

# VMware Virtual SAN 6: Deploy and Manage

## Delivery Methods

- Instructor-led training
- Live online
- [Onsite training](#)

## Course Duration

- Three (3) days of instructor-led classroom training
- 55% lecture, 45% hands-on lab

## Target Audience

Storage and virtual infrastructure administrators who want to use software-defined storage with Virtual SAN

## Course Suitability

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Administrator | <input type="checkbox"/> Expert                  |
| <input checked="" type="checkbox"/> Engineer      | <input type="checkbox"/> Advanced                |
| <input type="checkbox"/> Architect                | <input checked="" type="checkbox"/> Professional |
|   | <input type="checkbox"/> Fundamentals            |

## Prerequisites

- Storage administration experience on block or file storage devices
- Understanding of concepts presented in the VMware vSphere®: Install, Configure, Manage course

## Certifications

For more information, go to [www.vmware.com/certification](http://www.vmware.com/certification)

## Pricing

Contact your VMware representative or a VMware® Authorized Training Center™ for pricing information.

## More Information

Courses are conveniently scheduled around the world. Go to [www.vmware.com/education](http://www.vmware.com/education) to find the class that is right for you.

## Course Overview

This training course focuses on preparing you to deploy and manage a software-defined storage solution with VMware® Virtual SAN™ 6. VMware Virtual SAN 6: Deploy and Manage looks at how Virtual SAN is used as an important component in the VMware Software-Defined Data Center (SDDC). Students gain practical experience with these concepts through the completion of hands-on labs. The course is based on the VMware® ESXi™ 6, VMware® vCenter Server™ 6 and VMware Virtual SAN 6.

## Course Objectives

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

- Outline the tasks for upgrading from Virtual SAN 5 to Virtual SAN 6.
- Identify the different Virtual SAN features.
- Configure the Virtual SAN networking components.
- Plan, Design and Configure a Virtual SAN cluster.
- Identify benefits of storage policies.
- Configure virtual machine storage policies.
- Deploy virtual machines on a Virtual SAN datastore.
- Identify Storage Area Network (SAN) performance factors.
- Identify storage architectures.
- Describe the Virtual SAN architecture.
- Identify Virtual SAN use cases.
- Perform ongoing Virtual SAN management tasks.
- Use the Ruby vSphere Console (RVC).
- Monitor Virtual SAN with Virtual SAN Observer.



## Course Modules

<p><b>1 Course Introduction</b></p> <ul style="list-style-type: none"> <li>Describe the software-defined enterprise</li> <li>Describe the software-defined data center</li> <li>Describe the Virtual SAN architecture</li> <li>Configure the Virtual SAN networking</li> <li>Configure Virtual SAN</li> <li>Manage and monitor Virtual SAN</li> <li>Deploy virtual machines on a Virtual SAN datastore</li> <li>Identify benefits of storage policy-based management</li> </ul>	<p><b>6 Managing and Operating Virtual SAN</b></p> <ul style="list-style-type: none"> <li>Manage hardware storage devices</li> <li>Manage hardware device failures</li> <li>Identify and configure VMware vCenter Server™ alarms for Virtual SAN events</li> <li>Describe and configure fault domains</li> <li>Upgrade from Virtual SAN 5.5 to Virtual SAN 6</li> </ul>
<p><b>2 Storage Fundamentals</b></p> <ul style="list-style-type: none"> <li>Define common storage terminologies</li> <li>Identify common SAN architectures</li> <li>Identify characteristics of storage devices: magnetic and flash-based devices</li> <li>Identify and explain the differences between file, block, and object-oriented storage architectures</li> <li>Identify SAN performance factors</li> <li>Compare and contrast local, centralized, and distributed storage architectures</li> </ul>	<p><b>7 Interoperability with vSphere Features</b></p> <ul style="list-style-type: none"> <li>Identify VMware vSphere® features and VMware products that interoperate with Virtual SAN 6</li> <li>Describe how Virtual SAN 6 interoperates with VMware vSphere® Enterprise Edition™ features</li> <li>Describe how Virtual SAN 6 interoperates with third-party products and solutions</li> </ul>
<p><b>3 Introduction to Virtual SAN</b></p> <ul style="list-style-type: none"> <li>Describe Virtual SAN 6</li> <li>Describe the differences between the Virtual SAN 6 hybrid and all-flash architectures</li> <li>Identify the available options to build a Virtual SAN 6 cluster</li> </ul>	<p><b>8 Monitoring and Troubleshooting Virtual SAN</b></p> <ul style="list-style-type: none"> <li>Identify tools to troubleshoot Virtual SAN 6</li> <li>Use the Virtual SAN 6 health check plug-in</li> <li>Monitor and troubleshoot Virtual SAN 6</li> <li>Troubleshoot Virtual SAN 6 upgrades</li> </ul>
<p><b>4 Virtual SAN Configuration</b></p> <ul style="list-style-type: none"> <li>Identify physical network configuration requirements</li> <li>Configure the Virtual SAN virtual network</li> <li>Configure a Virtual SAN 6 cluster</li> <li>Test and validate the Virtual SAN 6 configuration and functionality</li> </ul>	<p><b>9 Designing a Virtual SAN Deployment</b></p> <ul style="list-style-type: none"> <li>Understand the Virtual SAN design basics</li> <li>Plan and design the Virtual SAN clusters</li> <li>Consider the Virtual SAN hybrid and all-flash designs</li> <li>Describe the Virtual SAN use case design considerations</li> <li>Identify the design and sizing tools for Virtual SAN</li> </ul>
<p><b>5 Virtual SAN Policies and Virtual Machines</b></p> <ul style="list-style-type: none"> <li>Explain how storage policies work with Virtual SAN 6</li> <li>Calculate storage requirements while defining a virtual machine storage policy</li> <li>Define the purpose of virtual machine storage policies and their attributes</li> <li>Define and create a virtual machine storage policy</li> <li>Apply and modify virtual machine storage policies</li> <li>Change virtual machine storage policies dynamically</li> <li>Identify virtual machine storage policy compliance status</li> <li>Describe how vsanSparse snapshots work</li> <li>Explain the considerations for vsanSparse snapshots</li> <li>Discuss the vsanSparse snapshot format</li> </ul>	



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