

VMware Certified Associate – Data Center Virtualization

Exam Blueprint

VCA-DCV Exam testing center exam code: VCAD510

Exam Blueprint Version 1.3

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Disclaimer:

This blueprint is intended to provide information about the objectives covered by this exam, related resources, and recommended courses. The material contained within this blueprint is not intended to guarantee that a passing score will be achieved on the exam. VMware recommends that a candidate thoroughly understands the objectives indicated in this guide and utilizes the resources and courses recommended in this guide where needed to gain that understanding.

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1. The Exam

1.1 Purpose of Exam

The VCAD510 VMware Certified Associate – Data Center Virtualization exam tests potential VCA candidates on their ability to identify technical requirements for data center virtualization and then align them with the technical products and solutions that meet those requirements. Successful candidates have a basic understanding of vSphere and related products and technologies, as well as the how those technologies drive specific business use cases.

1.2 Number of Questions

The VCAD510 exam consists of 50 questions and a short pre-exam survey consisting of 5 questions.

1.3 Passing Score

The passing score for this exam is 300, using a scaled scoring method. The scale is from 100-500. Scaled scores are calculated using a mathematical formula that considers a variety of factors, including the number and type of exam questions included in a specific version of the exam. Because this combination may vary in different versions of the same examination, scaled scores provide a fair score for each individual based on the version of the exam taken.

1.4 How Objectives Relate to Questions on the Exam

Objectives summarize what the test is designed to measure. Objectives are developed by Exam Developers and Subject Matter Experts based on identified tasks that relate to the job roles covered by this certification. Once the initial development process is complete, these objectives are verified using an external group of individuals in the same roles. The external survey determines the number of questions for each objective, which relates directly to the criticality of each task.

1.5 Languages

The exam is available in English, Japanese, French, German and Chinese.

1.6 Time Limit

The time limit for the exam is 75 minutes, with an additional 15 minutes to complete the survey questions and agreements, in cases where a survey is offered.

1.7 Scheduling and Taking the Exam

This exam is administered through Pearson VUE. Details on the rules and procedures associated with requesting authorization, registering, and sitting for the exam are available [here](#). For the latest certification news and more, please [sign up for updates](#).

1.8 Certification Tracks

While the VCAD510 exam is not a pre-requisite for other exams in the Data Center Virtualization track, preparation for and completion of this exam can provide a foundation on which to build a VMware Certified Professional level skillset. To obtain a VCA certification, a passing score on the exam is required. No other pre-requisites are required. To prepare for the exam, an e-learning course is available. More information on this course is provided in [section 4](#).

1.9 Retake Policy

The VMware Certified Associate exams do not have a waiting period between re-takes. If a candidate fails an exam, VMware highly recommends thoroughly reviewing the recommended course material detailed in [section 4](#) prior to re-taking the exam. This blueprint also provides links to relevant documentation that can be used to further study prior to attempting the exam again.

1.10 Exam Security

VMware reserves the right to refuse certifying a candidate who violates exam security policies. This includes copying and redistribution of exam material, using any type of unauthorized study material during the exam itself, or using a false identity to register for or take the exam.

2. Intended Audience

2.1 Intended Audience

A candidate for the VCA certification is familiar with VMware products and technologies and the business needs that can be met by those technologies. The candidate may be in any number of job roles that interact with VMware Data Center Virtualization technologies. The successful candidate will most likely have worked with VMware vSphere and should be knowledgeable of other VMware solutions where vSphere serves as a foundation, and should have related additional industry-recognized general IT certifications or the equivalent experience (typically 1-2 years).

3. Objectives covered in the VCAD510 Exam

3.1 Introduction

It is recommended that candidates have completed the VMware Data Center Virtualization Fundamentals e-learning course and have some hands-on exposure to vSphere 5 before taking the VCAD510 exam. The link to the e-learning course is: <http://mylearn.vmware.com/register.cfm?course=189018>

3.2 Objectives

Prior to taking this exam, candidates should understand each of the following objectives. Each objective is listed below; along with related tools the candidate should have experience with, and related documentation that contains information relevant to the objective. All objectives may also be referenced in other product documentation not specifically highlighted below. The candidate should be familiar with all relevant product documentation or have an equivalent skillset.

Section 1 – Explain Data Center Virtualization Concepts and How They Solve Typical Business Challenges

Objective 1.1 – Identify and Explain the Concept of Data Center Virtualization

Knowledge

- Explain Data Center Virtualization
- Differentiate Physical and Virtual Data Center Components
- Identify Data Center Virtualization Benefits

Tools

- [VMware vSphere Basics guide](#)
- [Virtualization Basics](#)
- [VMware Virtualization Toolkit](#)

Objective 1.2 – Identify Common Business Challenges Addressed By VMware Solutions

Knowledge

- Identify common availability challenges
- Identify common management challenges
- Identify common scalability challenges
- Identify common optimization challenges

Tools

- [VMware vSphere Basics guide](#)
- [Virtualization Basics](#)
- [The Business Value of Virtualization](#)
- [Business and Financial Benefits of Virtualization](#)

Section 2 – Identify, Explain and Differentiate vSphere Technologies

Objective 2.1 – Identify vSphere Core Components

Knowledge

- Explain the concept and capabilities of a virtual machine
- Identify purpose of ESXi and vCenter Server
- Differentiate VMware migration technologies
- Differentiate VMware availability technologies
- Explain the concepts of clusters and resource pools
- Identify and explain common VMware data center products

