



**Enterprise Computing Solutions - Education Services**

## **TRAINING OFFERING**

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**You can reach us at:**

Arrow Enterprise Computing Solutions Ltd, Part 1st Floor, Suite 1D/1, Central House, Otley Road, Harrogate, HG3 1UG

Email: [education.ecs.baltic@arrow.com](mailto:education.ecs.baltic@arrow.com)  
Phone: 0870 251 1000

CODE:	LENGTH:	PRICE:
VMW_VSANMO7	24 Hours (3 days)	€1,200.00

## 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 [v7] or equivalent knowledge
- VMware vSAN: Plan and Deploy [v7]

## Programme

<b>1 Course Introduction</b>	<b>2 vSAN Node Management</b>
• Introductions and course logistics	• Recognize the importance of hardware compatibility
• Course objectives	• 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**

On request. Please [Contact Us](#)

## **Additional Information**

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

