

# Advanced Deploy VMware vSphere® 7.x

## Exam Details (Last Updated: 11/16/2020)

The Advanced Deploy VMware vSphere® 7.x (3V0-22.21) exam which leads to VMware Certified Advanced Professional – Data Center Virtualization 2021 certification is a 17-item lab-based exam, with a passing score of 300 using a scaled scoring method. Candidates are given 205 minutes to complete the exam, 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) has about 12 months hands-on experience installing, configuring, and managing a vSphere® solution. The MQC is typically a senior administrator, capable of deploying, optimizing, operating, and troubleshooting virtualized environments. The MQC has knowledge of storage, networking, hardware, security, scripting, business critical applications, business continuity and disaster recovery concepts. The MQC may need occasional mentoring with advanced, complex tasks.

## 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 –Architectures and Technologies - There are no testable objectives for this section.

Section 2 –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 Set up VMware vCenter Server® and single sign-on (SSO)
  - 4.1.1 Deploy and configure VMware vCenter Server® and VMware ESXi™
  - 4.1.2 Configure identity sources
- Objective 4.2 Set up a clustering solution for VMware vSphere® High Availability (HA)
  - 4.2.1 Configure and manage High Availability options
- Objective. 4.3 Set up a cluster solution for VMware vSphere® Distributed Resource Scheduler™ (DRS)
  - 4.3.1 Configure VMware vSphere® vMotion
  - 4.3.2 Configure scalable shares
- Objective 4.4 Set up a cluster solution for VMware vSAN™
  - 4.4.1 Set up a cluster solution for VMware vSAN™

Section 5 – Performance-tuning, Optimization, and Upgrades

- Objective 5.1 Manage advanced virtual machine configurations (per VM EVC, latency sensitivity)
  - 5.1.1 Identify and implement vSphere® resource optimization opportunities

Section 6 – Troubleshooting and Repairing

- Objective 6.1 Troubleshoot resource issues
  - 6.1.1 Troubleshoot vSphere® configuration issues
  - 6.1.2 Troubleshoot resource pool configuration issues (e.g. Limits/Sharing, hierarchy)
  - 6.1.3 Troubleshoot virtual machine (VM) issues
- Objective 6.2 Troubleshoot network and storage issues
  - 6.2.1 Troubleshoot storage issues
  - 6.2.2 Troubleshoot network issues
- Objective 6.3 Troubleshoot vSphere® infrastructure issues
  - 6.3.1 Troubleshoot VMware ESXi™ host issues
  - 6.3.2 Troubleshoot resource issues of the VMware vCenter Server®
- Objective 6.4 Troubleshoot vSphere® 7.x clusters
  - 6.4.1 Troubleshoot virtual machine reservations and VMware Admission Control

Section 7 – Administrative and Operational Tasks

- Objective 7.1 Set up networking and storage
  - 7.1.1 Deploy and manage VMware vSphere® Standard Switch (vSS)
  - 7.1.2 Deploy and manage VMware vSphere® Distributed Switch (VDS)
  - 7.1.3 Configure and manage advanced storage configurations
- Objective 7.2 Set up log collection and VMware vCenter Server® backup
  - 7.2.1 Manage and review VMware vSphere® log files
  - 7.2.2 Configure VMware vCenter Server® file-based backup
  - 7.2.3 Configure and manage VMware vCenter Server® backup and restore options
  - 7.2.4 Configure VMware vCenter Server® profiles
- Objective 7.3 Manage and remediate host and clusters
  - 7.3.1 Configure and manage advanced cluster configurations (Quickstart, Admission Control)
  - 7.3.2 Create and manage host profiles (e.g. edit and apply host profiles)
  - 7.3.3 Manage and remediate clusters using vSphere® Lifecycle Manager™
  - 7.3.4 Configure and manage Lifecycle Manager™ components
- Objective 7.4 Work with content libraries
  - 7.4.1 Configure and manage a content library
  - 7.4.2 Update virtual machine templates in a content library
- Objective 7.5 Configure role-based access control (RBAC)
- Objective 7.6 Configure and manage advanced security options
  - 7.6.1 Configure CPU scheduler for security options
- Objective 7.7 Implement VMware vSphere® virtual machine encryption (VM encryption)
  - 7.7.1 Configure and manage a Key Management solution
  - 7.7.2 Create an encrypted virtual machine
- Objective 7.8 Configure and manage advanced host configurations
  - 7.8.1 Configure the VMware Tools and vSphere® Client repository (productLocker).

