



**Enterprise Computing Solutions - Education Services**

## **TRAINING OFFERING**

---

**Sie erreichen uns unter**

Arrow ECS GmbH, Elsenheimerstraße 1, 80687 München

Email: [training.ecs.de@arrow.com](mailto:training.ecs.de@arrow.com)

Phone: +49 (0)89 930 99 168

| CODE:       | LÄNGE:            | PREIS:    |
|-------------|-------------------|-----------|
| VMW_VSANFT7 | 40 Hours (5 Tage) | €5,250.00 |

### Description

During this five-day, intensive course, you gain the knowledge, skills, and tools to plan and deploy a VMware vSAN™ cluster. You learn about managing and operating vSAN. This course focuses on building the required skills for common Day-2 vSAN administrator tasks such as vSAN node management, cluster maintenance, security operations, and advanced vSAN cluster operations.

You also focus on learning the tools and skills necessary to troubleshoot vSAN 7 implementations and gain practical experience with vSAN troubleshooting concepts through the completion of instructor-led activities and hands-on lab exercises.

This course is a combination of the following courses: VMware vSAN: Plan and Deploy, VMware vSAN: Management and Operations, and VMware vSAN: Troubleshooting.

### Lernziel

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

- Describe vSAN concepts
- Detail the underlying vSAN architecture and components
- Explain the key features and use cases for vSAN
- Identify requirements and planning considerations for vSAN clusters
- Describe the different vSAN deployment options
- Explain how to configure vSAN fault domains
- Detail how to define and create a VM Storage policy
- Discuss the impact of vSAN storage policy changes
- Describe vSAN storage space efficiency
- Explain how vSAN encryption works
- Identify requirements to configure vSAN iSCSI target
- Detail HCI Mesh technology and architecture
- Detail vSAN file service architecture and configuration
- Explain the use cases of vSAN Direct
- Describe how to setup stretched and two-node vSAN clusters
- Explain the importance vSAN node hardware compatibility
- Describe the use of VMware vSphere® Lifecycle Manager™ to automate driver and firmware installations
- Detail vSAN resilience and data availability
- Discuss the vSAN cluster backup methodology

### Zielgruppe

Storage and virtual infrastructure consultants, solution architects, and administrators who are responsible for production support and administration of VMware vSAN [v7]

### Inhalt

#### 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 Life Cycle Manager to perform upgrades
- • Deploy and configure a vSAN Cluster using Cluster Quickstart wizard
- • Manually configure a vSAN Cluster using vSphere Client
- • Explain and configure vSAN fault domains
- • Using vSphere HA 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

## Kurstermine

Auf Anfrage. Bitte [kontaktieren Sie uns](#)

## Zusätzliche Information

Diese Schulung ist auch als Vor-Ort-Schulung verfügbar. Bitte kontaktieren Sie uns, um mehr zu erfahren.