VMWA-30 - VMWARE VSAN MANAGEMENT AND OPERATIONS [V7]

Categoria: **VMware**

INFORMAZIONI SUL CORSO

Durata:	Categoria:	Qualifica Istruttore:	Dedicato a:	Produttore:
3 Giorni	VMware	VMware Certified Instructor	Professionista IT	VMware

OBIETTIVI

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

PREREQUISITI

Completion of the following courses is required:

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

CONTENUTI

1 Course Introduction

- Introductions and course logistics
- Course objectives

2 vSAN Node Management

- 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

3 vSAN Resilience and Data Availability Operations

-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

4 vSAN Cluster Maintenance

-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

5 HCI Mesh Using Remote vSAN

-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

6 Managing Advanced vSAN Cluster Operations

-Describe the architecture for stretched clusters and two-node clusters

-Understand the importance of Witness Node

-Describe how stretched cluster storage policies affect vSAN objects

-Create and apply a vSAN stretched cluster policy to meet specific needs

-Discuss stretched cluster failure scenarios and responses

7 Managing vSAN Storage Space Efficiency Operations

-Discuss Deduplication and Compression techniques

-Understand Deduplication and Compression overhead

-Discuss Compression only mode

-Configure Erasure Coding

-Configure swap object Thin Provisioning

-Discuss Reclaiming Storage Space with SCSI UNMAP

-Configure TRIM/UNMAP

8 vSAN Security Operations

-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

9 vSAN Cluster Monitoring

- 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

10 vSAN Direct

- 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

11 Native vSAN File Service

- 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

INFO

Materiale didattico: Materiale didattico ufficiale VMware in formato digitale

Costo materiale didattico: incluso nel prezzo del corso a Calendario

Natura del corso: Operativo (previsti lab su PC)