



## VMware vSAN: Deploy and Manage [V6.6]

### *Outline for this course:*

#### **1. Course Introduction**

- Introductions and course logistics
- Course objectives
- Describe the software-defined data center

#### **2. Storage Fundamentals**

- Define common storage technologies
- Identify characteristics of storage devices: magnetic and flash-based devices
- Identify and explain various types of storage architectures
- Identify SAN performance factors

#### **3. Introduction to vSAN**

- Describe the vSAN architecture and components
- Describe the differences between the vSAN hybrid and all-flash architectures
- Describe the space-efficiency features of vSAN

#### **4. vSAN Configuration**

- Identify physical network configuration requirements
- Configure vSAN networking
- Configure a vSAN cluster
- Test and validate the vSAN configuration and functionality

#### **5. vSAN Policies and Virtual Machines**

- Explain how storage policies work with vSAN
- Define and create a virtual machine storage policy
- Apply and modify virtual machine storage policies
- Discuss the vsanSparse snapshot format
- Explain the considerations for vsanSparse snapshots

#### **6. Managing and Operating vSAN**

- Manage hardware storage devices
- Manage hardware device failures
- Identify vCenter Server alarms for vSAN events
- Configure fault domains
- Upgrade to vSAN 6.6

#### **7. Stretched Clusters and Two-Node Clusters**

- Describe the architecture for stretched clusters and two-node clusters
- Create a stretched cluster using a two-node configuration
- Configure VMware vSphere® High Availability and VMware vSphere® Distributed Resource Scheduler™ for a stretched cluster

- Demonstrate stretched cluster failover scenarios

#### **8. Monitoring and Troubleshooting vSAN**

- Use vSphere Web Client to detect issues
- Use the vSAN health service to monitor health and performance
- Monitor vSAN with VMware vRealize® Operations Manager™
- Use ESXi commands to monitor the vSAN environment
- Monitor vSAN with Ruby vSphere Console and vSAN Observer

#### **9. Interoperability with vSphere Features**

- Identify vSphere features and VMware products that interoperate with vSAN
- Describe how vSAN interoperates with third-party products and solutions

#### **10. Designing a vSAN Deployment**

- Understand vSAN design considerations
- Plan and design vSAN clusters
- Identify the design and sizing tools for vSAN
- Describe vSAN use cases

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