

VMware Cloud Infrastructure Administrator

Exam Details (Last Updated: 10/19/2023)

The VMware Cloud Infrastructure Administrator beta exam (6V1-11.23) which leads to the VMware Certified - VMware Cloud Infrastructure Administrator certification is a 98-item exam, unscored. **Please be aware that this is a beta exam. This means you won't get a pass or fail result until the beta phase ends, and we've analyzed the results. The length of the beta phase varies, and it depends on how many times the exam has been taken. Once it transitions to a production exam, you'll receive your score report.** Candidates are given an appointment time for the beta exam of 165 minutes, which includes 150 minutes for the exam and 15 minutes for a mandatory qualifying survey and standard exam NDA. The inclusion of a qualifying survey is a standard practice for beta exams. The survey is used solely for research purposes and has no bearing on the exam content presented to you. This exam contains scenario-based single-selection and multiple-selection multiple-choice items. For more detailed information on our beta exam process, visit the Frequently Asked Questions section of our [VMware Certified – VMware Cloud Infrastructure Administrator Certification webpage](#).

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 Learning Services – Certification website](#).

Minimally Qualified Candidate

The Minimally Qualified Candidate (MQC) earning the VMware Certified - VMware Cloud Infrastructure Administrator certification can install, configure, and maintain private and hybrid VMware Cloud infrastructure solutions; but may, occasionally, require assistance with carrying out the more complex administrative tasks. The candidate demonstrates a fundamental understanding of the VMware Cloud Infrastructure components. The candidate has a fundamental understanding of workload migration, including moving workloads to/from different VMware-based cloud offerings. The candidate understands the tools available for automating the deployment of VMware Cloud Infrastructure. The candidate can monitor the health and capacity of a multi-VMware cloud environment, including alerts and events of cloud services and workloads, but may occasionally need to research how to address issues and/or alerts. The candidate has a basic understanding of networking and security concepts, with a deeper understanding of both software-defined networking and network interconnectivity between clouds and security in-depth; but may occasionally need to research these topics. The candidate has a basic understanding of backup and disaster recovery as it relates to the VMware Cloud infrastructure. The candidate can apply all the requisite knowledge for, and has experience in, deploying and administering VMware-

based private cloud environments and at least one VMware-based hyperscaler cloud solution with minimal assistance. The candidate possesses most of the knowledge shown in the exam sections (blueprint).

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 Solution

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 below, 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 – Differentiate between VMware Cloud infrastructures.

Section 2 – VMware Products and Solutions

Objective 2.1 – Identify the use case for VMware vSphere with Tanzu on a VMware Cloud infrastructure.

Objective 2.2 – Differentiate between VMware Disaster Recovery Solutions.

Objective 2.2.1 – Differentiate between business continuity, backup, disaster recovery and ransomware solutions.

Objective 2.2.2 – Describe concepts of data protection in the cloud.

Objective 2.2.3 – Describe concepts related to Business Continuity and Disaster Recovery (BCDR) in the cloud.

Objective 2.3 – Describe VMware workload migration strategies and solutions.

Objective 2.3.1 – Differentiate between VMware workload migration solutions (VMware HCX, VMware HCX+).

Objective 2.3.2 – Differentiate between cloud migration techniques within a VMware Cloud infrastructure.

Objective 2.4 – Describe the benefits of DPU-based acceleration and GPU-based architecture.

Objective 2.5 – Identify use cases for scaling resources in a VMware Cloud infrastructure.

Objective 2.6 – Differentiate between network and security options for a VMware Cloud infrastructure.

Objective 2.6.1 – Identify the features and functions of the VMware NSX Application Platform.

Objective 2.6.2 – Configure Federation Services.

Objective 2.6.3 – Identify the features and functions of IDS/IPS.

Objective 2.7 – Recognize management and operational responsibilities within a VMware Cloud infrastructure.

Objective 2.8 – Identify the options for directory integration for a VMware Cloud infrastructure.

Section 3 – Plan and Design the VMware Solution

Not Applicable

Section 4 – Install, Configure, Administrate the VMware Solution

Objective 4.1 – Identify the requirements for cloud onboarding within a single- or multi- VMware Cloud environment.

Objective 4.1.1 – Given a scenario, identify the prerequisites for deploying and configuring VMware Cloud on AWS.

Objective 4.1.2 – Given a scenario, identify the prerequisites for deploying and configuring Microsoft Azure VMware Solution (AVS).

Objective 4.1.3 – Given a scenario, identify the prerequisites for deploying and configuring Google Cloud VMware Engine (GCVE).

Objective 4.1.4 – Given a scenario, identify the prerequisites for deploying and configuring VMware Cloud Foundation (VCF).

