VMWare[®] LEARNING

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 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

Target Audience

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

Prerequisites

Before taking this course, students should take the following courses or have equivalent knowledge and experience:

- VMware vSphere: Install, Configure, Manage
- VMware vSAN: Plan and Deploy
- <u>VMware vSAN: Management and Operations</u>

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®

Course Delivery Options

- Classroom
- Live Online
- <u>Private Training</u>

Product Alignment

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

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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 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

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Contact

If you have questions or need help registering for this course, click <u>here</u>.