

## **VMware vSphere: What's New [V8]**

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

### **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 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

### **4 vSphere and vCenter Management**

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

## **5 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

## **6 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

## **7 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

## **8 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

## **9 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

## **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
- 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

## **11 Auto Deploy**

- Manage custom host certificates using Auto Deploy

## **12 vSphere with Tanzu**

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

## **13 Announcing vSphere+**

- Describe the functionality and benefits of vSphere+