

# VMware Advanced Skills for vSphere Professionals Workshop

## Course Overview

This five-day workshop provides hands-on experience in advanced VMware vSphere® administration and helps you prepare to pass the VMware Certified Advanced Professional — Data Center Virtualization Deploy 2018 certification exam. This course provides practical exposure to various advanced vSphere administration and configuration topics. Additionally, the course aligns to the exam objectives to provide you with an opportunity to enhance and practice your skills and better prepare you for the exam.

## Course Objectives

By the end of the course, you should be able to meet the following objectives:

- Configure and manage VMware vSphere® Auto Deploy™ configurations
- Configure advanced system settings
- Deploy and configure core management infrastructure components
- Deploy and configure VMware vSphere® Update Manager™ components
- Perform virtual machine configurations
- Implement complex storage solutions
- Deploy and configure VMware vSAN™
- Troubleshoot complex storage solutions
- Implement and manage vSphere 6.x standard switch and distributed switch networks
- Troubleshoot a vSphere 6.x network implementation
- Implement and maintain vSphere availability solutions
- Implement and manage DRS solutions
- Troubleshoot vSphere clusters
- Manage a vSphere environment using command line tools
- Manage and analyze vSphere log files
- Configure and manage a content library
- Use vSphere performance monitoring tools
- Optimize virtual machine resources
- Backup and recover vSphere configurations
- Configure a vSphere 6.x environment for security
- Manage authentication and end-user security
- Manage SSL certificates
- Secure and encrypt a virtual machine

## Target Audience

Experienced system administrators.

## Prerequisites

You should have the following skills before taking this course:

- Completion of the VMware vSphere: Optimize and Scale course or equivalent skills

You must have the VMware Certified Professional – Datacenter Virtualization (VCP-DCV) certification in order to obtain the VCAP-DCV Deploy 2018 certification.

## Certifications

This course prepares you for the following certification:

- VMware Certified Advanced Professional — Data Center Virtualization Deploy 2018

## Course Delivery Options

- Classroom
- Live Online
- [Onsite](#)

## Product Alignment

- VMware ESXi™ 6.7
- vSphere 6.7

## Course Modules

### 1 Course Introduction

- Introductions and course objectives

### 2 Create and Deploy vSphere 6.x Infrastructure Components

- Configure and manage host profiles
- Configure and manage a vSphere environment for vSphere Auto Deploy
- Configure advanced system settings on an ESXi host, including syslog, scratch partition, and core dump location
- Configure and manage an identity source and root level global permissions
- Use vSphere Update Manager for creating baselines and schedules, staging patches, and remediating hosts
- Perform virtual machine (VM) configurations, including adjusting CPU and memory allocations, and specifying swap file location

### 3 Deploy and Manage a vSphere 6.x Storage Infrastructure

- Implement complex storage solutions - iSCSI storage, NFS datastores, and Storage I/O Control
- Deploy and configure vSAN, and create a vSAN storage policy
- Investigate and restore access to a VMware vSphere® VMFS datastore

### 4 Deploy and Manage a vSphere 6.x Network Infrastructure

- Migrate a VMkernel network adapter and vmnic from a standard switch to a distributed switch
- Create and configure a custom TCP/IP stack on an ESXi host
- Configure Network I/O Control to support network bandwidth constraint issues

### 5 Configure a vSphere Deployment for Availability and Scalability

- Enable VMware vSphere® High Availability and configure core components such as admission control, heartbeat datastores, and a custom isolation address
- Enable DRS and configure automation settings, EVC mode, and an affinity rule

- Troubleshoot a VMware vSphere® vMotion® issue within a vSphere cluster

### 6 Configure a vSphere Deployment for Manageability

- Create a VM and generate a report using VMware vSphere® PowerCLI™
- Configure VMware vCenter Server® database log settings and diagnostic logging levels
- Analyze a log file to investigate a network connection problem and remediate the problem
- Import an OVF template and create a subscribed content library for a multi-vCenter Server environment

### 7 Configure a vSphere Deployment for Performance

- Use ESXi command-line utilities to collect vSphere performance metrics and perform VM network packet capture
- Update the configuration on a VM template

### 8 Configure a vSphere 6.x Environment for Recoverability

- Backup and restore a distributed switch configuration
- Backup and restore a resource pool tree
- Schedule vCenter Server backups using the vCenter Server Appliance Management Interface

### 9 Configure a vSphere 6.x Environment for Security

- Register a KMS with vCenter Server, create an encryption storage policy, and create an encrypted VM
- Update advanced certificate parameters and renew an ESXi certificate
- Create a vCenter Server custom role and assign permissions to an identity source user
- Change password restrictions on an ESXi host
- Add an ESXi host to a directory service domain and enable lockdown mode

## Contact

If you have questions or need help registering for this course, click [here](#).



VMware, Inc. 3401 Hillview Avenue Palo Alto CA 94304 USA Tel 877-486-9273 Fax 650-427-5001 [www.vmware.com](http://www.vmware.com)  
 © 2019 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.