VMWARE VSAN: MANAGEMENT AND OPERATIONS [V7]

APP

Course Level:
Advanced

Course Duration:
3 Days

Course Overview:

This three-day VMware vSAN: Management and Operations [V7] training course from CloudThat teaches candidates how to manage and operate VMware vSAN 7. Through instructor-led sessions and hands-on labs, candidates attending this course learn the skills to perform tasks such as cluster maintenance, vSAN node management, cluster maintenance, advanced vSAN cluster operations, and security operations.

By enrolling in our VMware vSAN: Management and Operations [V7 training program, learners will acquire the necessary skills and knowledge to pass the final exam successfully. Candidates attending our training get access to the authored curriculum and can learn through engaging and interactive sessions delivered by VMware certified in-house trainers.

Product Alignment

• VMware ESXi 7.0 U1

• VMware vCenter Server 7.0 U1

• VMware vSAN 7.0 U1

Prerequisites

Completion of the following courses is required:

VMware vSphere: Install, Configure, Manage [v7] or equivalent knowledge
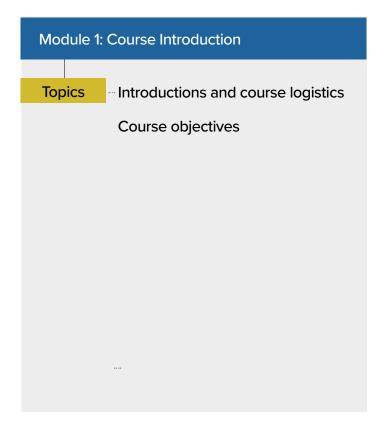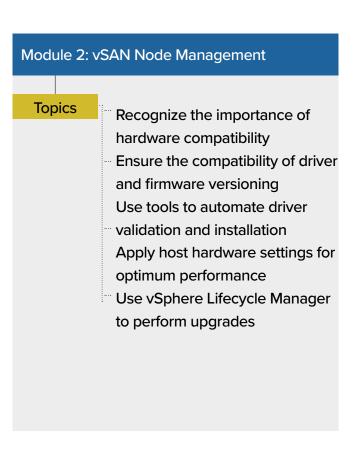
VMware vSAN: Plan and Deploy [v7]

Objectives

- Define the tasks involved in vSAN node management

- Updating and upgrading vSAN using VMware vSphere Lifecycle Manager™

- Explain vSAN resilience and data availability features

- Reconfigure vSAN storage policies and observe the cluster-wide impact

- Perform vSAN cluster scale-out and scale-up operations

- Describe common vSAN cluster maintenance operations

- Control vSAN resync operations

- Manage two-node cluster and stretched cluster advance operations

- Configure vSAN storage efficiency and reclamation features

- Use VMware Skyline Health to monitor cluster health, performance, and storage capacity

- Describe vSAN security operations

- Configure vSAN Direct for cloud native applications

- Configure remote vSAN datastore and vSAN native file services

Course Outline

Module 1: Course Introduction

Topics

Introductions and course logistics

Course objectives

....

Module 2: vSAN Node Management

Topics

Recognize the importance of hardware compatibility

Ensure the compatibility of driver and firmware versioning

Use tools to automate driver validation and installation

Apply host hardware settings for optimum performance

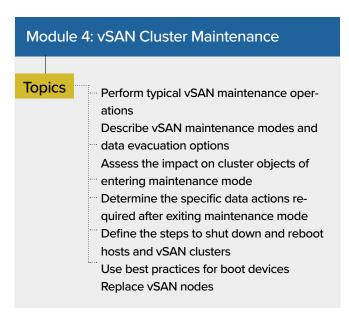Use vSphere Lifecycle Manager to perform upgrades
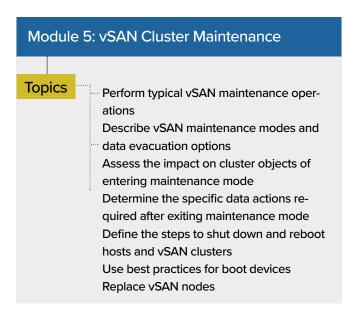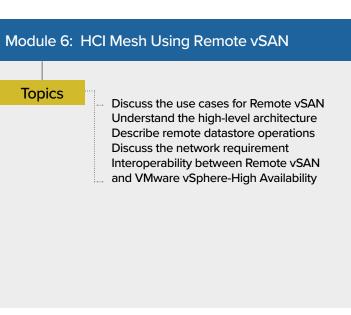
Course Outline

