Course Overview

VMware Virtual SAN: Deploy and Manage focuses on preparing you to deploy and manage software-defined storage with VMware Virtual SAN™ 6. This course explores how Virtual SAN is used as an important component in the VMware software-defined data center. You gain practical experience through the completion of hands-on labs. The course is based on VMware ESXi™ 6, VMware vCenter Server™ 6, and Virtual SAN 6.

Course Objectives

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

- Outline the tasks for upgrading from Virtual SAN 5.5 to Virtual SAN 6
- Identify Virtual SAN features
- Configure Virtual SAN networking components
- Plan, design, and configure a Virtual SAN cluster
- Identify the benefits of storage policies
- Configure virtual machine storage policies
- Deploy virtual machines on a Virtual SAN datastore
- Identify SAN performance factors
- Identify storage architectures
- Describe the Virtual SAN architecture
- Identify Virtual SAN use cases
- Perform ongoing Virtual SAN management tasks
- Use the Ruby vSphere Console
- Use Virtual SAN Observer to monitor Virtual SAN

More Information

Courses are conveniently scheduled around the world. Go to www.vmware.com/education to find the class that is right for you.

Delivery Methods
- Instructor-led training
- Live online
- Onsite training

Course Duration
- Three days of instructor-led classroom training
- 55% lecture, 45% hands-on lab

Target Audience
Storage and virtual infrastructure administrators who want to use software-defined storage with Virtual SAN

Course Suitability
☑ Administrator
☑ Engineer
☐ Architect
☑ Professional
☐ Fundamentals

Prerequisites
- Storage administration experience on block or file storage devices
- Understanding of concepts presented in the VMware vSphere: Install, Configure, Manage course

Certifications
For more information, go to http://www.vmware.com/certification.

Pricing
Contact your VMware representative or a VMware Authorized Training Center™ for pricing information.
## Course Modules

### 1. Course Introduction
- Introduction and course logistics
- Course objectives
- Course outline
- Describe software-defined data center concepts
- Identify the benefits of the software-defined data center
- Discuss VMware vSphere® storage virtualization

### 2. Storage Fundamentals
- Define common storage terminologies
- Identify common SAN architectures
- Identify characteristics of storage devices: magnetic and flash-based devices
- Identify and explain the differences between file, block, and object-oriented storage architectures
- Identify SAN performance factors
- Compare and contrast local, centralized, and distributed storage architectures

### 3. Introduction to Virtual SAN
- Introduction to Virtual SAN
- Describe the differences between Virtual SAN hybrid and all-flash architectures
- Describe Virtual SAN details
- Identify the options for building a Virtual SAN cluster
- Describe the Health Services Plug-In and its functions
- Identify Virtual SAN limits

### 4. Virtual SAN Configuration
- Identify physical network configuration requirements
- Configure the Virtual SAN virtual network
- Configure a Virtual SAN cluster
- Install the Health Services Plug-In
- Test and validate Virtual SAN configuration and functionality

### 5. Virtual SAN Policies and Virtual Machines
- Explain how storage policies work with Virtual SAN
- Calculate storage requirements during a VM storage policy definition
- Define the purpose of VM storage policies and their attributes
- Define and create a VM storage policy
- Apply and modify VM storage policies
- Change VM storage policies dynamically
- Identify the compliance status of VM storage policies

### 6. Managing and Operating Virtual SAN
- Manage hardware storage devices
- Manage hardware device failures
- Identify and configure Virtual SAN alarms in vCenter Server
- Describe and configure fault domains
- Describe the upgrade procedure from Virtual SAN 5.5 to Virtual SAN 6

### 7. Interoperability with vSphere Features
- Identify vSphere features and VMware products that interoperate with Virtual SAN
- Describe how Virtual SAN integrates with enterprise features
- Describe how Virtual SAN integrates with third-party products and solutions

### 8. Monitoring and Troubleshooting Virtual SAN
- Identify tools to troubleshoot Virtual SAN
- Introduction to the Health Services Plug-In
- Monitor and troubleshoot Virtual SAN
- Troubleshoot Virtual SAN upgrades

### 9. Designing a Virtual SAN Deployment
- Virtual SAN design overview
- Plan and design Virtual SAN clusters
- Virtual SAN hybrid and all-flash design considerations
- Virtual SAN use case design considerations
- Identify design and sizing tools for Virtual SAN