



VMware vSAN: Troubleshooting

**Duration: 2 Days** Course Code: VMVSANT

### 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: VM ware  $ESXi^{TM}$  7VM ware vC enter Server 7VM ware vSAN 7

# **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, Managecourse
- 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

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 00 971 4 446 4987 <a href="mailto:training@globalknowledge.ae">training@globalknowledge.ae</a>

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