VMWARE VSAN: PLAN AND DEPLOY [V7]

Course Code: 821435

Learn skills, and tools to plan and deploy a VMware vSAN cluster.

This two-day, hands-on training course provides you with the knowledge, skills, and tools to plan and deploy a VMware vSAN cluster. In this course, you are taught the many considerations that the vSAN configuration has on the initial planning of the vSAN datastore. You also manually configure a vSAN cluster.

What You'll Learn

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

- Explain the key features and use cases for vSAN
- Detail the underlying vSAN architecture and components
- Describe the different vSAN deployment options
- Detail vSAN cluster requirements and considerations
- Apply recommended vSAN design considerations and capacity sizing practices
- Explain the influence of vSAN objects and components on the initial cluster plan
- Determine and plan for storage consumption by data growth and failure tolerance
- Design vSAN hosts for operational needs
- Explain Maintenance Mode use and its impacts on vSAN
- Apply best practices for vSAN network configurations
- Manually configure a vSAN cluster using VMware vSphere Client
- Explain and configure vSAN fault domains
- Understand and apply vSAN storage policies
- Define encryption in the vSAN cluster
- Describe the architecture and use cases for stretched clusters
- Configure a stretched cluster
- Understand the steps involved in creating the vSAN iSCSI target services

Who Needs to Attend

Experienced VMware vSphere administrators.

Prerequisites

- Understanding of concepts presented in the VMware vSphere: Install, Configure, Manage course
- Knowledge of basic storage concepts

- Experience using vSphere Client to perform administrative tasks on vSphere clusters

VMWARE VSAN: PLAN AND DEPLOY [V7]

Course Code: 821435

VIRTUAL CLASSROOM LIVE	$2,210 CAD	2 Day

Virtual Classroom Live Outline

1. **Course Introduction**
   - Introductions and course logistics
   - Course objectives
2. **Introduction to vSAN**
   - Describe vSAN architecture
   - Describe the advantages of object-based storage
   - Describe the difference between All-Flash and Hybrid vSAN architecture
   - Explain the key features and use cases for vSAN
   - Discuss the vSAN integration and compatibility with other VMware technologies
   - Identify vSAN objects and components
   - Describe a vSAN object
   - Describe how objects are split into components
   - Explain the purpose of witness components
   - Explain how vSAN stores large objects
   - View object and component placement on the vSAN datastore
3. **Planning a vSAN Cluster**
   - Identify requirements and planning considerations for vSAN clusters
   - Apply vSAN cluster planning and deployment best practices
   - Determine and plan for storage consumption by data growth and failure tolerance
   - Design vSAN hosts for operational needs
   - Identify vSAN networking features and requirements
   - Describe ways of controlling traffic in a vSAN environment
   - Recognize best practices for vSAN network configurations
4. **Deploying a vSAN Cluster**
   - Deploy and configure a vSAN cluster using the Cluster QuickStart wizard
   - Manually configure a vSAN cluster using vSphere Client
   - Explain and configure vSAN fault domains

- Using VMware vSphere High Availability with vSAN
- Understand vSAN cluster maintenance capabilities
- Describe the difference between implicit and explicit fault domains
- Create explicit fault domains

5. **vSAN Storage Policies**
- Explain how storage policies work with vSAN
- Explain the role of storage policies in planning a vSAN cluster
- Define and create virtual machine storage policies
- Apply and modify virtual machine storage policies
- Change virtual machine storage policies dynamically
- Identify virtual machine storage policy compliance status

6. **Introduction to Advanced vSAN Configurations**
- Define and configure compression and deduplication in the vSAN cluster
- Define and configure encryption in the vSAN cluster
- Understand the remote vSAN datastore topology
- Identify the operations involved in managing the remote vSAN datastore
- Configure the vSAN iSCSI target service

7. **vSAN Stretched and Two-Node Clusters**
- Describe the architecture and use cases for stretched clusters
- Detail the deployment and replacement of a vSAN witness node
- Describe the architecture and use cases for twonode clusters
- Explain the benefits of vSphere HA and VMware Site Recovery Manager in a vSAN stretched cluster
- Explain storage policies for vSAN stretched cluster

VMWARE VSAN: PLAN AND DEPLOY [V7]

Course Code: 821435

PRIVATE GROUP TRAINING	2 Day

Visit us at www.globalknowledge.com or call us at 1-866-716-6688.