

# VMware vSAN: Plan and Deploy [V7]

Course code: VMW\_VSANPD

Cena školení je 750 EUR a bude přepočtena aktuálním kurzem v poslední den školení. Toto dvoudenní praktické školení vám poskytne znalosti, dovednosti a nástroje pro plánování a nasazení VMware vSAN™ klastrů. V tomto kurzu se seznámíte s mnoha aspekty, které má konfigurace vSAN při plánování a nasazování. Vyzkoušíte si nasazení vSAN klastrů v praxi. Tipy a triky z praxe Vám představí zkušený lektor a systémový inženýr s nejvyšší certifikací na vSAN.

## Who is the course for

Experienced VMware vSphere® administrators.

## What we teach you

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

- Explain the key features and use cases for vSAN
- Detail the underlying vSAN architecture and components
- Describe the different vSAN deployment options
- Detail vSAN cluster requirements and considerations
- Apply recommended vSAN design considerations and capacity sizing practices
- Explain the influence of vSAN objects and components on the initial cluster plan
- Determine and plan for storage consumption by data growth and failure tolerance
- Design vSAN hosts for operational needs
- Explain Maintenance Mode use and its impacts on vSAN
- Apply best practices for vSAN network configurations
- Manually configure a vSAN cluster using VMware vSphere® Client™
- Explain and configure vSAN fault domains
- Understand and apply vSAN storage policies
- Define encryption in the vSAN cluster
- Describe the architecture and use cases for stretched clusters
- Configure a stretched cluster
- Understand the steps involved in creating the vSAN iSCSI target services

## Required skills

You should have the following understanding or knowledge:

- Understanding of concepts presented in the VMware vSphere: Install, Configure, Manage course
- Knowledge of basic storage concepts
- Experience using vSphere Client to perform administrative tasks on vSphere clusters

## Course outline

### 1 Course Introduction

- Introductions and course logistics
- Course objectives

### 2 Introduction to vSAN

- Describe vSAN architecture
- Describe the advantages of object-based storage
- Describe the difference between All-Flash and Hybrid vSAN architecture
- Explain the key features and use cases for vSAN
- Discuss the vSAN integration and compatibility with other VMware technologies
- Identify vSAN objects and components
- Describe a vSAN object

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- Describe how objects are split into components
  - Explain the purpose of witness components
  - Explain how vSAN stores large objects
  - View object and component placement on the vSAN datastore
- ### 3 Planning a vSAN Cluster
- Identify requirements and planning considerations for vSAN clusters
  - Apply vSAN cluster planning and deployment best practices
  - Determine and plan for storage consumption by data growth and failure tolerance
  - Design vSAN hosts for operational needs
  - Identify vSAN networking features and requirements
  - Describe ways of controlling traffic in a vSAN environment
  - Recognize best practices for vSAN network configurations
- ### 4 Deploying a vSAN Cluster
- Deploy and configure a vSAN cluster using the Cluster QuickStart wizard
  - Manually configure a vSAN cluster using vSphere Client
  - Explain and configure vSAN fault domains
  - Using VMware vSphere® High Availability with vSAN
  - Understand vSAN cluster maintenance capabilities
  - Describe the difference between implicit and explicit fault domains
  - Create explicit fault domains
- ### 5 vSAN Storage Policies
- Explain how storage policies work with vSAN
  - Explain the role of storage policies in planning a vSAN cluster
  - Define and create virtual machine storage policies
  - Apply and modify virtual machine storage policies
  - Change virtual machine storage policies dynamically
  - Identify virtual machine storage policy compliance status
- ### 6 Introduction to Advanced vSAN Configurations
- Define and configure compression and deduplication in the vSAN cluster
  - Define and configure encryption in the vSAN cluster
  - Understand the remote vSAN datastore topology
  - Identify the operations involved in managing the remote vSAN datastore
  - Configure the vSAN iSCSI target service
- ### 7 vSAN Stretched and Two-Node Clusters
- Describe the architecture and use cases for stretched clusters
  - Detail the deployment and replacement of a vSAN witness node
  - Describe the architecture and use cases for two-node clusters
  - Explain the benefits of vSphere HA and VMware Site Recovery Manager™ in a vSAN stretched cluster
  - Explain storage policies for vSAN stretched cluster

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