

# **Enterprise Computing Solutions - Education Services**

# **TRAINING OFFERING**

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# **VMware vSAN: Production Operations [V6.7]**

CODE: LENGTH: PRICE:

VMW\_SANPO67 40 Hours (5 days) £1,290.00

## **Description**

# **Objectives**

By the end of the course, you should be able to meet the following objectives: Describe vSAN host operations

- Discuss vSAN networking requirements Define the tasks involved in hardware replacement in a vSAN cluster
- Perform vSAN cluster scale-out and scale-up operations Describe common vSAN maintenance operations
- Define the tasks required for updating and upgrading vSAN Describe vSAN security operations
- Configure a key management server (KMS) cluster
- Configure vSAN storage policies and observe the effects of a cluster-wide change
- Explain vSAN resilience and availability features Perform ongoing vSAN management tasks
- Use the vSAN health service to monitor health and performance

#### **Audience**

Storage and virtual infrastructure administrators who are responsible for production support and administration of vSAN v6.x

### **Prerequisites**

This course has the following prerequisites:

- Understanding of concepts presented in the VMware vSphere: Install, Configure, Manage [V6.x] course
- Storage administration experience with block or file storage devices

Completion of the VMware vSAN: Deploy and Manage [v6.x] course or equivalent experience with vSAN is desirable.

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

- 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.x] and VMware vSAN: Deploy and Manage [V6.x] courses before enrolling in VMware vSAN: Production Operations.

# **Programme**

- 1 Course Introduction Introductions and course logistics Course objectives 2 vSAN Host and Hardware Operations
- Recognize the importance of hardware compatibility Ensure the compatibility of driver and firmware versioning
- Use tools to automate driver validation and installation Apply host hardware settings for optimum performance
- Recognize the benefits of using VMware vSphere® Distributed Switch™
- Compare the benefits of NIC teaming and Link Aggregation Control Protocol (LACP)
- Plan appropriately for networking configuration changes Identify ESXCLI commands and namespace options
- Recognize how to use ESXCLI commands for troubleshooting vSAN software and hardware issues
- Use Ruby vSphere Console (RVC) to get detailed information about the vSAN environment 3 vSAN Data Availability Operations
- Describe vSAN storage policies Recognize the impact of a vSAN storage policy change
- Describe and configure the Object Repair Timer advanced option Plan disk replacement in a vSAN cluster
- Plan maintenance tasks to avoid vSAN object failures Recognize the importance of backing up data in vSAN
- Describe the VMware vSphere® Storage APIs Data Protection framework
- Recognize the importance of managing snapshot utilization in a vSAN cluster 4 vSAN Cluster Maintenance
- Perform typical vSAN maintenance operations Describe vSAN maintenance modes and data evacuation options
- Assess the impact on cluster objects of entering maintenance mode

- Determine the specific data actions required after exiting maintenance mode
- Define the steps to shut down and reboot hosts and vSAN clusters Migrate vSAN to a new vCenter Server instance
- Use best practices for boot devices Upgrade and update vSAN
- Replace vSAN hardware by using scale-in and scale-out strategies 5 vSAN Security Operations
- Identify differences between VM encryption and vSAN encryption
- Recognize how to perform ongoing operations to maintain data security
- · Identify steps in adding an existing encrypted vSAN cluster to a new vCenter Server instance 6 vSAN Monitoring and Performance
- Describe how the Customer Experience Improvement Program (CEIP) enables VMware to improve products and services
- Identify the vSAN tools and health checks available for monitoring vSAN health
- · Manage alerts, alarms, and notifications related to vSAN in vSphere Client
- Create and configure custom alarms to trigger vSAN health issues
- Describe the vSAN tools and services that monitor vSAN performance
- · Use performance views to access metrics for monitoring vSAN clusters, hosts, and virtual machines
- Explain how the writing of data generates I/O traffic and affects vSAN performance
- Use performance metrics to analyze the vSAN environment

#### **Session Dates**

On request. Please Contact Us

#### Additional Information

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