

VMware vSAN: Production Operations

Course Overview

In this two-day course, you focus on building skills in configuring and performing common Day 2 administrator and end-user tasks with VMware vSAN™ 6.7. You gain practical experience with vSAN production operations 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 vSAN host operations
- Discuss vSAN networking requirements
- Define the tasks involved in hardware replacement in a vSAN cluster
- Perform vSAN cluster scale-out and scale-up operations
- Describe common vSAN maintenance operations
- Define the tasks required for updating and upgrading vSAN
- Describe vSAN security operations
- Configure a key management server (KMS) cluster
- Configure vSAN storage policies and observe the effects of a cluster-wide change
- Explain vSAN resilience and availability features
- Perform ongoing vSAN management tasks
- Use the vSAN health service to monitor health and performance

Target Audience

Storage and virtual infrastructure administrators who are responsible for production support and administration of vSAN v6.x

Prerequisites

This course has the following prerequisites:

- Understanding of concepts presented in the [VMware vSphere: Install, Configure, Manage \[V6.x\]](#) course
- Storage administration experience with block or file storage devices

Completion of the [VMware vSAN: Deploy and Manage \[v6.x\]](#) course or equivalent experience with vSAN is desirable.

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

- Use VMware vSphere® Web Client
- Create and manage VMware vCenter Server® objects, such as data centers, clusters, hosts, and virtual machines
- Create and modify a standard switch
- Connect a VMware ESXi™ host to NAS, iSCSI, or Fibre Channel storage
- 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®
- Migrate a virtual machine with VMware vSphere® Storage vMotion®

If you cannot complete all of these tasks, VMware recommends that you complete the [VMware vSphere: Install, Configure, Manage \[V6.x\]](#) and [VMware vSAN: Deploy and Manage \[V6.x\]](#) courses before enrolling in VMware vSAN: Production Operations.

Course Delivery Options

- Classroom
- Live Online
- [Onsite](#)

Product Alignment

- ESXi 6.7
- vCenter Server 6.7
- vSAN 6.7

BETA

Course Modules

- 1 Course Introduction
 - Introductions and course logistics
 - Course objectives
- 2 Introduction to vSAN
 - Describe the vSAN architecture and components
 - Describe the differences between the vSAN hybrid and all-flash architectures
 - Describe the space-efficiency features of vSAN
 - Describe how vsanSparse snapshots work
- 3 vSAN Host Management
 - Recognize the importance of hardware compatibility
 - Use tools to automate driver validation and installation
 - Apply host hardware settings for optimum performance
 - Describe NIC teaming, Link Aggregation Control Protocol, and the benefits of using VMware vSphere® Distributed Switch™ in vSAN
 - Plan for networking configuration changes
 - Troubleshoot with ESXCLI commands
- 4 vSAN Policies and Resiliency
 - Explain how storage policies work with vSAN
 - Create and modify virtual machine storage policies
 - Identify the effects of vSAN storage policy changes
 - Monitor using the Ruby vSphere Console
 - Describe vSAN resiliency, availability, and backup features and operations
 - Manage hardware device failures
- 5 Cluster Maintenance
 - Perform typical vSAN maintenance operations
 - Upgrade and update vSAN
 - Replace vSAN hardware by using scale-in and scale-out strategies
- 6 vSAN Security Operations
 - Describe vSAN datastore encryption and Key Management Server (KMS) architecture
 - Integrate a KMS
 - Configure encryption in the vSAN cluster
 - Compare virtual machine and vSAN encryption
 - Perform ongoing operations to maintain data security
 - Add an encrypted cluster to vCenter Server
- 7 vSAN Monitoring and Performance
 - Identify common alerts, alarms, and notifications related to vSAN in vSphere Web Client
 - Use the health service to monitor vSAN health
 - Use the performance service to monitor vSAN performance
 - Proactively monitor and test the vSAN environment
 - Use the vSAN health CLI and Ruby vSphere Console (RVC) when vSphere Web Client is unavailable
 - Use ESXCLI commands to monitor the vSAN environment
 - Verify that the vSAN environment is functioning properly and performing as expected

Contact

If you have questions or need help registering for this course, click [here](#).



VMware, Inc. 3401 Hillview Avenue Palo Alto CA 94304 USA Tel 877-486-9273 Fax 650-427-5001 www.vmware.com

© 2018 VMware, Inc. All rights reserved. The product or workshop materials is protected by U.S. and international copyright and intellectual property laws. VMware products are covered by one or more patents listed at <http://www.vmware.com/download/patents.html>. VMware is a registered trademark or trademark of VMware, Inc. in the United States and/or other jurisdictions. All other marks and names mentioned herein may be trademarks of their respective companies.

VMware warrants that it will perform these workshop services in a reasonable manner using generally accepted industry standards and practices. THE EXPRESS WARRANTY SET FORTH IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE SERVICES AND DELIVERABLES PROVIDED BY VMWARE, OR AS TO THE RESULTS WHICH MAY BE OBTAINED THEREFROM. VMWARE WILL NOT BE LIABLE FOR ANY THIRD-PARTY SERVICES OR PRODUCTS IDENTIFIED OR REFERRED TO CUSTOMER. All materials provided in this workshop are copyrighted by VMware ("Workshop Materials"). VMware grants the customer of this workshop a license to use and make reasonable copies of any Workshop Materials strictly for the purpose of facilitating such company's internal understanding, utilization and operation of its licensed VMware product(s). Except as set forth expressly in the sentence above, there is no transfer of any intellectual property rights or any other license granted under the terms of this workshop. If you are located in the United States, the VMware contracting entity for the service will be VMware, Inc., and if outside of the United States, the VMware contracting entity will be VMware International Limited.