

2V0-31.20

Professional VMware vRealize Automation 8.1

Exam Preparation Guide

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Exam Details

The Professional VMware vRealize Automation 8.1 Exam (2V0-31.20), which leads to the VMware Certified Professional – Cloud Management and Automation 2020 certification, is a 70-item exam with a passing score of 300 using a scaled method. Candidates are given an appointment time of 120 minutes, which includes a five-minute seating time and adequate time to complete the exam for non-native English speakers. Actual exam time is 115 minutes.

Exam Delivery

This is a proctored exam delivered at Pearson VUE testing centers, world-wide. For more information, visit the [Pearson VUE website](#).

Certification Information

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

Minimally Qualified Candidate

The minimally qualified candidate (MQC) has 6-12 months hands-on experience installing and configuring vRealize Automation. The candidate is typically an administrator who is capable of performing a standard deployment of and managing vRealize Automation using Lifecycle Manager and troubleshooting a vRealize Automation 8.1 solution. The candidate possesses an understanding of basic cloud concepts including public/private/hybrid clouds, multitenancy, storage, networking and security. The candidate has working knowledge of each of the individual components, including Cloud Assembly Services, Service Broker, Code Stream and vRealize Orchestrator. The candidate has working knowledge of extensibility, identity and access management and basic knowledge of Kubernetes clusters and zones.

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

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Section 4 – Installing, Configuring, and Setup

Section 5 – Performance-tuning, Optimization, and Upgrades

Section 6 – Troubleshooting and Repairing

Section 7 – Administrative and Operational Tasks

There are sections with no testable objectives in this version of the exam and those are noted below, accordingly. The objective numbering will 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 the Exam

Section 1 – Architectures and Technologies

Objective 1.1 - Describe the Architecture of vRealize Automation

Objective 1.2 - Differentiate between vRealize Automation and vRealize Automation Cloud

Objective 1.3 – Describe the Services Offered by vRealize Automation

Section 2 – VMware Products and Solutions - There are no testable objectives for this section

Section 3- Planning and Designing - There are no testable objectives for this section

Section 4 – Installing, Configuring, and Setup

Objective 4.1 - Describe the Different Types of vRealize Automation deployments

Objective 4.2 - Prepare the Pre-requisites for an Installation (DNS, NTP, Service Accounts etc.)

Objective 4.3 - Perform a Standard Deployment using vRealize Easy Installer

Objective 4.4 - Configure vRealize Automation using Quickstart

Objective 4.5 - Perform Manual Installation using Lifecycle Manager

Objective 4.6 - Configure Identity Sources

Objective 4.7 - Configure Identity and Access Management

Objective 4.8 - Set up Cloud Accounts

Objective 4.9 - Add Cloud Zones

Objective 4.10 - Add Projects

Objective 4.11 - Add Image Mappings

Objective 4.12 - Add Flavor Mappings

Objective 4.13 - Add Network Profiles

Objective 4.14 - Add Storage Profiles

Objective 4.15 - Describe the Different Out of the Box Integrations Available with vRealize Automation

Objective 4.16 - Integrate vRealize Automation with vRealize Operations

Objective 4.17 - Describe the Onboarding Process

Objective 4.18 - Describe Action-Based Extensibility (ABX)

Objective 4.19 – Describe the Different Types of Tags in vRealize Automation

Objective 4.20 - Configure Capability Tags

Objective 4.21 - Configure Multi-Tenancy

Section 5 – Performance-tuning, Optimization, Upgrades - There are no testable objectives for this section

