vmware by Broadcom

Advanced VMware Cloud Foundation 9.0 Storage

Exam Details (Last Updated: 12/01/2024)

The Advanced VMware Cloud Foundation 9.0 Storage (3V0-23.25) exam, which leads to VMware Certified Advanced Professional - VMware Cloud Foundation 9.0 Storage certification (VCAP - Storage), is a 60-item exam with a passing score of 300 using a scaled method. Candidates are given an appointment time of 135 minutes, which includes adequate time to complete the exam for non- native English speakers. This exam may contain a variety of item types including multiple-choice, multiple-selection multiple-choice, build-list, matching, drag-and-drop, point-and-click and hot-area. Additional item types may be used but will appear less frequently than those previously mentioned.

Exam Delivery

This is a proctored exam delivered through Pearson VUE. For more information, visit the Pearson VUE website.

Certification Information

For details and a complete list of requirements and recommendations for attainment, please reference the VMware Certification website.

Minimally Acceptable Candidate

The candidate for VMware Certified Advanced Professional – VMware Cloud Foundation Advanced Storage (3V0-23.25) Certification is an experienced systems administrator, virtualization engineer, storage professional or VMware Cloud Foundation architect with at least 12 to 18 months of hands-on experience working with VMware vSAN, including the Express Storage Architecture (ESA).

The candidate has practical knowledge of deploying and managing advanced vSAN storage configurations within VMware Cloud Foundation environments. They understand the implications of advanced storage policies, encryption technologies, stretched and storage cluster architectures, and vSAN-native services such as File Services, iSCSI Target Services, and Data Protection.

The candidate demonstrates the ability to configure and apply advanced vSAN ESA storage policies, including disk striping, IOPS limits, and space reservations. They can deploy and manage vSAN File Services with support for NFS and SMB protocols, and enable vSAN iSCSI Target Services to manage LUNs and targets for block-based storage access. The candidate can implement vSAN Data-at-Rest Encryption, perform key management tasks, and differentiate encryption flows between OSA and ESA architectures. They are proficient in using and managing segment data by workload or tenant, and are capable of planning, deploying, and maintaining stretched clusters—including witness configuration and ensuring workload locality and resiliency. The candidate also understands how to implement storage clusters and describe its use in enterprise environments, as well as enable and manage vSAN native data protection features such as snapshots, replication, and protection schedules.

Exam Sections

VMware exam blueprint sections are now standardized to the five sections below, some of which may NOT be included in the final exam blueprint depending on the exam objectives.

Section 1 – IT Architectures, Technologies, Standards

Section 2 – VMware Cloud Foundation (VCF) Products and Solutions

Section 3 – Plan and Design the VMware Solution

Section 4 – Install, Configure, Administrate the VMware Solution

Section 5 – Troubleshoot and Optimize the VMware Solution

If a section does not have testable objectives in this version of the exam, it will be noted, accordingly. The objective numbering may be referenced in your score report at the end of your testing event for further preparation should a retake of the exam be necessary.

Sections Included in this Exam

Section 1 - IT Architectures, Technologies, Standards

- Objective 1.1 - Given a scenario, differentiate between types of Storage Architecture (HCI vs Traditional)
- Objective 1.2 - Given a scenario, identify the use case for different storage architectures (HCI vs Traditional)
- Objective 1.3 - Differentiate between the use cases for supported storage types (iSCSI, vSAN, NFS, FC, NVMe)

Section 2 - VMware Cloud Foundation (VCF) Products and Solutions

- Objective 2.1 - Given a scenario, differentiate between vSAN OSA and vSAN ESA
- Objective 2.2 - Given a scenario, identify the components of a vSAN Architecture/Solution
- Objective 2.3 - Given a scenario, differentiate between Principal and Supplemental storage in a VCF Workload Domain cluster
- Objective 2.4 - Given a scenario, identify the use cases for advanced VMware vSAN features/services/capabilities
- Objective 2.5 - Given a scenario, identify the components of a supported storage solution (i.e. datastores, datastore clusters, etc)
- Objective 2.6 - Given a scenario, identify the role of supported Storage within a VMware Supervisor-context.

Section 3 - Plan and Design the VMware Solution

- Objective 3.1 - Given a scenario with requirements, design a vSAN Storage Solution for VCF
- Objective 3.2 - Given a scenario with requirements, appropriately size a storage solution based on VMware vSAN
- Objective 3.3 - Given a scenario with requirements, design a supported (non-vSAN) Storage Solution for VCF

Section 4 - Install, Configure, Administrate the VMware Solution

- Objective 4.1 - Given a scenario, deploy a vSAN Cluster within a VCF Workload Domain
- Objective 4.2 - Given a scenario, deploy a vSAN Stretched Cluster within a VCF Workload Domain
- Objective 4.3 - Given a scenario, deploy a vSAN 2-Node Cluster
- Objective 4.4 - Given a scenario, deploy vSAN Data Protection
- Objective 4.5 - Given a scenario, deploy a VCF Workload Domain cluster with supported (non-vSAN) Storage
- Objective 4.6 - Given a scenario, configure vSAN Cross-Cluster Capacity Sharing and vSAN Storage Clusters
- Objective 4.7 - Given a scenario, configure vSAN Encryption
- Objective 4.8 - Given a scenario, configure the vSAN File Service
- Objective 4.9 - Given a scenario, configure the vSAN iSCSI Target Service

Objective 4.10 - Given a scenario, configure vSAN Data Protection

Objective 411 - Given a scenario, configure a Datastore (non-vSAN) in a VCF Workload Domain Cluster

Objective 4.12 - Given a scenario, configure a Datastore Cluster in a VCF Workload Domain Cluster

Objective 4.13 - Given a scenario, complete Day 2 administration tasks on a vSAN Cluster

Objective 4.14 - Given a scenario, complete Day 2 administration tasks on a vSAN Stretched Cluster

Objective 4.15 - Given a scenario, create/configure a vSAN Storage policy

Objective 4.16 - Given a scenario, create/configure a vSAN Data Protection Recovery Plan

Objective 4.17 - Given a scenario, configure a File Share using vSAN File Services

Objective 4.18 - Given a scenario, complete Day 2 administration task on non-VSAN Datastores and Datastore Clusters

Section 5 - Troubleshoot and optimize the VMware Solution

Objective 5.1 - Given a scenario, monitor VMware vSAN using tools in VCF

Objective 5.2 - Given a scenario, monitor supported (non-vSAN) Storage using tools in VCF

Objective 5.3 - Given a scenario, troubleshoot and resolve issues with VMware vSAN Storage

Objective 5.4 - Given a scenario, troubleshoot and resolve issues with supported (non-vSAN) Storage

Recommended Courses

VMware Cloud Foundation Storage: Advanced Design

VMware Cloud Foundation Storage: Advanced Configuration

VMware Cloud Foundation Storage: Advanced Troubleshooting

References*

In addition to the recommended courses, item writers use the following references for information when writing exam questions. It is recommended that you study the reference content as you prepare to take the exam, in addition to any recommended training.

Name	Products
https://www.vmware.com/topics/private-cloud	The VMware Cloud Foundation 9.0
https://techdocs.broadcom.com	The VMware Cloud Foundation 9.0
https://www.broadcom.com/	The VMware Cloud Foundation 9.0
*Content in this exam is based on VCF 9.0. Review all release notes and material for features and functions.	

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