COURSE OVERVIEW – VMWARE VSAN: DEPLOY AND MANAGE 6.7

In this three-day course, you focus on deploying and managing a software-defined storage solution with VMware vSANTM 6.7. You learn how vSAN functions as an important component in the VMware software- defined data center. You gain practical experience with vSAN concepts through the completion of hands- on lab exercises.

COURSE OBJECTIVES

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

- Describe the vSAN architecture
- Identify vSAN features and use cases
- Configure vSAN networking components
- Configure a vSAN cluster
- Deploy virtual machines on a vSAN datastore
- Configure virtual machine storage policies
- Perform ongoing vSAN management tasks
- Configure vSAN encryption
- Control vSAN resynchronization tasks
- Create and manage nested fault domains
- Use the vSAN health service to monitor health and performance
- Configure a stretched cluster and observe failover scenarios
- Describe vSAN interoperability with VMware vSphere® features and other products • Plan and design a vSAN cluster

TARGET AUDIENCE

Storage and virtual infrastructure administrators who want to use software-defined storage with vSAN

PREREQUISITES

This course requires meeting one of the following prerequisites:

- Storage administration experience on block or file storage devices
- Understanding of concepts presented in the VMware vSphere: Install, Configure, Manage [V6.x] course Experience working at the command line is helpful.

The course material presumes that a student can perform the following tasks with no assistance or guidance before enrolling in this course:

- Use VMware vSphere® Client™
- Create and manage VMware vCenter Server® objects, such as data centers, clusters, hosts, and virtual machines
- Create and modify a standard switch
- Create and modify a distributed switch
- Connect a VMware ESXiTM host to NAS, iSCSI, or Fibre Channel storage • Create a VMware vSphere® VMFS datastore
- Use a wizard or a template to create a virtual machine
- Migrate a virtual machine with VMware vSphere® vMotion®
- Migrate a virtual machine with VMware vSphere® Storage vMotion®

If you cannot complete all of these tasks, VMware recommends that you complete the VMware vSphere: Install, Configure, Manage [V6.7] course before enrolling in VMware vSAN: Deploy and Manage.

COURSE DELIVERY OPTIONS

- Classroom
- Live Online
- Onsite
- On Demand

PRODUCT ALIGNMENT

- ESXi 6.7
- vCenter Server 6.7
- vSAN 6.7

Course Modules

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

2 Introduction to vSAN

• Describe basic vSAN architecture and components
• Describe the differences between file, block, and object storage
• Explain the advantages of object-based storage
• Detail the configuration of a vSAN cluster
• Install and validate the initial vSAN installation and configuration

3 vSAN Configuration

• Apply vSAN design considerations
• Detail the expansion of a vSAN cluster • Configure vSAN disk groups manually • Identify physical network configuration requirements
• Describe the configuration of vSAN networking • Test and validate the vSAN configuration and functionality
• Describe the vSAN architecture and components
• Describe the differences between the vSAN hybrid and all-flash architectures
• Describe the advantages of all-flash architecture • Describe the space-efficiency features of vSAN • Describe the different vSAN assessment tools
• Explain vSAN License Details

4 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
• Change virtual machine storage policies dynamically
• Identify virtual machine storage policy compliance status

5 Managing and Operating vSAN

• Explain how to configure encryption in the vSAN cluster
• Explain the management of hardware storage devices
• Identify alarms for vSAN events
• Describe and configure fault domains
• Describe the configuration of the vSAN iSCSI service, iSCSI targets, and LUNS

6 Stretched Clusters and Two-Node Clusters

• Describe the architecture for stretched clusters and two-node clusters
• Create a stretched cluster
• Describe how stretched cluster storage policies affect vSAN objects
• Create and apply a vSAN stretched cluster policy to meet specific needs
• Discuss the behavior of a stretched cluster when various types of failures occur

7 Monitoring and Troubleshooting vSAN

• Discuss hardware failure scenarios
• Describe the process of resynchronization
• Explain the possible reasons for resynchronization
• Describe the use of vSphere Client to detect issues
• Explain the use of the health service to monitor vSAN health
• Explain the use of the performance service to monitor vSAN performance.
• Monitor and test the vSAN environment
• Describe vSAN architecture components and the PNOMA OSI model.

Contact If you have questions or need help registering for this course, click here