Objective 4.2 – Identify the required account access and privileges for an SDDC deployment within a single- or multi-VMware Cloud environment.

Objective 4.2.1 – Given a scenario, identify the access and privileges required for an SDDC deployment within a VMware Cloud on AWS environment.

Objective 4.2.2 – Given a scenario, identify the access and privileges required for an SDDC deployment within a Microsoft Azure VMware Solution (AVS) environment.

Objective 4.2.3 – Given a scenario, identify the access and privileges required for an SDDC deployment within a Google Compute VMWare Engine (GCVE) environment.

Objective 4.2.4 – Given a scenario, identify the access and privileges required for an SDDC deployment within VMware Cloud Foundation (VCF).

Objective 4.2.5 – Given a scenario, identify the access and privileges required for an SDDC deployment within VMware Cloud Foundation+ (VCF+).

Objective 4.2.6 – Describe the different security options and capabilities (RBAC, AAA, encryption, etc.) within a VMware Cloud infrastructure.

Objective 4.3 – Describe the configuration and administration of networking within a VMware Cloud infrastructure.

Objective 4.3.1 – Describe the configuration of network segments.

Objective 4.3.2 – Describe the configuration of T0 routers based on cloud requirements.

Objective 4.3.3 – Describe the configuration of T1 routers based on cloud requirements.

Objective 4.3.4 – Describe the deployment and configuration of NSX Edge virtual machines and clusters.

Objective 4.3.5 – Describe the configuration of NSX profiles including security, Edge virtual machines, and DHCP.

Objective 4.4 – Describe the configuration of hyperscaler networking connectivity options for a VMware Cloud infrastructure.

Objective 4.4.1 – Identify networking requirements for different public cloud solutions.

Objective 4.4.2 – Configure connectivity between VMware Cloud and native public cloud services.

Objective 4.5 – Manage vSphere clusters.

Objective 4.5.1 – Describe the process to create VMware vSphere clusters.

Objective 4.5.2 – Describe the configuration of VMware vSphere cluster options.

Objective 4.5.3 – Describe the configuration of VMware vSphere cluster advanced options.

Objective 4.5.4 – Describe the configuration of a VMware vSAN stretched cluster.

Objective 4.5.5 – Describe the process to scale a VMware vSphere cluster.

Objective 4.6 – Create and manage user accounts and role permissions in a VMware Cloud infrastructure.

Objective 4.7 – Create and manage a content library.

Objective 4.8 – Manage virtual storage.

Objective 4.8.1 – Create storage policies.

Objective 4.9 – Create and manage virtual machines.

Objective 4.9.1 – Ensure workload availability during maintenance using vMotion.

Objective 4.9.2 – Configure and manage the options for securing a VMware vSphere environment (virtual TPM, VBS, etc.).

Objective 4.9.3 – Perform lifecycle management activities of workload virtual machines.

Objective 4.10 – Describe the deployment and configuration process of VMware HCX.

Objective 4.10.1 – Describe the configuration of site pairing.

Objective 4.10.2 – Describe the configuration of network profiles.

Objective 4.10.3 – Describe the configuration of compute profiles.

Objective 4.10.4 – Describe the configuration of service mesh.

Objective 4.11 – Describe the process of migrating a workload between sites using VMware HCX.

Objective 4.12 – Describe the deployment and configuration process for VMware Cloud business continuity and disaster recovery (BCDR) solutions.

Objective 4.12.1 – Identify use cases for VMware Site Recovery.

Objective 4.12.2 – Describe the deployment and configuration of Site Recovery Manager.

Objective 4.12.3 – Describe the deployment and configuration of VMware Cloud Disaster Recovery.

Objective 4.13 – Describe the process of protecting a workload using a VMware BCDR solution.

Objective 4.14 – Perform lifecycle management activities in VMware Cloud infrastructures.

Objective 4.15 – Implement the backups of VMware Cloud Infrastructure components.

Objective 4.16 – Describe the configuration and administration of security within a VMware Cloud infrastructure.

Objective 4.16.1 – Describe the configuration of Distributed Firewall and microsegmentation.

Objective 4.16.2 – Describe the configuration of Gateway Firewall.

Objective 4.17 – Describe automation solutions for a VMware Cloud infrastructure.

Objective 4.17.1 – Describe automation of a VMware Cloud infrastructure using API.

Objective 4.17.2 – Describe automation of a VMware Cloud infrastructure using SDDC Manager.

Objective 4.17.3 – Describe automation of a VMware Cloud infrastructure using Power CLI.

