

VMware vSAN: Troubleshooting

Course Overview

In this two-day 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.

Course Objectives

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

- Describe the software components of vSAN and their roles
- Diagram how the components relate to each other
- Use Skyline Health to investigate and help determine failure conditions
- Use the command-line tools to help determine failure conditions

Target Audience

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

Prerequisites

You must complete one of the following prerequisites:

- Understanding of concepts presented in the VMware vSphere®: Install, Configure, Manage [V7.0] course
- Completion of the <u>VMware vSAN: Deploy and Manage [V6.7]</u> 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 <u>VMware vSphere: Install, Configure,</u> <u>Manage</u> and <u>VMware vSAN: Deploy and Manage</u> courses before enrolling in VMware vSAN: Troubleshooting.

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Course Delivery Options

- Classroom
- Live Online
- <u>Onsite</u>

Product Alignment

- VMware ESXi™ 7
- VMware vCenter Server 7
- VMware vSAN 7

Course Modules

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 vSAN software components: CLOM, DOM, LSOM, CMMDS, and RDT
- Explain the relationships between the 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 the improvements and added capabilities in Skyline Health for vSAN
- Use Skyline Health for vSAN to identify and correct issues in vSAN
- Discuss the ways to run various command-line tools
- Discuss the ways to access VMware 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

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Contact

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