Tools

- [VMware vSphere Basics guide](#)
- [Virtualization Basics](#)
- [What's New in VMware vSphere 5.5 Platform](#)
- [VMware vSphere 5.5 Availability Guide](#)
- [vSphere High Availability Deployment Best Practices](#)
- [vCenter Operations Manager Getting Started Guide](#)
- [Performance Best Practices for VMware vSphere 5.5](#)
- vSphere Client

Objective 2.2 – Differentiate vSphere Storage Technologies

Knowledge

- Differentiate physical and virtual storage
- Explain the use of shared storage in a vSphere implementation
- Differentiate VMFS and NFS datastores
- Explain Thin Provisioning
- Differentiate VMware disaster recovery/disaster tolerance technologies
- Identify capabilities of Storage I/O Control
- Identify capabilities of Storage DRS
- Explain VMware virtual storage technologies

Tools

- [VMware vSphere Basics guide](#)
- [Virtualization Basics](#)
- [What's New in VMware vSphere 5.5 Storage](#)
- [Introduction to VMware vSphere Data Protection](#)
- [Introduction to vSphere 5.5 Replication](#)
- [Understanding vSphere 5.1 Storage DRS](#)
- [What's New in VMware vSphere Flash Read Cache](#)
- vSphere Client

Objective 2.3 – Differentiate vSphere Networking Technologies

Knowledge

- Differentiate physical and virtual networking
- Differentiate VMware virtual switch technologies
- Identify VMware virtual switch components
- Identify common virtual switch policies
- Identify capabilities of Network I/O Control

Tools

- [VMware vSphere Basics guide](#)
- [Virtualization Basics](#)
- [What's New in vSphere 5.1 Networking](#)
- [vSphere Networking guide](#)
- vSphere Client

Section 3 – Correlate VMware Data Center Virtualization Solutions with Specific Business Challenges

Objective 3.1 – Apply VMware Data Center Virtualization Solutions to Common Business Challenges

Knowledge

- Apply VMware data center virtualization technologies to resolve common availability challenges
- Apply VMware data center virtualization technologies to resolve common management challenges
- Apply VMware data center virtualization technologies to resolve common optimization challenges
- Apply VMware data center virtualization technologies to resolve common scalability challenges
- Differentiate SMB and Enterprise challenges and solutions

Tools

- [VMware vSphere Basics guide](#)
- [Virtualization Basics](#)
- [VMware Virtualization Toolkit](#)
- [VMware Solutions for Small and Mid-Sized Businesses](#)
- [VMware vSphere Examples and Scenarios guide](#)
- [VMware vSphere Troubleshooting](#)

4. VCA Paths and Course Requirement Options

4.1 VCA-DCV Path Options

IF YOU ARE...	TRAINING COURSE	EXAM	CERTIFICATION
Just starting with VMware data center virtualization technologies	<i>RECOMMENDED</i> VMware Data Center Virtualization Fundamentals	Pass the VCA-DCV Exam	VCA-DCV

Certification requirements are subject to change and may not be retroactive to previous versions. Please regularly check vmware.com/certification for updates.

4.2 Course Recommendation

There are no course requirements to obtain the VCA-DCV certification. VMware does recommend the following course to candidates who wish to learn about the objectives covered in the exam.

VMware Data Center Virtualization Fundamentals

A three hour free e-learning course that provides a fundamental understanding of VMware's Data Center Virtualization products and technologies, including the business challenges they are intended to solve. The course covers the following objectives:

- Define and describe the need for Data Center Virtualization
- Provide an overview of the features of vSphere 5.5
- Define how VMware's Data Center Virtualization products help solve business and technical challenges

This course covers all of the objectives found on the VCAD510 exam and is recommended for individuals who want to gain a better understanding of the objectives represented in the VCAD510 exam. Please note that some exposure to vSphere 5 is recommended before attempting the exam. The link to the course is:

<http://mylearn.vmware.com/register.cfm?course=189018>

5. Additional Resources

5.1 Mock Exam

VMware will provide a mock exam (currently in development) for the VCAD510 exam. The mock exam will contain sample questions, along with explanations for incorrect responses. The mock exam will present 20 questions, drawn from a larger pool. The mock exam pass score is set to 100%, and a candidate can retake the mock exam as many times as desired until the 100% score is achieved. Please be advised that the pass score for the mock exam is unrelated to the pass score for the actual exam. Refer to section 1.3 for the scoring information for the VCAD510 exam.

Please visit the Certification site at <http://www.vmware.com/certification> for the latest exam information and updates.

5.2 VCA Community

VMware will provide an online community for VCA candidates (currently in development). This community will contain information from other candidates and existing VCAs, and is moderated by VMware certification staff.

Please visit the Certification site at <http://www.vmware.com/certification> for the latest exam information and updates.

5.3 Building a vSphere Test Environment

All VMware products, including vSphere 5, can be downloaded and evaluated for 60 days. If you have the equipment to install a copy of ESXi 5.x, you can install ESXi in a VM. This would allow you to install multiple copies of ESXi and a copy of vCenter Server. For shared storage, obtain a virtual appliance that contains an iSCSI target. Several of these are available on the [appliance marketplace](#).

Version	Date	Change Notes
1.2	2013-12-06	Updated section 1.7: Scheduling and Taking the Exam