

Advanced Design VMware Cloud Management and Automation

Exam Details (Last Updated: 02/27/2021)

The Advanced Design VMware Cloud Management and Automation (3V0-32.21) exam, which leads to VMware Certified Advanced Professional – Cloud Management and Automation Design 2021 certification is a 60-item exam, with a passing score of 300 using a scaled method. Candidates are given a time of 145 minutes, which includes adequate time to complete the exam for non-native English speakers.

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) is a conceptualization of the certification candidate that possesses the minimum knowledge, skills, experience, and competence to meet our expectations of a credentialed individual. The MQC achieving the VMware Certified Advanced Professional – Cloud Management and Automation Design 2021 (VCAP-CMA Design) certification is capable of developing a conceptual design given a set of customer requirements, determining the functional requirements needed to create a logical design, and architecting a physical design using these elements. They are typically designers or architects, capable of translating business requirements into a cloud management solution using vRealize Suite components. The successful candidate can design a solution that integrates vRealize Suite Lifecycle Manager, vRealize Automation, vRealize Orchestrator, vRealize Operations, and vRealize Log Insight. The successful candidate possesses an understanding of public and private cloud design concepts, including multi-tenancy, governance and compliance. The successful candidate usually has five or more years of general IT experience and at least two years' experience designing vRealize cloud management solution in accordance with VMware recommended practices. The candidate will likely hold one or more industry-recognized general IT certifications. The candidate holds a VMware Certified Professional - Cloud Management and Automation certification and demonstrates the knowledge contained in the VCAP-CMA Design exam blueprint.

Exam Sections

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

Section 1 – Architecture and Technologies

Section 2 – Products and Solutions

- Section 3 – Planning and Designing
- Section 4 – Installing, Configuring, and Setup
- Section 5 – Performance-tuning, Optimization, and Upgrades
- Section 6 – Troubleshooting and Repairing
- Section 7 – Administrative and Operational Tasks

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 – Architecture and Technologies

- Objective 1.1 – Differentiate between architecting a solution on SaaS vs on-prem (i.e. cloud proxy)
- Objective 1.2 – Differentiate between business and technical requirements
- Objective 1.3 – Differentiate conceptual, logical and detailed design
- Objective 1.4 – Differentiate between Availability, Manageability, Performance, Recoverability and Security (AMPRS)

Section 2 – Products and Solutions

- Objective 2.1 – Understand the design principles of VVD
- Objective 2.2 – Understand the design of vRealize Cloud Management solutions
- Objective 2.3 – Understand the design of VMware Cloud Foundation

Section 3 – Planning and Designing

- Objective 3.1 – Gather/Analyze requirements- Business/Technical
- Objective 3.2 – Determine risks, constraints, and assumptions for a design
- Objective 3.3 – Create a Conceptual Design
- Objective 3.4 – Create a vRealize Suite Lifecycle Manager Logical Design
- Objective 3.5 – Create a VMware Identity Manager Logical Design
- Objective 3.6 – Create a vRealize Automation Logical Design
- Objective 3.7 – Create a vRealize Operations Logical Design
 - 3.7.1 Determine the architecture of a vROps environment based on requirements
- Objective 3.8 – Create vRealize Log Insight Logical design
- Objective 3.9 – Create a vRealize Cloud Automation Extensibility Design (Orchestrator/ABX)
- Objective 3.10 – Create a VMware vRealize Suite Lifecycle Manager Physical Design
- Objective 3.11 – Create a VMware Identity Manager Physical Design
- Objective 3.12 – Create a vRealize Automation Physical Design
 - 3.12.1 Determine the appropriate tenancy model based on requirements

3.12.2 Determine the appropriate RBAC design based on requirements

Objective 3.13 – Create a vRealize Operations Physical Design

3.13.1 Determine the appropriate RBAC design based on requirements

3.13.2 Determine the appropriate Operational & Business Intent configuration based on requirements

3.13.3 Determine the size of a vROps Cluster based on requirements

3.13.4 Determine the architecture of a vROps environment based on requirements

3.13.5 Best Practices for vROps

Objective 3.14 – Create vRealize Log Insight Physical Design

3.14.1 Determine the appropriate RBAC design based on requirements

3.14.2 Determine the size of a vRLI Cluster based on requirements

3.14.3 Determine the architecture of a vRLI environment based on requirements

Objective 3.15 – Create a vRealize Automation Tenant Design (Cloud Assembly)

3.15.1 Determine the appropriate Cloud Account configuration based on requirements

3.15.2 Determine the appropriate Integration configuration based on requirements

3.15.3 Determine the appropriate Project design/configuration based on requirements

3.15.4 Determine the appropriate Image Mapping design based on requirements

3.15.5 Determine the appropriate Flavor Mapping design based on requirements

3.15.6 Determine the appropriate Storage Profile design based on requirements

3.15.7 Determine the appropriate Network Profile design based on requirements

Objective 3.16 – Create a vRealize Automation Service Catalog Design (Service Broker)

3.16.1 Determine the appropriate Content based on requirements

Objective 3.17 – Determine the vRealize Suite Integrations based on requirements

3.17.1 vROps - vRA integration (Workload Placement, Health and Pricing)

3.17.2 vROps - vRLI Integrations (Alerts)

Section 4 – There are no testable objectives for this section.

Section 5 – There are no testable objectives for this section.

Section 6 – There are no testable objectives for this section.

Recommended Courses

[VMware vRealize Operations: Install, Configure, Manage \[V8\]](#)

[VMware vRealize Operations: Deploy plus Operations with Cloud \[V8.2\]](#)

[VMware vRealize Automation: Install, Configure, Manage \[V8\]](#)

[VMware vRealize Suite Lifecycle Manager: Install, Configure, Manage \[V8.0\]](#)

[VMware vRealize Automation: Orchestration and Extensibility \[V8.1\]](#)

[VMware vSphere: Design \[V7\]](#)

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
http://www.vmware.com	vRealize Cloud Universal
http://kb.vmware.com	vRealize Cloud Universal
https://blogs.vmware.com	vRealize Cloud Universal
https://docs.vmware.com	vRealize Cloud Universal
https://www.vmware.com/support/pubs/	vRealize Cloud Universal
https://www.vmware.com/techpapers.html	vRealize Cloud Universal
http://pubs.vmware.com	vRealize Cloud Universal
*Content in this exam is based on vRealize Cloud Universal. Review all release notes and material for features and function.	

Certification Requirements

VCAP-CMA Design 2021

Exam Content Contributors

Kim Delgado
Michael Patton
Christopher Lewis
Shady Ali EIMalatawey
Sajal Debnath
Mukesh M Idnani
Selvakumar Jaganathan
Marshall Massengill
Bharah N
Trisha Navarro
Michael Poore



VMware, Inc. 3401 Hillview Avenue Palo Alto CA 94304 USA Tel 877-486-9273 Fax 650-427-5001 www.vmware.com
© 2021 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.