

Enterprise Computing Solutions - Education Services

TRAINING OFFERING

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VMware vSAN: Deploy and Manage plus VMware vSAN: Troubleshooting Workshop [V6.6]

CODE: LENGTH: PRICE:

VM-VSAN-DM+VSAN-TSW-V6.6 40 Hours (5 days) \$4.625.00

Description

In this five-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 and troubleshooting methodology and diagnostic tools 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
- · Use diagnostic and troubleshooting tools to resolve vSAN deployment and architectural issues

Audience

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

Programme

2 Storage Fundamentals

1 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

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

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

10 Designing a vSAN Deployment

- Understand vSAN design considerations
- · Plan and design vSAN clusters

9 Interoperability with vSphere Features

- 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

11 vSAN Architecture for Troubleshooting Methodology

- Discuss vSAN architecture as it relates to troubleshooting
- Describe vSAN specific troubleshooting methodology
- Stretched Clusters (2 node clusters)

12 vSAN Troubleshooting Tools

- Use esxcli commands and the Ruby vSphere Console to diagnose and troubleshoot issues
- Use vSphere Web Client and the vSAN Health Monitor to diagnose and troubleshoot issues

Test and Certification

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®

Session Dates

On request. Please Contact Us

Additional Information

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