Section 6 – Troubleshooting and Repairing

Objective 6.1 - Collect Log Bundles

Objective 6.2 - Describe vracli Command Options

Objective 6.3 - Describe kubectl Command Options

Objective 6.4 - Troubleshoot vRealize Automation Configuration Errors

Objective 6.5 - Troubleshoot Provisioning Errors

Objective 6.6 - Monitor Deployments

Objective 6.7 - Monitor vRealize Orchestrator Workflow Execution

Section 7 – Administrative and Operational Tasks

Objective 7.1 - Manage the Identity and Access Management Tab

Objective 7.2 - Manage Cloud Accounts

Objective 7.3 - Manage Cloud Zones

Objective 7.4 - Manage Projects

Objective 7.5 - Manage Image Mappings

Objective 7.6 - Manage Flavor Mappings

Objective 7.7 - Manage Capability and Constraint Tags

Objective 7.8 - Manage Storage Profiles

Objective 7.9 - Manage Network Profiles

Objective 7.10 - Create and Manage Blueprints

Objective 7.11 - Create and Manage Blueprint Versions

Objective 7.12 - Manage Extensibility/Subscription

Objective 7.13 - Deploy Catalog Items

Objective 7.14 - Manage Deployments

Objective 7.15 - Describe Kubernetes Clusters

Objective 7.16 - Customize a Deployment using cloudConfig and cloud-init

Objective 7.17 - Create Service Broker Content Sources

Objective 7.18 - Configure Content Sharing

Objective 7.19 - Create and Manage Custom Forms

Objective 7.20 - Manage Policies

Objective 7.21 – Manage Notifications

Sample Questions

Sample questions presented here are examples of the types of questions candidates may encounter and should not be used as a resource for exam preparation.

Sample Question 1

What are two advantages of using vRealize Automation on-premises over vRealize Automation Cloud? (Choose two.)

- A. Leverage existing VMware Identity Manager for authentication
- B. Integrate with on-premises vRealize Operations
- C. Support for provisioning workloads to on-premises infrastructure
- D. License key is not required
- E. Support for on-premises vRealize Orchestrator instance(s)

Answers: A,B

Sample Question 2

An administrator completes a proof-of-concept with vRealize Automation using a standard deployment to test out its key provisioning use cases. vRealize Suite Lifecycle Manager (vRSLCM) is going to be leveraged to scale out this vRealize Automation deployment to prepare it for production. What is a pre-requisite step the administrator must complete before using the vRSLCM Scale-Out option for the environment?

IaaS administrator

- A. Delete the existing standard deployment.
- B. Choose "Add Component" from the vRealize Automation environment card.
- C. Review VMware Knowledge Base articles for steps to validate the PostgreSQL cluster health status.
- D. Create or import a product certificate in the locker with all of the existing and new product component host names and the load balancer host name.

Answer: D

Sample Question 3

What is the maximum number of unmanaged machines that can be onboarded hourly using a single vRealize Automation Onboarding Plan?

- A. 1,000

- B. 3,000
- C. 3,500
- D. 17,000

Answer: C

Sample Question 4

Which command line tool can an administrator use to collect the log bundle for vRealize Automation?

- A. Kubeadm
- B. Vracli
- C. Docker
- D. Helm

Answer: B

Sample Question 5

What does the `-n` commandlet option represent in the `kubectl -n prelude get pods` command?

- A. Namespace
- B. Nginx
- C. Node
- D. New Deployment

Answer: A

Sample Question 6

The CTO updates the company's tagging policy to require that all newly deployed machines include a tag with the operating system type deployed (i.e. `ostype:windows` or `ostype:linux`). Following new guidance, an administrator responsible for creating blueprints in the App-Dev project successfully updates the Multi-Cloud-Windows blueprint to include the `ostype:windows` tag on the Cloud.Machine resource. Following a successful test from the blueprint canvas, the administrator creates a new version of the blueprint and checks the "Release this version to the catalog" checkbox to release it to Service Broker. Finally, the administrator successfully updates the Service Broker content source so that the other members of the App-Dev project can deploy the latest version of the blueprint. The next day, project members report that there is an option to choose which of two versions (1.0 and 1.1) of the blueprint they wish to deploy.

Which two tasks should the administrator complete to ensure only the latest released version of the catalog item is displayed? (Choose two.)

- A. Unrelease version 1.1 of the blueprint.
- B. Unrelease version 1.0 of the blueprint.
- C. Update the correct content source.
- D. Restore version 1.0 of the blueprint.
- E. Ensure the blueprint is shared with the App-Dev project.

