

5V0-31.20

VMware vSphere with Tanzu Specialist

Last Updated: Thursday, May 20, 2021

Exam Details

The VMware vSphere with Tanzu Specialist exam (5V0-31.20) which leads to VMware Certified Specialist - vSphere with Tanzu 2021 badge is a 62-item exam, with a passing score of 300 using a scaled method. Exam time is 125 minutes.

Exam Delivery

This is a proctored exam delivered through Pearson VUE. For more information, visit the [Pearson VUE website](#).

Badge Information

For details and a complete list of requirements and recommendations for attainment, please reference the [VMware Education Services – Certification website](#).

Minimally Qualified Candidate

The Minimally Qualified Candidate (MQC) has basic knowledge of Kubernetes and containers, at least 12 months of experience with vSphere. The MQC also has experience with NSX-T and network, virtualization and OS experience or education. Candidates should have completed all recommended training courses for this credential and hold a VCP-DCV 2020. The successful candidate will likely hold additional industry-recognized IT certifications or accreditations. The MQC should have all the knowledge contained in the exam sections listed below.

Exam Sections

This exam contains the seven sections below, some of which may NOT be included in the final exam blueprint depending on the exam objectives.

Section 1 Introduction - No testable objectives for this section

Section 2 Introduction to Containers and Kubernetes - No testable objectives for this section

Section 3 Introduction to vSphere with Tanzu

Objective 3.1: Identify the purpose and role of a Supervisor Cluster.

Objective 3.2: Identify the characteristics of the Control Plane VMs.

Objective 3.3: Given a scenario about a network, identify the workload, management, and front end.

Objective 3.4: Identify the purposes and differences between workload, management, and front end networks.

Objective 3.5: Identify the purpose and role of a Spherelet.

Objective 3.6: Identify the prerequisites and requirements to enable workload management.

Objective 3.7: Identify the characteristics and uses of kubectl CLI.

Objective 3.8: Identify how to authenticate to vSphere with Tanzu using kubectl.

Objective 3.9: Identify how to navigate namespaces using kubectl.

Objective 3.10: Given a scenario, identify the VMware solution for managing TKC.

Section 4 vSphere with Tanzu Core Services

Objective 4.1: Identify the characteristics of vSphere namespaces.

Objective 4.2: Identify the process to create a namespace.

Objective 4.3: Identify the prerequisites to create a namespace.

Objective 4.4: Given a scenario, identify the resources that can be limited in a namespace.

Objective 4.5: Given a scenario, identify the resources that can be limited for a Kubernetes object within a namespace.

Objective 4.6: Given a scenario, identify the roles that can be applied to user of a vSphere namespace.

Objective 4.7: Identify the process to allocate storage to a namespace.

Objective 4.8: Identify the characteristics of vSphere pods and CRX.

Objective 4.9: Identify the process to create a vSphere pod.

Objective 4.10: Identify the methods to scale out a vSphere pod.

Objective 4.11: Identify the characteristics of Cloud Native Storage.

Objective 4.12: Identify the relationship between a storage policy and storage class.

Objective 4.13: Given a scenario, identify the method that should be used to create a storage policy.

Objective 4.14: Identify how to view how much of the quota is being used in a given vSphere namespace.

Objective 4.15: Identify characteristics of persistent volumes in vSphere.

Objective 4.16: Identify use cases for persistent volumes.

Objective 4.17: Identify the process to manage a persistent volume claim.

Objective 4.18: Identify the method to view all the Persistent Volume claims in a vSphere environment.

Objective 4.19: Identify the characteristics of the NSX container plugin.

Objective 4.20: Identify the relationship between vSphere namespaces and NSX segments.

Objective 4.21: Identify the supervisor network topology when using NSX-T.

Objective 4.22: Identify the characteristics of Kubernetes services.

Objective 4.23: Identify the characteristics of Kubernetes network policies.

Objective 4.24: Identify the characteristics and components of vSphere with Tanzu on vSphere distributed switch.

Objective 4.25: Identify the purpose of external load balancer in vSphere with Tanzu.

Objective 4.26: Identify the characteristics of workload load balancers.

Objective 4.27: Identify the characteristics of workload networks.

Objective 4.28: Identify the relationship between workload networks and vSphere Namespaces.

Objective 4.29: Identify the supervisor network topology when using vSphere Distributed Switch Network Topology.

Objective 4.30: Identify the vSphere with Tanzu on vSphere Distributed Switch Network Requirements.

Objective 4.31: Identify the vSphere with Tanzu on vSphere Distributed Switch Prerequisites

Objective 4.32: Identify the process to enable vSphere with Tanzu on vSphere Distributed Switch

Objective 4.33: Identify the characteristics of Harbor.

Objective 4.34: Identify the use cases for an image registry.

Objective 4.35: Identify the process to enable the Harbor image registry.

Objective 4.36: Identify the integration between Harbor and vSphere with Tanzu.

Objective 4.37: Identify the process to push images to Harbor

Objective 4.38: Identify the process to deploy images from Harbor

Section 5 Tanzu Kubernetes Grid Service

Objective 5.1: Identify the characteristics of the Tanzu Kubernetes Grid Service.

Objective 5.2: Identify the differences and similarities of vSphere pods and Tanzu Kubernetes Grid clusters

Objective 5.3: Identify the relationship between supervisor clusters and TKC.

Objective 5.4: Identify the process to enable TKC versions.

Objective 5.5: Identify the characteristics of virtual machine class types for TKC.

Objective 5.6: Identify the process to deploy the TKC.

Objective 5.7: Identify the process to authenticate to a TKC.

Objective 5.8: Identify the process to Scale out a TKC.

Objective 5.9: Identify the process to Scale in a TKC.

Objective 5.10: Identify the process to upgrade a TKC.

Objective 5.11: Given a scenario with requirements, identify the kubectl command that should be used.

Section 6 Monitoring and Troubleshooting in vSphere with Tanzu - No testable objectives for this section

Section 7 vSphere with Tanzu Life Cycle

Objective 7.1: Identify the process to upgrade the vSphere with Tanzu supervisor cluster.

Objective 7.2: Identify the process to perform certificate management for vSphere with Tanzu supervisor cluster.

Recommended Courses

VMware vSphere with Tanzu: Deploy and Manage [V7] (Required)

Certification Requirements

VMware Certified Professional Data Center Virtualization 2020 or 2021

References

[VMware vSphere with Tanzu: Deploy and Manage \[V7\]](#)

<http://docs-prod.vmware.com/en/VMware-NSX-T-Data-Center/3.0/ncp-kubernetes/>

<http://docs-prod.vmware.com/en/VMware-vSphere/6.7/Cloud-Native-Storage/>

<https://blogs.vmware.com/vsphere/2020/05/vsphere-7-vsphere-pods-explained.html>

<https://docs.vmware.com/en/VMware-vSphere/7.0/com.vmware.vsphere.storage.doc/>

<https://docs.vmware.com/en/VMware-vSphere/7.0/vmware-vsphere-with-tanzu/>

<https://kb.vmware.com/s/article/80735>

<https://kubernetes.io/docs/concepts/>

<https://tanzu.vmware.com/mission-control>

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