

VMware vSphere: Advanced Administration [V8]

Course code: VMW_VSAAW

This five-day course provides hands-on training to equip students with a range of skills: from performing routine VMware vSphere® 8 administrative tasks to complex vSphere operations and configurations. Through lab-based activities, students are immersed in real-life situations faced by VMBeans, a fictitious company. These situations expose students to real-life scenarios faced by companies that are building and scaling their virtual infrastructure. This course uses scenario-based lab exercises and does not provide guided step-by-step instructions. To complete the scenario-based lab exercises, you are required to analyze the task, research, and deduce the required solution. References and suggested documentation are provided. Approximately 90% of the class is application-focused and taught through labs. The course aligns fully with the VMware Certified Advanced Professional – Data Center Virtualization Deploy exam objectives.

Who is the course for

- System administrators
- System engineer

What we teach you

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

- Enable cluster features and configure vSphere storage and networking
- Use host profiles to automate host configurations
- Use Cluster Quickstart to create a VMware vSAN™ enabled cluster
- Configure the VMware vCenter Server® identity provider
- Troubleshoot host connectivity and storage connectivity
- Perform lifecycle operations on vSphere components
- Implement security hardening guidelines to vSphere and virtual machines

Required skills

This course requires the following prerequisites:

- Completion of VMware vSphere: Optimize and Scale [V7] course
- VMware Certified Professional – Data Center Virtualization (VCP-DCV) certification
- System administration experience on Microsoft Windows or Linux operating systems

Course outline

1 Course Introduction

- Introductions and course logistics
- Course objectives
- Introduction to fictitious company: VMBeans

2 Creating and Configuring Management Clusters

- Enable cluster features that help to improve resource allocation and availability of virtual machines
- Use standard virtual switches to create networking in a cluster
- Recognize when to use VMware vSphere® vMotion®
- Recognize requirements for using iSCSI
- Identify the purpose of iSCSI multipathing
- Select the appropriate vSphere storage types to meet requirements
- Recognize when to configure ESXi NTP support
- Recognize ESXi user account best practices
- Configure ESXi host settings

GOPAS Praha

Na Strži 2097/63
140 00 Praha 4 - Krč
Tel.: +420 226 201 390
info@gopas.cz

GOPAS Brno

Nové sady 996/25
602 00 Brno
Tel.: +420 530 513 590
info@gopas.cz

GOPAS Bratislava

Dr. Vladimíra Clementisa 10
Bratislava, 821 02
Tel.: +421 902 903 132
info@gopas.sk



Copyright © 2026 GOPAS, a.s.,
All rights reserved

VMware vSphere: Advanced Administration [V8]

- Use host profiles appropriately
- ### 3 Creating and Configuring Production Clusters
- Use Cluster Quickstart to create a vSAN enabled cluster
 - Configure advanced vSphere HA settings
 - Recognize the benefits of Active Directory Federation Services (ADFS)
 - Configure the vCenter Server identity provider
 - Assign specific permissions and roles to ADFS users
 - Recognize how Enhanced vMotion Compatibility benefits VM mobility
 - Perform a Cross vCenter Server Migration
 - Use content libraries to share virtual machine templates between sites
- ### 4 Troubleshooting vSphere and Backing Up Configurations
- Troubleshoot ESXi connectivity issues
 - Troubleshoot iSCSI storage issues
 - Troubleshoot vSphere cluster resources
 - Troubleshoot VMware PowerCLI™ issues
 - Back up vCenter Server
- ### 5 Lifecycle Management
- Troubleshoot upgrade-blocking issues
 - Increase logging levels on vCenter Server
 - Configure a VMware Tools™ shared repository
 - Upgrade vCenter Server
 - Upgrade ESXi
 - Upgrade VMware Tools
 - Upgrade Virtual Machine Compatibility
 - Work with VM placement rules
- ### 6 vSphere Security
- Manage advanced virtual machine configurations
 - Configure a key management server
 - Encrypt virtual machines using vSphere VM encryption
 - Secure VMs in transit with encrypted vSphere vMotion
 - Identify and implement different ESXi CPU scheduler options
 - Apply security hardening guidelines to ESXi hosts
 - Replace vCenter Server certificates with trusted CA-signed certificates
 - Deploy a new vCenter Server instance
 - Reconfigure the primary network identifier for vCenter Server

GOPAS Praha
Na Strži 2097/63
140 00 Praha 4 - Krč
Tel.: +420 226 201 390
info@gopas.cz

GOPAS Brno
Nové sady 996/25
602 00 Brno
Tel.: +420 530 513 590
info@gopas.cz

GOPAS Bratislava
Dr. Vladimíra Clementisa 10
Bratislava, 821 02
Tel.: +421 902 903 132
info@gopas.sk

 **GOPAS®**
Copyright © 2026 GOPAS, a.s.,
All rights reserved