

# Course : VMware vSAN: Plan and Deploy V7 (VSANPD7)

Official course, exam preparation 5V0-22.23 (Badge)

*Practical course - 2d - 14h00 - Ref. MWF*

*Price : 1490 € E.T.*

With this training course, you'll have the knowledge, skills and tools you need to plan and deploy a VMware vSAN™ cluster. You'll also perform a fully manual configuration of a vSAN cluster.

## Teaching objectives

At the end of the training, the participant will be able to:

- ✓ Explain the key features and use cases of vSAN
- ✓ Details of the underlying vSAN architecture and components
- ✓ Describe the different vSAN deployment options
- ✓ vSAN cluster requirements and considerations in detail
- ✓ Apply vSAN design considerations and recommended capacity sizing practices
- ✓ Determine and plan storage consumption based on data growth and fault tolerance
- ✓ Explain the use of maintenance mode and its impact on vSAN
- ✓ Apply best practices for vSAN network configurations
- ✓ Manually configure a vSAN cluster using VMware vSphere® Client™.
- ✓ Understanding and applying vSAN storage policies
- ✓ Define encryption in the vSAN cluster
- ✓ Describe the architecture and use cases of extended clusters
- ✓ Designing vSAN hosts for operational needs
- ✓ Describe the architecture and use cases of two-node clusters
- ✓ Understand the steps involved in creating vSAN iSCSI target services

## Intended audience

Experienced VMware vSphere® administrators.

## Prerequisites

Understanding of the concepts presented in the course Ref. MWA (VSICM7). Knowledge of basic storage concepts. Practical experience of vSphere Client for administrative tasks.

### PARTICIPANTS

Experienced VMware vSphere® administrators.

### PREREQUISITES

Understanding of the concepts presented in the course Ref. MWA (VSICM7). Knowledge of basic storage concepts. Practical experience of vSphere Client for administrative tasks.

### TRAINER QUALIFICATIONS

The experts who lead the training courses are specialists in the subjects covered. They are approved by the publisher and certified for the course. They have also been validated by our teaching teams in terms of both professional knowledge and teaching skills for each course they teach. They have at least three to ten years of experience in their field and hold or have held positions of responsibility in companies.

### ASSESSMENT TERMS

Assessment of targeted skills prior to training.

Assessment by the participant, at the end of the training course, of the skills acquired during the training course.

Validation by the trainer of the participant's learning outcomes, specifying the tools used: multiple-choice questions, role-playing exercises, etc.

At the end of each training course, ITTCERT provides participants with a course evaluation questionnaire, which is then analysed by our teaching teams. Participants also complete an official evaluation of the publisher.

An attendance sheet for each half-day of attendance is provided at the end of the training course, along with a certificate of completion if the participant has attended the entire session.

## Certification

Passing the 5V0-22.23 exam earns you the "VMware Specialist - vSAN 2023" badge. To obtain this badge, it is recommended to have attended at least one of these training courses: Ref. MWF (VSANPD7) or Ref. MWJ (VSANMO7) or Ref. MWL (VSANT7).

[Comment passer votre examen ?](#)

## Practical details

### Teaching methods

Training in French. Official course material in English.

## Course schedule

### 1 Introducing vSAN

- Describe the vSAN architecture.
- Identify vSAN objects and components.
- Describe the advantages of object-based storage.
- Describe the difference between 100% Flash architecture and hybrid vSAN architecture.
- Explain the key features and use cases of vSAN.
- Discuss vSAN integration and compatibility with other VMware technologies.

### 2 Planning a vSAN cluster

- Identify requirements and planning considerations for vSAN clusters.
- Apply best practices in vSAN cluster planning and deployment.
- Determine and plan storage consumption according to data growth.
- Determine and plan storage consumption based on fault tolerance.
- Design vSAN hosts for operational needs.
- Identify vSAN network features and requirements.
- Describe how to control traffic in a vSAN environment.
- Recognize best practices for vSAN network configurations.

### 3 Deploying a vSAN cluster

- Deploy and configure a vSAN cluster using the Cluster Quick Start Wizard.
- Manually configure a vSAN cluster using the vSphere Client.
- Explain and configure vSAN fault domains.
- Using VMware vSphere® High Availability with vSAN.
- Understand the maintenance capabilities of the vSAN cluster.
- Describe the difference between implicit and explicit fault domains.
- Create explicit fault domains.

#### TEACHING AIDS AND TECHNICAL RESOURCES

The teaching resources used are the publisher's official materials and practical exercises.

#### TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training course.

#### ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you have specific accessibility requirements? Contact Ms FOSSE, disability advisor, at the following address: [psh-accueil@orsys.fr](mailto:psh-accueil@orsys.fr) so that we can assess your request and its feasibility.

#### 4 vSAN storage strategies

- Describe a vSAN object.
- Describe how objects are divided into components.
- Explain the purpose of control components.
- Explain how vSAN stores large objects.
- Display the placement of objects and components on the vSAN database.
- Explain how storage policies work with vSAN.
- Define and create a virtual machine storage policy.
- Apply and modify storage policies for virtual machines.
- Dynamically modify virtual machine storage policies.
- Identify the compliance status of virtual machine storage policies.

#### 5 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 topology of the remote vSAN databank.
- Identify the operations involved in managing the remote vSAN database.
- Understand the steps involved in creating the vSAN iSCSI target service.

#### 6 Extended and two-node vSAN clusters

- Describe the architecture and use cases of extended clusters.
- Detail the deployment and replacement of a vSAN control node.
- Describe the architecture and use case of two-node clusters.
- Explain the benefits of vSphere HA and vSphere Site Recovery Manager in an extended vSAN cluster.
- Explain storage strategies for the vSAN extended cluster.