

## **Enterprise Computing Solutions - Education Services**

# **TRAINING OFFERING**

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

CODE: LENGTH: PRICE:

VM-VSAN-DM-V6.6 24 Hours (3 days) \$2,550.00

## **Description**

In this three-day course, you will focus on deploying and managing a software-defined storage solution with VMware vSAN™ 6.6. You will learn how vSAN functions as an important component in the VMware software-defined data center. You will gain practical experience with vSAN concepts through the completion of hands-on lab exercises.

## **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
- Outline the tasks for upgrading to vSAN 6.6
- · 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

## **Audience**

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

## **Prerequisites**

This course requires completion of 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 [V6.5] 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® Web Client
- Create and manage VMware vCenter Server® objects, such as data centers, clusters, hosts, and virtual machines

Create and modify a standard switch

- Connect a VMware ESXi™ 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 [V6.5] course before enrolling in VMware vSAN: Deploy and Manage.

## **Programme**

#### **Storage Fundamentals**

#### **Course Introduction**

- · Introductions and course logistics
- · Course objectives

- · Define common storage technologies
- Identify characteristics of storage devices: magnetic and flash-based devices
- · Identify and explain various types of storage architectures
- Describe the software-defined data center• Identify SAN performance factors

#### 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

## vSAN Configuration

- · Identify physical network configuration requirements
- Configure vSAN networking
- · Configure a vSAN cluster

## 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
- Test and validate the vSAN configuration and functionality• Explain the considerations for vsanSparse snapshots

## 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

#### 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

#### 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

Interoperability with vSphere Features

#### **Designing a vSAN Deployment**

- Understand vSAN design considerations
- Plan and design vSAN clusters
- Identify vSphere features and VMware products that interoperate with vSAN• Identify the design and sizing tools for vSAN
- Describe how vSAN interoperates with third-party products and solutions
  Describe vSAN use cases

## **Session Dates**

On request. Please Contact Us

## **Additional Information**

This training is also available as onsite training. Please contact us to find out more.