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VMware Telco Cloud Automation Skills

Exam Details (Last Updated: 7/22/2020)

The VMware Telco Automation Skills Exam (5V0-44.21), which leads to VMware Telco Cloud Automation Skills certification is a 55-item exam, with a passing score of 300 using a scaled method. Exam time is 105 minutes.

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 Education Services – Certification website.

Minimally Qualified Candidate

The Minimally Qualified Candidate(MQC) has 3-6 months hands-on experience with VMware Telco Cloud Automation, as well as awareness of storage, networking and security services. The MQC has working knowledge of vSphere and basic understanding of ETSI architecture and VMware Telco Cloud services (benefits/features). Candidates also understand cloud management (private, public and hybrid) concepts and industry standard DevOps processes. The MQC has awareness of Kubernetes concepts and of ETSI/ TCA data models (Yaml, TOSCA, SOL/IFA, JSON). 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

Section 1: VMware Telco Cloud Automation Fundamentals

- Objective 1.1: Identify the role of TCA within the NFV architecture.
- Objective 1.2: Identify the role of OVF within a network function.
- Objective 1.3: Identify the role of Helm chart with a CNF.
- Objective 1.4: Identify the characteristics of Life Cycle Management events.
- Objective 1.5: Identify the characteristics of self-healing.

Section 2: VMware Telco Cloud Automation Installation

- Objective 2.1: Identify the characteristics of the distributed architecture of VMware TCA.
- Objective 2.2: Identify why a VMware TCP control plane element is required.
- Objective 2.3: Identify the steps needed to integrate a virtual infrastructure.

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Objective 2.4: Identify the steps needed to integrate a VIM infrastructure.

Objective 2.5: Identify how to integrate vRO with virtual infrastructures.

Objective 2.6: Identify how tags are used in VMware Telco Cloud Automation.

Section 3: Infrastructure Settings

Objective 3.1: Identify how to verify the appropriate URL for connecting to a VIM.

Objective 3.2: Identify the steps to configure a compute profile for a given VIM.

Section 4: Containers as a Service

Objective 4.1: Identify business benefits of automated CaaS deployment.

Objective 4.2: Identify the differences between Kubernetes and VMware Tanzu Kubernetes Grid architectures.

Objective 4.3: Identify the differences between the TKG cluster types.

Objective 4.4: Identify the steps to deploy a Management cluster.

Objective 4.5: Identify the steps to deploy a Workload cluster.

Objective 4.6: Identify the steps to scale a node pool.

Objective 4.7: Identify the prerequisites to deploy CaaS with no internet connectivity.

Section 5: Partner Integration

Objective 5.1: Identify the steps to integrate Harbor with TCA.

Objective 5.2: Identify the difference between specialized VNF managers (S-VNFMs) and generic VNF managers (G-VNFMs).

Section 6: Zero Touch Provisioning and Infrastructure Deployment

Objective 6.1: Identify the business benefit of infrastructure automation.

Objective 6.2: Identify the characteristics of infrastructure automation versioning.

Section 7: Network Functions ad Network Services

Objective 7.1: Identify the differences between the roles of network services and network functions.

Objective 7.2: Identify the differences between a CNF and VNF.

Objective 7.3: Identify the characteristics of NFD and NSD.

Objective 7.4: Given a descriptor, identify the attribute.

Objective 7.5: Identify the steps to onboard a network function.

Objective 7.6: Identify the prerequisites for onboarding a network service.

Objective 7.7: Identify the role of late binding.

Objective 7.8: Given a graphical display of a topology, identify the characteristics of the network function.

Objective 7.9: Identify the steps to instantiate a VNF network function.

Objective 7.10: Identify the steps to instantiate a CNF network function.

Objective 7.11: Identify the characteristics of the network function inventory.

Section 8: Authorization Model

Objective 8.1: Identify the role of a VMware vCenter Server® system in credential management.

Objective 8.2: Identify the steps in creating a role within TCA.

Objective 8.3: Identify the steps in creating a permission within TCA.

Objective 8.4: Identify the steps to modify a permission to include tag-based filtering within TCA.

Section 9: Platform Life Cycle Management

Objective 9.1: Identify the steps required after upgrading VMware Telco Cloud Automation.

Objective 9.2: Identify the key life cycle management events for a VNF.

Objective 9.3: Identify the key life cycle management events for a CNF.

Objective 9.4: Identify the key life cycle management events for a NS.

Objective 9.5: Identify the differences between performing a CNF update and a VNF update.

Objective 9.6: Identify the characteristics of performing healing on a network function.

Section 10: Troubleshooting

Objective 10.1: Given an image of a VMware Telco Cloud Automation dashboard, identify the configuration of TCA, VIMs, or alarms.

Objective 10.2: Given an image or description of a VMware Telco Cloud Automation dashboard, identify the steps to evaluate CNF or VNF faults.

Objective 10.3: Given an image or description of a VMware Telco Cloud Automation dashboard, identify the steps to evaluate CNF or VNF performance.

Objective 10.4: Given a system problem, identify the log that should be viewed to troubleshoot the problem.

Section 11: API Management

Objective 11.1: Given a scenario including an API call, identify the outcome.

Recommended Courses

TCA Fundamentals
TCA ICM [1.8]

References

In addition to the recommended courses, item writers used 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 the recommended training.

Name
https://docs.vmware.com/en/VMware-Telco-Cloud-Automation/1.9.5/com.vmware.tca.userguide

https://docs.vmware.com/en/VMware-Telco-Cloud-Automation/1.9/com.vmware.tca.userguid
https://docs.vmware.com/en/VMware-Telco-Cloud-Platform---5G-Edition/1.0/telco-cloud-platform-5G-edition-reference- architecture-guide-10

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