VMware vSphere® Lifecycle Manager™ to update an ESXi host that has a data processing unit (DPU)
- Identify devices supported for system storage on ESXi 8.0
- Recognize enhancements to VM hardware compatibility settings
- Recognize changes related to vSphere Memory Monitoring and Remediation that improve VMware vSphere® Distributed Resource Scheduler™

- Describe the new virtual non-uniform memory access (vNUMA) topology settings in the VMware vSphere® Client™
- Use vSphere Lifecycle Manager and VMware vSphere® Auto Deploy™ to manage configuration specifications for hosts in a cluster
- Recognize vSphere Lifecycle Manager and Auto Deploy enhancements in vSphere 8.0
- Describe new cluster management features in Tanzu Kubernetes Grid 2.0
- Recognize the cloud benefits that VMware vSphere+ brings to on-premises workloads
- Identify discontinued or deprecated features and technology in vSphere 8.0

Pré-requisitos

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
- 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 VMware vSphere® 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 VMware vSphere® Distributed Resource Scheduler™ cluster
- Configure and manage a VMware vSphere® High Availability cluster
- Use VMware vSphere® Update ManagerTM to apply patches and perform upgrades to ESXi hosts and VMs

If you cannot complete these tasks, it is recommended that you instead take the VMware vSphere: Install, Configure, Manage [V8] course.

Programa

- Course Introduction
- Artificial Intelligence and Machine Learning
- vSphere Distributed Services Engine
- vSphere and vCenter Management
- ESXi Enhancements
- vSphere Storage
- Guest OS and Workloads
- Resource Management
- Security and Compliance
- vSphere Lifecycle Manager
- Auto Deploy
- vSphere with Tanzu
- Announcing vSphere+

Course Introduction

- Introductions and course logistics
- Course objectives

Artificial Intelligence and Machine Learning

- Describe how device groups support AI and ML in vSphere 8.0
- Describe how device virtualization extensions support AI and ML in vSphere 8.0

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 the vSphere Client
- Add an ESXi host equipped with a DPU to a cluster
- Use vSphere Lifecycle Manager to update an ESXi host that contains a DPU
- 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

vSphere and vCenter Management

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

ESXi Enhancements

- Describe the function of the central configuration store in ESXi
- Explain how ConfigStore affects 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 8.0

vSphere Storage

- Describe the VMware 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 8.0

Guest OS and Workloads

- Review the enhancements of the latest virtual hardware versions
- Describe the features introduced with virtual hardware version 20
- Identify the snapshot modes of NVDIMM devices

Resource Management

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

Security and Compliance

- Describe how to manage vTPM secrets when cloning a VM
- Manage OVF templates for VMs configured with vTPM
- Deploy an OVF template with vTPM
- Describe the enhancements to trusted binary enforcement in ESXi
- Describe ESXi 8.0 enhanced security features

vSphere Lifecycle Manager

- Describe the enhancements to life cycle management of standalone ESXi hosts
- Manage the configuration profiles of ESXi hosts in a cluster
- 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 before remediation

Auto Deploy

- Manage custom host certificates using Auto Deploy

vSphere with Tanzu

- Describe the features of VMware Tanzu® Kubernetes Grid™ 2.0

Announcing vSphere+

- Describe the functionality and benefits of vSphere+