Section 5 – Troubleshoot and Optimize the VMware Solution

Objective 5.1 – Monitor VMware Cloud infrastructure components.

Objective 5.2 – Troubleshoot internetworking issues across VMware Cloud infrastructures.

Objective 5.2.1 – Troubleshoot VPN.

Objective 5.2.2 – Troubleshoot dedicated line connectivity.

Objective 5.2.3 – Troubleshoot Gateway Firewall.

Objective 5.3 – Troubleshoot NSX networking issues within a VMware Cloud infrastructure.

Objective 5.4 – Troubleshoot NSX security issues within a VMware Cloud Infrastructure.

Objective 5.4.1 – Troubleshoot Distributed Firewall.

Objective 5.5 – Troubleshoot certificate issues within a VMware Cloud Infrastructure.

Objective 5.6 – Troubleshoot workloads.

Objective 5.6.1 – Troubleshoot virtual machine status and configuration.

Objective 5.6.2 – Optimize resource allocation.

Objective 5.7 – Troubleshoot storage issues within a VMware Cloud Infrastructure.

Courses recommended to you for exam preparation in relevant areas, accordingly:

VMware Cloud Foundation: Deploy, Configure, Manage [V5.0]

VMware Cloud on AWS: Design, Configure, Manage 2023

VMware HCX: Deploy, Configure, Manage

VMware Site Recovery Manager: Install, Configure, Manage [V8.2]

VMware vSphere: Install, Configure, Manage [V8]

VMware vSphere: Operate, Scale and Secure [V8]

VMware vSAN: Install, Configure, Manage [V8]

VMware NSX: Install, Configure, Manage [V4.0]

VMware vSphere with Tanzu: Deploy, Configure, Manage [V8]

Certification Requirements

VMware Certified – VMware Cloud Infrastructure Administrator

References

Name	Topics
https://docs.vmware.com/	VMware vSphere Product Documentation; VMware vSphere with Tanzu Product Documentation; VMware Cloud Foundation Product Documentation; VMware HCX Product Documentation; VMware Cloud on AWS Product Documentation; VMware NSX Intelligence Product Documentation; VMware NSX Product Documentation; VMware Cloud Disaster Recovery Product Documentation; Site Recovery Manager Product Documentation; VMware Aria Operations for Logs Product Documentation
http://kb.vmware.com/	Consolidating/Committing Snapshots in VMware ESXi (1002310)
https://vmc.techzone.vmware.com/	Azure VMware Solution; Google Cloud VMware Engine; VMware vSAN for Azure VMware Solution
http://core.vmware.com/	Virtual GPUs and Passthrough GPUs on VMware vSphere: Can They be Used Together?; VMware vSAN Design Guide
https://blogs.vmware.com/	VMware Cloud on AWS Advanced Networking and Routing Features
https://www.vmware.com/topics/glossary.html	DPU-based Acceleration

Exam Contributors

Christopher Lewis

Cosmin Trif

Douglas Ugalde

Frances Wong

Frazier Smith

Gabriela Faba

Iwan Hoogendoorn

Joel West

Murali Krishnan

Richard van Dantzig

Steve Jones



VMware, Inc. 3401 Hillview Avenue Palo Alto CA 94304 USA Tel 877-486-9273 Fax 650-427-5001 www.vmware.com © 2023 VMware, Inc. All rights reserved. The product or workshop materials is protected by U.S. and international copyright and intellectual property laws. VMware products are covered by one or more patents listed at <http://www.vmware.com/download/patents.html>. VMware is a registered trademark or trademark of VMware, Inc. in the United States and/or other jurisdictions. All other marks and names mentioned herein may be trademarks of their respective companies. VMware warrants that it will perform these workshop services in a reasonable manner using generally accepted industry standards and practices. THE EXPRESS WARRANTY SET FORTH IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE SERVICES AND DELIVERABLES PROVIDED BY VMWARE, OR AS TO THE RESULTS WHICH MAY BE OBTAINED THEREFROM. VMWARE WILL NOT BE LIABLE FOR ANY THIRD-PARTY SERVICES OR PRODUCTS IDENTIFIED OR REFERRED TO CUSTOMER. All materials provided in this workshop are copyrighted by VMware ("Workshop Materials"). VMware grants the customer of this workshop a license to use and make reasonable copies of any Workshop Materials strictly for the purpose of facilitating such company's internal understanding, utilization and operation of its licensed VMware product(s). Except as set forth expressly in the sentence above, there is no transfer of any intellectual property rights or any other license granted under the terms of this workshop. If you are located in the United States, the VMware contracting entity for the service will be VMware, Inc., and if outside of the United States, the VMware contracting entity will be VMware International Limited.