

VMware vSAN: Install, Configure, Manage V8

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In diesem fünftägigen Kurs erwerben Sie das Wissen, die Fähigkeiten und die Tools zur Planung und Bereitstellung eines VMware vSAN™-Clusters. Sie lernen, wie Sie vSAN verwalten und betreiben. Der Schwerpunkt dieses Kurses liegt auf dem Aufbau der erforderlichen Fähigkeiten für gängige Day-2-vSAN-Administrationsaufgaben. Zu den Aufgaben eines Administrators gehören die Verwaltung von vSAN-Knoten, die Wartung von Clustern, Sicherheitsoperationen, Fehlerbehebung und erweiterte vSAN-Cluster-Operationen. Sie erwerben die Kursfähigkeiten durch die Teilnahme an von Ausbildern geleiteten Aktivitäten und praktischen Laborübungen.

Kursinhalt

- Course Introduction
- Introduction to vSAN
- Planning a vSAN Cluster
- Deploying a vSAN Cluster
- vSAN Storage Policies
- vSAN Resilience and Data Availability
- Configuring vSAN Storage Space Efficiency
- vSAN Security Operations
- Introduction to Advanced vSAN Configurations
- vSAN Cluster Maintenance
- vSAN Stretched and Two Node Clusters
- vSAN Cluster Monitoring

E-Book Sie erhalten englischsprachige Unterlagen von VMware als E-Book.

Zielgruppe

Storage and virtual infrastructure consultants, solution architects, and administrators who are responsible for production support and administration of VMware vSAN.

Voraussetzungen

Gleichwertige Kenntnisse oder der Abschluss des folgenden Kurses sind erforderlich:

- VMware vSphere: Install, Configure, Manage

Dieser Kurs im Web



Alle tagesaktuellen Informationen und Möglichkeiten zur Bestellung finden Sie unter dem folgenden Link: www.experteach.ch/go/VSIC

Vormerkung

Sie können auf unserer Website einen Platz kostenlos und unverbindlich für 7 Tage reservieren. Dies geht auch telefonisch unter 06074 4868-0.

Garantierte Kurstermine

Für Ihre Planungssicherheit bieten wir stets eine große Auswahl garantierter Kurstermine an.

Ihr Kurs maßgeschneidert

Diesen Kurs können wir für Ihr Projekt exakt an Ihre Anforderungen anpassen.

Training		Preise zzgl. MwSt.	
Termine in der Schweiz	4 Tage		
Online Training	4 Tage	CHF 3.075,-	
Termin/Kursort		Kurssprache Englisch	
21.05.-24.05.24	<input type="checkbox"/> Online	18.11.-21.11.24	<input type="checkbox"/> Online
26.08.-29.08.24	<input type="checkbox"/> Online		

Stand 26.04.2024



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VMware vSAN: Install, Configure, Manage V8

1 Course Introduction

- Introductions and course logistics
- Course objectives

2 Introduction to vSAN

- Describe vSAN architecture
- Describe the vSAN software components: CLOM, DOM, LSOM, CMMDS, and RDT
- Identify vSAN objects and components
- 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

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

- 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
- Use vSphere Lifecycle Manager to perform upgrades
- Deploy and configure a vSAN Cluster using the Cluster QuickStart wizard
- Manually configure a vSAN Cluster using VMware 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

- 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
- Explain how storage policies work with vSAN
- Define and create a virtual machine storage policy
- Apply and modify virtual machine storage policies
- Change virtual machine storage policies dynamically
- Identify virtual machine storage policy compliance status

6 vSAN Resilience and Data Availability

- 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 managing snapshot utilization in a vSAN cluster

7 Configuring vSAN Storage Space Efficiency

- Discuss deduplication and compression techniques
- Understand deduplication and compression overhead
- Discuss compression only mode
- Configure erasure coding
- Configure swap object thin provisioning
- Discuss reclaiming storage space with SCSI UNMAP
- Configure TRIM/UNMAP

8 vSAN Security Operations

- Identify differences between VM encryption and vSAN encryption
- Perform ongoing operations to maintain data security
- Describe the workflow of data-in transit encryption
- Identify the steps involved in replacing Key Management Server

9 Introduction to Advanced vSAN Configurations

- Identify requirements to configure vSAN iSCSI target
- Detail VMware HCI Mesh technology and

architecture

- Detail vSAN File Service architecture and configuration
- Explain the use cases of vSAN Direct Configuration

10 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
- Use best practices for boot devices
- Replace vSAN nodes

11 vSAN Stretched and Two Node Clusters

- Describe the architecture and uses case for stretched clusters
- Detail the deployment and replacement of a vSAN witness node
- Describe the architecture and uses case for two-node clusters
- Explain the benefits of vSphere HA and vSphere Site Recovery Manager in a vSAN stretched cluster
- Explain storage policies for vSAN stretched cluster

12 vSAN Cluster Monitoring

- Describe how the Customer Experience Improvement Program (CEIP) enables VMware to improve products and services
- Use VMware Skyline Health for monitoring vSAN cluster health
- Manage alerts, alarms, and notifications related to vSAN in VMware vSphere® Client™
- Create and configure custom alarms to trigger vSAN health issues
- Use IOInsight metrics for monitoring vSAN performance
- Analyse vsantop performance metrics
- Use a vSAN proactive test to detect and diagnose cluster issues

