



## TRAINING OFFERING

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**You can reach us at:**

Arrow ECS, Nidderdale House, Beckwith Knowle, Harrogate, HG3 1SA

Email: [educationteam.ecs.uk@arrow.com](mailto:educationteam.ecs.uk@arrow.com)

Phone: 0870 251 1000

CODE:	LENGTH:	PRICE:
VMW_VSANMO7	24 Hours (3 days)	£1,940.00

## Description

In this three-day course, you learn about managing and operating VMware vSAN™ 7. 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 gain practical experience through the completion of instructor-led activities and hands-on lab exercises.

## Objectives

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

- Define the tasks involved in vSAN node management
- Updating and upgrading vSAN using VMware vSphere Lifecycle Manager™
- Explain vSAN resilience and data availability features • Reconfigure vSAN storage policies and observe the cluster-wide impact
- Perform vSAN cluster scale-out and scale-up operations • Describe common vSAN cluster maintenance operations
- Control vSAN resync operations • Configure vSAN storage efficiency and reclamation features
- Use VMware Skyline™ Health to monitor cluster health, performance, and storage capacity • Describe vSAN security operations
- Configure vSAN Direct for cloud native applications • Configure remote vSAN datastore and vSAN native file services
- Manage two-node cluster and stretched cluster advance operations

## Audience

Storage and Virtual Infrastructure Administrators who are responsible for production support and administration of VMware vSAN 7.

## Prerequisites

- Completion of the following courses is required:**
- VMware vSphere: Install, Configure, Manage or equivalent knowledge
  - VMware vSAN: Plan and Deploy

## Programme

- 1 Course Introduction** • Introductions and course logistics • Course objectives
- 2 vSAN Node Management**
- 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
- 3 vSAN Resilience and 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 managing snapshot utilization in a vSAN cluster • Configure the vSAN fault domains
- 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 • Use best practices for boot devices • Replace vSAN nodes
- 5 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
- 6 vSAN Cluster Performance Monitoring**

- Describe how the Customer Experience Improvement Program (CEIP) enables VMware to improve products and services

- Use vSphere 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 IO Insight metrics for monitoring vSAN performance
- Analyse vsantop performance metrics
- Use a vSAN proactive test to detect and diagnose cluster issues

**7 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 (KMS) **8 vSAN Direct** • Discuss the use cases for vSAN Direct
- Understand the overall architecture of vSAN Direct • Describe the workflow of vSAN Direct datastore creation
- Explore how vSAN Direct works with storage policy tagging **9 Remote vSAN** • Discuss the use cases for remote vSAN
- Understand the high-level architecture • Describe remote datastore operations • Discuss the network requirement
- Interoperability between remote vSAN and VMware vSphere® High Availability **10 vSAN Native File Service**
- Discuss the use cases for vSAN file service • Understand the high-level architecture of vSAN file service
- Discuss the authentication model • Configure file shares • Monitor file share health and capacity utilization

**11 Manage Advanced vSAN Cluster Operations** • Describe the architecture for stretched clusters and two-node clusters

- Understand the importance of witness node • Describe how stretched cluster storage policies affect vSAN objects
- Create and apply a vSAN stretched cluster policy to meet specific needs
- Discuss stretched cluster failure scenarios and responses

### Session Dates

Date	Location	Time Zone	Language	Type	Guaranteed	PRICE
09 Sep 2024	Virtual Classroom	BST	English	Instructor Led Online		£1,940.00
02 Dec 2024	Virtual Classroom	GMT	English	Instructor Led Online		£1,940.00

### Additional Information

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