

# VMware vSphere 6.7: Fast Track

This five-day, intensive course takes you from introductory to advanced VMware vSphere® management skills. Building on the installation and configuration content from our best-selling course, you will also develop advanced skills needed to manage and maintain a highly available and scalable virtual infrastructure. Through a mix of lecture and hands-on labs, you will install, configure and manage vSphere 6.7. You will explore the features that build a foundation for a truly scalable infrastructure, and discuss when and where these features have the greatest effect. This course prepares you to administer a vSphere infrastructure for an organization of any size using vSphere 6.7, which includes VMware ESXi™ 6.7 and VMware vCenter Server® 6.7.

## Kursinhalt

- Introductions and course logistics
- Introduction to vSphere and the Software-Defined Data Center
- Creating Virtual Machines
- vCenter Server
- Configuring and Managing Virtual Networks
- Configuring and Managing Virtual Storage
- Virtual Machine Management
- Resource Management and Monitoring
- vSphere HA, vSphere Fault Tolerance, and Protecting Data
- vSphere DRS
- Network Scalability
- vSphere Update Manager and Host Maintenance
- Storage Scalability
- Securing Virtual Machines

**E-Book** Jeder Teilnehmer erhält englischsprachige Unterlagen von VMware als E-Book.

## Zielgruppe

- System administrators
- System engineers

This course prepares you for the following certification: VMware Certified Professional 6.5 – Data Center Virtualization (VCP6.5-DCV)

## Voraussetzungen

- System administration experience on Microsoft Windows or Linux operating systems

## Dieser Kurs im Web



Alle tagesaktuellen Informationen und Möglichkeiten zur Bestellung finden Sie unter dem folgenden Link: [www.expertech.de/go/VMF6](http://www.expertech.de/go/VMF6)

## Vormerkung

Sie können auf unserer Website einen Platz kostenlos und unverbindlich für 7 Tage reservieren. Dies geht auch telefonisch unter 06074 4868-0.

## Garantierte Kurstermine

Für Ihre Planungssicherheit bieten wir stets eine große Auswahl garantierter Kurstermine an.

## Ihr Kurs maßgeschneidert

Diesen Kurs können wir für Ihr Projekt exakt an Ihre Anforderungen anpassen.

Training		Preise zzgl. MwSt.
<b>Classroom Training</b>	<b>5 Tage</b>	<b>€ 4.595,-</b>
<b>Online Training</b>	<b>5 Tage</b>	<b>€ 4.595,-</b>
<b>Termin/Kursort</b>	Kurssprache Deutsch	
17.06.-21.06.19	Berlin	07.10.-11.10.19 Leinfelden
08.07.-12.07.19	München	04.11.-08.11.19 München
15.07.-19.07.19	Böblingen	18.11.-22.11.19
09.09.-13.09.19	Wien	
<b>Termin/Kursort</b>	Kurssprache Englisch	
03.06.-07.06.19		07.10.-11.10.19

Stand 16.05.2019



# Inhaltsverzeichnis

## VMware vSphere 6.7: Fast Track

### Course Introduction

#### 1. Introductions and course logistics

Course objectives  
Describe the content of this course  
Gain a complete picture of the VMware certification system  
Familiarize yourself with the benefits of the VMware Education Learning Zone  
Identify additional resources

#### 2. Introduction to vSphere and the Software-Defined Data Center

Describe how vSphere fits into the software-defined data center and the cloud infrastructure  
Explain how vSphere interacts with CPUs, memory, networks, and storage  
Use vSphere Client to access and manage your vCenter Server system and ESXi host  
Compare virtual machine hardware version 14 to other versions  
Identify the virtual network adapters, and describe the enhanced VMXNET3  
Compare the types of virtual disk provisioning  
Install and configure ESXi host settings  
Identify the advantages of ESXi Quick Boot

#### 3. Creating Virtual Machines

Create, provision, and remove a virtual machine  
Explain the importance of VMware Tools™  
Describe how to import a virtual appliance OVF template