Module 3: vSAN Resilience and Data Availability Operations

Topics

- Describe vSAN storage policies
- Recognize the impact of a vSAN storage policy change
- Describe and configure the Object Repair Timer advanced option
- Plan disk replacement in a vSAN cluster
- Plan maintenance tasks to avoid vSAN object failures
- Recognize the importance of managing snapshot utilization in a vSAN cluster
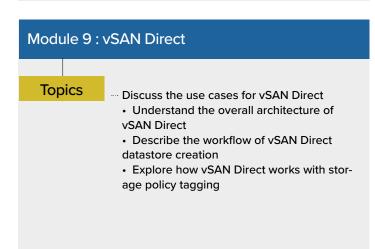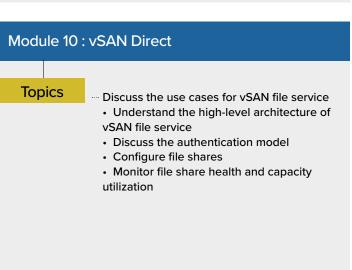- Configure the vSAN fault domains

Module 4: vSAN Cluster Maintenance

Topics

- Perform typical vSAN maintenance operations
- Describe vSAN maintenance modes and data evacuation options
- Assess the impact on cluster objects of entering maintenance mode
- Determine the specific data actions required after exiting maintenance mode
- Define the steps to shut down and reboot hosts and vSAN clusters
- Use best practices for boot devices
- Replace vSAN nodes

Module 5: vSAN Cluster Maintenance

Topics

- Perform typical vSAN maintenance operations
- Describe vSAN maintenance modes and data evacuation options
- Assess the impact on cluster objects of entering maintenance mode
- Determine the specific data actions required after exiting maintenance mode
- Define the steps to shut down and reboot hosts and vSAN clusters
- Use best practices for boot devices
- Replace vSAN nodes

Module 6: HCI Mesh Using Remote vSAN

Topics

- Discuss the use cases for Remote vSAN
- Understand the high-level architecture
- Describe remote datastore operations
- Discuss the network requirement
- Interoperability between Remote vSAN and VMware vSphere-High Availability

Course Outline

Module 7 : vSAN Security Operations

Topics

- Identify differences between VM encryption and vSAN encryption
- Perform ongoing operations to maintain data security
- Describe the workflow of Data-in Transit encryption
- Identify the steps involved in replacing Key Management Server

Module 8: vSAN Cluster Monitoring

Topics

- Describe how the Customer Experience Improvement Program (CEIP) enables VMware to improve products and services
- Use vSphere Skyline Health for monitoring vSAN Cluster Health
- Manage alerts, alarms, and notifications related to vSAN in vSphere Client
- Create and configure custom alarms to trigger vSAN health issues
- Use IO Insight metrics for monitoring vSAN performance
- Analyse vsantop performance metrics
- Use vSAN Proactive Test to detect and diagnose cluster issues

Module 9 : vSAN Direct

Topics

- Discuss the use cases for vSAN Direct
- Understand the overall architecture of vSAN Direct
- Describe the workflow of vSAN Direct datastore creation
- Explore how vSAN Direct works with storage policy tagging

Module 10 : vSAN Direct

Topics

- Discuss the use cases for vSAN file service
- Understand the high-level architecture of vSAN file service
- Discuss the authentication model
- Configure file shares
- Monitor file share health and capacity utilization

Who Should Enroll for this Course?

Storage and virtual infrastructure administrators who are responsible for production support and administration of VMware vSAN 7.

About CloudThat

CloudThat is the first company in India to offer Cloud Training & Consulting services for mid-market & enterprise clients from across the globe. Since our inception in 2012, we have trained over 500K+ IT professionals from fortune 500 companies on technologies such cloud, Artificial Intelligence, Machine Learning, IoT, OpenStack, OpenShift, DevOps, MongoDB, Big Data and more.

Through sheer dedication and excellence in the field of cloud training, CloudThat has recently being recognized as **VMware Authorized Training Reseller**. In addition, CloudThat is a proud Microsoft Gold Partner, AWS Advanced Consulting Partner, Google Cloud Platform Partner, and Databricks Partner. Recently, we have won the Microsoft Asia Superstar Campaign for India-2021 for being a global leader in providing cloud training and consultancy services with exemplary track record.

Our Success Track

10+ Years of Experience	**100+** Corporates served	**28+** countries catered
500K+ Professionals trained	**200+** Projects delivered	**350+** Cloud certifications

To know more about our VMware certification training, email at **sales@cloudthat.com** or call us at +**918880002200.**