



## VMware vSAN: Troubleshooting [V7]

**Duration: 2 Days**    **Course Code: VMVSANT**    **Version: 7.0**    **Delivery Method: Virtual Learning**

### Overview:

In this two-day VMware course, you focus on learning the tools and skills necessary to troubleshoot VMware vSAN™ 7 implementations. You gain practical experience with vSAN troubleshooting concepts through the completion of instructor-led activities and hands-on lab exercises.

**Product Alignment:** VMware ESXi™ 7 VMware vCenter Server 7 VMware vSAN 7

Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

### Target Audience:

Storage and virtual infrastructure administrators who want to be able to perform initial troubleshooting on their software-defined storage with vSAN

### Objectives:

- By the end of the course, you should be able to meet the following objectives:
- Describe the architectural components of vSAN and their roles
- Explain how the components interact with each other
- Explain the differences between object and component states
- Describe how to use Skyline Health to investigate and help determine failure conditions
- Explain how to use the command-line tools to help determine failure conditions

### Prerequisites:

You must complete one of the following prerequisites:

- Understanding of concepts presented in the VMware vSphere®: Install, Configure, Manage course
- Completion of the VMware vSAN: Deploy and Manage course or equivalent experience with vSAN
- Experience working with command-line interfaces

The course presumes that a student can perform the following tasks with no assistance or guidance before enrolling:

- Use VMware vSphere® Client™ for common operations
  - Create and manage VMware vCenter Server® objects, such as data centers, clusters, hosts, and virtual machines
  - Create and modify a standard switch
  - Modify a distributed switch
  - Create a VMware vSphere® VMFS datastore
  - Use a wizard or a template to create a virtual machine
  - Migrate a virtual machine with VMware vSphere® vMotion® and VMware vSphere® Storage vMotion®
- If you cannot complete all of these tasks, VMware recommends

that you complete the VMware vSphere: Install, Configure, Manage and VMware vSAN: Deploy and Manage courses before enrolling in VMware vSAN: Troubleshooting.

## Content:

### 1 Course Introduction

- Introductions and course logistics
- Course objectives

### 2 vSAN Architecture

- Describe the vSAN architecture and components
- Describe the policy-driven, object-based vSAN storage environment
- Describe the CLOM, DOM, LSOM, CMMDS, and RDT vSAN software components
- Explain the relationship between objects and components
- Determine how specific storage policies affect components

- Describe component placement

### 3 Troubleshooting Methodology

- Use a structured approach to solve configuration and operational problems

- Apply troubleshooting methodology to logically diagnose faults and optimize troubleshooting efficiency

### 4 Troubleshooting Tools

- Discuss VMware Skyline Health and the associated service
- Describe the use of VMware Skyline Health to identify and correct problems in VMware vSAN
- Apply information presented by vSAN Health online towards problem-solving
- Use vsantop to view vSAN performance metrics

- Discuss the ways to run commands from the vCenter Server and ESXi command lines

- Discuss the ways to access vSphere ESXi Shell

- Use commands to view, configure, and manage your vSphere environment

- Discuss the esxcli vsan namespace commands

- Discuss when to use Ruby vSphere Console (RVC) commands

- Explain which log files are useful for vSAN troubleshooting

- Use log files to help troubleshoot vSAN problems

## Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

[info@globalknowledge.co.uk](mailto:info@globalknowledge.co.uk)

[www.globalknowledge.com/en-gb/](http://www.globalknowledge.com/en-gb/)

Global Knowledge, Mulberry Business Park, Fishponds Road, Wokingham Berkshire RG41 2GY UK