#### 4. vCenter Server

Describe the vCenter Server architecture  
Discuss how ESXi hosts communicate with vCenter Server  
Access and configure vCenter Server Appliance  
Use vSphere Client to manage the vCenter Server inventory  
Add data center, organizational objects, and hosts to vCenter Server  
Create custom inventory tags  
Describe the rules for applying permissions  
Create a custom role in vCenter Server  
Create a vCenter Server Appliance backup schedule  
Restore vCenter Server Appliance from a backup

#### 5. Configuring and Managing Virtual Networks

Describe, create, and manage standard switches  
Configure virtual switch security, traffic-shaping and load-balancing policies

Compare vSphere distributed switches and standard switches

Describe the virtual switch connection types

Describe the new TCP/IP stack architecture

Use VLANs with standard switches

#### 6. Configuring and Managing Virtual Storage

Identify storage protocols and storage device types  
Discuss ESXi hosts using iSCSI, NFS, and Fibre Channel storage

Create and manage VMware vSphere® VMFS and NFS datastores

Explain how multipathing works with iSCSI, NFS, and Fibre Channel storage

Identify the advantages of VMware vSAN™

#### 7. Virtual Machine Management

Use templates and cloning to deploy new virtual machines  
Modify and manage virtual machines

Create an instant clone of a virtual machine

Identify the types of content libraries and how to deploy and use them

Add a hot-pluggable device

Dynamically increase the size of a virtual disk

Use customization specification files to customize a new virtual machine

Perform vSphere vMotion and vSphere Storage vMotion migrations

Create and manage virtual machine snapshots

#### 8. Resource Management and Monitoring

Discuss CPU and memory concepts in a virtualized environment

Describe what overcommitment of a resource means  
Identify additional technologies that improve memory usage

Configure and manage resource pools

Describe methods for optimizing CPU and memory usage

Use various tools to monitor resource usage

Create and use alarms to report certain conditions or events

#### 9. vSphere HA, vSphere Fault Tolerance, and Protecting Data

Explain the vSphere HA architecture

Configure and manage a vSphere HA cluster

Use vSphere HA advanced parameters

Enforce infrastructural or intra-app dependencies during failover

Describe vSphere HA heartbeat networks and datastore heartbeats

Examine the features and functions of vSphere Fault Tolerance

Enable vSphere Fault Tolerance on virtual machines  
Support vSphere Fault Tolerance interoperability with vSAN

Examine enhanced consolidation of vSphere Fault Tolerance virtual machines

#### 10. vSphere DRS

Describe the functions of a vSphere DRS cluster

Create a vSphere DRS cluster

View information about a vSphere DRS cluster

Configure virtual machine affinity, DRS groups, and VM-host affinity rules

Remove a host from a vSphere DRS cluster

#### 11. Network Scalability

Configure and manage vSphere distributed switches

Explain distributed features such as port mirroring, LACP, QoS tagging, and NetFlow

Configuring port mirroring on a distributed switch

#### 12. vSphere Update Manager and Host Maintenance

Describe the architecture, components, and capabilities of vSphere Update Manager

Use vSphere Update Manager to manage the patching of ESXi, virtual machines, and vApps

Examine the features and functions of vSphere Update Manager EAM integration

Integrate vSphere Update Manager with vSphere DRS

Describe and use host profiles

Examine the features and functions of vSphere Replication

Monitor vCenter Server Appliance

#### 13. Storage Scalability

Explain VMware vSphere® Storage APIs - Array Integration, VMware vSphere® API for Storage Awareness™, and vSphere APIs for I/O Filtering

Configure and assign virtual machine storage policies

Configure vSphere Storage DRS and Storage I/O Control

#### 14. Securing Virtual Machines

Set up encryption in your vSphere environment

Encrypt virtual machines

Encrypt core dumps



### ExperTech GmbH

Waldstraße 94 • 63128 Dietzenbach • Telefon: +49 6074 4868-0 • Fax: +49 6074 4868-109  
info@expertech.de • www.expertech.de