Answer: B, C

Sample Question 7

An administrator creates a new multi-cloud blueprint for the App-Dev team. The initial requirements for the multi-cloud blueprint were:

- All components must connect to a single network.
- The requestor must be able to select the image to be deployed.
- The requestor must be able to select to which cloud to deploy.
- The requestor must be able to select the number of machines to be deployed.

The administrator creates the blueprint and releases version 1.0 to the catalog. The App-Dev team decides to make some changes to the multi-cloud blueprint to include the following additional requirement:

- All machines must be deployed behind a load balancer.

An App-Dev administrator makes the required changes and publishes a new version of the blueprint. Upon receiving reports of issues, the administrator opens the multi-cloud blueprint and finds changes have been made. Testing of the newest version fails. From within the Cloud Assembly blueprint design canvas, which step should the administrator take first to get the blueprint back to a stable state?

- A. Restore version 1.0 of the blueprint.
- B. Create a new version of the blueprint.
- C. Download the blueprint in YAML.
- D. Clone the blueprint to a new blueprint.

Answer: A

Sample Question 8

What is the purpose of using a custom form?

- A. To customize Service Broker and enhance the user interface
- B. To customize the Cloud Assembly user interface
- C. To customize the input parameters and enhance a request form
- D. To customize a blueprint to enable guest customization

Answer: C

Recommended Course

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

References

In addition to the recommended [VMware vRealize Automation: Install, Configure, Manage \[v8\]](#) course, 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.

<https://docs.vmware.com> - [vRealize Automation 8.1, vRealize Automation 8.1 Reference Architecture Guide]

<https://docs.vmware.com> - [vRealize Automation 8.1, Administering vRealize Automation]

<https://docs.vmware.com> - [vRealize Automation 8.1, Getting Started with vRealize Automation Service Broker]

<https://docs.vmware.com> - [vRealize Automation 8.1, Using and Managing vRealize Automation Service Broker]

<https://docs.vmware.com> - [vRealize Automation 8.1, Using the Embedded vRealize Orchestrator Client]

<https://docs.vmware.com> - [vRealize Automation 8.1, vRealize Suite Lifecycle Manager 8.1 Installation, Upgrade, and Management]

<https://docs.vmware.com> - [vRealize Automation 8.1, Installing vRealize Automation with vRealize Easy Installer]

<https://docs.vmware.com> - [vRealize Automation 8.1, Getting Started with vRealize Automation Cloud Assembly]

<https://docs.vmware.com> - [vRealize Automation 8.1, Using and Managing vRealize Automation Cloud Assembly]

<https://docs.vmware.com> - [vRealize Suite Lifecycle Manager 8.1, vRealize Suite Lifecycle Manager 8.1 Installation, Upgrade, and Management]

<https://docs.vmware.com> - [vRealize Suite, Restoring, Powering On, and Validating vRealize Suite]

<https://docs.vmware.com> - [vRealize Orchestrator 8.1, Installing and Configuring VMware vRealize Orchestrator]

<https://docs.vmware.com> - [vRealize Orchestrator 8.1, Using the VMware vRealize Orchestrator Client]

<https://docs.vmware.com> –[Workspace ONE Access, Deploying VMware Identity Manager in the DMZ]

<https://blogs.vmware.com/management/2019/10/vrealize-automation-new-install-and-configuration.html> [vRealize Automation 8 – Install and Configuration]

<https://blogs.vmware.com/management/2018/11/abx-serverless-extensibility-of-cloud-assembly-services.html> [ABX: Serverless extensibility of Cloud Assembly Services]

<https://blogs.vmware.com/management/2020/04/introducing-multitenancy-support-vrealize-automation-81.html> [Introducing Multitenancy Support for vRealize Automation 8.1]

<https://kb.vmware.com/> - [Redirection to the VMware Identity Manager login page from vRealize Automation 8.0 returns “Bad Gateway” (76379)]

<https://kb.vmware.com/> - [Built-in containers root password expires preventing installations for vRealize Automation 8.0 and 8.0.1 or cumulative update patches on existing deployments” (78235)]

<https://kb.vmware.com/> - [Failed to start file system check on /dev/disk...” error on Photon OS based virtual appliances” (2149838)]

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