#### Recommended Course

[VMware vSphere®: Advanced Administration Workshop \[V7\]](#)

**References\***

In addition to the recommended course, 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.

<b>Name</b>	<b>Version</b>	<b>Products</b>
<a href="#">VMware vCenter Server Installation and Setup &gt; Deploying the VMware vCenter Server Appliance</a>	VMware Docs	VMware vSphere® 7.0, VMware ESXi™ and VMware vCenter Server®
<a href="#">VMware ESXi Installation and Setup &gt; Introduction to vSphere Installation and Setup</a>	VMware Docs	VMware vSphere® 7.0, VMware ESXi™ and VMware vCenter Server®
<a href="#">VMware vCenter Server Configuration &gt; Using the vSphere Client to Configure VMware vCenter Server</a>	VMware Docs	VMware vSphere® 7.0, VMware ESXi™ and VMware vCenter Server®
<a href="#">VMware vCenter Server Configuration &gt; Using the VMware vCenter Server Management Interface to Configure VMware vCenter Server</a>	VMware Docs	VMware vSphere® 7.0, VMware ESXi™ and VMware vCenter Server®
<a href="#">VMware vCenter Server and Host Management &gt; Organizing Your Inventory</a>	VMware Docs	VMware vSphere® 7.0, VMware ESXi™ and VMware vCenter Server®
<a href="#">vSphere Availability &gt; Creating and Using vSphere HA Clusters</a>	VMware Docs	VMware vSphere® 7.0, VMware ESXi™ and VMware vCenter Server®
<a href="#">vSphere Resource Management &gt; Creating a DRS Cluster</a>	VMware Docs	VMware vSphere® 7.0, VMware ESXi™ and VMware vCenter Server®
<a href="#">vSphere Resource Management &gt; Managing Resource Pools</a>	VMware Docs	VMware vSphere® 7.0, VMware ESXi™ and VMware vCenter Server®
<a href="#">vSphere Virtual Machine Administration &gt; Managing Virtual Machines</a>	VMware Docs	VMware vSphere® 7.0, VMware ESXi™ and VMware vCenter Server®
<a href="#">vSphere Storage &gt; Configuring iSCSI and iSER Adapters and Storage</a>	VMware Docs	VMware vSphere® 7.0, VMware ESXi™ and VMware vCenter Server®
<a href="#">vSphere Networking &gt; Setting Up Networking with vSphere Distributed Switches</a>	VMware Docs	VMware vSphere® 7.0, VMware ESXi™ and VMware vCenter Server®
<a href="#">vSphere Networking &gt; Setting Up VMkernel Networking</a>	VMware Docs	VMware vSphere® 7.0, VMware ESXi™ and VMware vCenter Server®
<a href="#">vSphere Security &gt; vSphere Permissions and User Management Tasks</a>	VMware Docs	VMware vSphere® 7.0, VMware ESXi™ and VMware vCenter Server®
<a href="#">vSphere Security &gt; Use Encryption in Your vSphere Environment</a>	VMware Docs	VMware vSphere® 7.0, VMware ESXi™ and VMware vCenter Server®

<a href="#">vSAN Planning and Deployment &gt; Creating a vSAN Cluster</a>	VMware Docs	VMware vSphere® 7.0, VMware vSAN™
<a href="#">Administering VMware vSAN &gt; Expanding and Managing a vSAN Cluster</a>	VMware Docs	VMware vSphere® 7.0, VMware vSAN™
<a href="#">VMware response to 'L1 Terminal Fault - VMM' (L1TF - VMM) Speculative-Execution vulnerability in Intel processors for vSphere: CVE-2018-3646 (55806)</a>	VMware Knowledge Base	
<a href="#">Implementing Hypervisor-Specific Mitigations for Microarchitectural Data Sampling (MDS) Vulnerabilities (CVE-2018-12126, CVE-2018-12127, CVE-2018-12130, and CVE-2019-11091) in vSphere (67577)</a>	VMware Knowledge Base	
<a href="#">Consolidating/Committing Snapshots in VMware ESXi (1002310)</a>	VMware Knowledge Base	
*vSphere® content in this exam based on V 7.0. Review all 7.0 release notes and material for features and function.		

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